ENVIRONMENTAL PROTECTION

WATERSHED AND LAND MANAGEMENT

Discharges of Petroleum and Other Hazardous Substances

Coastal Zone Management Rules

Freshwater Wetlands Protection Act Rules

Stormwater Management

Well Construction and Maintenance; Sealing of Abandoned Wells

Safe Drinking Water Act

Flood Hazard Area Control Act Rules

New Jersey Pollutant Discharge Elimination System

Solid Waste

Recycling Rules

Hazardous Waste

New Jersey's Protecting Against Climate Threats (NJPACT) Rules

Proposed Amendments: 7:1E-2.9; 7:1F-2.4; 7:3-5.4; 7:7-1.1, 1.5, 1.6, 2.1, 2.4, 3.1, 3.2, 3.3, 3.4, 3.5, 3.7, 3.8, 4.3, 4.4, 4.5, 4.8, 4.9, 4.10, 4.11, 4.13, 4.15 through 4.23, 5.1, 5.2, 5.3, 6.4, 6.5, 6.20, 6.22—6.26, 7.1, 7.2, 7.3, 8.1, 8.2, 9.2, 9.6, 9.15, 9.16, 9.18, 9.22, 9.25, 9.26, 9.27, 9.34, 9.41, 9.42, 9.43, 9.46, 9.47, 10.2, 12.6, 12.7, 12.11, 12.21, 13.1, 13.2, 13.16, 13.17, 13.18, 15.2, 15.4, 15.11, 16.2, 16.12, 17.5, 17.7, 17.9, 21.3, 23.1, 23.2, 23.3, 23.4, 24.1, 24.3, 24.4, 24.5, 25.1, 27.2, 27.5, 28.1, 29.5, Appendix I; 7:7A-1.1, 1.3, 1.4, 2.7, 4.7, 5.4, 5.7, 6.1, 7.1, 7.2, 7.4, 7.5, 7.6, 7.10A, 7.10B, 7.11, 7.13, 7.14, 7.15, 7.16, 7.20, 7.21, 7.25, 7.26, 8.1, 8.2, 11.2, 11.4, 11.6, 11.8, 12.2, 14.3, 16.2, 16.6, 16.7, 16.10, 20.2, 20.6, 21.1; 7:8-1.2, 1.3, 1.6, 3.4, 4.2, 5.2, 5.3, 5.5, 5.6, 5.7; 7:9A-2.1, 3.18, 4.3, 4.6; 7:9D-2.3; 7:10-11.5, 11.6, 11.7, 11.8, 11.9; 7:13-1.1, 1.2, 1.3, 2.1, 2.2, 2.3, 2.4, 2.5, 3.3, 3.5, 3.6, 3.7, 3.8, 4.1, 5.2, 5.3, 5.4, 5.5, 5.6, 6.1, 6.2, 6.3, 6.4, 6.6, 6.7, 7.3, 7.8, 7.9, 7.10, 7.13, 7.14, 7.15, 7.16, 7.18 through 7.26, 7.30, 7.31, 7.34, 7.41,

7.56 through 7.63, 8.5, 8.8, 8.15, 8.16, 9.2, 9.3, 9.4, 9.5, 9.6, 9.8, 9.12, 9.13, 9.14, 10.1, 10.2, 11.2, 11.3, 11.4, 11.5, 11.6, 12.1, 12.2, 12.4, 12.5, 12.7, 12.8, 12.10, 12.11, 12.12, 12.13, 12.16 through 12.21, 13.1, 13.2, 13.4, 13.5, 13.6, 13.10, 13.11, 13.13, 13.15 through 13.21, 15.1, 16.3, 17.2, 18.1, 18.2, 18.3, 18.4, 18.5, 18.7, 18.8, 19.1, 19.3, 19.4, 20.1, 21.1, 21.4, 22.2, 22.5, 22.6, 23.1, 24.1, 24.5, 24.6, Appendices 1, 2; 7:14A-20.8, 23.13; 7:26-2.9, 2.10, 2A.6, 3.6, 3A.39; 7:26A-3.2, 7:26G-12.1, 12.2; 7:28-59.1; 7:36-6.4, 17.4, 26.4, 26.9; 7:38-1.2, 3.7, 3.10, 7.1, 8.1, 9.1, 10.2, 11.5

Proposed Repeals and New Rules: N.J.A.C. 7:7-6.17; 7:13-3.1, 3.2, 3.4, 6.5, 9.1, 9.11, and 12.6

Proposed New Rules: N.J.A.C. 7:7-3.5, 3.9, 5.4 through 5.12, 6.33, 8.4, 9.50, 12.23, and 27.9; 7:8-5.10; and 7:13-2.5, 3.6, 6.8, 7.30, 8.5 through 8.15, 9.12, 10.4, 11.5, 13.9, 18.9, and 22.3

Proposed Repeals: N.J.A.C. 7:7-3.6, 4.1, 4.2, 4.6, 4.7, 4.12, 4.14, 12.23, and 13.19 and 7:7 Appendices H and J; and N.J.A.C. 7:13-7.1, 7.2, 7.4, 7.5, 7.6, 7.7, 7.11, 7.12, 7.17, 7.27, 7.28, 7.29, 7.32, 7.33, 7.35 through 7.40, 7.42 through 7.55, 8.1, 8.2, 8.3, 8.4, 8.6, 8.7, 8.9 through 8.14, 9.7, 9.9, and 9.10

Authorized By: Shawn M. LaTourette, Commissioner, Department of Environmental Protection.

Authority:

As to N.J.A.C. 7:1E: N.J.S.A. 13:1D-125 through 133, 13:1K-1 et seq., 58:10-23.11, and 58:10-46 through 50;

As to N.J.A.C. 7:1F: N.J.S.A. 13:1B-3, 13:1D-1 et seq., 13:1K-19 et seq., 26:2C-1 et seq., 58:10-35.1 through 35.4, and 58:10A-1 et seq.;

As to N.J.A.C. 7:3: N.J.S.A. 13:1B-3 et seq., 13:1D-9 et seq., 13:1L-1 et seq., 45:1-9, 45:15C-1 et seq., and 54:4-23.1 et seq.;

As to N.J.A.C. 7:7: N.J.S.A. 12:3-1 et seq., 12:5-3, 13:1D-1 et seq., 13:1D-9 et seq., 13:1D-29 et seq., 13:9A-1 et seq., 13:19-1 et seq., 23:2A-1 et seq., and 58:10A-1 et seq.;

As to N.J.A.C. 7:7A: N.J.S.A. 13:9B-1 et seq., 23:2A-1 et seq., and 58:10A-1 et seq.;

As to N.J.A.C. 7:8: N.J.S.A. 12:5-3, 13:1D-1 et seq., 13:9A-1 et seq., 13:19-1 et seq., 23:2A-1 et seq., 40:55D-93 through 99, 58:1A-1 et seq., 58:4-1 et seq., 58:10A-1 et seq., 58:11A-1 et seq., and 58:16A-50 et seq.;

As to N.J.A.C. 7:9A: N.J.S.A. 13:1D-1 et seq., 26:3A2-21 et seq., 58:10A-1 et seq., and 58:11-23 et seq.;

As to N.J.A.C. 7:9D: N.J.S.A. 13:1D-1 et seq., 58:4A-4.1 et seq., and 58:12A-1 et seq.;

As to N.J.A.C. 7:10: N.J.S.A. 13:1D-1 et seq., 58:1A-1 et seq., 58:4A-4.1 et seq., 58:11-9.1 et seq., 58:11-23 et seq., and 58:12A-1 et seq.;

As to N.J.A.C. 7:13: N.J.S.A. 13:1D-1 et seq., 13:1D-29 et seq., 13:20-1 et seq., 23:2A-1 et seq., 58:1A-1 et seq., 58:10A et seq., 58:11A-1 et seq., and 58:16A-50 et seq.;

As to N.J.A.C. 7:14A: N.J.S.A. 13:1B-3 et seq., 13:1D-1 et seq., 13:1E-1 et seq., 58:10-23.11 et seq., 58:10A-1 et seq., 58:11-49 et seq., 58:11A-1 et seq., and 58:12A-1 et seq.;

As to N.J.A.C. 7:26: N.J.S.A. 13:1B-3, 13:1D-1 et seq., 13:1D-125 et seq., 13:1E-1 et seq., 13:1E-9, 26:2C-1 et seq., 47:1A-1 et seq., 58:10-23.11, and 58:10A-1 et seq.;

As to N.J.A.C. 7:26A: N.J.S.A. 13:1B-3, 13:1D-1 et seq., 13:1D-125 et seq., 13:1E-1 et seq., 13:1E-9, 13:1E-99.94 et seq., 26:2C-1 et seq., 47:1A-1 et seq., 58:10-23.11, and 58:10A-1 et seq.;

As to N.J.A.C. 7:26G: N.J.S.A. 13:1E-1 et seq.,13:1B-3, 13:1D-1 et seq., 13:1E-9, 13:1D-125 et seq., 26:2C-1 et seq., 47:1A-1 et seq., 58:10-23.11, and 58:10A-1 et seq.;

As to N.J.A.C. 7:28: N.J.S.A. 13:1B-1 et seq., 13:1D-1 et seq., and 26:2D-1 et seq.;

As to N.J.A.C. 7:36: N.J.S.A. 13:8A-1 et seq., 13:8A-19 et seq., 13:8A-35 et seq., 13:8C-1 et seq., and 13:8C-43 et seq.; and

As to N.J.A.C. 7:38: N.J.S.A. 13:1B-15.128 et seq., 13:1D-1 et seq., 13:9B-1 et seq., 13:20-1 et seq., 23:2A-1 et seq., 58:1A-1 et seq., 58:11-23 et seq., 58:11A-1 et seq., 58:12A-1 et seq., and 58:16A-50 et seq.

Calendar Reference: See Summary below for explanation of exception to calendar requirement.

DEP Docket Number: 05-24-05.

Proposal Number: PRN 2024-073.

Public hearings concerning this notice of proposal will be held on:

September 5, 2024, Live at 6:00 P.M., at Ocean County College, Gateway Lecture Hall #104 College Drive, Toms River, NJ 08754;
September 12, 2024, Virtually at 2:00 P.M.; and

September 19, 2024, Virtually at 10:00 A.M.

A link to the virtual public hearing and more information about the live hearing will be provided on the Department's NJPACT website www.nj.gov/dep/njpact/.

Submit comments by close of business on November 3, 2024, electronically at www.nj.gov/dep/rules/comments. Each comment should be identified by the applicable N.J.A.C. citation, with the commenter's name and affiliation following the comment.

The Department encourages electronic submittal of comments. In the alternative, comments may be submitted on paper to:

Melissa Abatemarco, Esq.

Attention: DEP Docket No. 05-24-05

Office of Legal Affairs

New Jersey Department of Environmental Protection

401 East State Street, 7th Floor

Mail Code 401-04L

PO Box 402

Trenton, NJ 08625-0402

If you are interested in providing oral testimony or submitting written comments at a public hearing, please email the Department at DEPWLMProgramDevelopment@dep.nj.gov no later than 5:00 P.M., two days prior to the scheduled hearing date, with your contact information (name, organization, telephone number, and email address). You must provide a valid email address so the Department can send you an email confirming receipt of your interest to testify orally at the hearing and provide you with a separate option for a telephone call-in line if you do not have access to a computer that can connect to Microsoft Teams. It is requested (but not required) that anyone providing oral testimony at the public hearing provide a copy of any prepared text to the Department at the hearing. Please note the Department will take oral testimony at the hearings in chronological order based upon when you registered for the event. Further, the hearings will be recorded. This notice of proposal may be viewed or downloaded from the Department's website at www.nj.gov/dep/rules.

The agency proposal follows:

Summary

As the Department has provided a 90-day comment period on this notice of proposal, it is excepted from the rulemaking calendar requirement pursuant to N.J.A.C. 1:30-3.3(a)5.

This notice of proposal by the Department proposes amendments, repeals, and new rules to the Coastal Zone Management (CZM) rules, N.J.A.C. 7:7, Freshwater Wetlands Protection Act (FWPA) rules, N.J.A.C. 7:7A, Flood Hazard Area Control Act (FHACA) rules, N.J.A.C. 7:13, and Stormwater Management (SWM) rules, N.J.A.C. 7:8, as well as several additional rules that cross-reference these four chapters, as part of a comprehensive update of the State's Land Resource Protection program to reflect the latest global, regional, and State-specific scientific information on climate change. These rules work in

tandem and collectively help protect New Jersey's land and water resources, as well as afford protections to public safety, health, and welfare. This rulemaking will ensure the use of reliable climate science to aid New Jersey communities in better preparing themselves to confront the critical environmental and public safety threats presented by climate change. Additionally, the Department proposes amendments to update and clarify various aspects of these rules, as well as to further the Watershed and Land Management Program's continued efforts to increase efficiency, consistency, and accountability in the processing, issuance, and enforcement of permits and authorizations.

Introduction on Climate Change

To understand the discussion regarding the science of climate change and the related policy decisions that follow, it is helpful to have an understanding of the current underlying principles of climate science. According to the National Oceanic and Atmospheric Association (NOAA), "climate is determined by the long-term pattern of oceanic and atmospheric conditions at a location. Climate is described by statistics, such as means and extremes of temperature, precipitation, and other variables, and by the intensity, frequency, and duration of weather events." (NOAA, 2021). The term "climate" is often erroneously conflated with the term "weather." According to the National Weather Service, both climate and weather are determined by "the state of the atmosphere with respect to wind, temperature, cloudiness, moisture, pressure, etc. Weather refers to these conditions at a given point in time (e.g., today's high temperature), whereas climate refers to the 'average' weather conditions for an area over a long period of time (e.g., the average high temperature for today's date)." (National Weather Service, 2021). The Intergovernmental Panel on Climate Change (IPCC) defines climate change as "... change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties and that persists for an extended period, typically decades or longer. Climate change may be due to natural internal processes, or external forces such as modulations of the solar cycles, volcanic eruptions, and persistent anthropogenic changes in the composition of the atmosphere or in land

use." (IPCC, 2018). When "climate change" is used throughout this rulemaking, it refers to observed or expected changes in the long-term pattern of oceanic and atmospheric conditions in a given locational context, whether that be global, regional, or State-specific.

It is well-settled in the scientific community that climate change is primarily driven by increased atmospheric levels of greenhouse gas concentrations, such as carbon dioxide, and that anthropogenic (human-created) sources are responsible for almost all the increase in greenhouse gases in the atmosphere over the last 150 years (IPCC, 2007). The concentration of greenhouse gases in the atmosphere has a direct impact on the amount of radiation (heat) from the sun being retained on Earth. The difference between the incoming and outgoing radiation on Earth is known as "radiative forcing" (NOAA Climate.gov, 2021). A higher concentration of greenhouse gases in the atmosphere will result in higher radiative forcing – greater heat retention on Earth – which drives warming of the planet's average global temperature, a phenomenon commonly known as "global warming" (NOAA Climate.gov, 2021). In their sixth, and most recent, assessment cycle (AR6), the IPCC released a Working Group document that found average global surface temperature continues to rise and is 0.19 degrees Celsius higher than the average global surface temperature reported in the last assessment cycle (AR5) report released in 2014 (IPCC, 2021). Global warming has resulted, and is expected to continue to result, in changes in climate, the type and extent of which will vary depending upon locality.

One such change in climate, which is particularly relevant to this rulemaking, is the increase in average global temperature. This change results in the warming and expansion of the world's oceans, a phenomenon commonly known as "sea level rise." An increase in average global temperature also causes Earth's atmosphere to hold more water vapor, which leads to a higher potential for increased and more intense precipitation in certain regions. Both sea level rise and a higher potential for increased and more intense precipitation impact the extent and frequency of flooding in New Jersey, which carries critical implications for the public health, safety, and welfare of the State's residents.

While the Department's recent adoption of the Inland Flood Protection rules on July 17, 2023, focused predominantly on the current and future precipitation increases and the effects on fluvial areas and stormwater management in New Jersey, this rulemaking considers increased precipitation, as well as sea level rise predictions particular to the State.

The Best Available Science of Climate Change

On June 30, 2020, in accordance with Governor Murphy's Executive Order No. 89 (EO No. 89), the Department released New Jersey's Scientific Report on Climate Change (NJ Climate Science Report). This report synthesized the latest and most reliable scientific information on the current and predicted future impacts of climate change that are specific to New Jersey's natural and built environments. According to the report, New Jersey has already experienced impacts from the observed increase in greenhouse gas concentrations since the end of the 1890s, including a 3.5 degrees Fahrenheit (1.9 degrees Celsius) increase in the State's average temperature, a 7.9 percent increase in the State's average precipitation, more frequent and intense precipitation, and 0.16 inches per year of sea-level rise over the past century (NJDEP, 2020). The science explained in the report indicates that the primary driver of these impacts, increased average temperature, is occurring at a greater rate in New Jersey than other parts of the world. "New Jersey has experienced a [3.5 degrees Fahrenheit (1.9 degrees Celsius)] increase in the State's average temperature (Office of the New Jersey State Climatologist, 2020), which is faster than the rest of the Northeast region (2 degrees Fahrenheit [1.1 degrees Celsius]) (Melillo et al., 2014) and the world (1.5 degrees Fahrenheit [0.8 degrees Celsius]) (IPCC 2014)". The following discussion focuses on the best available science related to sea level rise and changes in precipitation in New Jersey.

Sea Level Rise in New Jersey

As discussed in the NJ Climate Science Report, sea level rise is occurring throughout the world, and is an indicator of Earth's increasing temperature (NJDEP, 2020). The primary factors contributing to global sea level rise are thermal expansion and melting terrestrial glaciers and polar ice sheets (NJDEP,

2020). Additional factors that influence sea level rise, which can be accounted for at the regional and local levels, include changes in ocean circulation, vertical land movement (for example, land subsidence), isostatic rebound (for example, adjustment of land surface once covered by ice sheets), and local coastal morphology (NJDEP, 2020). These additional factors can play a significant role in the rate of regional and local sea level rise. New Jersey-specific observations and expected estimates of the extent of sea level rise are available from the New Jersey Climate Change Alliance Science and Technical Advisory Panel report prepared by Rutgers University and is discussed below (Kopp et al., 2019).

In 2016, Rutgers University convened a New Jersey Science and Technical Advisory Panel (STAP) on sea level rise and changing coastal storms. This effort synthesized the most recent climate science needed to inform efforts to increase the resilience of New Jersey's people, places, and assets to regional sea level rise and changing coastal storms and resulting flood risk. In 2016, STAP produced a comprehensive report after these deliberations, entitled "Assessing New Jersey's Exposure to Sea-Level Rise and Coastal Storms: Report of the New Jersey Climate Adaptation Alliance Science and Technical Advisory Panel." https://doi.org/10.7282/T3ZP48CF.

In 2019, in response to the Department's request, STAP reconvened and produced an updated report entitled "New Jersey's Rising Seas and Changing Coastal Storms: Report of the 2019 Science and Technical Advisory Panel" (STAP report), (www.nj.gov/dep/climatechange/pdf/nj-rising-seas-changing-coastal-storms-stap-report.pdf). According to the report, sea level in New Jersey could rise from 2000 levels by up to 1.1 feet by 2030, 2.1 feet by 2050, and 6.3 feet by 2100 (Kopp et al., 2019). A range of predictions was provided based on percentage of certainty of occurrence. The lower end of the likely range, the less likely outcome, which represents expected sea level rise in New Jersey without global sea level rise acceleration considerations, still results in expected sea level rise of 0.5 feet above the 2000 baseline by 2030 (Kopp et al., 2019). This lower end of the likely range projection could underestimate the rate of sea level rise by 2030, given that a 2019 report by the Intergovernmental Panel on Climate Change (IPCC)

found that global mean sea level (GMSL) is indeed rising, "with acceleration in recent decades due to increasing rates of ice loss from the Greenland and Antarctic ice sheets (very high confidence), as well as continued glacier mass loss and ocean thermal expansion." (IPCC, 2019).

The 2019 STAP report also found that New Jersey has already been disproportionally affected by climate change and sea level rise, at a rate that is more than two times the global average due to regional factors such as land subsidence (Kopp et al., 2019). In New Jersey, from 1979 through 2019, sea level rose along the coast at a rate of 0.2 inches per year, compared to the global average of 0.1 inches per year over the same time period (Kopp et al., 2019). Sea levels at Atlantic City, Cape May, and Sandy Hook have risen at a rate of approximately 0.16 inches per year (four millimeters per year) since the beginning of the 20th century (Kopp 2013, NOAA 2019). By 2050, there is a 50 percent chance that sea-level rise will meet or exceed 1.4 feet and a 17 percent chance it will exceed 2.1 feet (Kopp et al., 2019). Under a moderate emission scenario, described below, those levels increase to 3.3 and 5.1 feet by the end of the century (Kopp et al., 2019).

These impacts pose a threat to New Jersey's natural resources, communities, infrastructure, and economy. For example, in the moderate emissions scenario, Atlantic City is likely to experience 17 to 75 high-tide flooding days per year by 2030; compared with eight days per year in 2016 and only one day per year in the 1950s (Kopp et al., 2019). By the year 2100, it is extremely likely (greater than a 95 percent chance) that Atlantic City will experience high-tide flooding (at least twice per day) at least 95 days a year, and likely (50 percent chance) it will experience high-tide flooding 355 days per year (Kopp et al., 2019). NOAA's 2021 State of High Tide Flooding and Annual Outlook Report includes similar projecting for high tide flooding in Atlantic City, projects that Atlantic City is likely to experience 20 to 35 days of high tide flooding by 2030, and 65 to 155 days of high tide flooding by 2050 (NOAA, 2021). An increase in sea level will have other exacerbating flooding consequences, such as inundation of stormwater discharge points, and increase the baseline for flooding related to coastal storms and high tides.

Annual Precipitation and Extreme Storm Events in New Jersey

As discussed in the NJ Climate Science Report, as temperatures increase, the atmosphere can hold more water vapor, which leads to a greater potential for precipitation in terms of increased occurrence, intensity, and overall rainfall totals during storm events (NJDEP, 2020). Higher temperatures can increase the energy in a storm, which increases the potential for more intense tropical storms (Huang et al., 2017), especially those of category four and five (Melillo et al., 2014). An increase in the intensity and frequency of storms and the overall rainfall total is likely to lead to increased flooding events that will significantly impact land use practices, land resources, public safety, and infrastructure.

The NJ Climate Science Report includes literature that supports the assertion that precipitation and extreme storm events have been increasing in New Jersey due to climate change and will continue to increase. In the New England and Mid-Atlantic regions of the Northeastern United States, a significant increase of over 130 percent has occurred in the frequency of extreme rainfall events, which exceed the 10-year, 24-hour storm, between 1950 and 2017 (Wright et al., 2019). In New Jersey, extreme storms typically include coastal nor'easters and snowstorms between September and April, and spring and summer thunderstorms, tropical storms and, on rare occasions, hurricanes in the warmer months between April and October. Over the last 50 years, storms that resulted in extreme rain increased by 71 percent in New Jersey, which is a faster rate of increase than anywhere else in the United States (Huang et al., 2017).

Accompanying this increase in extreme rain events is an increase in flood events. In New Jersey, major flood events were observed in 2000, 2004, 2005, 2006, 2007, 2010, 2011, 2012, 2016 (NJDEP, 2020), and most recently in 2021, associated with the remnants of Tropical Storm Ida. According to the 2019 State Hazard Mitigation Plan, NOAA's National Climatic Data Center (NCDC) database reported that New Jersey experienced 1,582 flood events in a 63-year period beginning in 1950 and ending in 2012 (NJ Office of Emergency Management, 2019). The next five-year period, beginning January 1, 2013, and ending

December 31, 2017, saw an additional 643 flood events that occurred in New Jersey (NJ Office of Emergency Management, 2019).

New Jersey has also seen an increase in overall average precipitation. A "wet year" is defined as an annual precipitation of 10 inches or more above the current long-term average from 1895 to the current year. Wet years are historically infrequent in New Jersey, but over the past two decades have become more common (Broccoli et al., 2020). For example, wet years occurred in 20 percent of the years between 1895 and 1999, but in the last 20 years, the percentage of wet years has increased to 30 percent (Office of the New Jersey State Climatologist, 2020). In the past 10 years, annual precipitation totals show a 7.9 percent increase over the long-term average (Runkle et al., 2017). Annual precipitation in New Jersey could increase by 2.3 to 3.5 inches above the 1980-2010 average (46.7 inches) by the 2080s based on medium and high emissions scenarios, respectively (Horton et al., 2015). Such increases reflect a 4.9 percent and 7.5 percent increase in annual precipitation by the end of the century (Horton et al., 2015).

Building upon the existing literature around precipitation and extreme storm events discussed in the NJ Climate Science Report, on November 18, 2021, the Department released two reports prepared by the Northeast Regional Climate Center, a National Oceanic and Atmospheric Administration partner – entitled, "Changes in Hourly and Daily Extreme Rainfall Amounts in NJ since the Publication of NOAA Atlas 14 Volume," available at https://dspace.njstatelib.org/handle/10929/97364, and "Projected Changes in Extreme Rainfall in New Jersey based on an Ensemble of Downscaled Climate Model Projections," available at https://dspace.njstatelib.org/handle/10929/93913. These studies, which were published after the release of the NJ Climate Science Report, indicate that precipitation in New Jersey has been significantly increasing since the mid- to late-20th century and will continue to increase through the end of the 21st century.

The report entitled "Changes in Hourly and Daily Extreme Rainfall Amounts in NJ since the Publication of NOAA Atlas 14 Volume" utilizes historical rainfall data between 1950 and 2019 collected

by 55 weather stations located within the area extending from latitude 41.7 degrees North to 37.5 degrees North and longitude 76.0 degrees West to 72.5 degrees West, which approximately includes New Jersey, Delaware, a part of Maryland along Chesapeake Bay, a part of Pennsylvania adjacent to the western boundary of New Jersey, a portion of southern New York, and the southwest portion of Connecticut. This report found, over the approximately 20-year study period ending in 2019, increases in extreme precipitation were seen at over 75 percent of the weather stations in New Jersey, with more than half of the stations in the study area showing increases in extreme precipitation of 2.5 percent above 2006 levels (NJDEP, 2021). The results of this study were used to inform current precipitation amounts in the Inland Flood Protection rulemaking for N.J.A.C. 7:8, Stormwater Management, and 7:13, Flood Hazard Area Control Act Rules, which were adopted on July 17, 2023.

The latter study, "Projected Changes in Extreme Rainfall in New Jersey based on an Ensemble of Downscaled Climate Model Projections," utilized the same historical rainfall data mentioned above, and projected 24-hour rainfall depths of two-, 10-, and 100-year storms in New Jersey into the future for two time periods: 2020 to 2069, and 2050 to 2099. These projections were performed under a moderate greenhouse gas emissions scenario (RCP4.5), and a high greenhouse gas emissions scenario (RCP8.5). Under a moderate emissions scenario, this report projected precipitation associated with the 100-year, 24-hour storm will increase, on average, by 20 to 25 percent in northern New Jersey counties, and that there is a 17 percent chance that precipitation under the same storm recurrence interval will increase by as much as 45 to 50 percent for some counties by 2050-2099, under a moderate emissions scenario (NJDEP, 2021). These New Jersey-specific reports are the most recent and best available studies, which are part of a growing body of research that highlight the increasing commonness of these economically, environmentally, and socially damaging storm events (NJDEP, 2021).

The increased precipitation depth, intensity, and duration of storms will impact the runoff generated from development, the extent of floodplains, and the conveyance capacity of storm sewer systems

(Berggren et al., 2012; Blair et al., 2014; Semadeni-Davies, 2008). As precipitation depth, intensity, and duration increase, fluvial flood elevations will also increase. The rule standards at N.J.A.C. 7:8 and 7:13, adopted on July 17, 2023, addressed these climate change concerns in fluvial areas, and in the design of stormwater basins. Properties in areas subject to the FHACA rules, N.J.A.C. 7:13, will likely be subject to more frequent and severe flooding; while properties currently located in proximity to mapped flood hazard areas will find themselves subject to flooding. In addition, Stormwater Best Management Practices (BMPs), such as basins, that were designed based on historical rainfall patterns, will become increasingly unable to manage the storm events they were initially designed to manage, thereby increasing the risk of flooding to the surrounding community.

Near term impacts of climate change in New Jersey cannot be avoided, but the Department is utilizing best available science to respond to current, and reduce future, impacts. These forward-looking amendments will be the first step in an ongoing commitment to implement regulatory and policy changes to protect our citizens, our environment, and our economy.

Addressing Future Climate Change Threats – Resilient Environments and Landscapes

On January 27, 2020, Governor Murphy issued Executive Order No. 100 (2020) (EO No. 100). This order directed the Department to develop rules consistent with applicable law to address climate change, with those regulatory changes to be known as New Jersey's Protecting Against Climate Threats (NJPACT) rules. On the same day, then-Department Commissioner Catherine McCabe issued Administrative Order No. 2020-01 (AO No. 2020-01) further directing the Department to develop this rulemaking. EO No. 100 and AO No. 2020-01 directed the Department to integrate climate change considerations, such as sea level rise and chronic flooding, into regulatory requirements in this rulemaking. These proposed regulatory changes, which address sea level rise and other aspects of climate change, are part of an effort entitled Resilient Environments and Landscapes (REAL) to address current and future flood storage, flooding, stormwater management, and inundation concerns.

A 2021 report by First Street Foundation found that an additional 10,870 New Jersey properties are expected to experience financial loss from flood damage over the next 30 years; average expected annual loss per property is expected to increase by 53 percent over that same time period (First Street Foundation, 2021). In response to Governor Murphy's NJPACT announcement, Moody's Investors Service determined that "New Jersey's adoption of stronger building codes, especially along the state's 130-mile coastline, is 'credit positive'" and indicated that "New Jersey's economic vulnerability to increased flooding is substantive" and "total storm damage in New Jersey since 1980 is equivalent to 5.7 percent of the State's gross domestic product, compared with 3.1 percent for the United States for the same time period." (Moody's Investors Services, 2020). Given this significant financial exposure and the reality that investment in resilience leads to savings in recovery and an increasing awareness of and desire to avoid unmitigated climate risks among investors, actions to empower smarter development, protect residents from the looming threat of sea level rise, improve air quality Statewide, and incentivize cleaner technologies are necessary for the economic and environmental resilience of the State.

To enable the State's residents and businesses to adapt appropriately and safely to these changes in the environment, the Department proposes this rulemaking based on the latest and best available scientific data in order to ensure the Department's rules continue to protect the public health, safety, and welfare of the State's residents and the environment, not just at the time activities subject to the Department's rules are constructed, but for the foreseeable life of the structures and improvements authorized. Past development patterns in flood-prone areas, as well as recent analyses from scientific and economic experts, support the idea that this rulemaking will foster responsible development in flood-prone areas.

According to Moody's Investors Service, "robust regulations at the state level provide a framework for local governments to follow when addressing and managing the risks posed to public health, safety, and welfare by climate change." (Moody's Investors Service, 2020). Additionally, a 2020 national report by First Street Foundation estimated at the national level, the number of properties exposed to substantial flood

risk is 1.7 times the number of properties that are currently within the Federal Emergency Management Agency's (FEMA) Special Flood Hazard Area (SFHA) designation (First Street Foundation, 2020). These findings display that past methodologies, and current standards for assessing and managing flood risk, may not capture all areas at risk of flooding and/or may not accurately reflect the severity of flood risk in known flood-prone areas in the wake of a changing climate. This is consistent with the FEMA Risk Rating 2.0 - Equity in Action, which updated the National Flood Insurance Program's (NFIP's) risk-rating methodology beginning October 1, 2021, in order to "enable FEMA to deliver rates that are actuarily sound, equitable, easier to understand and better reflect a property's flood risk." (FEMA, 2021).

This proposed rulemaking will help those making decisions regarding investments in at-risk areas have the necessary information to adequately factor that risk into decisions on where they may want their family to reside, where development should occur, and the types of development that are most appropriate in a particular area.

Balancing the level of risk of today, with the anticipated risk of the future, is central to the development of the proposed standards set forth in this rulemaking. This rulemaking reflects the most current science and considers future conditions to supplement past observations of flood events and stormwater management. Relying solely on past flooding events fails to address the influence of climate change on current and expected flooding impacts in the future. These proposed standards will ensure safe, sustainable, resilient development and redevelopment in New Jersey, while also facilitating the creation and restoration of natural systems to assist in the mitigation of climate threats. Separate from these proposed standards, but in tandem with the efforts to educate regarding the impacts of climate change in these regulatory areas, the Department has created tools to help homeowners, developers, and public entities make informed decisions about their property investments.

On July 17, 2023, the Department adopted an Inland Flood Protection rule that included new rules, amendments, and repeals to the Flood Hazard Area Rules, N.J.A.C. 7:13, and Stormwater Management

rules, N.J.A.C. 7:8, in order to address precipitation-driven flooding such as was seen during the remnants of Tropical Storm Ida, which caused devastating fluvial flooding, driven by record-breaking rainfall in much of the central and northern regions of the State. While the Inland Flood Protection Rules focused on fluvial flooding and stormwater management, the rules did not address the impacts of sea level rise. Thus, a primary focus of this rulemaking is to address the impacts to people and property caused by sea level rise and tidal flooding. Additionally, there are several proposed changes in this rulemaking that will address the impacts of climate change Statewide, such as onsite retention of stormwater, improved water quality treatment for stormwater runoff, freshwater wetland and riparian zone mitigation standards, and the tracking of activities in the flood hazard area through changes to permit types.

Stakeholder Process

In response to the overwhelming science indicating changes to New Jersey's environment, which will impact the public health, safety, and welfare of all citizens, the Department conducted numerous stakeholder meetings and educational sessions over the past few years while developing this rulemaking. Meeting materials are available on the Department's website at www.nj.gov/dep/njpact/. Numerous virtual stakeholder meetings and information sessions were held to share the Department's vision for implementing AO No. 2020-01 and to solicit comments, suggestions, and ideas to successfully balance responsible development with an enhanced protection of public health, safety, and welfare, as well as land and water resources, considering a changing climate.

An intragovernmental agency stakeholder meeting was held on February 18, 2020. Attendees included representatives from various State and Federal agencies and departments, including FEMA, NJTransit, New Jersey Department of Transportation, the Economic Development Authority, Department of Community Affairs, Department of Agriculture, Highlands Council, and Pinelands Council. An open public stakeholder meeting was held on March 2, 2020. Due to overwhelming interest, the day was split into two sessions to accommodate all interested participants. Members of the public, as well as members

of environmental and business communities, were present and provided suggestions on rule changes. In addition to the interagency and open public stakeholder meetings above, the Department also conducted external stakeholder meetings with Federal, State, and local government representatives, the regulated community, and environmental groups. These included:

- March 17, 2020: Meeting with FEMA, New Jersey Department of Community Affairs, and the New Jersey Office of Emergency Management;
- March 18, 2020: Meeting with industry engineers to discuss potential changes to the flood hazard area;
- March 25 and May 6, 2020: Meeting with Federal and State agencies, estuary programs, and practitioners to discuss changes to the Land Resource Protection rules related to nature-based solutions;
- March 30, 2020: Meeting with Federal and State agencies, and the regulated community regarding incorporation of resilience into development/redevelopment;
- April 29, 2020: Webinar for municipal officials to introduce them to NJPACT and solicit feedback;
- April 30 and May 21, 2020: Meetings with the New Jersey Department of Agriculture and the United States Department of Agriculture (USDA), Natural Resource Conservation Service (NRCS) regarding potential changes to Land Resource Protection rules regarding agricultural practices;
- May 5, 2020: Meeting with Baltimore, Maryland floodplain managers;
- May 13, 2020: Meeting with Maryland State floodplain managers;
- July 7, July 21, and August 7, 2020: Meetings with FEMA to discuss NFIP compliance;
- July 30, 2020: Meeting with external stakeholders to provide an update and receive feedback from stakeholders on previously discussed topics;

- September 17, 2020: Meeting with wind and solar industry to discuss options for incentivizing renewable energy;
- September 18, 2020: Meeting with public transportation entities to discuss challenges specific to transportation agencies;
- September 23, 2020: Meeting with PSEG, Atlantic City Electric, JCP&L, and other utility entities to discuss challenges specific to public utilities;
- September 23, 2020: Meeting with industry representatives, environmental advocates, and concerned residents to discuss regulatory issues related to offshore wind;
- September 29, 2020: Meeting to hear from industry professionals;
- October 1, 2020: Meeting to hear from municipal officials;
- December 21 and 22, 2020, and January 15, 2021: Meetings to discuss the Department's proposed (REAL) framework;
- January 25, 2021: Meeting with Cape May Chamber of Commerce;
- March 12, 2021: Meeting with county engineers;
- March 23, 2021: Meeting with New Jersey Corporate Wetlands Restoration Partnership;
- March 26, 2021: Meeting with the New Jersey Association for Floodplain Management;
- April 19, 2021: Meeting with the New Jersey Economic Development Authority;
- April 29, 2021: Meeting with the Federal Environmental Protection Agency;
- June 9, 2021: Engagement at the Delaware Bayshore Community Stakeholder Meeting;
- June 17, 2021: Engagement with the Environmental Law Forum;
- June 24, 2021: Meeting with the Federal Environmental Protection Agency;
- October 28, 2021: Meeting with the New Jersey Association for Floodplain Management;
- November 11, 2021: Engagement at the Watershed Conference;
- May 10, 2022: Meeting with the Southern New Jersey Chamber of Commerce;

- May 19, 2022: Meeting with the Society of Women Environmental Professionals & Brownfield Coalition of the Northeast;
- May 23, 2022: "REAL Regulatory Updates"; engagement with various environmental and environmental justice organizations;
- May 24, 2022: "REAL Regulatory Updates"; engagement with governmental entities-mayors, municipal, and county associations;
- May 25, 2022: "REAL Regulatory Updates"; engagement with business entities;
- June 8, 2022: Meeting with the American Council of Engineering Companies of New Jersey;
- December 15 and 19, 2022: virtual overview of proposed standards; and
- Various requested meetings through April 2024 to discuss the purpose and impact of the draft rulemaking.

The proposed amendments to the Stormwater Management chapter, N.J.A.C. 7:8, were discussed with stakeholder groups for many years. Prior to the Department's 2019 rulemaking of amendments at N.J.A.C. 7:8 on March 2, 2020, of rules requiring the use of green infrastructure for compliance with design and performance standards for groundwater recharge, and runoff quality and quantity, the Department received many comments during the stakeholder process and comment period on other areas of the Stormwater Management rules. As noted in that rulemaking (see 50 N.J.R. 2375(a); 52 N.J.R. 402(a)), the Department continued to engage stakeholders to discuss and address the comments that were beyond the scope of that rulemaking. Further, in the response to comments on the amendments adopted on March 2, 2020 and operative on March 2, 2021, the Department acknowledged the challenges of implementing small-scale green infrastructure in public transportation projects, including the limited rights-of-way and immediately adjacent land available for the incorporation of multiple green infrastructure BMPs, the higher administrative costs to acquire multiple pieces of land for multiple small-scale green infrastructure BMPs, increased safety concerns for motorists and maintenance crews for the maintenance of multiple small-scale

green infrastructure BMPs along a public roadway, and the need to spend public funds to prepare an analysis for a waiver when it is clearly infeasible to achieve strict compliance with green infrastructure requirements. In the response document, the Department stated it intended to propose another rulemaking to address the above-mentioned challenges to public transportation projects after the rules were adopted on March 2, 2020.

Subsequent to the adoption of the green infrastructure amendments, the Department convened a stakeholder meeting on May 27, 2020, to discuss potential amendments to the rules that could address the unique issues applicable to public roadway or railroad projects while continuing to achieve improvements in water quality consistent with the goals of the green infrastructure requirements. Invitations to the stakeholder meeting were extended to the New Jersey Department of Transportation (NJDOT), New Jersey Turnpike Authority, South Jersey Transportation Authority, Department of Community Affairs, the Department of Agriculture, environmental groups, developers, academia, municipalities, counties, regional agencies, and consultants. During this meeting, the Department received input regarding the types of projects that should qualify for flexibility in satisfying the rules' requirements, as well as how flexibility should be provided. Overall, the Department received supportive comments for the proposed amendments that provide flexibility in the implementation of green infrastructure requirements for public transportation projects while still requiring the implementation of green infrastructure, when feasible. Participants to the stakeholder meeting provided feedback and input on provisions, including the exclusion of Green Acres encumbered lands from consideration when evaluating lands available for green infrastructure BMPs, and the type of documentation needed at each step in the process to demonstrate compliance with the design and performance standards. Feedback and input received during the prior public comment period and the stakeholder meeting were considered in drafting this rulemaking.

Principles of this Rulemaking

Throughout the development of this rulemaking, the Department has committed to these principles:

1. Increased protection against future flood inundation and damage;
2. Protecting critical facilities and infrastructure from the effects of climate change;
3. Increased protection of land and water resources;
4. Planning for climate change;
5. Facilitating nature-based solutions;
6. Encouraging renewable energy;
7. Improved stormwater management; and
8. Administrative process improvements.

Each of the eight principles and relevant proposed amendments are summarized below.

Increased Protection Against Future Flood Inundation and Damage

The significant adverse socioeconomic impacts of flooding on public health, safety, welfare, and the environment are extensively documented, and further are exacerbated by the effects of climate change. Development can obstruct and displace floodwaters within flood prone areas, contributing to an increase in the frequency, intensity, duration, and extent of flooding. This increased risk subjects State residents to severe and repetitive flood damage, and results in the displacement of residents, loss or damage of critical infrastructure, interruption of essential public and private services, and prolonged economic disruption or loss. In order to avoid, minimize, and ameliorate these adverse impacts, several of the proposed changes will increase protection against future flood inundation:

- Creating an "Inundation Risk Zone" (IRZ) regulated area within tidal flood hazard areas. Standards for proposed new or improved residential buildings, critical buildings, and critical infrastructure within the IRZ are proposed to account for the increased flood risk that people and property are exposed to due to expected sea level rise and more intense storm events.
- Redefining the extent of tidal flood hazard areas and replacing the existing "flood hazard area design flood elevation" with the proposed "climate-adjusted flood elevation." The proposed

climate-adjusted flood elevation is calculated by adding five feet to FEMA's 100-year flood elevation in tidal flood hazard areas.

- Aligning the State's floodplain management efforts with the NFIP's minimum standards to ensure the permit standards or authorizations issued pursuant to the FHACA Rules or CZM Rules are no less protective than the NFIP minimum standards, as established in each community's rule or floodplain ordinance in which the site is located.

Protecting Critical Facilities and Infrastructure from the Effects of Climate Change

Essential to a community's resilience after a flood and/or storm event is the continuation of government services, resumption of public utilities, and unimpeded access to medical care. As flood elevations continue to rise due to climate change, New Jersey's residents will increasingly rely on first responders and the existing network of roads and utilities that cross the State, which were largely constructed without incorporating designs that address future flood conditions. The projected increases in flood risk and flood damage potential are, therefore, likely to disproportionately impact facilities that are critical to a community's resilience. In order to ameliorate these impacts, this rulemaking proposes more stringent design and construction standards for critical facilities and infrastructure, which are commensurate with the level of anticipated risk.

Increased Protection of Land and Water Resources

New Jersey's land and water resources are being degraded because of climate change. Sea level rise is inundating tidal marshes along the coast, eliminating habitats for countless species of wildlife and plants that rely upon these unique transitional areas between the shoreline and open water. Extreme precipitation events are contributing to flash flooding that is eroding streams and carrying pollutants into our waterways, degrading sources of drinking water and recreational opportunities. More intense coastal storms are eroding the State's beaches and dunes, putting coastal communities at increased risk for future

storm events, and placing an economic burden upon government entities to continually replenish and restore these areas' invaluable assets to the State's environment and economy. The amendments listed below are included under this protection theme because they are part of the broader goal, which is addressing the impacts of climate change to the environment, particularly New Jersey's land and water resources.

N.J.A.C. 7:7 Coastal Zone Management Rules:

- Clarification that the presence of engineered dunes created for the purpose of shore protection does not diminish the importance of any other dune areas.
- Amendments to the traffic rule to ensure that permitted development meets or exceeds Traffic Level D standards.
- Adding a definition for "cabana" that describes the structures and clarifies that such structures are regulated as dwelling units and setting forth the conditions under which development of cabanas is acceptable in coastal high hazard areas.
- Replacing the term "canopied shelter" with a newly defined term "sun shelter" in the definition of the existing term "seasonal temporary structures related to the tourism industry." The proposed definition for "sun shelter" clarifies that these structures are temporary and serve functions such as providing shelter from the sun while using the beach.
- Clarifying that structures subject to the Zane Exemption must exist at the time of application to qualify for the "repair, replacement, renovation or reconstruction of the preexisting structure" in the rule. A Zane Exemption is a limited exemption available pursuant to the Waterfront Development Act, N.J.S.A. 12:5-1 through 11, which allows waterfront structures (for example, docks, wharfs, piers, bulkheads, and buildings) that legally existed prior to January 1, 1981, to be rebuilt, repaired, renovated, or reconstructed, provided such actions do not increase the size of the waterfront structure and the structure is used for residential, docking, or servicing of vessels.

- Replacing the term "permit-by-rule," throughout the chapter with the new term "permit-by-registration," which requires user registration and submittal of compliance information to the Department through its online portal to provide for better tracking of regulated activities throughout the State.

N.J.A.C. 7:7A Freshwater Wetlands Protection Act Rules:

- Clarifying that applicants must justify that wetland impacts are necessary for conducting a project regardless of whether the impacts meet other criteria established in the rules.
- Requiring applicants to demonstrate compliance with the Stormwater Management rules for any project impacting wetlands or transition areas, which is associated with, or part of, a major development.
- In non-surface water connected wetlands, requiring onsite assessment when impacts are proposed in vernal habitats.
- Requiring a permit for horizontal directional drilling to protect against accidental release of contaminants.
- Requiring the removal of existing impervious surface, where practicable, within 25 feet of wetlands under a special activity transition area waiver for redevelopment of a significantly disturbed area to promote restoration and more closely align with the FHACA rules.
- Ensuring all activities in transition areas are situated at least 25 feet from freshwater wetlands.
- Requiring the entire transition area to be protected by a conservation restriction once modified through an averaging plan.

N.J.A.C. 7:13 Flood Hazard Area Control Act Rules:

- Ensuring isolated waters draining less than 50 acres are regulated in order to better protect headwater areas.
- Placing riparian zones on the non-oceanfront side of barrier island complexes.

- Applying a 150-foot riparian zone to regulated waters based upon defined criteria for endangered or threatened species that are considered "critically dependent on the regulated water for survival" and requiring riparian zone mitigation for all impacts within 150-foot riparian zones that individually or cumulatively exceed 2,000 square feet.
- Requiring riparian zone mitigation in a 50-ft riparian zone when onsite impacts cumulatively exceed 0.1 acres.
- Replacing references to "manmade" waters (such as ditches and piped streams) with the term "human created" waters. This replaces gender specific terms with more inclusive language that underscores the Department's commitment to equality and diversity.
- Deleting the exception for work that lies within 25 feet of "a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water" to better protect structures from flood damage and preserve water quality.
- Requiring an Individual Permit (IP) for bridge and culvert replacements to facilitate reduction in flooding due to undersized structures, ameliorate threatened or endangered species habitat fragmentation, and remove obstacles to low-flow aquatic passage.
- Requiring a general permit authorization for horizontal directional drilling to protect against accidental release of contaminants.

Planning for Climate Change

This rulemaking includes proposed standards, such as the climate-adjusted flood elevation, that incorporate data projections through the year 2100. These standards will protect development in New Jersey from the expected impacts of flooding and extreme storm events today, and through the end of the century. While these standards are essential, they do not fully capture the far-reaching social and economic impacts that accompany the damaging impacts of flooding and extreme storm events. To capture some of these social and economic impacts associated with flooding, such as human health risks, infrastructure

vulnerability, and public safety, the Department proposes several planning requirements within the Stormwater Management rules, N.J.A.C. 7:8, and the FHACA rules, N.J.A.C. 7:13. The following proposed amendments will encourage communities and permit applicants to consider future flood risk in their decision-making.

- Incorporating climate resilience planning in the municipal stormwater master plan at N.J.A.C. 7:8-3.4(a)7 and 4.2(c)15 and the regional stormwater management plan at N.J.A.C. 7:8-3.4(a)7. This will require an evaluation of how climate change impacts (for example, sea level rise, increased flooding frequency and extents, and increased rainfall depth and intensity) will impact stormwater management. It will aid municipalities in identifying vulnerable stormwater infrastructure and mitigation measures.
- Requiring an Inundation Risk Assessment for certain FHACA and CZM rule permit applicants to consider the human health, safety, and welfare implications of constructing a project in an area that has been identified as being subject to increased risk of daily or permanent inundation due to sea level rise at proposed N.J.A.C. 7:7-9.50(b)2 and 7:13-11.5(b)2.
- Adding standards to the CZM rules at N.J.A.C. 7:7-13, regarding the minimum criteria for determining consistency with a State Planning Commission-approved planning area boundary, center, core, or node. The Department must assess these applications considering the goals of the Coastal Area Facility Review Act (CAFRA), N.J.S.A. 13:19-1 et seq., to ensure they will not result in unacceptable harm to the coastal ecosystem or the resources of the built or natural environment. This rulemaking also proposes to delete Department-delineated non-mainland coastal centers from the CZM rules, currently codified at N.J.A.C. 7:7 Appendix H. As a result, centers, cores, and nodes that apply to be designated as a CAFRA center, core, or node, will be required to go through the formal State Planning Commission plan endorsement process in order to receive a higher impervious cover limit.

Facilitating Nature-Based Solutions

"Nature-based solutions" are projects designed to protect, restore, or enhance shorelines, wetlands, and in-water areas, utilizing natural features and processes to address erosion and flooding issues, and to restore or create ecological habitat. The proposed amendments would incentivize the permitting and implementation of nature-based solution projects by making them more accessible. A new definition for "nature-based solution" in the CZM rules that clarifies these projects have a substantial biological design component and includes examples of projects that would be considered a "nature-based solution," such as certain living shorelines, marsh restoration and enhancement, and shallow submerged habitat creation projects.

- Amending the definition of the term "living shoreline." The proposed definition redefines two categories of living shoreline, "non-structural" and "hybrid," and clarifies that a living shoreline project must include a "living" component and cannot be purely structural in nature.
- Adding dredged material, loose shell, or shell bags as allowable substrate for living shoreline construction.
- Allowing greater flexibility in the footprint of restored shorelines that allow permit applicants to make modifications to the "shape" of the shoreline, as long as the project's scope does not exceed the footprint of the historical shoreline shown on the applicable Tidelands Mapping.
- Expanding the general permit for habitat creation and living shoreline projects to include broader, non-structural, and hybrid nature-based solution projects that includes living shorelines and removing the sponsorship requirement.
- Creating a new general permit for nature-based solution research projects that authorizes the restoration, creation, or enhancement of wetlands using techniques that will advance knowledge regarding habitat creation, restoration, or enhancement, and/or nature-based solution activities for the benefit of the environment and New Jersey residents.

- Clarifying the Coastal Engineering rule, N.J.A.C. 7:7-15.11, that any shore-protection structure, not just structural shore protection and/or storm damage reduction measures that are using Federal or State funding, must be undertaken with an understanding, on an individual site and regional basis, of the consequences to natural shoreline sand systems.

Encouraging Renewable Energy

While the Department recognizes the great importance of facilitating renewable energy sources, it also recognizes that siting such facilities should, and can, be done in a way that also protects other important natural resources. The Department's stakeholder process identified ways to incentivize renewable energy while protecting land and water resources, such as striking a balance between maintaining habitats while encouraging renewable energy, such as offshore wind. Relevant proposed amendments that encourage responsible siting and installation of renewable energy are:

- Adding standards at N.J.A.C. 7:7-12.21, the submerged cable rule, to allow the installation of electrical cables associated with offshore wind development, including appropriate cable burial depth requirements, and mitigation standards to afford protections to shellfish and marine fish habitat and responsible commercial harvesting of fisheries resources within these areas.
- Adding a requirement at proposed N.J.A.C. 7:7-5.10 that the existing general permit by certification, for the construction of one to three wind turbines less than 200 feet in height having a cumulative rotor swept area no greater than 2,000 square feet, be submitted by a New Jersey licensed professional engineer or registered architect.
- Expanding the exceptions to the development prohibition in shellfish habitat to allow the installation of submerged cables to accommodate reasonable development of offshore wind facilities and associated infrastructure.

- Amending the FHACA rules to discourage the installation of solar panels in open waters or forested areas and to incentivize their placement in areas that have minimal environmental impact.

Improved Stormwater Management

Enhanced and more consistent stormwater management will mitigate the increase in stormwater runoff and flooding resulting from increased precipitation and intensity. By decreasing stormwater volume and improving pollutant removal in stormwater, the proposed amendments will have additional benefits, such as reducing combined sewer overflow incidents and improving water quality throughout the State.

- To assist with climate resilience planning in local communities, proposed N.J.A.C. 7:8-4.2(c) would require climate resilience planning in the municipal stormwater management plan and the regional stormwater management plan at proposed N.J.A.C. 7:8-3.4(a)7. A municipality or regional planning agency would be required to evaluate climate change impacts on stormwater management, including, but not limited to: sea level rise, increased flooding frequency and extent, and increased rainfall and intensity. The municipality would identify areas and stormwater management infrastructure vulnerable to flooding and/or sea level rise, as well as measures, such as "green infrastructure," that can be utilized to mitigate the impacts.
- Amending the definition of "major development" to ensure consistency between the developments subject to the State's review pursuant to this rulemaking, and the developments subject to local review under municipal stormwater control ordinance(s). This would eliminate a gap in the level of protection for water quality and flood prevention between State and municipal project reviews.
- Provide a definition of "public roadway or railroad limits" to clarify the categories of projects that will be afforded flexibility under the waiver for public transportation entities at N.J.A.C. 7:8-5.2(e) and proposed amended N.J.A.C. 7:8-5.3 when applying the requirements of green infrastructure Best Management Practices.

- Provide a definition of “reconstruction” to clarify the modifications to an existing structure that will constitute a major development.
- Provide a definition of “retention” to address the activities that retain stormwater runoff for volumetric reduction standards set forth in the stormwater runoff quantity standards.
- Provide public transportation entities with the flexibility to manage stormwater runoff by using green infrastructure Best Management Practices but also provide a comprehensive, hierarchical approach to ensure the implementation of green infrastructure BMPs to the maximum extent, considering the hydrologic and hydraulic conditions of lands within and immediately adjacent to the project limits, and in the upstream drainage area.
- Require reduction of runoff volumes from major developments to ensure a significant portion of stormwater volume, particularly in more frequent, smaller storm events, will not be discharged offsite, thereby helping to reduce local and regional flooding.
- Provide an alternative for a major development to meet the volumetric reduction standards through the removal of existing impervious surfaces to reduce the generation of runoff or retaining stormwater runoff offsite within the same HUC-14 when the volumetric reduction of runoff onsite is demonstrated to be technically impracticable.
- Clarify that the volumetric reduction standards are not applicable to projects that are undertaken by a public transportation entity in cases where the project meets the definition of major development solely because the project results in increased capacity of an existing stormwater conveyance system.
- Provide clarification as to when the hydrologic and hydraulic analysis required at N.J.A.C. 7:8-5.6(b)2 shall include an analysis of downstream flooding impacts when the change in timing of stormwater runoff will not be needed if the change in time is solely a result of the proposed

installation of BMPs to meet the stormwater quality standards or the volumetric reduction standards.

- Add flexibility for the Department to grant a variance from meeting certain design and performance standards onsite in cases where the municipal separate storm sewers systems (MS4) permittee that has review obligations over the project has determined, under a mitigation plan that meets the Department's requirements, that these standards can instead be provided offsite.
- To ensure dams are maintained, provide a new exemption to allow the maintenance of an existing dam to be exempt from groundwater recharge, stormwater runoff quality, and stormwater runoff quantity requirements.
- To facilitate the use of small-scale green infrastructure BMPs, eliminate the minimum size requirement for the orifice diameter from the intake to the outlet of a stormwater management basin, as long as the design of the flow control device in the outlet is proven to prevent clogging and remain functional.
- Require Total Suspended Solid (TSS) removal for the stormwater runoff from both new (already required) and redeveloped motor vehicle surfaces, with flexibility provided to public transportation entities where doing so would be technically impracticable. This protects water quality and is of particular importance given the State's commitment to environmental justice. Many of the State's overburdened communities have developed, along with motor vehicle surfaces, and have experienced degraded water quality from unmanaged runoff because of these motor vehicle surfaces.
- Clarifying the applicability of the 95 percent TSS removal rate requirement to ensure it is applied to runoff discharged into an existing or proposed stormwater conveyance system that ultimately discharges within a 300-foot riparian zone located within the same HUC-14 as the major development.

- Incorporation of additional measures from the New Jersey Pollutant Discharge Elimination System (NJPDES) rules into Water Quality Design and Performance Standards at N.J.A.C. 7:8-5.5(j). For example, municipalities located in a watershed that have established, approved, or adopted Total Maximum Daily Load (TMDL(s)), require that major developments incorporate additional measures to address the established, approved, or adopted TMDL(s). The TMDL represents the assimilative or carrying capacity of a waterbody, taking into consideration point, and nonpoint, sources of the pollutants of concern, natural background levels of pollutants, and surface water withdrawals. A TMDL quantifies the amount of a pollutant a waterbody can accommodate without violating water quality standards. Additionally, it allocates that loading capacity to known point sources in the form of Waste Load Allocations (WLAs) and to nonpoint sources in the form of Load Allocations (LAs) and includes a margin of safety and optional consideration for reserve capacity.
- Replacing the term "Board of Chosen Freeholders" within the definition of County Review Agency at N.J.A.C. 7:8-1.2 with the term "Board of County Commissioners," pursuant to P.L. 2020, c. 67. This law changed the name of the Board of Chosen Freeholders to the Board of County Commissioners and this amendment is proposed for consistency.
- Incorporation of an exemption for major development public roadway or railroad projects so they are not subject to the proposed rule amendment when this type of major development has achieved a preferred alternative or equivalent milestone and has no substantial changes.
- Incorporation of an exemption for public safety improvements to an existing public roadway and railroad.
- Expanding the exemption for a linear development to additionally include electricity and data transmission cables and clarifying the applicability of this exemption to the construction, reconstruction, or repair of such developments.

Administrative Process Improvements

To better align the Land Resource Protection rules and to provide increased protection of public health, safety, and welfare, and the environment, the Department proposes amending certain permits to allow for better activity tracking. Specifically, pursuant to the FHACA and CZM rules, the Department is proposing to repeal the existing promulgated permits-by-rule and replace them as one of the following: (1) limited categorical exemptions; (2) general permits-by-registration; (3) permits-by-certification; or (4) general permits. Further, in certain cases, pursuant to this rulemaking, an individual permit would be required for activities that are currently promulgated under a permit-by-rule. Specifically, this rulemaking:

- Creates a new type of authorization, "permit-by-registration," under which applicants would be required to log onto NJDEP's free, online permitting portal. Basic information, such as the location, type of activity being taken, and appropriate contact information would be required. Registration of these activities would enable the Department to track cumulative impacts on a watershed-wide basis, and objectively analyze permit use to allow for adjusted standards to address the 303(d) impaired waters and TMDLs and/or to reflect the State's future planning goals. This will also fulfill the State's requirement as part of its participation in the National Flood Insurance Program to record and track approvals for activities within FEMA's "special flood hazard area." Additionally, certain categorical exemptions are proposed for minor repair and property maintenance activities, as well as limited construction activities where there is no potential for adverse impacts to flooding or the environment.
- Consolidates several rarely used general permits-by-certification into new or amended general permits so the range of authorized activities is broadened.
- Requires a New Jersey licensed professional engineer or architect, as appropriate, to apply, and certify, each item in an FHACA rule general permit-by-certification due to the technical nature of

the activities authorized. General permits-by-certification pursuant to the CZM rules would require compliance with the flood hazard area rule at N.J.A.C. 7:7-9.25, when applicable.

- Enhances post-approval notice requirements, which will enable the Department to track the status of issued approvals and ensure conditions placed on the permit or authorization have been met. Specifically, this rulemaking would require permittees to log on to the Division of Land Resource Protection's webpage and register the following milestones:
    - Start of construction.
    - Filing of required deed notices or conservation restrictions, including a request to upload the appropriate documentation.
    - Completion of construction, including a request to upload any applicable State, Federal, or local permit documents, photographs, or as-built drawings, where available.
- Amends the program's name from the "Division of Land Use Regulation" to the "Division of Land Resource Protection" to reflect its reorganization and name change.

Amended Timing Restrictions

In addition to the above, the Department is proposing to update timing restrictions for fishery resources based on the best available science and recommendations from the Department's Division of Fish and Wildlife, at N.J.A.C. 7:7-6.23, 7:7A-5.7, and 7:13-11.5 (to be recodified as N.J.A.C. 7:13-11.6).

Table 5.7 of the Freshwater Wetlands Protection Act rules, N.J.A.C. 7:7A-5.7, Table 11.5 of the Flood Hazard Area Control Area rules, N.J.A.C. 7:13-11.5, and the Coastal Zone Management rules' General Permit 23 for geotechnical survey borings, N.J.A.C. 7:7-6.23, set forth time periods during which activities that may introduce sediment into a stream or cause the stream to become turbid are prohibited to protect fishery resources. The timing restrictions within Tables 5.7 and 11.5 are the same. These timing restrictions and the proposed changes described in this rulemaking, are established by the Department's

Fish and Wildlife biologists based on the best available science and the biologists' experience in managing the fishery resource.

These timing restrictions that apply to trout production waters set forth at Tables 5.7 and 11.5 are proposed to be amended. The proposed changes clarify the timing restriction for trout production waters where Brook and/or Brown Trout are present is from September 15 through March 15; the timing restriction for trout production waters where only Rainbow Trout are present is from February 1 through April 30; and the timing restriction for trout production waters where Brook and/or Brown in addition to Rainbow Trout are present is from September 15 through April 30.

For non-trout waters, the Department is proposing to amend Tables 5.7 and 11.5 to replace the term "general game fish" with "warm water species" as this term more accurately reflects the species to be protected. In addition, for regulated waters that support warm water species located south of Interstate 195, the timing restriction is proposed to be changed from May 1 through June 30 to April 1 through June 30. This change reflects that warm water species spawn prior to May 1. Amendments to the timing restrictions for regulated waters that support pickerel are also proposed. For regulated waters located north of Interstate 195 that support pickerel, the timing restriction is proposed to be changed from the period from "ice out through April 30" to "March 15 or ice out, (whichever is earlier) through April 30." "Ice out" means the disappearance of ice from the surface of a waterbody, such as a lake, due to thawing. As the climate changes and temperatures rise, waters in northern New Jersey do not always freeze during the winter months. Therefore, the timing restriction is proposed to be modified to address situations where the waters do not freeze. When ice fails to cover a regulated water in a given year, ice out will be March 15. Last, the walleye timing restriction of March 1 through May 30 for regulated waters is proposed for deletion. New Jersey's walleye population is supported by New Jersey Fish and Wildlife's stocking program and not spawning; thus, the timing restriction is no longer necessary.

Currently, the timing restriction for anadromous waters at Tables 5.7 and 11.5 is based on the location of the proposed activity. The Department is proposing to simplify the timing restriction for waters supporting anadromous fish by having one timing restriction, from March 1 through June 30, that applies to all anadromous waters. This change is protective of the fishery resource and is consistent with the National Oceanic and Atmospheric Administration's National Marine Fisheries Service's anadromous fish timing restriction.

The Coastal Zone Management rules' general permit for geotechnical survey borings at N.J.A.C. 7:7-6.23 also contains a timing restriction for anadromous fish at N.J.A.C. 7:7-6.23(a)5. Similar to Tables 5.7 and 11.5 of the Freshwater Wetlands Protection Act and Flood Hazard Area Control Act Rules, respectively, the timing restrictions for anadromous fish are based on location. For the same reasons described above, the Department is proposing to replace the existing timing restrictions within this general permit with a single timing restriction of March 1 through June 30 to protect the migration of anadromous fish.

Alignment of Purpose and Scope

The CZM, FWPA, and FHACA rules each set forth a purpose and scope listing the individual rules that detail the enabling statutes used in implementing the rules, as well as used in the review of permits. These sections have not been previously amended to reflect the wholistic approach to application review that is currently utilized. This rulemaking seeks to align the purpose and scope of the CZM rules at N.J.A.C. 7:7-1.1(a), the FWPA rules at N.J.A.C. 7:7A-1.1(a), and the FHACA rules at N.J.A.C. 7:13-1.1(b) in order to provide consistency and reflect the Department's wholistic approach to application review.

Cross References to Other Programs

A number of Department rules reference standards and/or use terminology associated with the FHACA, CZM, FWPA, and SWM rules. To align terminology, this rulemaking proposes amendments to

all Department rules that contain references to language in these Watershed and Land Management (WLM) rules. These proposed amendments include replacing terms that are not currently defined in the FHACA Rules, such as "flood plain" and "100 year flood plain," as well as replacing terms that are not consistent with the amendments proposed to the FHACA rules, particularly at Subchapter 3, Determining the Flood Hazard Area and Floodway. The Department proposes to amend the scope of its purview pursuant to the rules by redefining the extent of the flood hazard area along tidal waters, to account for anticipated increases in flood elevations due to sea level rise. This includes establishing a new "climate-adjusted flood elevation," to better protect roads, buildings, and other structures for both today's anticipated flood events, as well as the floods of the future. This rulemaking incorporates terminology that reflects the changes to tidal and fluvial flood hazard areas into other Department rules, to ensure that all construction is protected from future flooding threats based on the best available science.

Other rules that are proposed to be amended include: Discharges of Petroleum and Other Hazardous Substances Rules, N.J.A.C. 7:1E; Underground Storage Caverns, N.J.A.C. 7:1F; Forestry, N.J.A.C. 7:3-5; Standards for Individual Subsurface Disposal Systems, N.J.A.C. 7:9A; Well Construction and Maintenance; Sealing Of Abandoned Wells, N.J.A.C. 7:9D; the Safe Drinking Water Act Rules, N.J.A.C. 7:10; the NJPDES Rules, N.J.A.C. 7:14A; Solid Waste, N.J.A.C. 7:26; the Recycling Rules, N.J.A.C. 7:26A; Hazardous Waste, N.J.A.C. 7:26G; the Radiation Protection Program Rules, N.J.A.C. 7:28; Green Acres Program, N.J.A.C. 7:36; and Highlands Water Protection and Planning Act Rules, N.J.A.C. 7:38.

N.J.A.C. 7:1E DISCHARGES OF PETROLEUM AND OTHER HAZARDOUS SUBSTANCES RULES

SUBCHAPTER 2. PREVENTION AND CONTROL OF DISCHARGES AT MAJOR FACILITIES

N.J.A.C. 7:1E-2.9 Flood hazard areas

The Discharges of Petroleum and Other Hazardous Substances Rules set forth guidelines and procedures to be followed by all persons in the event of a discharge of a hazardous substance. They also set

forth certain registration, reporting, design, operational, and maintenance requirements for owners and operators of major facilities and transmission pipelines that handle hazardous substances. N.J.A.C. 7:1E-2.9 provides the standards for the prevention and control of discharges at major facilities located within flood hazard areas; N.J.A.C. 7:1E-2.9(a) currently requires that hazardous substances stored within the tidal floodplain as delineated by FEMA or the floodway of any watercourse as delineated by the Department at N.J.A.C. 7:13-7.1 must be adequately protected to prevent such hazardous substances from being carried off by or being discharged into flood waters. For consistency with the current and proposed FHACA Rules, the Department proposes to replace the "tidal floodplain as delineated by the Federal Emergency Management Agency or the floodway of any watercourse as delineated by the Department in N.J.A.C. 7:13-7.1" with the "flood hazard area described at N.J.A.C. 7:13."

N.J.A.C. 7:1F-2.4 ASSESSMENTS OF ENVIRONMENTAL, HEALTH, AND CLIMATE CHANGE IMPACTS

SUBCHAPTER 2. CONSTRUCTION OF AN UNDERGROUND STORAGE CAVERN

Prior to construction of any underground storage cavern system and as part of an application for an approval to construct pursuant to N.J.A.C. 7:1F-4, the owner and operator of an underground cavern system is required to submit an environmental inventory in accordance with N.J.A.C. 7:1F-2.4(b). The inventory must contain all information contained on a list included therein. Currently, the list asks the owner/operator to identify "floodway and flood fringe areas of the flood hazard areas." The Department is proposing to amend the rule to instead reference "regulated areas" as identified pursuant to the State Flood Hazard Area Control Act and the Flood Hazard Area Control Act rules at N.J.A.C. 7:13. Additionally, at N.J.A.C. 7:1F-2.4(f), where the owner and operator are required to include a climate change impact assessment, the Department is replacing N.J.A.C. 7:1F-2.4(f)2ii, which currently references the 100-year storm event, with a reference to the " climate-adjusted flood elevation," as defined at N.J.A.C. 7:13, for consistency with the

amendments to Subchapter 3 of the FHACA rules, as explained above. To determine the climate-adjusted flood elevation, applicants may use the flood verification process pursuant to N.J.A.C. 7:13.

N.J.A.C. 7:3 FORESTRY

SUBCHAPTER 5. FOREST STEWARDSHIP PLANS

N.J.A.C. 7:3-5.4 Background and goals

The Forestry rules set procedures for obtaining seedlings from the State Forest Nursery, govern the Department's maintenance of an approved forester list in support of Farmland Assessment Act implementation, set standards for Forest Stewardship Plans and for Plan compliance with a Plan, and establish Advisory Committee membership, function, and authorities. As part of a Forest Stewardship Plan, the rules require that information be provided regarding whether some or all the forest land is in a flood hazard area. The Department is amending the cross-references to the Flood Hazard Area Control Act rules at N.J.A.C. 7:13.

N.J.A.C. 7:7 COASTAL ZONE MANAGEMENT RULES

SUBCHAPTER 1. GENERAL PROVISIONS

N.J.A.C. 7:7-1.1 Purpose

The CZM rules are enforceable policies of the New Jersey Coastal Management Program (NJCMP), as approved pursuant to the Federal Coastal Zone Management Act (16 U.S.C. §§ 1451 et seq.), which aim to balance the protection of coastal resources with the many competing uses of coastal areas. The coastal goals at N.J.A.C. 7:7-1.1(c) set forth the results that the NJCMP strives to achieve. Each goal is supplemented by related policies that describe the means to achieve that goal. The Department is proposing to add two new goals and related policies to reflect the necessity of combatting climate change impacts and achieving environmental and social justice in New Jersey's coastal zone.

In April 2021, the Department released the Statewide Climate Change Resilience Strategy (Resilience Strategy), which includes a Coastal Resilience Plan. The Coastal Resilience Plan identifies the increasing risk of hazards resulting from climate change throughout New Jersey's coastal zone. The Resilience Strategy defines "climate resilience" as the ability of social and ecological systems to absorb and adapt to climate change shocks and stressors, while becoming better positioned to respond. Addressing the long-term underlying factors and conditions that put a community at risk from existing and future climate-related impacts, is critical to a safe and vibrant coastal zone and success of the other nine coastal goals. As many of the decisions surrounding land use management, resource management, and the economy are made at the local level, at N.J.A.C. 7:7-1.1(c)6v, the Department is proposing to add the consideration of resilience plans to the coastal goal for safe, healthy, and well-planned coastal communities and regions. This change is intended to encourage coastal municipalities to address their own unique resilience planning needs with support from the State.

According to the 2020 New Jersey Scientific Report on Climate Change, human activities are now the primary cause of climate change, particularly greenhouse gas emissions from the burning of fossil fuels and land use changes, such as deforestation, which have increased atmospheric carbon dioxide concentrations by more than one third over the past century. As a result of climate change, New Jersey's coastal zone is at risk from more intense floods and tropical storms, as well as increasing ocean acidity, which will negatively impact the shelled mollusks that are crucial to the economy of New Jersey's southern coastal counties. Sea levels are also rising at a faster rate in New Jersey than in other parts of the world. The report projects that New Jersey will likely experience at least 2.0 to 5.1 feet of sea-level rise between 2000 and 2100, resulting in increased tidal flooding in the coastal zone, even on sunny days without precipitation.

In consideration of these concerns, the Department is proposing to add a new goal at proposed N.J.A.C. 7:7-1.1(c)7 to integrate climate change considerations, such as sea-level rise, into its coastal

decision-making. This new goal is to be achieved by ensuring that management of coastal activities includes identification of the vulnerabilities created by current and future climate conditions, with management measures designed to address the identified vulnerabilities based on the most recent science, while also encouraging renewable energy development, which would reduce the generation of greenhouse gas emissions.

Climate change also severely affects overburdened communities and socially vulnerable populations, which are more vulnerable to its impacts, such as increased flooding, heat waves, droughts, and wildfires. On April 20, 2018, Governor Murphy's Executive Order 23 (2018) directed all of New Jersey's departments, agencies, boards, and commissions to consider environmental justice when implementing their statutory and regulatory responsibilities, recognizing that environmental justice includes "ensuring that residents of all communities receive fair and equitable treatment in decision-making that affects their environment, communities, homes, and health."

Therefore, the Department is proposing a new goal at proposed N.J.A.C. 7:7-1.1(c)8 to foster social and environmental justice issues, specifically by ensuring environmental hazards are minimized where they threaten the health and livelihood of overburdened populations, neighborhoods, and communities within New Jersey's coastal zone and by ensuring that overburdened populations, neighborhoods, and socially vulnerable communities are proactively engaged with decisions affecting their communities, that any barriers to such engagement are minimized, and that the effectiveness of these efforts are regularly evaluated.

The coastal goals of coordinated coastal decision-making, comprehensive planning and research, and coordinated public education and outreach at existing N.J.A.C. 7:7-1.1(c)7 and 8, respectively, are proposed to be recodified at N.J.A.C. 7:7-1.1(c)9 and 10 with no change in text.

N.J.A.C. 7:7-1.5 Definitions

The Department is proposing new definitions of "cabana" and "sun shelter." The new definitions are needed to clarify that these types of development are considered seasonal and temporary structures associated with the tourism industry. Additionally, the new definitions will facilitate the proposed changes to the general permit, at existing N.J.A.C. 7:7-6.22, for the construction of certain structures related to the tourism industry at hotels and motels, commercial developments, and multi-family residential developments over 75 units. Additionally, the Department is proposing to modify the definitions of "seasonal or temporary structure related to the tourism industry" and "habitable" as they relate to structures or development. The purpose of these changes is to provide clarity around the Department's review of applications for structures meant for human occupancy in the coastal area, particularly in those areas like beaches that are subject to impacts of storm surge and high winds, and where the natural functions of the beach and dunes are critical for shore protection. Such structures are likely to be destroyed or cause property damage or injuries during increasingly frequent storm events, whether occupied or unoccupied at the time of the storm.

Pursuant to CAFRA, a cabana is included in the definition of "dwelling unit" and, therefore, regulated pursuant to CAFRA at N.J.S.A. 13:19-3 as a residential development. However, the term "cabana" is currently undefined. For the purposes of the CZM rules, the Department is proposing that "cabana" be defined as a structure with vertical walls that accommodates beach- or pool-use related conveniences, such as the storage of personal items, socializing, showering, changing, sleeping, and/or sun protection. As explained in the summary of changes to the general permit at N.J.A.C. 7:7-6.22, since 1993 when the concept of seasonal and temporary structures was incorporated into CAFRA, many structures that have four walls and allow for human occupancy (sometimes including utilities, showers, and kitchens) have been placed on beaches under the applicant's assertion that they are temporary/seasonal structures and, thus, exempt from CAFRA or eligible for a general permit. Some of these structures adversely impact beach

functions and water quality, and can become hazards during storm events, thus negatively impacting public health and safety. By adding a definition of "cabana," the rules will provide boundaries so inappropriate structures are not considered seasonal and/or temporary and are, therefore, regulated as dwelling units.

In connection with the new proposed definition of "cabana," the Department proposes to replace the definition of "habitable" to more closely align with the FHACA rule definition. Currently, the CZM rules define "habitable" as a structure that has been, or could have been, legally occupied in the most recent five-year period. The proposed new definition of "habitable" with reference to structures or development, means a building intended for human occupation and/or residence. This clarifies that even if a structure is not intended for overnight occupancy, does not have all the typical amenities of a primary residence, and/or would not be eligible for a certificate of occupancy, it may still be considered "habitable" and, thus, regulated as a dwelling unit if it is nonetheless intended for human occupancy. This supports the Department's regulation of cabanas and other regularly occupied structures as residential development pursuant to the CZM rules due to the inherent dangers to life and property associated with locating such structures in areas subject to storms. The proposed changes to the coastal high hazard areas rule, N.J.A.C. 7:7-9.18, and the general permit, at N.J.A.C. 7:7-6.22, describe conditions pursuant to which development of cabanas and beach-use related structures are acceptable in the coastal zone.

Currently, the definition of "seasonal temporary structures related to the tourism industry," and the general permit at N.J.A.C. 7:7-6.22, both reference "canopied shelter." This term is not defined in the rules, and, thus, in this rulemaking the Department proposes to replace the term "canopied shelter," with "sun shelter" in the definition of "seasonal temporary structures related to the tourism industry," which is exempt from CAFRA permitting. In the general permit at N.J.A.C. 7:7-6.22, "canopied shelter" is described to clarify this general permit would authorize canopied shelters without walls that can be placed on the sand with dimensions not to exceed 12 feet by 12 feet by 12 feet. This is different from a sun shelter because, while it must be removed seasonally and during a weather event, it does not need to be removed daily. In

addition, proposed amendments to the definition of "seasonal or temporary structures related to the tourism industry" clarify that this defines structures associated with a government agency's operation of the beach, such as a lifeguard stand, equipment shed for life saving equipment, bench, and other amenity, and that these structures must be capable of quick relocation in advance of a severe weather event. The definition is amended to limit the size of beach badge sheds to a footprint of 120 square feet and to specify that these structures cannot have utility connections. These amendments ensure these structures are seasonal and temporary, and that is reinforced by banning these structures from having utility connections. Further, by limiting the size of these structures on beaches, the amount of useable beach for the public is maximized. Also, with respect to public use of the beach, the definition of seasonal or temporary structures related to the tourism industry makes it clear that the placement of these structures cannot interfere with existing public access points or the public's ability to utilize lands subject to the public trust doctrine.

A new definition of "sun shelter" is proposed to clarify these structures are temporary and serve functions such as providing shelter from the sun while using the beach. The proposed dimensions define a limited sized structure that may be easily constructed and removed, to distinguish sun shelters from event tents used for weddings and other gatherings. Accordingly, a "sun shelter" means a tent-like structure without walls or a roof, and dimensions not exceeding 12 feet by 12 feet by 12 feet, which is placed on the beach and made available to the public for daily, not season long, use and which is removed from the beach daily. The dimensions in the definition are drawn from common, commercially available 12-foot by 12-foot shelters. This definition distinguishes a sun shelter, which falls under the exemption for seasonal temporary structures related to the tourism industry, from cabanas, which are regulated as residential development.

New Jersey's coastal environment is dynamic, and shaped by natural forces such as wind, waves, and storms. Shorelines lost due to erosion eliminate intertidal habitat, reduce the amount of sandy beach, and decrease the availability of the amount of organic matter necessary to maintain tidal wetlands. New

Jersey's coastal wetlands are being threatened by climate change and sea level rise. Therefore, as discussed below in the summary of changes at N.J.A.C. 7:7-6.17, 6.24, 6.33, 9.27, and 12.23, the Department proposes amendments designed to encourage nature-based solutions, such as the beneficial reuse of dredged material to elevate the wetland platform or replenish the existing wetland edge, because of the positive environmental benefits they provide. To facilitate these changes, definitions of "environmental non-governmental organization or NGO," "nature-based solution," and "NRCS" (Natural Resource Conservation Service) are newly proposed.

The term "environmental non-governmental organization or NGO" is proposed to be added as these entities will be eligible to submit a permit application for authorization under the proposed general permit for nature-based solution research projects at N.J.A.C. 7:7-6.33. The Department is limiting eligibility to established organizations that have experience with such projects.

A new definition of "nature-based solution" would mean a project designed to protect, restore, or enhance shorelines, wetlands, and in-water areas utilizing natural features and processes to address erosion and flooding issues, and to restore or create ecological habitats. Nature-based solution projects may be non-structural or hybrid (as part of the definition of "living shoreline") but have a substantial biological design component. Nature-based solutions include living shorelines and marsh restoration/enhancement projects accomplished using the strategic placement of material on the marsh to elevate the wetland platform such as beneficial use of dredged material placement. Material can be strategically placed in shallow water areas adjacent to the marsh to allow coastal processes to naturally move the material onto the marsh. Another type of nature-based solution is using material to create a shallow submerged habitat in open water for habitat creation/enhancement, or for wave energy dissipation.

A new definition, "NRCS," the acronym for the United States Department of Agriculture's Natural Resource Conservation Service, is proposed. This definition is needed because the NRCS is referenced in the general permit for nature-based solution research projects at N.J.A.C. 7:7-6.33.

Amendments are also proposed for the definition of "living shorelines," to specify that a living shoreline is a type of nature-based solution project. Further, the Department is redefining two types of living shorelines as non-structural and hybrid. The use of the term "non-structural" is more specific than "natural." The Department is further proposing to include dredged material on the list of materials that may comprise a non-structural living shoreline, as it can be used as a substrate to facilitate vegetative growth. In addition, the reuse of dredged material in this manner helps to keep sediment in the system as explained at the proposed amendments to the wetlands rule at N.J.A.C. 7:7-9.2 The Department is proposing to replace the reference to "natural" vegetation to "native" vegetation since native vegetation is a commonly used term throughout the rules and specifies the need to select plants that are known to grow as part of the ecology of New Jersey. The Department is also proposing to add dredged material, loose shell, or shell bags to the list of materials that may be used as part of a hybrid living shoreline and to reiterate that a hybrid living shoreline includes a structural component. The Department is proposing to add oyster castles to the list of structures that may comprise a hybrid living shoreline. The Department is also proposing to clarify, by removing the comma after stone containment, that stone containment could also be used as a substrate for seeding native shellfish. Finally, the Department is proposing to delete from the definition, a "structural" living shoreline, since shore protection that is entirely structural with no living component should not be part of the definition of a living shoreline.

A primary focus of this rulemaking is to incorporate the Department's recognition of the impacts of climate change and sea level rise, and to include consideration of these impacts in decision-making pursuant to the CZM, FWPA, and FHACA rules. To facilitate the addition of the new special area rule designed to recognize and incorporate into decision-making the impacts of climate change and sea level rise, the "inundation risk zone" at proposed N.J.A.C. 7:7-9.50, the following new terms are proposed: "climate-adjusted flood elevation," "inundation risk zone," "mean higher high water," "substantial damage," and "substantial improvement."

The "climate-adjusted flood elevation" is the flood elevation which is anticipated to occur as a result of climate change and sea level rise, using a planning horizon year of 2100 and a moderate emission rate of 17 percent. The methods for determining the climate-adjusted flood elevation are set forth in the FHACA rules at N.J.A.C. 7:13-3.2(b). The climate-adjusted flood elevation is used in determining the lowest floor elevation of a building located within the inundation risk zone when repairing a substantially damaged building. This definition is the same as the proposed definition in the FHACA rules at N.J.A.C. 7:13-1.2.

Pursuant to the CZM rules, the definition of the "inundation risk zone" special area is contained within its own rule. Accordingly, the proposed new definition of "inundation risk zone" refers to the special area rule at N.J.A.C. 7:7-9.50. The inundation risk zone is the portion of a tidal flood hazard area that has been determined to be at significant risk for future permanent or daily inundation and which, therefore, represents a high level of hazard for existing or proposed development or habitation. The term "mean higher high water" is also proposed. This term is used in determining the inundation risk zone where the applicant believes that the zone is incorrectly identified using the Department's interactive mapping tool. Mean higher high water is the arithmetic average of the elevations of the higher high water, that is the higher of the two high waters of a tidal day, over a 19-year period. The limits of the inundation risk zone on a particular site are determined using the methods set forth in the FHACA rules at N.J.A.C. 7:13-3.4. Finally, definitions of "substantial damage" and "substantial improvement" are proposed to match those in the FHACA rules at N.J.A.C. 7:13-1.3. These terms are used in determining the type of development that can occur within the inundation risk zone.

Consistent with the proposed amendments to the FHACA rules, a definition for the commonly used acronym "NAVD 88" is proposed to describe the North American Vertical Datum of 1988, which is the predominant datum for surveying used in the United States, as described by the National Geodetic Survey.

This datum is proposed to be used for all surveying, topography, and elevation datum used in this chapter. Accordingly, all references in the rule to "NGVD" are proposed to be replaced with "NAVD 88."

N.J.A.C. 7:7-2.1 Applicability and Activities for Which a Permit is Required

Existing N.J.A.C. 7:7-2.1(b)1 is being amended to incorporate the proposed new term "permits-by-registration." The term "permit-by-rule," is proposed to be replaced throughout the chapter with the new term "permit-by-registration," which requires user registration and submittal of compliance information to the Department through its online portal pursuant to proposed new N.J.A.C. 7:7-3.4, described in detail in the summary below. Also, at N.J.A.C. 7:7-2.1(b)1, reference to new N.J.A.C. 7:7-3, 4, and 5, which sets forth the requirements for submittal of a permit-by-registration at added.

N.J.A.C. 7:7-2.4 Waterfront Development

Existing N.J.A.C. 7:7-2.4(d) 6 and 7 would be revised to clarify that to be eligible for the waterfront development exemption, commonly referred to as a Zane Exemption, the structure must "currently exist" at the time of application. A Zane Exemption is a limited exemption available pursuant to the Waterfront Development Act at N.J.S.A. 12:5-3, which allows waterfront structures (for example, docks, wharfs, piers, bulkheads, and buildings) that legally existed prior to January 1, 1981, to be rebuilt, repaired, renovated, or reconstructed; provided such actions do not increase the size of the waterfront structure and the structure is used for residential, docking, or servicing of vessels. The rule currently states the exemption applies to the "repair, replacement, renovation or reconstruction of the preexisting structure" which, as set forth at N.J.S.A. 12:5-3, applies to reparative and restorative activities to existing structures, not new construction. However, some applicants seek to use this exemption for structures that were previously demolished and have not existed for many years.

On November 12, 1981, Governor Byrne stated, "I agree with the content of this bill that repairs to existing waterfront structures be freed from a burdensome regulatory process and I am convinced that no damage to the environment will result." Governor's Veto Statement to S. 3231 (November 12, 1981). The Zane Exemption was never intended to allow new construction in water areas to escape regulatory review.

The addition of "existing" will clarify that this exemption is not applicable if the structure has been demolished, or otherwise does not exist at the time of application review. For example, if a dock was originally built in the mid-19th century, but fell into disrepair over the decades since, and there is now no physical evidence of the dock, this would not be considered "existing," and the Zane Exemption would not apply to allow the complete rebuilding of such a dock. This clarification is increasingly important as sea levels rise and structures located in water areas are subject to flooding, inundation, and storm damage, placing people and property in danger. As sea levels rise, structures that may have been above water decades ago, may in the future be underwater, or otherwise unsafe.

SUBCHAPTER 3. GENERAL PROVISIONS FOR PERMITS-BY-REGISTRATION, GENERAL PERMITS-BY-CERTIFICATION, AND GENERAL PERMITS

The Department is proposing a new type of authorization, permits-by-registration, to replace the promulgated permits-by-rule in the CZM and FHACA rules. Accordingly, amendments to Subchapter 3 are required.

N.J.A.C. 7:7-3.2 Standards for issuance, by rulemaking, of permits-by-registration, general permits-by-certification, and general permits

N.J.A.C. 7:7-3.2 establishes the requirements that must be met for the Department to promulgate through rulemaking a permit-by-rule, general permit-by-certification, or general permit. In addition to replacing the term "permit-by-rule" with the proposed new term "permit-by-registration," a reference to the National Flood Insurance Program is added at N.J.A.C. 7:7-3.2(b)2 to ensure that the Department will not

promulgate a permit unless the minimum standards of the National Flood Insurance Program at 44 CFR 60.3 are met.

N.J.A.C. 7:7-3.3 Use of a Permit-By-Registration, or an Authorization Pursuant to a General Permit-By-Certification or a General Permit to Conduct Regulated Activities

N.J.A.C. 7:7-3.3(a) provides that an activity that meets the requirements of a permit-by-rule may be conducted without prior Department approval, except that the activities pursuant to the permits-by-rule at N.J.A.C. 7:7-4.4, 4.5, and 4.9 may be conducted only after the Department has issued the required waterfront development permit that is necessary for these activities. Subsection (a) is proposed to be modified to reflect the redesignation of permits-by-rule as permits-by-registration, to update cross-references, and to indicate that an activity that meets the requirements of the applicable permit-by-registration may be conducted after online registration with the Department, except for the permits-by-registration at proposed N.J.A.C. 7:7-4.2, 4.3, and 4.6. Consistent with existing rules, activities at proposed N.J.A.C. 7:7-4.2, 4.3, and 4.6 can be conducted only after the waterfront development permit is obtained. Since a formal waterfront development permit application must be submitted for these activities, registration is not required.

Proposed N.J.A.C. 7:7-3.3(b) sets forth the timing of commencement of an activity authorized pursuant to a general permit-by-certification. Pursuant to this provision, the Department is proposing to clarify who can submit the application. For the permits-by-certification at N.J.A.C. 7:7-5.1, 5.2, 5.3, 5.9, 5.11, and 5.12, the person proposing the activity can submit the application. However, for the permits-by-certification at N.J.A.C. 7:7-5.4, 5.5, 5.6, 5.7, 5.8, and 5.10, a New Jersey licensed professional engineer or registered architect, as appropriate, must submit the online application on behalf of the applicant. This requirement is necessary because these permits require certification that the proposed activity complies with the flood hazard area rule at N.J.A.C. 7:7-9.25 and/or the riparian zone rule at N.J.A.C. 7:7-9.26.

These permits require certifications or acknowledgments regarding engineering and other technical information for highly technical requirements.

N.J.A.C. 7:7-3.5 Duration of an Authorization Under a General Permit-By-Certification

Existing N.J.A.C. 7:7-3.5 duration of an authorization pursuant to a general permit-by-certification is proposed for recodification as N.J.A.C. 7:7-3.6. Proposed new N.J.A.C. 7:7-3.5, Procedure for Registering to Undertake an Activity Authorized Pursuant to a Permit-by-Registration, will establish the process by which a person registers to undertake an activity authorized pursuant to a permit-by-registration.

New N.J.A.C. 7:7-3.5, Procedure for Registering to Undertake an Activity Authorized Pursuant to a Permit-by-Registration, will establish the process by which a person registers to undertake an activity authorized pursuant to a permit-by-registration. Pursuant to the existing rules, a person can undertake an activity authorized by a permit-by-rule without prior notification to the Department. Except where a person interested in undertaking an activity is told by the Department by an applicability determination that the activity qualifies for a permit-by-rule, the Department is not generally aware of when and where activities authorized pursuant to a permit-by-rule are occurring. As a result, the Department cannot inspect the authorized activities after completion or determine how much work is taking place within a given municipality or watershed. Local governments are additionally unaware of these activities, which often require municipal building permits or other local approvals.

The Department is, therefore, proposing a no-fee, online permit-by-registration process to enable tracking of cumulative impacts within a community or watershed that aligns with FEMA's requirement to record and track approvals pursuant to the NFIP. Such tracking additionally enables the Department to propose future amendments to adjust regulatory standards to reflect the State's planning goals, as well as to ensure, as required at N.J.A.C. 7:7-3.2(b)1, that the "regulated development will cause only minimal adverse environmental impacts when performed separately, will have only minimal cumulative adverse

impacts on the environment, and is in keeping with the legislative intent to protect and preserve the coastal area from inappropriate development." Tracking further enables the Department to address waters appearing on the List of Water Quality Limited Waters (the 303(d) List) pursuant to the Federal Clean Water Act at 33 U.S.C. § 1313(d), the New Jersey Water Quality Planning Act, at N.J.S.A. 58:11A-7, and the Water Quality Management Planning rules, at N.J.A.C. 7:15-5.4, and those for which a TMDL has been developed in accordance with those same provisions. An additional reference to the National Flood Insurance Program at N.J.A.C. 7:7-3.2(b)2 ensures that the Department will not promulgate a permit unless the minimum standards at 44 CFR 60.3 are met.

Proposed N.J.A.C. 7:7-3.5(a) sets forth the scope of the section, explains where permits-by-registration are promulgated, and clarifies that undertaking an activity authorized pursuant to a permit-by-registration is not subject to the chapter's application requirements, public notice requirements, or application fees pursuant to N.J.A.C. 7:7-23, 24, and 25, respectively.

Proposed N.J.A.C. 7:7-3.5(b) establishes the procedure for registering to undertake an activity authorized pursuant to a permit-by-registration. Persons interested in undertaking an activity authorized pursuant to a permit-by-registration are required to register the intended activity prior to commencement. This will enable Department staff to inspect the site while the activities are being conducted. Additionally, registration must be completed by either the owner of a site on which the activity will take place, or a person designated, in writing, by the owner to register on their behalf, such as an engineer, attorney, or consultant. Registration is made through the Department's online permitting system, pursuant to which the owner or designee must indicate which permit-by-registration is being sought, provide a name or other identifier, such as a county bridge number, for the proposed development or project, provide a brief description of the proposed activity including anticipated start and completion dates, identify the location of the proposed activity, and provide contact information for both the property owner and any designated registrant. The owner or registrant must additionally certify that the site identified in the registration is the actual location

of the project and that the registrant has obtained written consent from the property owner that the registration can be made on the property owner's behalf using the PIN issued to the registrant upon registration. There is no fee required for a permit-by-registration. The substance of the certification, set forth at N.J.A.C. 7:7-3.5(b)6, mirrors the certification required for applications at N.J.A.C. 7:7-23.2(j) as part of the general permit application requirements. A person registering to use the registration system must provide personal identification information and is issued a PIN when they register. This PIN must be provided as part of the certification process to help verify that the person registering does have the owner's authorization to act. By collecting this data, the Department can track development within communities and watersheds and assess what impact, if any, authorized activities may have on water quality or flooding. Department staff can also inspect the progress of activities and contact the registrant if problems arise.

Once the online registration process is completed, proposed N.J.A.C. 7:7-3.5(c) explains that documentation of the registration will be accessible to the applicant through the Department's online permitting system and that upon completion of the registration, the registrant can provide a copy of the documentation provided by the Department to the local construction official and floodplain administrator. This will enable local governments to track and report on activities authorized within the special flood hazard area, which is required as part of a community's participation in the National Flood Insurance Program (NFIP). An exception is made where the registrant is a State agency and is, therefore, not subject to municipal review.

Proposed N.J.A.C. 7:7-3.5(d) provides that activities pursuant to the permit-by-registration shall commence within 180 days of the date of registration pursuant to proposed N.J.A.C. 7:7-3.5(b). This is necessary to ensure that activities being undertaken are based on the most recent flood data available. After registration, a new or revised Department delineation or FEMA flood mapping may become available, which indicates a higher level of risk associated with a specific development than was understood at the time of registration. In this circumstance, the design of the development as initially contemplated and

registered may not be adequately protective of public health, safety, and welfare in consideration of this new information. For this reason, communities participating in the NFIP are required to issue permits and authorizations for activities within FEMA's special flood hazard area that are valid for no more than 180 days unless construction commences. Proposed N.J.A.C. 7:7-3.5(d) also provides that where authorized activities have not commenced within 180 days of registration, said activities may not commence unless and until the activity is registered anew. This will allow the project to remain consistent with the NFIP and ensure current and future flood hazard risks are considered and activities are undertaken based on the best available information, thereby protecting public health, safety, and welfare. Otherwise, the registered activities, if commenced within 180 days of registration, can continue unless and until the permit-by-registration pursuant to which activities are being undertaken is repealed or modified by the Department.

Proposed N.J.A.C. 7:7-3.5(e) requires the registrant to indicate when activities are completed through the Department's online system and proposed N.J.A.C. 7:7-3.5(f) provides that applicants that disagree with this re-registration requirement, may appeal the decision using the chapter's existing appeal procedure at N.J.A.C. 7:7-28.

N.J.A.C. 7:7-3.6 Duration of an Authorization Under a General Permit for Which an Application was Declared Complete for Review Prior to July 6, 2015

The Department is proposing to repeal existing N.J.A.C. 7:7-3.6, Duration of an Authorization Under a General Permit for Which an Application was Declared Complete for Review Prior to July 6, 2015, as it is no longer needed. This provision was added for applicants whose application was declared complete for review prior to the effective date of the consolidated rules in 2015. By now, the Department has either rendered a decision on the application or the application has been withdrawn.

Recodified N.J.A.C. 7:7-3.6 sets forth the provisions regarding the duration of general permits-by-certification. Recodified N.J.A.C. 7:7-3.6(a), which provides that a general permit-by-certification is valid

for five years from issuance, is proposed to be amended to clarify that the duration starts the date of the Department's issuance of the permit-by-certification in accordance with N.J.A.C. 7:7-23.3, which sets forth additional application requirements for an authorization pursuant to a general permit-by-certification.

Recodified N.J.A.C. 7:7-3.6(c) requires that regulated activities must immediately cease "if" a general permit-by-certification expires, is amended to replace the word "if" with "when." This amendment clarifies that general permits-by-certification do have an expiration date.

N.J.A.C. 7:7-3.7 Duration of an Authorization Under a General Permit

N.J.A.C. 7:7-3.7, sets forth the provisions regarding the duration of general permits for which an application is deemed complete for review on or after July 6, 2015. The heading of the existing rule is proposed to be amended to delete reference to applications deemed complete for review on or after July 6, 2015, to reflect that this section applies to all general permit authorizations.

Existing N.J.A.C. 7:7-3.7(a) explains that this section pertains to the duration of a general permit for which an application is deemed complete for review on or after July 6, 2015, while existing N.J.A.C. 7:7-3.6 sets forth the duration of a general permit authorization for which an application was declared complete for review prior to July 6, 2015. For the reasons described above, the Department is proposing to repeal existing N.J.A.C. 7:7-3.6 and, therefore, the roadmap established at existing N.J.A.C. 7:7-3.7(a) is no longer necessary and is also proposed for deletion.

Existing N.J.A.C. 7:7-3.7(b), which sets forth the duration of an authorization pursuant to a general permit, is proposed to be recodified as N.J.A.C. 7:7-3.7(a) with no change in text. The Department is also proposing to recodify existing (c), (d), and (e) as (b), (c), and (d) without change.

N.J.A.C. 7:7-3.8 Conditions Applicable to a Permit-By-Rule, or to an Authorization Pursuant to a General Permit-By-Certification or a General Permit

The Department is proposing amendments at existing N.J.A.C. 7:7-3.8 to replace “permit-by-rule" with “permit-by-registration," which will not have a substantive effect on the conditions that are already applicable pursuant to the existing rule.

N.J.A.C. 7:7-3.9 Obligations Pursuant to the National Flood Insurance Program

Proposed new N.J.A.C. 7:7-3.9 ensures that the State’s commitment to uphold minimum NFIP standards is met, as articulated at existing N.J.A.C. 7:7-9.25(f)3. Identical requirements are being proposed at new N.J.A.C. 7:7-8.4 for individual permits, as well as in the Department’s FHACA rules at new N.J.A.C. 7:13-6.8 for permits-by-registration, general permits-by-certification, and general permits, and new N.J.A.C. 7:13-10.4 for individual permits.

Proposed N.J.A.C. 7:7-3.9 focuses on development located within two specific areas mapped by FEMA. For a given community, FEMA-adopted flood insurance rate mapping (FIRM) generally depicts both the limits of FEMA’s 100-year (or one-percent probability) “special flood hazard area,” as well as regulatory floodway limits along the studied section of water. This section applies to development located within a FEMA-adopted regulatory floodway, as well as within a FEMA-adopted special flood hazard area that does not include a FEMA-mapped regulatory floodway, as required pursuant to 44 CFR 60.3. While the FHACA rules generally prohibit development within floodways, certain activities are permitted because it is understood they would not exacerbate flooding. Thus, satisfying the requirements of this section is necessary before an applicant undertakes activities within these FEMA-defined areas in order to meet minimum NFIP standards.

Proposed N.J.A.C. 7:7-3.9(b) explains that before a person undertakes an activity authorized pursuant to a permit-by-registration, and prior to the Department issuing an authorization pursuant to a general permit-by-certification or general permit, the registrant or applicant must take certain actions. First, pursuant to N.J.A.C. 7:7-3.9(b)1, where activities are proposed within a FEMA-adopted regulatory

floodway, and the activities would result in "no net increase" to the 100-year flood elevation, the registrant or applicant must provide an engineering certification to the local floodplain administrator having jurisdiction over the site confirming that the project will meet FEMA's no rise criteria. This is important to ensure that development within and adjacent to delineated floodways does not exacerbate flooding. Second, pursuant to N.J.A.C. 7:7-3.9(b)2, where activities are proposed within a FEMA-adopted regulatory floodway, which would result in a net increase to the 100-year flood elevation, the registrant or applicant must apply for and obtain a Conditional Letter of Map Revision (CLOMR) from FEMA. In both scenarios, a "net increase" in the flood elevation is equated with any anticipated change in the water surface profile of greater than 0.00 feet.

A third scenario is presented, in which activities are proposed within a FEMA-adopted special flood hazard area that does not include mapping of the regulatory floodway. In this case, if a project, when combined with all other existing and anticipated development within the flood hazard area, would result in a cumulative increase of greater than 0.20 feet in the 100-year flood elevation, the registrant or applicant shall apply for and obtain a CLOMR from FEMA, similar to N.J.A.C. 7:7-3.9(b)2. When mapping floodway limits in New Jersey, the Department and FEMA both utilize calculations that define the floodway as causing no more than a 0.20-foot rise in the 100-year flood elevation. Thus, should a project within a FEMA-mapped 100-year floodplain cause flood elevations to rise more than this amount, it would not meet the standards set forth in the Department's FHACA rules to protect people and property from increased flooding due to development. (See the Department's FHACA rules at N.J.A.C. 7:13-12.1(g)5ii.)

Pursuant to proposed new N.J.A.C. 7:7-3.9(c), hydraulic calculations undertaken to demonstrate compliance with this section must be rounded to the nearest one-hundredth (0.01) of a foot. Two examples are provided to demonstrate how this standard should be applied. As with any type of modeling, there are limitations on the precision of the calculations. In other sections of the FHACA rules, calculations are to be rounded to the nearest one-tenth (0.1) of a foot. (See the Department's FHACA rules at N.J.A.C. 7:13-

12.1(g), 12.7(b)1, and 12.14(d)5.) However, since FEMA considers the accuracy of the calculations to the nearest one-hundredth (0.01) of a foot, this standard is necessary to demonstrate compliance with this section in order to ensure that the requirements of the NFIP are met.

Proposed N.J.A.C. 7:7-3.9(d) requires registrants for permits-by-registration and applicants for general permits-by-certification or general permits to upload a copy of the required no rise certification or approved CLOMR, as required pursuant to proposed N.J.A.C. 7:7-3.9(b), to the Department's online portal at https://www.nj.gov/dep/online prior to the issuance of the individual permit. This facilitates the Department's ability to track and report to FEMA actions pursuant to this section and subchapter.

Proposed N.J.A.C. 7:7-3.9(e) further underscores that the requirements of this proposed section shall not be construed to contradict or obviate the requirements of the National Flood Insurance Program. As the purpose of this section is to ensure that NFIP standards are met and is furthermore being proposed based on the Department's understanding of FEMA's requirements pursuant to 44 CFR 60.3 and related sections, it is appropriate to include this provision.

SUBCHAPTER 4. PERMITS-BY-REGISTRATION

As part of the conversion of permits-by-rule to permits-by-registration, the Department evaluated each existing permit-by-rule to determine whether it is appropriate for the permit-by-rule to be converted to a permit-by-registration and whether amendments to the permit-by-registration are required. Based upon that evaluation, the Department is proposing to convert 14 existing permits-by-rule to permits-by-registration and convert six existing permits-by-rule to permits-by-certification. Specifically, the Department is proposing to recodify the permits-by-rule at N.J.A.C. 7:7-4.1, 4.2, 4.6, 4.7, 4.12, and 4.14 as 5.5, 5.6, 5.7, 5.8, 5.10, and 5.9, respectively, as permits-by-certification for the activities currently authorized pursuant to these permits. Where an existing permit-by-rule is proposed to be converted to a permit-by-registration and recodified with no changes to the permit requirements, no additional summary is provided. The

following table summarizes the recodification of the existing permits-by-rule as permits-by-registration and/or permits-by-certification.

Table of Cross-References, Recodifications, and Proposed Changes

As the Department is proposing to relocate some permits-by-rule out of this section and recodify the remaining permits-by-registration for ease of reference, the cross-references and permit titles reflect the existing rules.

Subject matter	**Current citation N.J.A.C.**	**Proposed citation N.J.A.C.**	**Proposed change(s)**
Expansion of a single-family home or duplex	7:7-4.1	7:7-5.5	Converted to general permit-by-certification with amendments
Development of a single-family home or duplex and/or accessory development on a bulkheaded lagoon lot	7:7-4.2	7:7-5.6	Converted to general permit-by-certification; no change in requirements
Placement of public safety or beach/dune ordinance signs on beaches or dunes and placement of signs on beaches or dunes at public parks	7:7-4.3	7:7-4.1	Converted to permit-by-registration; no change in requirements

Construction of nonresidential docks, piers, boat ramp,s and decks located landward of mean high water line	7:7-4.4	7:7-4.2	Registration requirement combined with Waterfront Development permit application
Construction of portion of a recreational dock or pier located landward of mean high water line	7:7-4.5	7:7-4.3	Registration requirement combined with Waterfront Development permit application
Reconstruction of a residential or commercial development within the same footprint	7:7-4.6	7:7-5.7	Converted to general permit-by-certification; no change in requirements
Expansion or relocation (with or without expansion) landward or parallel to the mean high water line of the footprint of a residential or commercial development	7:7-4.7	7:7-5.8	Converted to general permit-by-certification with proposed amendments
Construction of a utility line attached to a bridge or culvert	7:7-4.8	7:7-4.4	Converted to permit-by-registration; no change in requirements
Previous filling of tidelands associated with an existing single-family home or duplex	7:7-4.9	7:7-4.5	Converted to permit-by-registration; no change in requirements

Construction of portion of boat ramp located landward of the mean high-water line at a residential development	7:7-4.10	7:7-4.6	Registration requirement combined with Waterfront Development permit application
Construction and/or installation of a boat wash wastewater system at a marina, boatyard, or boat sales facility	7:7-4.11	7:7-4.7	Converted to permit-by-registration; no change in requirements
Construction of one to three wind turbines less than 200 feet in height having a cumulative rotor swept area no greater than 2,000 square feet	7:7-4.12	7:7-5.10	Converted to general permit-by-certification; no change in requirements
Installation of solar panels on a maintained lawn or landscaped area at a single-family home or duplex lot	7:7-4.13	7:7-4.8	Converted to permit-by-registration; no change in requirements
Reconfiguration of any legally existing dock, wharf, or pier at a legally existing marina	7:7-4.14	7:7-5.9	Converted to general permit-by-certification; no change in requirements
Placement of sand fencing to create or sustain a dune	7:7-4.15	7:7-4.9	Converted to permit-by-registration; no change in requirements

Placement of land-based upwellers and raceways for aquaculture activities	7:7-4.16	7:7-4.10	Converted to permit-by-registration; no change in requirements
Placement of predator screens and oyster spat attraction devices within a shellfish lease area	7:7-4.17	7:7-4.11	Converted to permit-by-registration; no change in requirements
Placement of shellfish cages within a shellfish lease area	7:7-4.18	7:7-4.12	Converted to permit-by-registration; no change in requirements
Construction and/or installation of a pumpout facility and/or pumpout support facilities	7:7-4.19	7:7-4.13	Converted to permit-by-registration; no change in requirements
Implementation of a sediment sampling plan for sampling in a water area as part of a dredging or dredged material management activity or as part of a remedial investigation of a contaminated site	7:7-4.20	7:7-4.14	Converted to permit-by-registration; no change in requirements
Application of herbicide within coastal wetlands to control invasive plant species	7:7-4.21	7:7-4.15	Converted to permit-by-registration; no change in requirements
Construction of a swimming pool, spa, or hot tub and associated	7:7-4.22	7:7-4.16	Converted to permit-by-registration; modified to not apply

decking on a bulkheaded lot without wetlands			to sites along the Atlantic Ocean or Delaware Bay
Installation of an at-grade dune walkover at a residential, commercial, or public development other than a single-family home or duplex	7:7-4.23	7:7-4.17; 7:7-5.4	At-grade dune walkover at a residential or public development converted to permit-by-registration at N.J.A.C. 7:7-4.17; at-grade dune walkovers at commercial development converted to general permit-by-certification at N.J.A.C. 7:7-5.4

N.J.A.C. 7:7-4.1 Permit-By-Rule 1 – Expansion of a Single-Family Home or Duplex

N.J.A.C. 7:7-4.1, Permit-by-rule 1, authorizes the expansion of a legally constructed single-family home or duplex on the non-waterward sides of the single-family home or duplex, provided the expansion: is not proposed on a beach, dune, or wetland; meets the requirements of the flood hazard area rule, N.J.A.C. 7:7-9.25; and does not exceed a cumulative surface area of 400 square feet on the property constructed after July 19, 1994.

The permit also requires that the proposed addition meets the requirements of the flood hazard area rule at N.J.A.C. 7:7-9.25. This requirement is intended to ensure the expansion does not adversely affect special areas and that the structure is constructed in a manner that is consistent with the Department's standards for elevation and flood proofing.

Upon examination of the requirements of this permit-by-rule, and because of the increase in flooding due to climate change, the Department has determined that the activity authorized pursuant to this permit is more appropriately subject to authorization pursuant to a permit-by-certification. The

Department's online electronic permitting system can track the cumulative surface area of the expansion. Accordingly, once the threshold pursuant to the permit is reached, the system will not allow the applicant to submit an online application, thus ensuring that the impacts pursuant to this permit are minimized. The applicant would then be required to apply for an authorization pursuant to a general permit.

Therefore, the Department is proposing to recodify this permit-by-rule and as a general permit-by-certification at N.J.A.C. 7:7-5.5, with no changes to the requirements. By converting this permit to general permit-by-certification, the applicant will be required to certify compliance with the Department's standards for elevation and flood proofing. Further, because the proposed general permit-by-certification must be submitted by a professional engineer for the reasons discussed at the summary of proposed N.J.A.C. 7:7-3.3(b) above, the Department considers this to be the most effective manner in which to address potential impacts to the structure from increased flooding. The Department has determined that the proposed general permit-by-certification will result in minimal adverse environmental impact and is consistent with the FHACA rules, N.J.A.C. 7:13.

The Department is proposing to remove the word "habitable" from recodified N.J.A.C. 7:7-5.5(a), since single-family homes and duplexes are specifically identified pursuant to the proposed new definition of "habitable," and to add the requirement from the current definition of "habitable" that the housing "has been or could have been legally occupied in the most recent five-year period." This preserves the intent that this general-permit-by-certification only applies to such structures.

N.J.A.C. 7:7-4.2, Permit-By-Rule 2 - Development of a Single-Family Home or Duplex and/or Accessory Development on a Bulkheaded Lagoon Lot

N.J.A.C. 7:7-4.2, Permit-by-rule 2, authorizes the development (including expansion or reconstruction and expansion) of a single-family home or duplex and/or accessory development (such as garages, sheds, pools driveways, grading, excavation, and clearing excluding shore protection structures)

provided the single-family home or duplex and accessory development are located on a bulkheaded lagoon lot and provided certain conditions are met.

This permit-by-rule requires the single-family home or duplex and/or accessory development to meet the requirements of the flood hazard area rule, N.J.A.C. 7:7-9.25. For the same reasons discussed at N.J.A.C. 7:7-4.1, the Department is proposing to recodify this permit-by-rule as a general permit-by-certification, N.J.A.C. 7:7-5.6, without change. The Department has determined the proposed general permit-by-certification will result in minimal adverse environmental impact and is consistent with the Flood Hazard Area Control Act Rules, N.J.A.C. 7:13.

N.J.A.C. 7:7-4.4 Permit-By-Rule 4 - Construction of Nonresidential Docks, Piers, Boat Ramps, and Decks Located Landward of Mean High Water Line

This permit authorizes the construction of nonresidential docks, piers, and boat ramps located landward of the mean high-water line, provided that a waterfront development permit has been obtained for the construction waterward of the mean high water line. The Department is proposing to recodify this as a permit-by-registration at N.J.A.C. 7:7-4.2. N.J.A.C. 7:7-4.2(a) is proposed for amendment to additionally clarify that activities authorized pursuant to this permit-by-registration will be considered automatically registered upon issuance of the required waterfront development permit in order to make this permit-by registration consistent with the requirements at N.J.A.C. 7:7-3.3(a).

N.J.A.C. 7:7-4.5 Permit-By-Rule 5 - Construction of Portion of a Recreational Dock or Pier Located Landward of Mean High Water Line

The Department is proposing to rename and recodify existing N.J.A.C. 7:7-4.5, Permit-by-rule 5, for the construction of portion of a recreational dock or pier located landward of mean high water line as Permit-by-registration at N.J.A.C. 7:7-4.3. Similar to proposed permit-by-registration 2, the Department is

clarifying, at N.J.A.C. 7:7-4.3(a), that activities authorized pursuant to this permit-by-registration will be considered automatically registered upon issuance of the required waterfront development permit in order to make this permit-by-registration consistent with the requirements found at N.J.A.C. 7:7-3.3(a).

N.J.A.C. 7:7-4.6 Permit-By-Rule 6 - Reconstruction of a Residential or Commercial Development within the Same Footprint and N.J.A.C. 7:7-4.7 Permit-By-Rule 7 – Expansion or Relocation (With or Without Expansion) Landward or Parallel to the Mean High-Water Line of the Footprint of a Residential or Commercial Development

Other than reconstruction within the coastal area that meets the exemption from a CAFRA permit at N.J.A.C. 7:7-2.2(c)3, the existing permit-by-rule at N.J.A.C. 7:7-4.6 authorizes the reconstruction, within the same footprint, of a legally constructed residential or commercial development that has been or could have been legally occupied in the most recent five-year period, provided certain conditions are met.

The existing permit-by-rule at N.J.A.C. 7:7-4.7 authorizes the expansion or relocation (with or without expansion) landward or parallel to the mean high water line of the footprint of a legally constructed residential development, including accessory development, such as sheds, garages, pools, and driveways, or commercial development that has been or could have been legally occupied in the most recent five-year period, provided certain conditions are met.

Existing N.J.A.C. 7:7-4.6 and 4.7 require that the development meets the requirements of the FHACA rules at N.J.A.C. 7:7-9.25. For the same reasons discussed at N.J.A.C. 7:7-4.1, the Department is proposing to recodify these permits-by-rule as permits-by-certification at N.J.A.C. 7:7-5.7 and 5.8, respectively, thereby ensuring the structure is protected from increased flooding due to climate change and sea level rise. In addition, existing N.J.A.C. 7:7-4.7 requires compliance with the riparian zone rule, N.J.A.C. 7:7-9.26. The conversion of this permit-by-rule to a general permit-by-certification will also

ensure any impacts to the riparian zone are minimized. See summary of the proposed general permits-by-certification at N.J.A.C. 7:7-5.7 and 5.8 for more detail.

N.J.A.C. 7:7-4.10 Permit-By-Rule 10 - Construction of Portion of Boat Ramp Located Landward of the Mean High Water Line at a Residential Development

The Department is proposing to rename and recodify existing N.J.A.C. 7:7-4.10 permit-by-rule 10 for the construction of portion of a boat ramp located landward of the mean high water line at a residential development as a permit-by-registration at N.J.A.C. 7:7-4.6. Also, at recodified N.J.A.C. 7:7-4.6(a), the Department is adding language that requires that activities authorized pursuant to this permit-by-registration will be considered registered upon issuance of the waterfront development permit to make this permit-by-registration consistent with the requirements at N.J.A.C. 7:7-3.3(a).

N.J.A.C. 7:7-4.12 Permit-By-Rule 12 – Construction of One to Three Wind Turbines less than 200 Feet in Height Having a Cumulative Rotor Swept Area No Greater than 2,000 Square Feet

Existing permit-by-rule 12 authorizes the construction of one to three wind turbines less than 200 feet in height, measured from the ground surface to the tip of the blade at its highest position, and having a cumulative rotor swept area no greater than 2,000 square feet provided, and among other things, that the wind turbine is not located within a floodway. This requirement is necessary to protect the turbine from flood damage, since the depth and velocity of flood waters present in the floodway portion of the flood hazard area would subject the wind turbine to unsafe conditions that could undermine and compromise the structural integrity of the tower. Furthermore, the placement of fill or structures within floodways obstructs flow and exacerbates nearby flooding conditions.

To further ensure the turbines are not located within the floodway, the Department is proposing to recodify this permit as a general permit-by-certification at N.J.A.C. 7:7-5.10, with no changes to the existing

requirements. While the requirements specified at recodified N.J.A.C. 7:7-5.10 remain the same as those specified at existing N.J.A.C. 7:7-4.12, by requiring that the proposed general permit-by-certification be submitted by a professional engineer at proposed N.J.A.C. 7:7-3.3(b) for the reasons discussed in the summary of N.J.A.C. 7:7-3.3(b), the Department will ensure that the structural integrity of the tower is not compromised, protecting both the turbine itself and downstream properties and people that could be endangered by a collapse of the tower, and that flooding within the area of the turbine is not exacerbated. The Department has determined the proposed general permit-by-certification will result in minimal adverse environmental impact and is consistent with the FHACA rules.

N.J.A.C. 7:7-4.14 Permit-By-Rule 14 – Reconfiguration of any Legally Existing Dock, Wharf, or Pier at a Legally Existing Marina

Existing permit-by-rule N.J.A.C. 7:7-4.14 Permit-by-rule 14 authorizes the reconfiguration of any legally existing dock, wharf, or pier located at a legally existing marina that is not located within shellfish habitat, submerged vegetation habitat, or wetlands. The reconfiguration of a dock, wharf, or pier within a marina qualifies for this permit-by-rule, provided the reconfiguration does not result in structures located outside the area covered by an existing Tidelands instrument, increase the number of boat slips, hinder navigation, or increase the total linear footage of docks or piers in the marina. In addition, the structures must be configured in such a manner as to minimize the water area covered by structures and provide a minimum of four feet from all property lines. These requirements ensure additional water areas are not affected by the reconfiguration, the number of boat slips and linear footage of docks or piers at the marina are not increased, the water area covered by structures is minimized, and navigation in the waterway and access to any adjacent dock is not impeded.

Since the permit-by-rule was adopted in May 2013, the reconfigurations occurring pursuant to this permit have not been meeting the requirements of the permit and, therefore, may be creating more than

minimal environmental impacts, as well as impacts to navigation. Accordingly, the activities subject to this permit are more appropriately authorized pursuant to a general permit-by-certification. Therefore, the Department is proposing to recodify this permit as general permit-by-certification at N.J.A.C. 7:7-5.9. The conversion of the permit to a general permit-by-certification will ensure the authorized activities have minimal adverse impacts to the environment and navigation.

N.J.A.C. 7:7-4.18 Permit-By-Rule 18 - Placement of Shellfish Cages Within a Shellfish Lease Area

Existing N.J.A.C. 7:7-4.18, recodified as N.J.A.C. 7:7-4.12, authorizes the placement of shellfish cages within a shellfish lease area. The Department is proposing to amend the permit-by-registration to only allow it to be used for the placement of cages that are less than 10 square feet in area. The Department is aware that there are new devices associated with some types of shellfisheries that are significantly larger. However, because this is a permit-by-registration and not a general permit that would allow the Department the opportunity to review a proposed larger device, the Department is proposing to add a specific size limit to ensure the activities remain consistent with the use of traditional cage sizes, which tend to be less than 10 square feet. Also, the Department is amending the existing language at subsection (a) to clarify that a water quality certificate pursuant to Section 401 of the Federal Clean Water Act, 33 U.S.C. §§ 1251 et seq., is automatically granted by the Department for activities that qualify for this permit-by-registration.

N.J.A.C. 7:7-4.20 Permit-By-Rule 20 – Implementation of a Sediment Sampling Plan for Sampling in a Water Area as Part of a Dredging or Dredged Material Management Activity or as Part of a Remedial Investigation of a Contaminated Site

The Department is proposing to rename and recodify existing N.J.A.C. 7:7-4.20 permit-by-registration 20 for the implementation of a sediment sampling plan for sampling in a water area as part of a dredging or dredged material management activity or as part of a remedial investigation of a contaminated

site, as a permit-by-registration at N.J.A.C. 7:7-4.14. Also, at recodified N.J.A.C. 7:7-4.14(a), the Department is adding language that requires that activities authorized pursuant to this permit-by-registration will be considered registered upon issuance of the waterfront development permit application to make this permit-by-registration consistent with the requirements found at N.J.A.C. 7:7-3.3(a).

N.J.A.C. 7:7-4.22 Permit-By-Rule 22 - Construction of a Swimming Pool, Spa, or Hot Tub and Associated Decking on a Bulkheaded Lot Without Wetlands

Existing N.J.A.C. 7:7-4.22, recodified as N.J.A.C. 7:7-4.16, authorizes the construction of a swimming pool, spa, or hot tub and associated decking (for example, wood or recycled plastic planking, concrete, or paver blocks) on a lot with a legally existing, functioning bulkhead along the entire waterfront portion of the site. Pursuant to this rulemaking, the requirement that no wetlands be located landward of the bulkhead is proposed to be codified as N.J.A.C. 7:7-4.16(a)1. Proposed N.J.A.C. 7:7-4.16(a)2 requires that the site not be located along the Atlantic Ocean or Delaware Bay. In accordance with existing N.J.A.C. 7:7-4.22(a)8, recodified as N.J.A.C. 7:7-4.16(a)8, swimming pools, spas, or hot tubs and associated decking constructed under this permit cannot be located on a coastal bluff. As described in the coastal bluff rule at N.J.A.C. 7:7-9.29(d), disturbance of coastal bluffs, which undermines their natural resistance to wind and rain erosion, increases the risk of their collapse and causes cuts in the bluffs, which is dangerous for structures at the top of the bluff and reduces the bluff's ability to buffer upland areas from coastal storms. Therefore, construction on a coastal bluff must be carefully evaluated by the Department and is not appropriate to be authorized pursuant to a permit-by-registration. To ensure the activities are not located on a coastal bluff, the Department is proposing to limit the scope of this permit to sites not located along the Atlantic Ocean and the Delaware Bay that is the estuary outlet of the Delaware River lying between Delaware and New Jersey. The construction of a swimming pool, spa, or hot tub and associated decking

on sites located along the Delaware Bay and Atlantic Ocean would be subject to authorization pursuant to the existing general permit at N.J.A.C. 7:7-6.5.

Existing N.J.A.C. 7:7-4.22(a)1 and 2 are proposed to be recodified as N.J.A.C. 7:7-4.16(a)3 and 4 without change. Existing N.J.A.C. 7:7-4.22(a)3 and 4 are recodified as N.J.A.C. 7:7-4.16(a)5 and 6 and proposed to be amended to replace reference to "permit-by-rule" to "permit-by-registration" for the reasons previously described. Existing N.J.A.C. 7:7-4.22(a)5 through 8 are proposed to be recodified as N.J.A.C. 7:7-4.16(a) 6 through 9 without change.

N.J.A.C. 7:7-4.23 Permit-By-Rule 23 - Installation of an At-Grade Dune Walkover at a Residential, Commercial, or Public Development Other Than a Single-Family Home or Duplex

Existing N.J.A.C. 7:7-4.23, recodified as N.J.A.C. 7:7-4.17, authorizes the installation of an at-grade dune walkover, such as a stabilization mat, at a residential, commercial, or public development other than a single-family home. This permit sets several design and construction parameters to ensure the installation of an at-grade walkover has only a *de minimis* impact on the dune. Accordingly, this permit does not authorize grading or excavation of a beach or dune because any grading or excavation may adversely affect the dune and, therefore, must be reviewed by Department staff. The permit establishes width limits for walkovers at different types of development. Walkovers at non-commercial properties cannot exceed six feet in width. The total width of the walkover structure plus any fencing or edging is limited to eight feet. Commercial properties may have a walkover as wide as 10 feet (12 feet with any edging or fencing).

Since the adoption of this permit-by-rule in 2018, due to the scope of at-grade walkovers at commercial developments, grading, and/or excavation of the beach and/or dune is required. To ensure the beach and/or dune are not adversely affected, the Department is proposing to amend this permit to exclude the installation of at-grade walkovers at commercial developments. Instead, the Department is proposing

a new general permit-by-certification at N.J.A.C. 7:7-5.4 for the installation of at-grade walkovers at commercial developments. To facilitate this change, the Department is proposing to delete the width requirements for commercial developments at N.J.A.C. 7:7-4.23(a)4. The proposed permit amendments ensure minimal environmental impacts to the beach and dune system.

SUBCHAPTER 5. GENERAL PERMITS-BY-CERTIFICATION

Pursuant to this rulemaking, the Department is proposing to expand the types of activities subject to authorization pursuant to a general permit-by-certification. As previously described, six existing permits-by-rule are proposed to be recodified as general permits-by-certification. The Department determined that the impacts associated with the six activities warrant authorization pursuant to a general permit-by-certification. The summary of the new permits-by-certification proposed to be converted from permits-by-rule is found in the specific permit-by-rule section-by-section summary at N.J.A.C. 7:7-4. The following table summarizes the cross-references, recodifications, and proposed changes.

Table of citations, recodifications, and proposed changes

Subject matter	**Current citation N.J.A.C.**	**Proposed citation N.J.A.C.**	**Proposed change(s)**
Reconstruction of a legally existing functioning bulkhead in-place or upland of a legally existing functioning bulkhead	7:7-5.1	No citation change	Modified to exclude sites located along the Atlantic Ocean or Delaware Bay; clarified that bulkheads that do not meet permit-by-certification standards may

			qualify for authorization pursuant to the general permit at N.J.A.C. 7:7-6.10; also, the heading was changed to N.J.A.C. 7:7-5.1, General permit-by-certification 1 for clarification
Construction of piers, docks, including jet ski ramps, pilings, and boatlifts in man-made lagoons	7:7-5.2	No citation change	Clarified that piers, docks, including jet ski ramps, pilings, and boatlifts that do not meet general permit-by-certification standards may qualify for authorization pursuant to the general permit at N.J.A.C. 7:7-6.15; also, the heading was changed to N.J.A.C. 7:7-5.2, General permit-by-certification 2, for clarification
Installation of an elevated timber dune walkover at a residential, commercial, or public development other than a single-family home or duplex	7:7-5.3	No citation change	The heading was changed to N.J.A.C. 7:7-5.3, General permit-by-certification 3, for clarification
Installation of an at-grade dune walkover at a commercial development	7:7-4.23	7:7-5.4	Permit-by-rule 23 was bifurcated into recodified N.J.A.C. 7:7-4.17 for residential/public development

			and new permit-by certification 4 for commercial development; the permit-by-certification requires submission by a New Jersey licensed professional engineer or registered architect
Expansion of a single-family home or duplex	7:7-4.1	7:7-5.5	Permit-by-rule 1 was recodified as new permit-by-certification 5, which requires submission by a New Jersey licensed professional engineer or registered architect
Development of a single-family home or duplex and/or accessory development on a bulkheaded lagoon lot	7:7-4.2	7:7-5.6	Permit-by-rule 2 was recodified as new permit-by-certification 6, which requires submission by a New Jersey licensed professional engineer or registered architect
Reconstruction of a residential or commercial development within the same footprint	7:7-4.6	7:7-5.7	Permit-by-rule 6 was recodified as new permit-by-certification 7; the permit-by-certification clarified the five-year occupancy requirement; clarifies structure cannot be constructed waterward of the mean high water line; and requires

			submission by a New Jersey licensed professional engineer or registered architect
Expansion or relocation (with or without expansion) landward or parallel to the mean high-water line of the footprint of a residential or commercial development	7:7-4.7	7:7-5.8	Permit-by-rule 7 was recodified as new permit-by-certification 8; the permit-by-certification clarified the five-year occupancy requirement; requires submission by a New Jersey licensed professional engineer or registered architect; and requires that structure cannot be constructed waterward of the mean high-water line
Reconfiguration of any legally existing dock, wharf, or pier at a legally existing marina	7:7-4.14	7:7-5.9	Permit-by-rule 14 was recodified as new permit-by-certification 9; no changes are proposed to the permit standards
Construction of one to three wind turbines less than 200 feet in height having a cumulative rotor swept area no greater than 2,000 square feet	7:7-4.12	7:7-5.10	Permit-by-rule 12 was recodified as new permit-by-certification 10 which requires submission by a New Jersey licensed professional engineer or registered architect

Shoreline stabilization using coir logs, vegetation, and plant-based materials	N/A	7:7-5.11	New permit-by-certification
Shoreline stabilization using shellfish and/or shell bags	N/A	7:7-5.12	New permit-by-certification

N.J.A.C. 7:7-5.1 General Permit-By-Certification 1 - Reconstruction of a Legally Existing Functioning Bulkhead In-Place or Upland of a Legally Existing Functioning Bulkhead

N.J.A.C. 7:7-5.1 general permit-by-certification 1 authorizes the in-place or upland reconstruction of a legally existing functioning bulkhead in-place or upland of a legally existing functioning bulkhead provided certain conditions are met, including the requirement that the bulkhead shall not create net adverse shoreline movement downdrift, including erosion or shoaling. As the shorelines along the Atlantic Ocean and Delaware Bay are subject to highly erosive forces, any bulkhead construction in these areas could have a net adverse impact on shoreline movement downdrift. As a result, such construction in these two waters must be reviewed by Department staff. Accordingly, the Department is proposing to limit the applicability of this permit to bulkheads excluding those located along the Atlantic Ocean and Delaware Bay. Instead, bulkheads located along the Atlantic Ocean and Delaware Bay would be reviewed pursuant to a general permit. For clarity, the Department is proposing new N.J.A.C. 7:7-5.1(b), which directs applicants whose proposed reconstruction does not meet the standards of this permit to the general permit for the reconstruction of a legally existing functioning bulkhead at N.J.A.C. 7:7-6.10. The proposed amendments to this general permit-by-certification will result in minimal adverse environmental impact. Also, the heading of this general permit-by-certification was revised to remove the 10 and re-numbered to General permit-by-certification 1, for clarification.

N.J.A.C. 7:7-5.2 General Permit-By-Certification 2 – Construction of Piers, Docks, including Jet Ski Ramps, Pilings, and Boatlifts in Man-Made Lagoons

N.J.A.C. 7:7-5.2 General permit-by-certification 2 authorizes the construction of piers, docks, including jet ski ramps, pilings, and boatlifts in man-made lagoons, provided certain conditions are met. Similar to the new language at N.J.A.C. 7:7-5.1(b), proposed new N.J.A.C. 7:7-5.2(b) directs applicants whose proposed construction does not meet the standards of this permit to the general permit for the construction of piers, docks, including jet ski ramps, pilings, and boatlifts in man-made lagoons, N.J.A.C. 7:7-6.15. Also, the heading of this general permit-by-certification was revised to remove the 15 and re-numbered to General permit-by-certification 2, for clarification.

N.J.A.C. 7:7-5.3 General Permit-By-Certification 3 – Installation of an Elevated Timber Dune Walkover at a Residential, Commercial, or Public Development other than a Single-Family Home or Duplex

The heading of N.J.A.C. 7:7-5.3 General permit-by-certification 3 was revised to remove the 1A and re-numbered to General permit-by-certification 3, for clarification. No additional changes were made to the permit requirements.

N.J.A.C. 7:7-5.4 General Permit-By-Certification 4 - Installation of an At-Grade Dune Walkover at a Commercial Development

N.J.A.C. 7:7-5.4 General Permit-by-Certification 4 was created to ameliorate the proposed exclusion of at-grade dune walkovers at commercial development, which is currently proposed at N.J.A.C. 7:7-4.17. Due to the scope of at-grade walkovers at commercial developments, grading, and/or excavation of the beach and/or dune is routinely required. These activities impact the beach and dunes in ways that are

not considered to be the *de minimis* activities for which permits-by-registration are intended. To compensate for the more rigorous requirements of the general permit-by-certification, the Department is proposing to delete the width requirements for commercial developments. For further discussion see the Summary of N.J.A.C. 7:7-4.23.

N.J.A.C. 7:7-5.5 General Permit-By-Certification 5 - Expansion of a Single-Family Home or Duplex

N.J.A.C. 7:7-5.5, General permit-by-certification 5, is a newly created general permit-by-certification recodified from the existing permit-by-rule at N.J.A.C. 7:7-4.1. It authorizes the expansion of a legally constructed single-family home or duplex on the non-waterward sides of the single-family home or duplex, provided the expansion: is not proposed on a beach, dune, or wetland; meets the requirements of the flood hazard area rule, N.J.A.C. 7:7-9.25; and does not exceed a cumulative surface area of 400 square feet on the property constructed after July 19, 1994. Upon review, the Department has determined that these activities are more appropriately subject to authorization pursuant to a permit-by-certification. See N.J.A.C. 7:7-4.1 for further discussion.

N.J.A.C. 7:7-5.6 General Permit-By-Certification 6 - Development of a Single-Family Home or Duplex and/or Accessory Development on a Bulkheaded Lagoon Lot

N.J.A.C. 7:7-5.6, General permit-by-certification 6, is a newly created general permit-by-certification recodified from the existing permit-by-rule at N.J.A.C. 7:7-4.2. It authorizes the development (including expansion or reconstruction and expansion) of a single-family home or duplex and/or accessory development (such as garages, sheds, pools, driveways, grading, excavation, and clearing excluding shore protection structures) provided the single-family home or duplex and accessory development are located on a bulkheaded lagoon lot and provided certain conditions are met. Upon review, the Department has

determined that these activities are more appropriately subject to authorization pursuant to a permit-by-certification. See N.J.A.C. 7:7-4.2 for further discussion.

N.J.A.C. 7:7-5.7 Permit-By-Certification 7 - Reconstruction of a Residential or Commercial Development within the Same Footprint

N.J.A.C. 7:7-5.7, General permit-by-certification 7, is a newly created general permit-by-certification recodified from the existing permit-by-rule at N.J.A.C. 7:7-4.6, which authorizes the reconstruction, within the same footprint, of a legally constructed residential or commercial development that has been or could have been legally occupied in the most recent five-year period. Upon review, the Department has determined that these activities are more appropriately subject to authorization pursuant to a permit-by-certification. Existing N.J.A.C. 7:7-4.6(a) requires that the development must have been or could have been legally occupied in the most recent five-year period. This provision was intended to exclude reconstruction of residential and commercial development that have not been recently occupied or are derelict while considering that, after a storm or other event renders the structure uninhabitable, there may be some period before reconstruction begins when the structure is not inhabited. For the purposes of clarity and consistency with the FHACA rules, the Department is proposing to amend this provision to make clear that the development must have been occupied within five years prior to the date of application to the Department. The Department is also proposing to require, at proposed N.J.A.C. 7:7-5.7(a)6, that the residential or commercial development to be reconstructed cannot be located waterward of the mean high-water line. The Department has determined these permits, as amended, will result in minimal adverse environmental impacts and are consistent with the FHACA rules. See N.J.A.C. 7:7-4.6 for further discussion.

N.J.A.C. 7:7-5.8 General Permit-By-Certification 8 – Expansion or Relocation (With or Without Expansion) of the Footprint of a Residential or Commercial Development

N.J.A.C. 7:7-5.8, General permit-by-certification 8, is a newly created general permit-by-certification recodified from the existing permit-by-rule N.J.A.C. 7:7-4.7 that authorizes the expansion or relocation (with or without expansion) landward or parallel to the mean high water line of the footprint of a legally constructed residential development, including accessory development such as sheds, garages, pools, and driveways, or commercial development that has been or could have been legally occupied in the most recent five-year period. Upon review, the Department has determined that these activities are more appropriately subject to authorization pursuant to a permit-by-certification. See N.J.A.C. 7:7-4.7 for further discussion. The Department is additionally proposing amendments mirroring the proposed changes at N.J.A.C. 7:7-5.7.

N.J.A.C. 7:7-5.9 General Permit-By-Certification 9 – Reconfiguration of any Legally Existing Dock, Wharf, or Pier at a Legally Existing Marina

N.J.A.C. 7:7-5.9, General permit-by-certification 9, is a newly created general permit-by-certification recodified from the existing permit-by-rule N.J.A.C. 7:7-4.14 and authorizes the reconfiguration of any legally existing dock, wharf, or pier located at a legally existing marina that is not located within shellfish habitat, submerged vegetation habitat, or wetlands. Upon review, the Department has determined these activities are more appropriately subject to authorization pursuant to a permit-by-certification. See N.J.A.C. 7:7-4.14 for further discussion.

N.J.A.C. 7:7-5.10 General Permit-By-Certification 10 - Construction of One to Three Wind Turbines less than 200 Feet in Height Having a Cumulative Rotor Swept Area No Greater than 2,000 Square Feet

N.J.A.C. 7:7-5.10, General permit-by-certification 10, is a newly created general permit-by-certification recodified from the existing permit-by-rule N.J.A.C. 7:7-4.12 and authorizes the construction of one to three wind turbines less than 200 feet in height, measured from the ground surface to the tip of the blade at its highest position, and having a cumulative rotor swept area no greater than 2,000 square feet provided, among other things, that the wind turbine is not located within a floodway. Upon review, the Department has determined that these activities are more appropriately subject to authorization pursuant to a permit-by-certification. See N.J.A.C. 7:7-4.12 for further discussion.

N.J.A.C. 7:7-5.11 General Permit-By-Certification 11 – Shoreline Stabilization Using Coir Logs, Vegetation, and Plant-Based Materials

Proposed new N.J.A.C. 7:7-5.11, General permit-by-certification 11, authorizes the stabilization of an existing shoreline through the installation of coir logs (meshed together coconut fiber, known as coir, encased in a blanket of coir twine to create the shape of a tree log) and/or the planting of native vegetation to prevent erosion and stabilize the shoreline provided certain conditions are met. Proposed N.J.A.C. 7:7-5.11(a)1 requires that the project be less than 350 feet in length. This length was selected after a review of Florida's living shoreline program, where project lengths of 350 feet in length or less were not regulated due to their minimum impact and low risk. Shoreline stabilization projects using suitable native vegetation greater than 350 feet in length may be authorized pursuant to the new general permit for shoreline stabilization projects at N.J.A.C. 7:7-6.17.

To ensure the proposed project does not adversely affect shellfish lease areas and navigation channels, proposed N.J.A.C. 7:7-5.11(a)2 specifies the project cannot be located within a shellfish lease area authorized at N.J.S.A. 50:1-23 and proposed paragraph (a)3 requires that the project not interfere with navigation. In accordance with proposed paragraph (a)4, the project may only consist of coir logs, native vegetation, or natural materials associated with the plantings. Requiring the use of native vegetation

improves the likelihood of survival of the vegetation since it reflects the natural physiological limitations of the species to survive within a distinct habitat. Further, the use of native vegetation also ensures that invasive species are not introduced into the ecosystem. Proposed paragraph (a)5 provides that the project cannot include the placement of materials that extend more than 10 feet waterward of the existing shoreline. Coir logs are often placed waterward for shoreline stabilization. Ten feet is a limited and measurable distance that will allow installation while avoiding any potential interference with navigation.

Proposed N.J.A.C. 7:7-5.11(b) requires that shoreline stabilization activities authorized pursuant to the general permit-by-certification do not interfere with existing public access points or the public's ability to utilize lands subject to the public trust doctrine be maintained.

If the Department determines the shoreline stabilization has resulted in adverse shoreline movement, including erosion or shoaling, proposed N.J.A.C. 7:7-5.11(c) provides that the Department may require the permittee to remove the shoreline stabilization materials. While the Department does not anticipate that this will occur, in the unlikely event that it does, this provision provides the Department with the ability to require restoration of the habitat to preexisting conditions.

To encourage this environmentally beneficial shoreline stabilization measure, the Department is proposing to not require an application fee pursuant to N.J.A.C. 7:7-25.1 for this general permit-by-certification.

N.J.A.C. 7:7-5.12 General Permit-By-Certification 12 – Shoreline Stabilization Using Shellfish and/or Shell Bags

Proposed new N.J.A.C. 7:7-5.12, General permit-by-certification 12, authorizes the stabilization of an existing shoreline using oysters, marine mussels, and/or placed, staked, or secured shell bags, provided several conditions are met. Proposed paragraph (a)1 requires that the project is located within water other than restricted or prohibited as determined by the Shellfish Growing Water Classification Rules, N.J.A.C.

7:12. This provision ensures that the use of oysters and marine mussels are placed in areas where the growing of shellfish is permitted. For the same reasons described at proposed N.J.A.C. 7:7-5.11(a)1, proposed paragraph (a)2 specifies that the project shall be less than 350 feet in length. Proposed paragraph (a)3 specifies the species that can be used within the project to ensure species native to New Jersey are used. These include hard clam (*Mercenaria mercenaria*), soft clam (*Mya arenaria*), eastern oyster (*Crassostrea virginica*), bay scallop (*Argopecten irradians*), blue mussel (*Mytilus edulis*), and/or ribbed mussel (*Geukensia demissa*). Pursuant to N.J.S.A. 50:1-34, the Commissioner has the authority to ensure that any shellfish sourced from foreign countries, or any other state are safe and free of disease, prior to importation into New Jersey. Accordingly, proposed N.J.A.C. 7:7-5.12(a)4 requires that any shellfish imported from outside of New Jersey meet the certification requirements at N.J.S.A. 50:1-34. Proposed N.J.A.C. 7:7-5.12(a)5 specifies that the use of oyster castles or other structures is prohibited as these structures would be located outshore of the existing shoreline. Additionally, proposed N.J.A.C. 7:7-5.12(a)8 provides that this permit does not authorize the placement of shellfish or shell bags more than 10 feet waterward of the existing shoreline. As previously described, shellfish and shell bags are often placed waterward for shoreline stabilization. Ten feet is a limited and measurable distance that will allow installation while avoiding any potential interference with navigation.

Proposed N.J.A.C. 7:7-5.12(a)6 requires that the project not interfere with navigation. Finally, proposed N.J.A.C. 7:7-5.12(a)7 requires that the project cannot be located within a shellfish lease area authorized pursuant to N.J.S.A. 50:1-23. However, the rule allows for the possibility that the Department, in consultation with the New Jersey Shellfisheries Council, may modify a lease boundary to accommodate a project. Shellfish lease areas can vary from those that are actively being used, to those that are assigned, but not currently leased. Thus, the Department and the Shellfisheries Council may consider modifying the dimensions of a lease area to allow shoreline stabilization. An applicant proposing shoreline stabilization

in a shellfish lease area should work with the Department to determine if such modification may be granted before applying for the general permit-by-certification.

Consistent with proposed N.J.A.C. 7:7-5.11(b), proposed N.J.A.C. 7:7-5.12(b) requires that the shoreline stabilization work pursuant to this permit-by-certification shall not interfere with existing public access points or the public's ability to utilize lands subject to the public trust doctrine.

Consistent with proposed N.J.A.C. 7:7-5.11(c), proposed N.J.A.C. 7:7-5.12(c) provides that the Department may require the permittee to remove the shoreline stabilization materials if it determines that the construction has resulted in adverse shoreline sand movement, including erosion or shoaling.

To encourage this environmentally beneficial shoreline stabilization measure, there is no application fee pursuant to N.J.A.C. 7:7-25.1 proposed for this general permit-by-certification.

SUBCHAPTER 6. GENERAL PERMITS

N.J.A.C. 7:7-6.4 General Permit 4 - Development of One or Two Single-Family Homes or Duplexes

The general permit at N.J.A.C. 7:7-6.4 authorizes the development of one or two single-family homes or duplexes and/or accessory development (such as garages, sheds, pools, driveways, grading, filling, and clearing, excluding shore protection structures), provided the one or two single-family homes or duplexes and accessory development are located landward of the mean high water line. As explained abover, to ensure that the most protective standards are applied to proposed development, the Department is proposing a new regulatory special area, the "inundation risk zone." This area encompasses currently dry land that is expected to be inundated by tidal water permanently by 2100 based on the Rutgers STAP report. For the reasons explained at N.J.A.C. 7:7-9.50, the Department is proposing to add a new inundation risk zone rule. To facilitate this change, amendments are proposed to the general permit at N.J.A.C. 7:7-6.4, as well as the Housing rule at N.J.A.C. 7:7-15.2.

Existing N.J.A.C. 7:7-6.4(c) provides a list of rule provisions that must be followed to qualify for the general permit. As previously noted, the Department is proposing to add to the list the requirement to comply with the Inundation Risk Zone provisions at N.J.A.C. 7:7-9.50. The purpose of these amendments is to recognize and prepare for a changing environment. As this general permit allows the development of one or two single-family homes or duplexes, it is important to understand, assess, and comply with the rule provisions that seek to avoid impacts, and protect such structures and their inhabitants, if they are proposed in the "inundation risk zone."

N.J.A.C. 7:7-6.4(f) sets forth the standards for the development of single-family homes or duplexes located on the landward slope of a secondary or tertiary dune. Such development need not comply with the dune rule, provided certain criteria are met. One of these criteria at existing subparagraph (f)1iii is that the beach area adjacent to the proposed development is either naturally stable without beach nourishment or naturally accretional without beach nourishment. Such determination is made by using the method described pursuant to the erosion hazard area (multiplying the projected annual erosion rate at the site by 30 for the development of one- to four-unit dwelling structures and by 60 for all other developments) and using the information in the Department's Geographic Information System (GIS) database as found in the Historical Shoreline coverage. The existing calculation is no longer deemed to be necessary and is rarely used. Therefore, the Department is proposing to remove the use of the calculation to determine if a beach area is either naturally stable or naturally accretional without beach nourishment. Rather, the Department will use its GIS Historical Shorelines coverage to determine the long- or short-term trend in shoreline changes that will most likely continue into the future for a specific site. Further, the reference to the 1836-1986 coverage is proposed for deletion to allow the use of updated coverages.

The Department is proposing to delete N.J.A.C. 7:7-6.4(h), which currently provides an exception to the requirements to comply with coastal high hazard and erosion hazard rules for certain single-family and duplex dwellings. With the same concerns as those previously described, given the current knowledge

regarding climate change and how it will affect the State's residents, it is necessary for all dwellings proposed for human habitation in the coastal zone to be constructed in compliance with these rule provisions to ensure the highest level of protection and safety.

The Department is recodifying N.J.A.C. 7:7-6.4(i) through (m) as (h) through (l) without change. Finally, at existing N.J.A.C. 7:7-6.4(n), recodified as N.J.A.C. 7:7-6.4(m), the Department is proposing to amend the setback requirements for non-oceanfront sites with existing or proposed shore protection structures to clarify that the setback on a coastal bluff cannot be reduced to less than 10 feet consistent with the requirement at recodified paragraph (m)1.

N.J.A.C. 7:7-6.5 General Permit 5 - Expansion, or Reconstruction (With or Without Expansion), of a Single-Family Home or Duplex

N.J.A.C. 7:7-6.5, General permit 5, authorizes the expansion, or reconstruction (with or without expansion), of a legally constructed, habitable single-family home or duplex and/or accessory development (such as garages, sheds, pools, driveways, grading, excavation, and clearing, excluding shore protection structures), provided the single-family home or duplex and accessory structures are located landward of the mean high water line, and provided the single-family home or duplex is not located on a bulkheaded lagoon lot.

N.J.A.C. 7:7-6.5(d)1iii states the beach area adjacent to the proposed development is either naturally stable without beach nourishment or naturally accretional without beach nourishment. This regulation also specifies that the determination be made using the method described pursuant to the erosion hazard area (as previously described). For the same reasons, previously described at N.J.A.C. 7:7-6.4, the Department is proposing to remove the use of the calculation to determine if a beach area is either naturally stable or naturally accretional without beach nourishment and to use its GIS Historical Shorelines coverage

to determine the long- or short-term trend in shoreline changes. The reference to the 1836-1986 coverage is also proposed for deletion.

At N.J.A.C. 7:7-6.5(f), the Department is proposing to add the requirement to comply with the Inundation Risk Zone provisions at N.J.A.C. 7:7-9.50 for the reasons discussed at N.J.A.C. 7:7-6.4. However, unlike the proposed changes at N.J.A.C. 7:7-6.4(h), structures meeting the criteria at N.J.A.C. 7:7-6.5(f)1 continue to be excluded from having to comply with the coastal high hazard areas rule at N.J.A.C. 7:7-9.18, erosion hazard areas rule at N.J.A.C. 7:7-9.19, and the new proposed "inundation risk zone" rule at N.J.A.C. 7:7-9.50. The Department is continuing this exception and adding the IRZ rule to the exceptions as well, because this general permit is for the expansion or reconstruction of already existing structures for which the risk has already been assessed.

Finally, at proposed N.J.A.C. 7:7-6.5(l), like recodified N.J.A.C. 7:7-6.4(m), the Department is proposing to amend the setback requirements for non-oceanfront sites with existing or proposed shore protection structures to clarify that the setback on a coastal bluff cannot be reduced to less than 10 feet consistent with the requirement at recodified N.J.A.C. 7:7-6.4(m)1.

N.J.A.C. 7:7-6.17 General Permit 17 – Shoreline Stabilization using Suitable Vegetation

Existing general permit 17 (N.J.A.C. 7:7-6.17) for the stabilization of an eroded shoreline is proposed to be repealed and replaced with a new general permit for shoreline stabilization using suitable native vegetation. This new general permit will promote the use of vegetation to stabilize existing shorelines enabling them to continue to function as part of the natural ecosystem.

In accordance with proposed new N.J.A.C. 7:7-6.17(a), this general permit authorizes the stabilization of an existing shoreline through the installation of coir logs and/or the planting of vegetation to prevent erosion and stabilize the shoreline provided certain conditions are met.

The proposed general permit includes several conditions designed to ensure that the proposed project achieves its intended goals while having no impact on other resources, with some conditions equally applicable to the general permit-by-certification proposed at N.J.A.C. 7:7-5.11. Particularly, the project cannot be located within a shellfish lease area authorized pursuant to N.J.S.A. 50:1-23, cannot interfere with navigation, and can only consist of coir logs, native vegetation, or natural materials associated with the plantings. However, as the general permit is designed to address larger projects, it includes several additional requirements. In addition to there being no limitation on the scope of the project, proposed N.J.A.C. 7:7-6.17(a)4 requires that, where shoreline stabilization occurs outshore of a wetland, the project shall result in minimum feasible alteration or impairment of the natural contour or the natural vegetation of the wetlands, thus ensuring that the project results in the minimum amount of environmental impact to special areas. Wetlands provide natural shore protection, so negatively affecting a wetland would be contrary to the permit's purpose.

Proposed N.J.A.C. 7:7-6.17(b) requires the submission of a construction completion report. This report is similar to the construction completion report required for mitigation projects at N.J.A.C. 7:7-17.13. The purpose of this report is to document the conditions of the site upon completion of construction, also known as the baseline conditions. The construction completion report will enable more efficient and accurate monitoring of the site by the Department. Proposed N.J.A.C. 7:7-6.17(b) requires that the construction completion report be submitted within 60 calendar days after construction is completed. The report must include an as-built plan of the completed project, showing grading, the location of coir logs if they are part of the stabilization project, and the type, location, and distribution of plantings, included in the approved shoreline stabilization project; photographs of the shoreline stabilization area; and an explanation for any minor deviation from the approved stabilization plan. Minor deviations may include the substitution of plant species if those previously approved are not available.

Proposed N.J.A.C. 7:7-6.17(c) requires that stabilization activities cannot interfere with existing public access points or the public's ability to utilize lands subject to the public trust doctrine.

Consistent with proposed N.J.A.C. 7:7-5.11(c) and 5.12(c), proposed N.J.A.C. 7:7-6.17(d) provides that if the Department determines that the shoreline stabilization has resulted in adverse shoreline movement, the Department may require the permittee to remove the shoreline stabilization materials and restore the habitat to preexisting conditions. If the Department requires the removal of the shoreline stabilization materials and the restoration of the habitat, the applicant may submit an application for a different type of shoreline stabilization technique.

Consistent with the general permit-by-rule at N.J.A.C. 7:7-5.11, no application fee is proposed for this general permit.

N.J.A.C. 7:7-6.22 General Permit 22 – Construction of Certain Structures Related to the Tourism Industry at Hotels and Motels, Commercial Developments, and Multi-Family Residential Developments over 75 Units

N.J.A.C. 7:7-6.22, General permit 22, authorizes the construction of certain structures related to the tourism industry at hotels, motels, commercial developments, and multi-family residential developments. The Department is proposing to amend the general permit to make it specific to listed activities at subsection (a), accordingly, "such as" is proposed to be deleted. Structures not specified pursuant to the general permit will instead require authorization pursuant to an individual permit. This change adds predictability as to the structures authorized pursuant to the general permit. It also ensures that structures that are permanent or that might be habitable do not qualify for this general permit and must be reviewed in accordance with all rules, including the proposed inundation risk zone rule. The structures authorized pursuant to this general permit are limited to those that are temporary and seasonal and that serve

functions such as providing a temporary shelter from the sun while at the beach, or a temporary storage area for items needed for the operation of the commercial or residential entity applying for the permit.

The Department is also proposing to replace "canopied shelters" with "sun shelters" for the reasons previously discussed. In addition, the Department is clarifying that this general permit does not authorize the installation of sewer lines except temporary, seasonal sewer lines in Atlantic City that comply with the requirements in the Atlantic City rule at N.J.A.C. 7:7-9.47(l).

Connecting sewer lines to structures on the beach indicates permanence and supports more continuous human occupation. Further, to connect into a municipal sewer system, the sewage generating structures must be located within a sewer service area. In most cases, environmentally sensitive areas, such as beaches, are excluded from the sewer service area. Finally, the placement of sewer lines on beaches that are subject to being adversely affected by storms, erosion, and waves, poses a public health and safety risk. Accordingly, the proposed amendment to the general permit at N.J.A.C. 7:7-6.22(a) now clarifies that it excludes the installation of sewer lines except temporary, seasonal sewer lines associated with a hotel, casino, and/or restaurant development abutting the landward side of the boardwalk in Atlantic City.

N.J.A.C. 7:7-6.22(a)1 states that the structures qualifying for this general permit, with the exception of a subsequent list of structures at subparagraph (a)1i, are intended to support the tourism industry, which is seasonal and, therefore, will only remain in place during the tourism season from May 1 through October 31. The Department is proposing to add to this, an explicit statement requiring that by November 1, the structure(s) must be removed from the beach and relocated to a secure location.

N.J.A.C. 7:7-6.22(a)1i, provides the list of structures that can remain year-round. The Department is proposing to amend this provision to exclude underground utilities to avoid confusion, since sewer lines are not authorized pursuant to the general permit for the reasons previously stated. N.J.A.C. 7:7-6.22(a)2 sets forth the requirement that all structures authorized pursuant to this general permit other than those listed at subparagraph (a)1i shall be removed from the beach any time the National Weather Service issues certain

Severe Weather Alerts that could impact the structures. When implementing this general permit since its adoption in 2000, it has been the Department's experience that the size and number of structures has increased making them more difficult to remove prior to a significant storm event and often they are not removed. In light of the safety concerns this raises, the Department is proposing to add to paragraph (a)2, the requirement that the applicant submit for Department approval an Emergency Structure Removal Plan, which shall include:1) a detailed description how the structures will be removed including a timeline showing removal can be accomplished within 24 hours of a Severe Weather Alert; 2) the identity and contact information of parties responsible for removal and relocation of the structures and proof of agreement for such services; 3) a list of equipment that will be needed and confirmation of the responsible parties' access to such equipment which accounts for competing needs during storm events; and 4) the location to which structures will be moved.

N.J.A.C. 7:7-6.22(a)4 requires that the placement of the structure excludes any excavation, grading, or filling of a beach, ensuring these structures are seasonal and temporary. The installation of permanent footings and anchoring or support piles is indicative of structural permanence. Accordingly, the Department is proposing to clarify that the installation of permanent footings and anchoring or support piles are not authorized pursuant to the general permit.

N.J.A.C. 7:7-6.22(a)8 provides that if the structure is located on a beach, it cannot unreasonably conflict with ocean views or other beach uses. This provision is proposed to be modified to ensure that structures do not interfere with existing public access points or the public's ability to utilize lands subject to the public trust doctrine. The intent of this amendment, together with N.J.A.C. 7:7-6.22(a)9, which is not proposed to be changed, and paragraph (a)10 is to ensure that when commercial and residential entities place temporary structures along the beach, the structures do not interfere with access for the public to the beach and tidal waters.

A new provision making clear that structures authorized pursuant to this general permit shall not have permanent utilities is proposed at N.J.A.C. 7:7-6.22(a)11. This amendment is proposed because connecting sewer and permanent utility lines to structures on the beach indicates permanence and supports more continuous human occupation of these structures. Further, to connect into a municipal sewer system, the sewage generating structures must be located within a sewer service area. In most cases, environmentally sensitive areas, such as beaches, are excluded from the sewer service area. Finally, the placement of utility lines on beaches that are subject to being adversely affected by storms, erosion, and waves, poses a public health and safety risk.

Recodified N.J.A.C. 7:7-6.22(a)12, requires that where structures are located on a beach, the permittee submit, on or before April 1st to the Department for review and approval, a revised site plan showing the location of the beach berm area, and demonstrating compliance with the requirements of the general permit. The Department is proposing to amend this provision to include, as required contents of the site plan, the location where structures will be relocated when a Severe Weather Alert requires the removal of the structure from the beach. This will ensure these structures will not be relocated to an area where the structure will pose a public safety hazard or be located within an environmentally sensitive area.

N.J.A.C. 7:7-6.23 General Permit 23 – Geotechnical Survey Borings

N.J.A.C. 7:7-6.23 is the general permit for geotechnical survey borings. N.J.A.C. 7:7-6.23(a)5 sets forth time periods during which activities are prohibited that may introduce sediment into a stream or cause the stream to become turbid for the protection of fishery resources. These timing restrictions and the proposed changes described herein, are established by the Department's Fish and Wildlife biologists based on the best available science and the biologists' experience in managing the fishery resource.

Currently, the timing restriction for anadromous waters is based on the location of the proposed activity. The Department is proposing to simplify the timing restriction for waters supporting anadromous

fish by having one timing restriction, from March 1 through June 30, that applies to all anadromous waters. This change is protective of the fishery resource and is consistent with the National Oceanic and Atmospheric Administration's National Marine Fisheries Service's anadromous fish timing restriction.

N.J.A.C. 7:7-6.24 General Permit 24 – Nonstructural and Hybrid Nature-Based Solution Activities Including Habitat Creation, Restoration, Enhancement, and Living Shoreline Activities

The general permit at existing N.J.A.C. 7:7-6.24 authorizes habitat creation, restoration, enhancement, and living shoreline activities necessary to implement a plan for the restoration, creation, enhancement, or protection of the habitat, water quality functions, and values of wetlands, wetland buffers, and open water areas. All of those activities and more are included in the proposed definition of a nature-based solution. Therefore, pursuant to this rulemaking, the Department is proposing to expand the general permit to include all types of nature-based solutions. For example, activities authorized pursuant to this general permit include the beneficial use of dredge material to elevate the marsh platform to enhance the resilience of wetlands that are threatened by sea level rise and climate change.

To increase and support the establishment of environmentally beneficial projects, the sponsorship requirements at existing N.J.A.C. 7:7-6.24(a) and (b) are proposed for deletion as the sponsorship requirement has prevented environmentally beneficial projects from being authorized pursuant to this general permit. Originally, the sponsorship requirement was intended to ensure that habitat restoration, creation, and enhancement projects authorized pursuant to the general permit were suitable for their intended purpose with oversight by Federal and/or State experts. However, since the promulgation of this general permit in 2006, the Department and regulated community have gained experience and knowledge from implementing these projects (see 37 N.J.R. 4108(a); 38 N.J.R. 1657(a)). Accordingly, the Department has determined that the sponsorship requirements are no longer necessary.

Existing N.J.A.C. 7:7-6.24(c) is proposed to be recodified as N.J.A.C. 7:7-6.24(b) with amendments that expand the scope of projects eligible for authorization pursuant to this general permit to include shoreline stabilization projects and elevation of the wetland platform. At recodified N.J.A.C. 7:7-6.24(b)1, runnels (small channels within a marsh that allow for proper drainage of the marsh platform) are being added to the types of drainage structures, the alteration of which can change hydrology to restore or create wetland conditions. The Department is proposing to add two new activities to the list of types of activities authorized pursuant to the general permit. At new N.J.A.C. 7:7-6.24(b)7, the Department is proposing to add marsh restoration or enhancement through the strategic placement of dredged material from the same system to elevate the marsh platform. At new N.J.A.C. 7:7-6.24(b)8, the Department is proposing to add the placement of dredged material into shallow water areas adjacent to the marsh for habitat enhancement or wave energy dissipation. Both activities have been found to provide positive benefits to the shoreline and are, therefore, examples of the way a nature-based solution works with environmental processes to improve the shoreline and are appropriate activities to be included in the general permit. Additionally, the Department is proposing new N.J.A.C. 7:7-6.24(b)9 to explicitly allow fencing for habitat connectivity projects or barriers to prevent wildlife/vehicle mortality, either on its own, and/or if used in conjunction with a proposed or existing culvert or bridge. Animals must be able to move through the landscape to find food, water, shelter, mates, and other resources necessary for their survival. Roadways fragment wildlife habitat. A critical step in restoring wildlife habitat connectivity is facilitating the movement of animals across roads. Installation of crossing structures with wildlife fencing is an effective means of reducing wildlife vehicle collisions and allowing safe movement across road barriers, thus maintaining connectivity. These wildlife passage systems can be in the form of new structures and fencing or retrofits to existing culverts or bridges.

Proposed N.J.A.C. 7:7-6.24(c)4, requires that for a proposed project to be eligible for authorization pursuant to the general permit, the applicant must demonstrate that it will have a reasonable likelihood of

success, unless performed by a college or university for the purpose of research, in which case, the project can be authorized if it will advance the level of knowledge regarding living shorelines in the State. References to research projects are being deleted since the Department is proposing to add a new general permit for nature-based solution research projects at N.J.A.C. 7:7-6.33.

At proposed new N.J.A.C. 7:7-6.24(d)5, the Department is disallowing the use of a nature-based solution in a shellfish lease area. However, the new paragraph allows that in some situations, approval may be granted by the Bureau of Shellfisheries and the Shellfisheries Council to modify the boundaries of the lease area to accommodate a nature-based solution project.

Proposed new N.J.A.C. 7:7-6.24(d)6 prioritizes the types of nature-based solutions pursuant to this general permit. The establishment of a hierarchy is intended to encourage the use of non-structural nature-based solutions in those cases where the environment is conducive to such solutions. At subparagraph (d)6i, the Department is providing several factors to be considered when evaluating a site to determine if the intended project can be accomplished by using solely non-structural methods, whether it be habitat restoration, shoreline stabilization, or any of the other activities for which the permit may be used. If it can be accomplished without a structural component, then the applicant will be required to use a non-structural method. If the site is not conducive to nonstructural methods, then the proposed rule at subparagraph (d)6ii describes the evaluation of similar site factors to determine if the desired project can be successfully accomplished using a hybrid nature-based solution. If the project can be accomplished using a hybrid nature-based solution, then the general permit will be applicable to the proposed project. If the project would not be successful using either a non-structural or hybrid nature-based solution method, and instead can only be accomplished using a structure, the general permit will not be applicable.

Recodified N.J.A.C. 7:7-6.24(e) sets forth additional conditions that a living shoreline must meet to be authorized pursuant to the general permit. The Department is proposing to amend paragraph (e)3; the current provision limits the footprint of the restored shoreline to that appearing on the applicable Tidelands

Map except for the placement of shore-protection structures. The Department is proposing to allow changes to the "shape" of the shoreline, as long as the resulting shoreline does not exceed the footprint. This is intended to give applicants the opportunity to "smooth out" a shoreline that may be irregular on the Tidelands Map.

For the same reasons discussed in the summary at proposed N.J.A.C. 7:7-6.17, General permit for shoreline stabilization using suitable native vegetation, the Department is proposing new N.J.A.C. 7:7-6.24(g), pertaining to the submission of a construction completion report, which will serve as the baseline for future monitoring. The Department is proposing that the report consists of an as-built plan of the completed project showing grading, plantings (including species, sizes, planting, densities, and any structures); photographs of the completed project; and a written description of challenges, successes, and any lessons learned during construction. The latter will help the Department, and future applicants add to the body of knowledge regarding nature-based solutions.

N.J.A.C. 7:7-6.25 General Permit 25 – Construction of One to Three Wind Turbines Less Than 200 Feet in Height and Having a Cumulative Rotor Swept Area No Greater than 4,000 Square Feet

Existing N.J.A.C. 7:7-6.25(a)8 is amended to update the name of the Division to the Land Resource Protection and updating the website, as well, to https://www.nj.gov/dep/wlm. In addition, existing N.J.A.C. 7:7-6.25(b) is proposed to be amended to update the existing cross-reference to timing restrictions for operation of the wind turbines during migration season(s) for birds and bats to N.J.A.C. 7:7-3.7(b).

N.J.A.C. 7:7-6.33 General Permit 33 – Nature-Based Solutions Research Projects

Proposed N.J.A.C. 7:7-6.33 establishes a new general permit for nature-based solutions research projects. Specifically, proposed N.J.A.C. 7:7-6.33(a) authorizes the restoration, creation, or enhancement of wetlands using techniques that will advance the level of knowledge regarding habitat creation,

restoration, or enhancement, and/or nature-based solution activities for the benefit of the environment and the residents of New Jersey. This is appropriate because researchers throughout the world are experimenting with different designs, locations, materials (both vegetative and non-vegetive), and, in some cases, structures for new and innovative mechanisms to stabilize shorelines and to enhance or create habitat to adapt to a changing environment.

Pursuant to proposed subsection (b), the Department is limiting the entities that are eligible to apply for authorization pursuant to this general permit to the Department, United States Fish and Wildlife Service, NRCS, United State Army Corps of Engineers, USEPA, and the NOAA's Restoration Center, an environmental NGO with experience in nature-based solutions, colleges, or universities, as these entities have expertise in conducting environmental research.

Proposed N.J.A.C. 7:7-6.33(c) sets forth the acceptability conditions pursuant to the general permit. Specifically, proposed N.J.A.C. 7:7-6.33(c)1 limits the size to half an acre, but allows for up to a one-acre project, if the research requires a larger area. Limiting the size of the project will minimize adverse environmental impacts should the project fail. Proposed N.J.A.C. 7:7-6.33(c)2 requires that the project be conducted solely for research. Proposed paragraph (c)3 requires monitoring for five years after completion of construction unless the applicant requests and the Department agrees that a different monitoring period is needed to ensure the success of the project. Proposed paragraph (c)4 ensures that the project will not interfere with or otherwise cause a hazard to navigation; and proposed paragraph (c)5 limits the disturbance to special areas to the minimum amount necessary to implement the project. Proposed paragraph (c)6 states that a project cannot be authorized in a shellfish lease area. However, it does allow that, for a project deemed necessary by the Department to protect the public interest or to protect upland structure or resources, the Department, in consultation with the New Jersey Shellfisheries Council, may modify the boundaries of shellfish lease to accommodate a project. For the same reasons discussed at proposed N.J.A.C. 7:7-6.24(f),

proposed N.J.A.C. 7:7-6.33(d) requires the submission of a construction completion report that will serve as the baseline for the monitoring period.

In accordance with the public trust rights rule, N.J.A.C. 7:7-9.48, and the public access rule, N.J.A.C. 7:7-16.9, proposed N.J.A.C. 7:7-6.33(e) requires public access be provided.

Finally, proposed N.J.A.C. 7:7-6.33(f) provides that if the Department determines the project has failed to meet the stated objectives, the permittee shall be responsible for restoration of the site to the maximum extent practicable, including the possible removal of structures, if any were used in the research project. Within 60 days of determining whether the project is unsuccessful, the permittee shall provide a restoration plan for review and approval by the Department. Once that plan is approved, the applicant has 60 days to implement the restoration plan. While a failure using vegetated material may not result in other negative impacts, if structures were used these could provide unintended consequences in the future and, therefore, must be removed as quickly as possible.

To encourage nature-based solution research projects, the Department is proposing to not require an application fee for the general permit pursuant to N.J.A.C. 7:7-25.1.

SUBCHAPTER 8. INDIVIDUAL PERMITS

N.J.A.C. 7:7-8.2 Duration of an Individual Permit

N.J.A.C. 7:7-8.2 establishes the duration of an individual permit, providing that an individual permit for any activity waterward of the mean high-water line is valid for five years from the date of issuance and may be extended one time for five years. Existing N.J.A.C. 7:7-8.2(g) requires that regulated activities must cease immediately upon the expiration of an individual permit or an extension of an individual permit and requires that a person wishing to commence or continue the previously authorized activities obtain a new individual permit. Existing N.J.A.C. 7:7-8.2(g)2 requires that if regulated activities have occurred prior to the expiration of the permit, the project must be revised where feasible to meet the

requirements of the CZM rules in effect when the new individual permit application is deemed complete for review. It further indicates that feasibility of meeting the new requirements shall consider the amount of construction that has been completed, the reasonable financial investment that has been made in the original design, and whether continuing construction as approved pursuant to the original permit would have adverse impacts on flooding or the environment. The Department is proposing to amend this provision to clarify that the amount of reasonable financial investment is considered in proportion to the project and is determined by the Department. This distinction is necessary to evaluate feasibility in the context of the project as a whole.

N.J.A.C. 7:7-8.4 Obligations Pursuant to the National Flood Insurance Program

A new section is proposed at N.J.A.C. 7:7-8.4 to ensure that the State's commitment to uphold minimum NFIP standards is met, as articulated at existing N.J.A.C. 7:7-9.25(f)3. Identical requirements are being proposed at new N.J.A.C. 7:7-3.9 for permits-by-registration, general permits-by-certification, and general permits, as well as in the Department's FHACA rules at new N.J.A.C. 7:13-6.8 for permits-by-registration, general permits-by-certification, and general permits, and new N.J.A.C. 7:13-10.4 for individual permits.

Proposed N.J.A.C. 7:7-8.4 focuses on development located within two specific areas mapped by FEMA. For a given community, FEMA-adopted flood insurance rate mapping generally depicts both the limits of FEMA's 100-year (or one-percent probability) "special flood hazard area," as well as regulatory floodway limits along the studied section of water. This section applies to development located within a FEMA-adopted regulatory floodway, as well as within a FEMA-adopted special flood hazard area that does not include a FEMA-mapped regulatory floodway, as required pursuant to 44 CFR 60.3. While the FHACA rules generally prohibit development within floodways, certain activities are permitted because it is understood they would not exacerbate flooding. Thus, satisfying the requirements of this section is

necessary before an applicant undertakes activities within these FEMA-defined areas in order to meet minimum NFIP standards.

Proposed N.J.A.C. 7:7-8.4(b) explains that, prior to the Department issuing an individual permit, the applicant must take certain actions. First, pursuant to N.J.A.C. 7:7-8.4(b)1, where activities are proposed within a FEMA-adopted regulatory floodway, and the activities would result in "no net increase" to the 100-year flood elevation, the registrant or applicant must provide an engineering certification to the local floodplain administrator having jurisdiction over the site confirming that the project will meet FEMA's no rise criteria. This is important to ensure that development within and adjacent to delineated floodways does not exacerbate flooding. Second, pursuant to N.J.A.C. 7:7-8.4(b)2, where activities are proposed within a FEMA-adopted regulatory floodway, which would result in a net increase to the 100-year flood elevation, the registrant or applicant must apply for and obtain a Conditional Letter of Map Revision from FEMA. Both N.J.A.C. 7:7-8.4(b)1 and 2 presume that a "net increase" in the flood elevation is equated with any anticipated change in the water surface profile of greater than 0.00 feet.

A third scenario is presented, in which activities are proposed within a FEMA-adopted special flood hazard area that does not include mapping of the regulatory floodway. In this case, if a project, when combined with all other existing and anticipated development within the flood hazard area, would result in a cumulative increase of greater than 0.20 feet in the 100-year flood elevation, the applicant shall apply for and obtain a CLOMR from FEMA, similar to N.J.A.C. 7:7-8.4(b)2. When mapping floodway limits in New Jersey, the Department and FEMA both utilize calculations that define the floodway as causing no more than a 0.20-foot rise in the 100-year flood elevation. Thus, should a project within a FEMA-mapped 100-year floodplain cause flood elevations to rise more than this amount, it would not meet the standards set forth in the FHACA rules to protect people and property from increased flooding due to development. (See the Department's FHACA rules at N.J.A.C. 7:13-12.1(g)5ii.)

Pursuant to proposed new N.J.A.C. 7:7-8.4(c), hydraulic calculations undertaken to demonstrate compliance with this section must be rounded to the nearest one-hundredth (0.01) of a foot. Two examples are provided to demonstrate how this standard should be applied. As with any type of modeling, there are limitations on the precision of the calculations. In other sections of the FHACA rules, calculations are to be rounded to the nearest one-tenth (0.1) of a foot. (See the Department's FHACA rules at N.J.A.C. 7:13-12.1(g), 12.7(b)1, and 12.14(d)5.) However, since FEMA considers the accuracy of the calculations to the nearest one-hundredth (0.01) of a foot, this standard is necessary to demonstrate compliance with this section in order to ensure that the requirements of the NFIP are met.

Proposed N.J.A.C. 7:7-8.4(d) requires applicants for individual permits to upload a copy of the required no rise certification or approved CLOMR, as required pursuant to proposed N.J.A.C. 7:7-8.4(b), to the Department's online portal at https://www.nj.gov/dep/online prior to the issuance of the individual permit. This facilitates the Department's ability to track and report to FEMA actions pursuant to this section and subchapter.

Proposed N.J.A.C. 7:7-8.4(e) further underscores that the requirements of this proposed section shall not be construed to contradict or obviate the requirements of the National Flood Insurance Program. As the purpose of this section is to ensure that NFIP standards are met, and is furthermore being proposed based on the Department's understanding of FEMA's requirements at 44 CFR 60.3 and related sections, it is appropriate to include this provision.

SUBCHAPTER 9. SPECIAL AREAS

N.J.A.C. 7:7-9.2 Shellfish Habitat

N.J.A.C. 7:7-9.2(a) defines shellfish habitat, which includes estuarine bay or river bottoms that have a history of production for hard clams, soft clams, eastern oysters, bay scallops, or blue mussels.

Shellfish habitat areas are defined as areas with a specific shellfish density or areas that appear on specified U.S. Department of Interior and/or Department shellfish maps. N.J.A.C. 7:7-9.2(a)2 is proposed to be amended to add the web address for the referenced Distribution of Shellfish Resources in Relation to the New Jersey Intracoastal Waterway (U.S. Department of the Interior, 1963) and/or "Inventory of New Jersey's Estuarine Shellfish Resources" (Division of Fish, Game and Wildlife, Bureau of Shellfisheries, 1983-present) which, among other things, classify areas based upon their commercial value for shellfish production. To further New Jersey's clean energy goals, Governor Murphy's Executive Order No. 315 (2023) calls for 100 percent clean energy by 2035. To fulfill this commitment, and to meet the Global Warming Response Act, N.J.S.A. 26:2C-37 et seq., mandate of reducing State greenhouse gas emissions, by 80 percent by 2050 (known as the 80 x 50 goal), the 2019 New Jersey Energy Master Plan outlines strategies and implementation plans, which include accelerating the development of offshore wind. To implement the Energy Management Plan's offshore wind strategy, Executive Order No. 92 (2019) increased the offshore wind energy goal to 7,500 megawatts by the year 2035.

The construction of wind farms off the coast of New Jersey includes accessory development such as electric transmission cables to bring the generated power onshore. Due to its ocean location, a wind farm developer has no alternative but to install electric transmission cables in the ocean and, in some cases, within the State's estuarine waters to link the offshore facilities to the chosen upland substation location. Accordingly, the Department is proposing amendments to allow for the installation of these cables while ensuring the impacts to the shellfish habitat are avoided where possible, with unavoidable impacts minimized and mitigation provided. Accompanying changes at N.J.A.C. 7:7-17.9, Requirements for shellfish habitat mitigation, are also proposed to address compensatory mitigation.

N.J.A.C. 7:7-9.2(c) prohibits development that would result in the destruction, condemnation, or contamination of shellfish habitat unless the proposed development is a dock, pier, or boat mooring, expansion of an existing marina or construction of a new marina in limited infill situations, dredging, a

living shoreline, or a development required for national security. For the reasons previously discussed, reference to "living shorelines" is proposed to be replaced with "nature-based solution" and is also replaced in the proposed amendments at recodified N.J.A.C. 7:7-9.2(k). The exceptions to the prohibition of development in shellfish habitat are proposed to be expanded to allow for the installation of submerged cables (discussed at proposed new subsections (f) and (g)). The list of exceptions is also proposed to be amended to reflect the recodification of existing subsection (k) as (n), which addresses national security.

Currently, new dredging within shellfish habitat is prohibited, except for new dredging to maintain the use of public launching facilities with 25 or more trailer parking spaces, and marinas with 25 or more slips. Pursuant to the proposed amendments, to provide the necessary balance of resource protection and furtherance of the State's clean energy and emission reduction goals through development of offshore wind facilities, the Department would consider the installation of submerged cables within shellfish habitat to be discouraged but allowable under certain circumstances. In cases where the Department considers the proposed use to be in the public interest despite its discouraged status, the Department may permit the use, provided mitigating or compensating measures can be taken so that there is a net gain in quality and quantity of the coastal resource of concern. Accordingly, proposed new N.J.A.C. 7:7-9.2(e) provides that new dredging, as defined at N.J.A.C. 7:7-12.7, is prohibited within shellfish habitat, except for new dredging for the installation of submerged cables at proposed N.J.A.C. 7:7-9.2(f) and new dredging to maintain the use of public launching facilities (ramps) with 25 or more trailer parking spaces or marina facilities with 25 or more dockage units, consisting of either dry dock storage or wet slips at recodified N.J.A.C. 7:7-9.2(h).

Proposed new N.J.A.C. 7:7-9.2(f) provides that new dredging for the installation of submerged cables is discouraged unless the submerged cable is in the public interest, there is no other practicable or feasible alternative alignment, and measures are implemented to minimize and compensate for impacts to the shellfish habitat. For example, certain renewable energy facilities, such as offshore wind, and associated infrastructure, are in the public interest and would, therefore, be acceptable, provided measures such as

specific construction/installation techniques, are implemented to minimize impacts and compensation, such as creating and/or enhancing shellfish habitat within the estuary, or a monetary contribution to the Department's dedicated account for shellfish habitat mitigation is provided for impacts to shellfish habitat.

The Department is proposing a new N.J.A.C. 7:7-9.2(g) specific to protections for oyster reef habitat. Oyster reef shellfish habitat is found in New Jersey's estuarine waters and plays a significant ecological role and forms a distinct community, which is different than the surrounding seabed. The term oyster reef shellfish habitat includes living oysters and/or dead oyster shell accumulations. Numerous marine organisms, such as bryozoans, hydroids, sponges, barnacles, ascidians, tube-building worms, and other bivalves attach to oysters and the associated structure of the reef. These fouling organisms, in turn, attract various crustaceans and small fish. This delivers a concentrated prey source for many recreationally and commercially sought after finfish species, such as weakfish, striped bass, croaker, and black drum. Additionally, many marine species use the oyster community and the interstices of the oyster reef for foraging and spawning habitat. Accordingly, management and policy efforts to bolster these habitats not only provide major economic benefits for harvesters and local communities but add to the overall ecology of estuaries by increasing habitat and faunal diversity, while in some cases potentially improving water quality by reducing particulates and shifting nutrient dynamics. Oyster reef shellfish habitats can also play a role in storm protection (resilience against wave action and energy) and water quality improvements (filter feeding and nutrient reduction).

Pursuant to proposed new N.J.A.C. 7:7-9.2(g), disturbance to oyster reef habitat is discouraged, except for the installation of submerged cables as defined at N.J.A.C. 7:7-12.21. The installation of submerged cables is conditionally acceptable where there is no practicable or feasible alternate alignment, including the potential for cable co-location within existing cable corridors and mitigation for the condemnation of shellfish habitat or other impacts to the marine ecosystem is provided in accordance with N.J.A.C. 7:7-17. These requirements are intended to ensure that all alternate alignments, including co-

location, have been explored and, where it is determined that there is no practicable or feasible alternative, mitigation is provided for the disturbance.

The standards for new dredging associated with maintenance of public launching facilities or certain size marinas at recodified N.J.A.C. 7:7-9.2(h) with amendments to clarify that dredging is acceptable for these types of facilities. Minor wording corrections are also proposed that are not substantive. Further, existing N.J.A.C. 7:7-9.2(f) through (g) are proposed to be recodified as N.J.A.C. 7:7-9.2(i) through (j) without change.

Recodified N.J.A.C. 7:7-9.2(k) addresses the establishment of living shorelines in shellfish habitat. As previously discussed, pursuant to this rulemaking, reference to "living shorelines" is proposed to be replaced with "nature-based solution project." Replacing "living shorelines" with "nature-based solution project" will broaden the scope of environmentally beneficial activities intended to enhance the overall health and ecology of the coastal waters in which they are placed, thus enhancing the shellfish habitat. As a nature-based solution project is a habitat protection, restoration, or enhancement project that will result in a net gain of habitat functions and values, mitigation is not required. Existing N.J.A.C. 7:7-9.2(i) through (l) are proposed to be recodified as N.J.A.C. 7:7-9.2(m) through (o) without change.

The rule rationale at recodified N.J.A.C. 7:7-9.2(p) is proposed to be amended to address the above amendments.

N.J.A.C. 7:7-9.6 Submerged Vegetation Habitat

The Department is proposing to amend N.J.A.C. 7:7-9.6(b)6vi, which addresses the permitted construction of a single noncommercial dock or pier in submerged aquatic habitat (SAV) areas. The existing rule requires that a minimum water depth of four feet at mean low water must be present in the area where "boats will be moored." The intent of the rule is to only allow the mooring of vessels at a dock in an SAV habitat in four feet of water at mean low water (MLW). Applicants have claimed that since no boats are

proposed to be moored, a dock can be placed in less than four feet of water in an SAV habitat. Once the dock is constructed, however, future owners may moor their boats at the dock causing damage to SAV, both through mooring and as a result of vessels travelling through the shallow habitat with their propeller incidentally "dredging" the habitat. Therefore, the Department is proposing to amend the rule to require that all docks proposed in an SAV habitat must be, at a minimum, water depth of four feet at mean low water in the area of the most waterward 10 feet of the dock. Ten feet provides ample room for mooring of a vessel and being at the most waterward end allows vessels to depart immediately into deeper waters off the end of the pier, avoiding SAV habitat. Paragraph (b)8 provides the establishment of a living shoreline in submerged vegetation habitat to address the loss of vegetated shorelines and habitat in the littoral zone is conditionally acceptable provided the living shoreline complies with the living shorelines general water area rule at N.J.A.C. 7:7-12.23. Pursuant to this rulemaking, reference to "living shorelines" at N.J.A.C. 7:7-9.6(b)8 is proposed to be replaced with "nature-based solution project" as discussed above and in the summary of the proposed nature-based solution rule at N.J.A.C. 7:7-12.23. The Department has determined that construction of nature-based solutions projects within an SAV habitat is conditionally acceptable, provided the project meets the requirements of the proposed nature-based solutions rule. This change will broaden the scope of environmentally beneficial activities intended to enhance the overall health and ecology of the coastal waters in which they are placed, thus enhancing the submerged vegetation habitat that may exist at that location. Some types of nature-based solution projects may require the placement of fill within submerged vegetation habitat to restore habitat that has been lost or to protect existing habitat. For example, increased sedimentation from an eroding shoreline will directly affect the submerged vegetation habitat in the immediate area where the erosion is occurring and may also adversely affect a larger area of habitat through indirect impacts associated with the suspension of sediment in the water column. While the placement of fill to construct the nature-based solution project will also directly impact

the submerged vegetation habitat in the immediate area, the long-term stabilization of the shoreline will protect the larger area of submerged vegetation habitat.

The rule rationale at N.J.A.C. 7:7-9.6(e) is amended to include information supporting the changes to the rule allowing the construction of nature-based solutions within this special area.

N.J.A.C. 7:7-9.15 Intertidal and Subtidal Shallows

Existing N.J.A.C. 7:7-9.15(g) provides that the establishment of a living shoreline in intertidal and subtidal shallows, to address the loss of vegetated shorelines and habitat in the littoral zone, is conditionally acceptable provided the living shoreline complies with the living shorelines general water area rule at N.J.A.C. 7:7-12.23. For the reasons discussed at N.J.A.C. 7:7-9.2 and 9.6, the Department is proposing to replace "living shorelines" with "nature-based solution project." As intertidal and subtidal shallows include areas from the spring high tide line to a water depth of four feet mean low water, the construction of nature-based solution projects, including living shorelines, will affect this special area. Like living shorelines, other nature-based solutions projects provide benefits, such as the reduction of shoreline erosion, restoration of eroded wetlands, and creation of habitats, thus justifying the expansion of the scope of allowed environmentally beneficial activities to include all nature-based solutions projects since they are all intended to enhance the overall health and ecology of the coastal waters in which they are placed.

The rule rationale at N.J.A.C. 7:7-9.15(j) is amended to include information supporting the rule changes to allow nature-based solution construction within this special area.

N.J.A.C. 7:7-9.16 Dunes

The Department is proposing to supplement the dune rule at N.J.A.C. 7:7-9.16(a) to clarify that the presence of engineered dunes created for the purpose of shore protection shall not diminish the importance of any other dune areas. Beach nourishment and creation of engineered dunes are essential storm protection

to upland properties and infrastructure. However, this already dynamic system continues to change based upon factors, such as sea level rise and the continued loss of sand, which will ultimately threaten the elevation/area needed for the effectiveness and constructability of these engineered shore protection structures. The creation of this engineered system should not undervalue the current and future importance of existing dune areas that are not part of this engineered design. As climate-change-induced sea level rise and associated storms continue to push this system and its functions and protection properties landward, this area will become the primary line of defense against storm surge. This area will be an accommodation zone where wind-transported sediments, from the increased frequency of storms and the current engineered system, can accumulate and be stored to support, and continue to form, higher elevations that protect against wave-induced erosion and breaching during storm events. Therefore, it is essential that these areas continue to be protected to allow the natural dune systems to continue to provide their current and future valuable function. As the consequences of sea level rise are realized, it is even more important to protect and support these areas to ultimately sustain the migrating systems' values and functions, including the geomorphological character and function, and the storm protection and wildlife habitat benefits that are provided.

The rule rationale at N.J.A.C. 7:7-9.16(e) is amended to include information supporting the importance of dunes in addition to those that have been the subject of engineering.

N.J.A.C. 7:7-9.18 Coastal High Hazard Areas

The Department is proposing to establish conditions pursuant to which temporary beach-use related structures and cabanas are acceptable in Coastal High Hazard Areas. Currently, such structures are not expressly addressed in the Coastal High Hazard Areas Rule. The Department proposes to add N.J.A.C. 7:7-9.18(c)3 to include cabanas within conditionally acceptable types of residential development in coastal

high hazard areas, provided the development complies with the requirements set forth at new subsection (h).

N.J.A.C. 7:7-9.18(h) states that temporary and seasonal beach-use related structures and cabanas are conditionally acceptable in Coastal High Hazard Areas, provided a number of conditions can be met.

N.J.A.C. 7:7-9.18(h)1 requires that structures only remain in place from May 1 through October 31. N.J.A.C. 7:7-9.18(h)2 sets forth the requirement that all structures shall be removed from the beach any time the National Weather Service issues certain Severe Weather Alerts that could impact the structures. As stated previously, it has been the Department's experience that the size and number of beach-use related structures on beaches has increased, making them more difficult to remove prior to a significant storm event and often they are not removed. In light of the safety concerns this raises, the Department is proposing to require submission and approval of an Emergency Structure Removal Plan, which shall include a detailed description of how the structures will be removed, including a timeline showing removal can be accomplished within 24 hours of a Severe Weather Alert; the identity and contact information of parties responsible for removal and relocation of the structures and proof of agreement for such services; a list of equipment that will be needed and confirmation of the responsible parties' access to such equipment, which accounts for competing needs during storm events, and the location to which structures will be moved.

N.J.A.C. 7:7-9.18(h)3 prohibits the structures from being connected to underground utilities, including sewer lines. Connecting underground utilities and sewer lines to structures on the beach indicates permanence and supports more continuous human occupation. Further, to connect into a municipal sewer system, the sewage generating structures must be located within a sewer service area. In most cases, environmentally sensitive areas, such as beaches, are excluded from the sewer service area. Finally, the placement of sewer lines on beaches that are subject to being adversely affected by storms, erosion, and waves, poses a public health and safety risk.

The requirements at N.J.A.C. 7:7-9.18(h)4 through 12 are aimed at ensuring the location of these temporary structures will not conflict with the Department's obligation to protect special areas and provide public access. Thus, the structures shall have no adverse impact on special areas, they shall not be located on a dune, coastal bluff, or in a wetland, and must be located at least 50 feet from any wetlands, and shall not include the excavation, grading, or filling of a beach. Placement of the structures cannot include the excavation, grading, or filling of a beach, or installation of permanent footings, or anchoring and support piles, both minimizing environmental impacts and indicating non-permanence. If the structure is located on a beach, it cannot unreasonably conflict with ocean views or other beach uses and cannot block the public's access to the beach and tidal waters, and the beach and structures must be kept open to the public. Further, the structures must be located on the most landward portion of the beach, cannot occupy more than 33 percent of the beach berm area, and cannot have a combined footprint of more than one acre. These requirements ensure that the placement of temporary structures on beaches will not unreasonably interfere with the public's enjoyment of the open beach area. Applicants must also provide public access in accordance with N.J.A.C. 7:7-9.48 and 16.9.

Proposed N.J.A.C. 7:7-9.18(h)13 requires that, if the structures are authorized, the permittee must submit, on or before April 1st, to the Department for review and approval a revised site plan showing the location of the beach berm area and demonstrating continued compliance with N.J.A.C. 7:7-9.18(h)1 through 12.

N.J.A.C. 7:7-9.22 Beaches

The proposed amendment to the Beaches rule at N.J.A.C. 7:7-9.22(b)6 will clarify that while some types of linear development are listed as acceptable development on a beach, utility and sewer lines are not acceptable on beaches. This change is needed because structures located on beaches should be temporary and seasonal in nature and cause minimal impact to the natural functioning of the beach and dune system.

Over time, the Department has noted a trend toward larger, more permanent structures being proposed on beaches, and sewer lines have in some cases been installed. Extending sewers onto beaches invites increased development potential and attendant environmental impacts and public safety concerns and could interfere with needed beach replenishment or shore protection projects. Connecting sewer lines to structures on the beach indicates permanence and supports more continuous human occupation. Further, to connect into a municipal sewer system, the sewage generating structures must be located within a sewer service area. In most cases, environmentally sensitive areas, such as beaches, are excluded from the sewer service area. Finally, the placement of sewer lines on beaches that are subject to being adversely affected by storms, erosion, and wave action, poses a public health and safety risk. Accordingly, this proposed amendment clarifies that sewer and utilities are not acceptable types of development on a beach. The rule amendment also cross-references the Atlantic City rule, N.J.A.C. 7:7-9.47, which creates a narrow exception to the prohibition of sewer lines on beaches and allows for temporary, seasonal sewer lines on beaches in Atlantic City.

N.J.A.C. 7:7-9.25 Flood hazard areas

At N.J.A.C. 7:7-9.25(a), the Department is proposing to delete the reference to the flood hazard area design flood to replace it with the term "climate-adjusted flood elevation." As previously stated, these rules establish a new "climate-adjusted flood elevation" to better protect roads, buildings, and other structures for both today's anticipated flood events, as well as the floods of the future. Additionally, at N.J.A.C. 7:7-9.25(f)1, the Department is adding language to clarify that activities proposed within a flood hazard area, which require a coastal permit, are required to meet the requirements at N.J.A.C. 7:13, unless exempted from such rules.

N.J.A.C. 7:7-9.26 Riparian Zones

In the Department's November 5, 2007 rulemaking, jurisdiction pursuant to N.J.A.C. 7:13 expanded to include flood hazard areas and riparian zones that in some cases lie within CAFRA or Waterfront Development jurisdiction. Rather than require applicants to seek both a flood hazard area permit and a coastal permit for an activity that is subject to both N.J.A.C. 7:13 and 7:7, the Department has added language at N.J.A.C. 7:7-9.26(h) to clarify that activities proposed within a riparian zone, which require a coastal permit, are required to meet the riparian zone requirements at N.J.A.C. 7:13 unless exempted from such rules.

N.J.A.C. 7:7-9.27 Wetlands

According to the 2020 New Jersey Scientific Report on Climate Change, tidal wetlands are one of the most valuable habitats in New Jersey, providing in excess of $1.24 billion in ecological benefits every year. Specifically, tidal wetlands help protect coastal communities from storms, filter nutrients, and sediment so that coastal waters are suitable for fishing and swimming, provide nursery habitat for commercially significant fish species, as well as critical habitat for rare and endangered species, and offer recreational opportunities, such as fishing, crabbing, and birding.

However, New Jersey's coastal zone, including its tidal wetlands, faces significant threats and challenges in the face of a changing climate and rising seas. The climate change report projects that sea levels will rise 0.9 to 2.1 feet between 2000 and 2050 and 1.4 to 4.2 feet between 2050 and 2100. The NOAA Coastal Vulnerability Index indicates that 98 percent of the New Jersey coastline is moderately to highly vulnerable to sea level rise, while 42 percent is highly vulnerable to shoreline erosion. According to the National Estuarine Research Reserve Association (NERRA), many tidal wetlands and adjacent tidal flats will be lost in the next several decades without active management. Modeling by the Rutgers University Center for Remote Sensing and Spatial Analysis in December 2019 suggests that, if the sea level rises between one to two feet by 2050, approximately 28 percent of existing tidal salt marshes in New Jersey

could be replaced by open water and unconsolidated shore. It is anticipated that one foot of sea level rise may cause more than 19,200 acres of salt marsh to convert to mudflat open water, resulting in a loss of vegetated marsh. An additional 24,800 acres of tidal wetlands are expected to be lost to erosion.

According to NERRA, the health and sustainability of a tidal wetland is largely dependent upon the wetland's vertical elevation relative to the sea level because there are limits to the frequency and duration of flooding that wetland plants and animals can withstand. The 2020 New Jersey Scientific Report on Climate Change reports that the elevation rates of most tidal wetlands in New Jersey are not keeping pace with local sea level rise. For example, 32 wetlands were recently studied in the Delaware Estuary and Barnegat Bay, and for 94 percent of those wetlands, the rate of vertical accretion was found to be slower than the rate of sea level rise. To survive sea level rise, New Jersey's tidal wetlands must be able to maintain the existing sediment within the wetlands system and keep pace with sea level rise. When sediment leaves the system, less sediment is available for the wetland to gain elevation. Certain project types rely upon importing sediment from another system in order to raise the elevation of a wetland. However, while the system in which the material is deposited benefits, the system from which the sediment was taken suffers. Therefore, the Department's amendments in this rulemaking encourage projects that foster the wetland's ability to accrete vertically while maintaining the system's own sediment, including the placement of dredged material on the wetlands surface or platform, the establishment of runnels that allow for the wetland to drain properly during normal tidal cycles, nearshore placement of material in the aquatic system, and/or the restoration or enhancement of wetlands to a high marsh system, rather than a low marsh environment.

The depth and width of tidal flats adjacent to wetlands also have a direct impact on wetland erosion. Tidal flats are the buffer zone between wetlands and deeper water, and protect intertidal habitats by dissipating wave energy, thereby reducing wave-induced wetland erosion. These intertidal habitats are also of great importance to large numbers of invertebrates and juvenile fish, supporting estuarine food webs and supporting migratory bird populations. However, as tidal flats deepen in response to erosion from increased

storm intensity and water levels rise due to sea level rise, and sediment continues to be removed from the system, this important shallow water ecosystem will convert to a deeper water area, losing the important habitat and storm protection function that it currently provides.

As explained above, New Jersey's coastal wetlands are being threatened by climate change and sea level rise. For these wetlands to survive, they need to adapt to future conditions. The use of nature-based solution projects help reduce shoreline erosion, restores eroded wetlands, and creates habitats that are rapidly diminishing in coastal areas. Nature-based solutions include, but are not limited to, vegetated shorelines, the elevation of the wetland platform through the placement of dredged material on the wetland platform, the placement of dredged material adjacent to the wetland platform, or the strategic placement of material in water to allow natural coastal processes to move material onto the marsh, to create a shallow submerged habitat adjacent to the platform, or to dissipate wave energy. Accordingly, N.J.A.C. 7:7-9.27(d) is proposed to be amended to allow the use of nature-based solution projects to enhance the resilience of wetlands threatened by sea level rise and climate change, to protect existing shorelines or habitat areas, or to achieve other environmental benefit.

In accordance with the amended subsection, projects designed to achieve these purposes using nature-based solutions are conditionally acceptable provided the nature-based solution project complies with N.J.A.C. 7:7-12.23. In addition, because a nature-based solution project is a habitat protection, restoration, or enhancement project that will result in a net gain of habitat functions and values, mitigation is not required.

As discussed above, for New Jersey's wetlands to survive, it is important to provide the wetlands with the ability to accrete vertically while maintaining the system's own sediment. Accordingly, proposed new N.J.A.C. 7:7-9.27(f) provides that, where a habitat creation, restoration, or enhancement project involves a nature-based solution, to the maximum extent practicable, it must include the beneficial use of sediments from within the same regulated water, estuary, or ecosystem.

The rule rationale at recodified subsection (k) is amended to support the changes to the rule allowing the use of nature-based solution projects and requiring the beneficial use of dredged material from within the same system, to the maximum extent practicable.

N.J.A.C. 7:7-9.46 Hudson River Waterfront Area

The Department is proposing, at N.J.A.C. 7:7-9.46(a)5, to replace the existing "flood hazard area design flood elevation" with the proposed "climate-adjusted flood elevation." This change is meant to align terminology with that proposed in the coastal flood hazard areas rule at N.J.A.C. 7:7-9.25.

N.J.A.C. 7:7-9.47 Atlantic City

As discussed above, the Department proposes to add to the Beaches rule, at N.J.A.C. 7:7-9.22, a cross-reference to the Atlantic City rule at N.J.A.C. 7:7-9.47(l), which is proposed to allow temporary seasonal sewer lines on beaches in Atlantic City, if necessary, to serve a food and/or drink service establishment and which is associated with a hotel, casino, and/or commercial development immediately upland/abutting the landward side of the boardwalk. This exception to the CZM rules' general prohibition of sewer lines on beaches is more flexible in Atlantic City due to the larger-scale development unique to the area.

The Department first established the Atlantic City special area on February 7, 2000, to encourage redevelopment of Atlantic City and its beach and oceanfront facilities in recognition of Atlantic City's unique situation based on the 1976 referendum approving casino gambling in the city. The goals of the Atlantic City rule are to: (1) provide a predictable permitting process for proposed developments in Atlantic City; (2) promote tourism; (3) maintain, enhance, and promote continued public access to the Atlantic Ocean and Absecon Inlet waterfront and adjacent beach areas; (4) allow Atlantic City to compete in the future with other gaming resorts throughout the nation; and (5) enable the city to reach its stated goals of

becoming a world-class resort. The rule reflects the existing intensity of development in Atlantic City and the importance of the gaming industry to the continued enhancement of the tourist-oriented resort economy and recognizes the need to promote continued public-use and tourism-related development. This is consistent with the goals of CAFRA to promote multiple uses that support diversity and are in the best long-term, social, economic, aesthetic, and recreational interests of all the people of the State.

The larger scale development allowed in Atlantic City creates a need for food and drink establishments located on beaches to serve larger crowds, and the temporary sewage disposal methods available to smaller-scale developments could create safety and environmental concerns due to the need to locate sewage holding tanks and pipes above-ground in environmentally sensitive areas. Thus, allowing temporary, seasonal sewer connections on Atlantic City beaches for this limited purpose comports with the purposes of the CAFRA and the Atlantic City rule.

Proposed N.J.A.C. 7:7-9.47(l)i through v set forth the criteria that must be met for the Department to approve a temporary sewer line pursuant to this regulation: (i) the temporary sewer line is connected to the existing facilities of the upland development; (ii) the temporary sewer line is disconnected and removed from the beach seasonally from November 1 – April 30 each year; (iii) the applicant provides a certification that the temporary utility lines on the beach will be immediately disconnected from the upland development and removed from the beach prior to severe weather events, including detailed information about how the disconnection and removal will be accomplished and the name, title, and contact information for the party responsible for removal; (iv) the temporary utility lines on the beach are buried no more than four feet below the beach surface; and (v) the temporary sewer connection is consistent with the applicable Water Quality Management Plan.

In addition, the general permit at N.J.A.C. 7:7-6.22 (formerly General Permit 22) for construction of certain structures related to the tourism industry at hotels and motels, commercial developments, and

multi-family residential developments over 75 units has been proposed for amendments to reflect the conditional permissibility of temporary utilities on Atlantic City beaches.

N.J.A.C. 7:7-9.50 Inundation Risk Zone (IRZ)

The Department is proposing new N.J.A.C. 7:7-9.50 to address the unique challenges and impacts related to development within the newly proposed "inundation risk zone." This section includes standards identical to those proposed in the Department's Flood Hazard Area Control Act Rules at N.J.A.C. 7:13-11.5, discussed below.

Due to the significant flooding risk associated with developing within this area that will be subject to inundation and flooding in the future, this rulemaking proposes standards at N.J.A.C. 7:7-9.50 that afford protection to applicants proposing new structures and other improvements. While a large portion of the inundation risk zone is currently developed, portions of the inundation risk zone remain developable today. By nature, some development carries more significant flood-associated risk than others. Proposed N.J.A.C. 7:7-9.50 acknowledges this balance by requiring additional analyses for development with greater flood-associated risks, as discussed below.

Proposed N.J.A.C. 7:7-9.50(a) sets forth the scope of the section, which applies to buildings and infrastructure, that are described at proposed N.J.A.C. 7:7-9.50(a)1 and 2, respectively. Pursuant to proposed N.J.A.C. 7:7-9.50(a)1, the section would apply to any residential or critical building. An exception is made for repair and maintenance activities in cases where the building's height and footprint area are unchanged, and the habitable area of the building is not increased. In some cases, these improvements could constitute a "substantial improvement" to the building, as defined in the Flood Hazard Area Control Act Rules at N.J.A.C. 7:13-1.2. However, improvements that are designed to maintain a building in a state of good repair, and which do not increase the habitable area of the building, would not be associated with

added risk. These types of repairs would likely increase the resilience of the building in question, having a positive effect.

Certain infrastructure would be subject to the requirements of this section as set forth at proposed N.J.A.C. 7:7-9.50(a)2. This provision includes infrastructure that is critical for emergency response and recovery, or which poses a risk to public health, safety, and welfare, should the infrastructure be damaged or unable to perform its intended function. It is essential that such infrastructure meet the elevated standards set forth in this section, given the adverse public safety impacts that could result if proper construction techniques are not utilized, and the applicant does not understand or recognize the associated risk of flooding and inundation. These standards apply only to the work that is being proposed. If only a segment of the infrastructure within an inundation risk zone is being constructed or improved, then the standards apply only to that portion of the project.

Exceptions are provided in three situations. Pursuant to N.J.A.C. 7:7-9.50(a)2i, the construction of drainage improvements and associated stormwater management structures necessary to ameliorate periodic inundation along a lawfully existing roadway are not subject to the requirements of this section. Proposed N.J.A.C. 7:7-9.50(a)2ii exempts from the requirements of this section, certain improvements to a lawfully existing railroad or public roadway. Specifically, safety or "state of good repair" improvements are exempt, provided that there is no reasonable opportunity to meet the requirements at proposed N.J.A.C. 7:7-9.50(b), as part of the project's overall scope and purpose. Pursuant to N.J.A.C. 7:7-9.50(a)2i and ii, these activities do not contribute to additional flood-related risk and, in general, are likely to increase the level of flood resilience of a particular community located within the inundation risk zone.

Proposed N.J.A.C. 7:7-9.50(a)2iii addresses projects by public transportation entities that have reached a milestone in their development and design, prior to the effective date of this rulemaking, such that meeting the requirements at proposed N.J.A.C. 7:7-9.50(b) would necessitate reevaluation of the selected preferred alternative or equivalent milestone, a significant redesign, or significant modifications

or additions to private land acquisition plans, whether in fee or easement. In such a case, it would not be feasible, or in the public interest, for the public transportation entity, which is defined in both the Flood Hazard Area Control Act Rules at N.J.A.C. 7:13-1.2 and the Stormwater Management Rules at N.J.A.C. 7:8-1.2, to significantly modify its design. This is similar to the existing provision in the Department's Flood Hazard Area Control Act Rules at N.J.A.C. 7:13-12.6(b), which provides flexibility for the elevation of roadways that meet the same milestone described here. The Department will work with public transportation agencies as they develop plans to address resilience to ensure alignment between planning and regulation. Such alignment may allow for efficiencies in permitting in the future.

Proposed N.J.A.C. 7:7-9.50(b) establishes the standards to conduct the activities listed at subsection (a) within an inundation risk zone. Proposed N.J.A.C. 7:7-9.50(b)1 requires the applicant to provide data specific to the likelihood this site will be inundated, and the frequency at which inundation could occur by 2100. The applicant must provide the elevation of the mean higher highwater line nearest to the site and must disclose the minimum amount of inundation that would cause the lowest portion of the site to be inundated on a regular basis. An applicant proposing construction or improvements to a building subject to this section must additionally disclose the minimum amount of inundation that would cause the lowest portion of the primary roadways providing regular or emergent access to the site to be inundated daily, as well as the corresponding maximum depth of inundation on the roadway itself. By providing this data to the Department, staff can evaluate the relative risk associated with the proposed activity, as well as the risk to end users of the proposed development.

Proposed N.J.A.C. 7:7-9.50(b)2 requires applicants to provide an "inundation risk assessment" to consider the potential adverse impacts of inundation on the site of the regulated activity in the future. This analysis of risk would focus on potential injury or loss of life of people inhabiting or relying upon the building or subscript infrastructure, damage, or loss of use of the building or infrastructure due to inundation, including the potential for disruption of public transportation, government services, or

commerce, as well as an evaluation of the potential increases in short- and long-term costs due to inundation. Examples of these costs could include, but are not limited to, evacuation, storm response and recovery, as well as operations, maintenance, repair, replacement, reconstruction, demolition, and removal of structures located within the inundation risk zone.

Finally, proposed N.J.A.C. 7:7-9.50(b)3 requires applicants to demonstrate that all reasonable measures have been taken to avoid or ameliorate potential adverse impacts on public health, safety, welfare, and the environment. Since development within the inundation risk zone is inherently associated with a certain level of risk, it is important that applicants proposing the activities listed at proposed N.J.A.C. 7:7-9.50(a) have evaluated all reasonable measures for accomplishing the basic purpose of the project, while maximizing the reduction of risk associated with the development. Examples of measures may include changes to onsite topography that would reduce or eliminate inundation of the project, such as raising up portions of the property, and alternative onsite configurations that may reduce or eliminate inundation of the project, such as locating as much of the project as practicable outside the inundation risk zone, or upon portions of site where less inundation is anticipated.

Applicants proposing buildings designated as Flood Design Class 4, or any non-linear infrastructure, as described at paragraph (a)2, must demonstrate that there are no practicable alternative offsite locations to accomplish the purpose of the proposed regulated activity, where that location would meet the requirements of this section. As noted in the proposed definition for "critical building" in the Flood Hazard Area Control Act Rules at N.J.A.C. 7:13-1.2, buildings belonging to Flood Design Class 4 possess the highest level of criticality to the surrounding community. Examples include, but are not limited to: power plants, hospitals, and other buildings that a community depends upon for its recovery after a flood event. Due to the criticality of these buildings for a community's resilience, it is appropriate that offsite locations be explored for citing these types of buildings and infrastructure listed at paragraph (a)2.

Finally, proposed N.J.A.C. 7:7-9.50(c) requires that permanent signage be incorporated on any new or substantially improved habitable building within an inundation risk zone, where the project is funded in whole, or in part, by public funds. This requirement will educate and raise awareness to people entering a building of the risk within an inundation risk zone. The sign will reflect that in the years 2050, 2070, and/or 2100, a portion of that particular building could be permanently or partially inundated. N.J.A.C. 7:7-9.50(c)1 requires that at least one sign is placed prominently close to the entrance of the building. Where there are multiple entrances, N.J.A.C. 7:7-9.50(c)2 directs the applicant to place the sign at the primary entrance. Pursuant to N.J.A.C. 7:7-9.50(c)3, the signage must incorporate the sea level rise data published by the Department, and depicted in Table 9.50, as appropriate for the specific site. As directed at N.J.A.C. 7:7-9.50(c)4, the sign must be readily legible, and have characters no less than two inches in height. N.J.A.C. 7:7-9.50(c)5 requires that only the projected sea level elevations described at N.J.A.C. 7:7-9.50(c)3, and corresponding Table 9.50, must be depicted on the signage. Signage pursuant to this subsection would not be required where the entire building is situated entirely above all the Department's projected sea level elevations.

Proposed N.J.A.C. 7:7-9.50(d) sets forth the Department's rationale for identifying the purpose and location of the new inundation risk zone and establishing standards for development within it.

SUBCHAPTER 12. GENERAL WATER AREAS

N.J.A.C. 7:7-12.6 Maintenance Dredging and N.J.A.C. 7:7-12.7 New Dredging

The maintenance dredging rule at N.J.A.C. 7:7-12.6(c)8 and new dredging rule at N.J.A.C. 7:7-12.7(c)9 and 10vii set forth the side slopes for dredged areas. Currently, the rules require that the slopes be three vertical units to one horizontal unit, which is not a stable slope. In 2003, the Department adopted the requirement that a slope of no steeper than three horizontal units to one vertical (3:1) unit shall be maintained adjacent to wetlands to prevent undermining and slumping of the wetlands, since typically

unconsolidated material will not have a stable angle of repose steeper than 3:1 (34 N.J.R. 74(a); 35 N.J.R. 632(a)). Therefore, the Department is amending the rule to reflect the appropriate slope.

N.J.A.C. 7:7-12.11 Filling

N.J.A.C. 7:7-12.11(d) allows for the establishment of a living shoreline in accordance with the living shoreline general water area rule at N.J.A.C. 7:7-12.23. Pursuant to this rulemaking, reference to "living shoreline" is proposed to be replaced with "nature-based solution." As discussed at new N.J.A.C. 7:7-12.23, some types of nature-based solution projects may require filling in order to reduce shoreline erosion, restore eroded wetlands, and/or create habitats that are rapidly diminishing in coastal areas. The Department has determined that the construction of nature-based solution projects is environmentally beneficial and, therefore, filling for such construction is conditionally acceptable pursuant to this section, provided it meets the standards set forth therein. N.J.A.C. 7:7-12.11(f)1 through 5 identify activities for which mitigation is not required. As a nature-based solution project is a habitat protection, restoration, or enhancement project that will result in a net gain of habitat functions and values, mitigation is not required.

Existing N.J.A.C. 7:7-12.11(h) addresses filling for the purposes of beach nourishment and establishment of living shorelines. This subsection is being amended to replace "living shorelines" with "nature-based solution projects." This change reflects that filling for the purposes of a nature-based solution project is an acceptable use and to allow for the beneficial use of dredged material that is deemed appropriate fill material through a determination of the acceptable use of the material by the Department. This change will continue to promote the long-standing State policy of treating dredged material as a resource and to beneficially use dredged material in appropriate applications. The rule rationale at N.J.A.C. 7:7-12.11(j) is amended to reflect that nature-based solution projects are an acceptable use.

N.J.A.C. 7:7-12.21 Submerged Cables

As indicated above in the summary of changes to N.J.A.C. 7:7-9.2, Shellfish habitat, the Department is proposing changes to the rules consistent with the State and Governor Murphy's commitment to a transition to 100 percent clean energy, including an offshore wind component. As part of this effort, the Department is proposing to amend the submerged cables rule at N.J.A.C. 7:7-12.21.

Existing N.J.A.C. 7:7-12.21 sets forth the standards applicable to underwater telecommunication cables including all associated structures in the water such as repeaters. Pursuant to this rulemaking, the definition of submerged cable at subsection (a) is proposed to be amended to include electric transmission cables. The Department has reviewed the standards applicable to telecommunication cables at subsections (b) and (c) and determined that most of those standards are also applicable to electric transmission cables. The Department is proposing additional standards applicable only to electric transmission cables as discussed below.

Existing subsection (b) sets forth the standards for submerged cables, or portions thereof, not located in the Atlantic Ocean. The Department has determined these standards are also applicable to the installation of electric transmission cables. In addition, the amendments proposed within this subsection are applicable to both telecommunication and electric transmission cables. The Department is proposing to amend existing N.J.A.C. 7:7-12.21(b)1, which provides that the cable shall not be located within special areas unless no practicable alternate route exists. The Department is proposing to supplement this requirement by requiring a feasibility analysis and adding standards related to the onshore landing of the cable. Specifically, proposed new subparagraph (b)1i requires a feasibility analysis that includes an evaluation of the potential for cable co-location within existing cable corridors demonstrating that no practicable alternate route exists. This requirement is intended to limit the location of new cables within special areas, thereby minimizing impacts to the resource. Proposed new subparagraph (b)1ii requires onshore cable landings to be located in, or adjacent to, existing developed or disturbed areas, such as roadways, utilities, or other rights-of-way, to the maximum extent practicable, again limiting the amount

of disturbance to these special areas. N.J.A.C. 7:7-12.21(b)2 is proposed to be amended to encourage the installation of cables through directional drilling (over the use of trenching), as this method of installation is less disruptive to sensitive coastal resources.

The Department is proposing to add new N.J.A.C. 7:7-12.21(b)5 and 6. N.J.A.C. 7:7-12.21(b)5 directs the applicant to the applicable burial depth requirements at N.J.A.C. 7:7-12.21(d) or (e) for telecommunication cables for electric cables, respectively. Proposed new N.J.A.C. 7:7-12.21(b)6 requires mitigation if the cable or portions of the cable are not buried to the prescribed depth and are located either within shellfish habitat, or within areas where marine fish are commercially harvested using mobile bottom-tending gear. Mitigation is necessary because shallower burial will result in the inability to harvest shellfish or marine fish in areas where cables are more shallowly buried and will pose a safety risk to harvesters. Proposed mitigation will take the form of a contribution to the shellfish fund that is calculated at the rate of $100.00 per meter of cable that is buried to a depth of less than 0.6 meters for telecommunication cables or two meters for electric transmission cables. This calculation is consistent with that used for shellfish mitigation throughout the rules. The money in the Department's dedicated account for shellfish habitat mitigation is administered by the Department's Bureau of Shellfisheries and used for shellfish habitat restoration, enhancement, and related research projects.

N.J.A.C. 7:7-12.21(c) sets forth the standards for submerged cables, or portions thereof, located in the Atlantic Ocean. The Department has determined that these standards are also applicable to the installation of electric transmission cables. In addition, the amendments proposed within this subsection are applicable to both telecommunication and electric transmission cables. At N.J.A.C. 7:7-12.21(c)1i, the term "practicable" is added in reference to a proposed cable route in certain special areas to provide flexibility in project design. For the same reasons discussed above, the Department is proposing to require, at subparagraph (c)1iii, a feasibility analysis, including an evaluation of the potential for cable co-location within existing cable corridors demonstrating that there is no practicable alternate route; and at N.J.A.C.

7:7-12.21(c)1iv to specify that onshore cable landings must be located in or adjacent to existing developed or disturbed areas such as roadways, utilities, or other rights-of-way, to the maximum extent practicable.

Similar to N.J.A.C. 7:7-12.21(b)5, paragraph (c)2 is proposed to state that the submerged cable burial depth is dependent upon the type of cable to be installed and references proposed subsection (d), which sets forth the burial requirements for telecommunication cables and proposed N.J.A.C. 7:7-12.21(e) that sets forth the burial requirements for electric transmission cables. Existing N.J.A.C. 7:7-12.21(c)2, 3 and 4, which establish the burial depth of at least 1.2 meters for telecommunication cables and establish standards for exceptions to the burial depth due to crossing of other cables are proposed to be relocated as paragraphs (d)1, 2 and 3 without change.

Recodified N.J.A.C. 7:7-12.21(c) is amended, consistent with paragraph (b)2, to encourage the installation of cables through horizontal directional drilling. Recodified paragraphs (c)4 and 5, which require the cable route minimize areas where anchors are likely to foul the submerged cable, and require the permittee obtain a financial assurance from a lender or insurer regulated and authorized by the New Jersey Department of Banking and Insurance, respectively, are proposed without change. Recodified paragraph (c)6, which requires implementation of a long-term inspection and maintenance plan approved by the Department, is proposed with minor changes to reflect the change in codification and the bifurcation of the cable burial depth requirements.

Recodified N.J.A.C. 7:7-12.21(c)7 requires submission of an initial inspection report to the Department within six months of installation. The initial report must "provide the installed route of the cable," identify all areas where inactive cables have been cut, and identify all areas where the cable is not buried to the depth specified at proposed subsection (d) (for telecommunication cables) or (e) (for electric transmission cables), and include the actual burial depth of the cable in those areas. This report must also be submitted to fishing interest groups identified at N.J.A.C. 7:7-24.3(f), which include the Garden State Seafood Association, National Fisheries Institute, North Atlantic Clam Association, Rutgers Cooperative

Extension, New Jersey Shellfisheries Council, and New Jersey Marine Fisheries Council. This is required to minimize the risk to the cable and fishing operations by notifying the commercial fishing industry of the locations of areas where the cable is buried less than the depth prescribed for communication or electric generation cables.

Recodified N.J.A.C. 7:7-12.21(c)8 sets forth the requirements for subsequent reports, including the requirements that the reports must include when reporting on storms that may have affected the cable, and any cable hits. These reports are due in January of each year. It must also be reported when the cable is taken out of service. Recodified paragraph (c)9 is amended to specify that, within two years after "a telecommunication cable" has been taken out of service in accordance with Federal Communications Commission regulations, the cable shall be removed from the ocean both in surf clam areas and in waters where marine fish are commercially harvest using mobile bottom-tending gear.

For the same reasons previously described, recodified N.J.A.C. 7:7-12.21(c)10 requires mitigation for portions of a telecommunication cable that are not buried to a depth of 0.6 meters, and located either within surf clam areas or areas where marine fish are commercially harvested using mobile bottom-tending gear. In addition, the existing provision is amended to add a similar mitigation requirement for electric transmission cables that are not buried to the required depth of 2.0 meters, if located within surf clam areas or areas where marine fish are commercially harvested using mobile bottom-tending gear. Mitigation in the form of a monetary contribution must be provided to the Department's dedicated account for shellfish habitat mitigation. The monetary contribution is calculated at the rate of $100.00 per meter of cable buried to less than 0.6 meters for telecommunication cables and 2.0 meters for electric transmission cables and is deposited into a fund to enhance fisheries. The Department's dedicated Shellfish Habitat Mitigation Account (SHM account) was established in the late 1990s to mitigate for impacts associated with activities relating to coastal development through the restoration of various types of shellfish habitat. The Marine Fisheries Administration (MFA) worked with the DLRP to develop a Memorandum of Understanding

regarding the disbursement and use of monies in the SHM account. The account is primarily administered by the DLRP, and the MFA uses these funds to conduct activities related to the restoration of shellfish habitat throughout State waters. In order to accomplish these objectives, the MFA conducts habitat restoration activities that include, but are not limited to, actions associated with the purchase, rearing, maintenance, and planting of shellfish seed; purchase of, transportation, and planting of shell and other approved cultch materials; field assessments necessary to delineate, map, and confirm candidate enhancement sites and shellfish areas and post-enhancement/restoration monitoring; and purchase and maintenance of required equipment and vessels necessary to implement all phases of shellfish enhancement and restoration activities.

Proposed new N.J.A.C. 7:7-12.21(d) establishes the burial requirements for submerged telecommunication cables. As previously explained, existing paragraphs (c)2, 3, and 4, establish the burial depth of at least 1.2 meters for telecommunication cables and establishes standards for exceptions to the burial depth due to crossing of other cables, are proposed to be recodified as (d)1, 2, and 3 without change.

Proposed new subsection (e) establishes the burial requirements for electric transmission cables with the exception of those cases where an applicant requests a different (shallower) burial depth. The request for a different depth may be based upon site specific conditions. In such a case, the applicant will have to demonstrate that the requested depth is appropriate by evaluating site specific conditions, the project area, performing a cable burial risk assessment, and evaluating ground conditions and seabed mobility. It is also possible that the applicant must comply with another government entity, such as the Army Corps of Engineers or the Coast Guard, and that government entity may require a different burial depth. All of these factors will be considered when the Department determines whether a different depth is appropriate. Therefore, proposed N.J.A.C. 7:7-12.21(e)1 states that, except for submerged electric cables located within anchorages, shellfish habitat, surf clam areas, and areas where marine fish are commercially harvested using mobile bottom-tending gear, the burial depth of the cables shall be at least two meters. Proposed paragraph

(e)2 states that the burial depth in anchorages shall be at least 4.5 meters. A deeper burial depth is required for submerged cables located within anchorages due to the potential impact of the ship's anchor hitting or snagging the cable. Finally, proposed paragraph (e)3 states that when located within shellfish habitat, surf clam areas, and areas where marine fish are commercially harvested using bottom tending gear, the cable must be buried to a depth of at least two meters.

Proposed new N.J.A.C. 7:7-12.21(f) requires those applicants who are proposing a cable burial depth that differs from the depths set forth previously in the rules at subsection (e) to submit to the Department a cable burial risk assessment and any other factors relevant to cable burial depth that was evaluated when designing the project for submerged electric transmission cables as part of the permit application. The format and contents of the cable burial risk assessment are set forth at proposed N.J.A.C. 7:7-12.21(f)1 through 15. These elements address the physical, geological, and hydrological impacts of the cable route, as well as the social and anthropogenic impacts relating to other marine users.

The rule rationale at recodified N.J.A.C. 7:7-12.21(g) is being updated to incorporate discussion of the State's clean energy goals, including the goal of increasing offshore wind energy, with the corresponding need to install electric transmission cables in the ocean and potentially within estuarine waters while continuing to protect coastal resources and uses.

N.J.A.C. 7:7-12.23 Nature-Based Solutions

Pursuant to this rulemaking, the Department is proposing to repeal the existing "living shoreline" general water area rule at N.J.A.C. 7:7-12.23 and replace it with a new "nature-based solutions" rule. The intent of this new rule is to broaden the scope of activities that can be implemented to protect, restore, and enhance New Jersey's wetlands and protect the upland edge from the impacts of climate change and sea level rise.

The new rule encourages the use of native vegetation and natural materials to protect the marsh edge and includes strategic sediment placement in water areas. For example, the strategic placement of dredged material in water areas may provide an immediate benefit to the wetland or upland edge directly behind it by serving as a barrier or "speed bump" to dissipate the wave energy and reduce fetch which, in turn, benefits both the wetland and upland edge. However, that same activity may negatively impact submerged aquatic vegetation or shellfish habitat in the area where the material is placed. Yet, without the barrier, the submerged aquatic vegetation, shellfish habitat, or other special area that is located between the island and the wetland or upland edge could be adversely impacted by waves and sediment, affecting the water quality and greatly impacting any species currently using the area as habitat. Therefore, despite the impacts to the special areas in the location immediately occupied by the placement of the barrier the remainder of the special areas in the vicinity will benefit from the placement of the material.

However, there are coastal environments where the site conditions are not appropriate for such techniques but require more structural protection measures to adequately protect the wetland or upland edge. Structural measures may include sills, bulkheads, and/or groins. Similar to the living shoreline rule proposed for repeal, the proposed nature-based solutions rule requires an assessment of ecological impacts to the site for the placement of any of these structures to ensure that they will provide long-term benefits to the wetland and/or upland.

Proposed new N.J.A.C. 7:7-12.23 recites the new proposed definition for nature-based solution at N.J.A.C. 7:7-1.5, that is to protect, restore, or enhance shorelines and in-water areas to reduce erosion and flooding, and to restore or create habitats while mimicking the function of natural shorelines in the local system to increase resilience. This purpose is achieved through restoration and enhancement of habitats, including, but not limited to, vegetated shorelines, beaches, dunes, and wetlands. Proposed N.J.A.C. 7:7-12.23(a) also includes the same examples of nature-based solution projects previously described.

Proposed subsection (b) sets forth the conditions pursuant to which the construction of a nature-based solution project is conditionally acceptable. Proposed criteria at subsection (b) are similar to those in the general permits for nature-based solutions at N.J.A.C. 7:7-6.24 and 6.33; however, this section addresses projects that do not meet the general permit criteria. These proposed conditions are similar to existing N.J.A.C. 7:7-12.23(b), with the exceptions that follow. Proposed N.J.A.C. 7:7-12.23(b)2 includes all statutes that may be involved when contemplating a nature-based solution, including the FWPA. As the definition of nature-based solution includes habitat enhancement, such projects may take place in a freshwater wetland in the coastal zone that may be regulated by the FWPA. At proposed paragraph (b)4, environmental NGOs are added to the list of entities that can undertake a nature-based solution project to advance the level of knowledge regarding nature-based solutions in the State. This proposed amendment is also consistent with the requirements of the general permit for nature-based solution research at proposed N.J.A.C. 7:7-6.33.

The Department is proposing to add new N.J.A.C. 7:7-12.23(b)7 to require that projects design consider the erosion history of the site, fetch and tidal range, shore width and shoreline location, water depths, and soil bearing capacity. These factors and others are referenced within the "Living Shoreline Engineering Guidelines," prepared for the Department by the Stevens Institute of Technology, dated February 2015, last revised February 2016.

Consistent with the changes proposed to the wetlands rule at N.J.A.C. 7:7-9.27(f), proposed N.J.A.C. 7:7-12.23(c) requires that where a habitat creation, restoration, or enhancement project involves a nature-based solution, it must be designed to use sediments from within the same regulated water, estuary, or ecosystem. This ensures that the sediment stays in the same ecological system and does not result in the potential introduction of contaminants.

For the same reasons indicated above, the Department is proposing N.J.A.C. 7:7-12.23(d) to require a construction completion report comprised of an as-built plan, photographs, and a description of

challenges, successes, and knowledge or understanding gained by experience. The Department does not require monitoring of these projects because that may be costly and time consuming and discourages the applicant from choosing to try a nature-based solution instead of using traditional mechanisms to accomplish their goals. Proposed N.J.A.C. 7:7-12.2(e) sets forth the rationale for the rule.

SUBCHAPTER 13. REQUIREMENTS FOR IMPERVIOUS COVER AND VEGETATIVE COVER FOR GENERAL LAND AREAS AND CERTAIN SPECIAL AREAS

N.J.A.C. 7:7-13.1 Purpose and Scope

As detailed at N.J.A.C. 7:7-13.16, the Department is proposing to add CAFRA Critical Environmental Sites to the CAFRA Planning map. To facilitate this change, existing N.J.A.C. 7:7-13.1(a)2, which explains how the impervious cover limits and vegetative cover requirements are determined, is proposed to be amended to include CAFRA critical environmental sites.

N.J.A.C. 7:7-13.2 Definitions

N.J.A.C. 7:7-13.2 sets forth definitions specific to Subchapter 13. Pursuant to this rulemaking, the terms "coastal center" and "Coastal Critical Environmental Site" are proposed for deletion. As explained at N.J.A.C. 7:7-13.19, the Department is proposing to delete non-mainland coastal centers. Accordingly, the impervious cover limits and vegetative cover percentages will be determined based on whether the site is located in a CAFRA center, core, node, or critical environmental site, or based upon the coastal planning area in which the site is located. Further, as explained below, all mainland coastal centers have already expired, so the term "Coastal center" is no longer necessary. The term "Coastal Critical Environmental Site" is also proposed for deletion as it applied only to mainland coastal centers. As all mainland coastal centers have expired, this term is no longer necessary.

The term "Critical Environmental Site" is proposed to be amended to clarify that these sites are designated by the State Planning Commission, outside of a planning area classified as environmentally sensitive, or within a State Planning center, core, or node. "Critical Environmental Sites" are areas that contain environmental features but do not meet the minimum size criteria of one square mile to be designated as a planning area. Thus, these areas are similar to the environmentally sensitive planning area, but are not designated as such. A new term "CAFRA critical environmental site" is proposed to describe the addition of critical environmental sites, either incorporated by reference or revised in accordance with N.J.A.C. 7:7-13.16, to the CAFRA Planning Map.

Additionally, the Department is proposing to add a definition for "formal action by the State Planning Commission," which is defined as the approval of any new or changed Planning Area boundary, community development boundary, any new or changed core or node boundary, or any new or changed critical environmental site boundary; or the expiration or extension of any new or changed Planning Area boundary, community development boundary, any new or changed core or node boundary, or any new or changed critical environmental site boundary pursuant to N.J.A.C. 5:85, which establishes the period of endorsement to be 10 years. The concise phrase "formal action by the State Planning Commission" will also serve to replace the language corresponding to the definition that is currently spelled out in this subchapter in multiple places. Also, the Department is proposing to include the expiration or extension of approved boundaries even though these actions may be considered passive actions by the State Planning Commission with no corresponding notice on their part.

N.J.A.C. 7:7-13.16 Boundaries for Coastal Planning Areas, CAFRA Centers, CAFRA Cores, CAFRA Nodes, and CAFRA Critical Environmental Sites

Critical Environmental Sites are established by the State Planning Commission pursuant to the State Development and Redevelopment Plan. The Department has evaluated the incorporation of Critical Environmental Sites into the CZM rules and determined that these areas warrant special protection pursuant

to CAFRA. The protection of Critical Environmental Sites from intense development furthers the CAFRA statutory mandates and the goal of preserving the most ecologically sensitive and fragile area from inappropriate development and providing environmental safeguards for development in the CAFRA area. Accordingly, the Department is proposing to incorporate CAFRA Critical Environmental Sites into the CZM rules and CAFRA Planning Map. Amendments are proposed throughout N.J.A.C. 7:7-13.16 to reflect the addition of the sites. Further, the Department is proposing to amend recodified N.J.A.C. 7:7 Appendix H, CAFRA Centers, to identify CAFRA centers, cores, and nodes that include Critical Environmental Sites as such sites are a formal action by the State Planning Commission. The process for Department approval of a CAFRA Critical Environmental Site is discussed below.

At N.J.A.C. 7:7-13.16(a), the Department is proposing to incorporate, by reference, any Critical Environmental Sites that were a result of a formal action by the State Planning Commission between the date of proposal of this rulemaking and the effective date of this rulemaking. The incorporation by reference will result in these areas being designated as CAFRA Critical Environmental Sites upon the effective date of this rulemaking and without the need for the evaluation process described at proposed new subsection (f). Critical Environmental Sites approved after the effective date of this rulemaking will be subject to the evaluation process set forth at subsection (f). Incorporation by reference is appropriate because these areas were developed with Department coordination, in consideration of not only the proposed rulemaking, but also of CAFRA, the CZM rules, and with public participation through the State Planning Commission process. This approach is similar to the previous incorporation by reference of State Planning Commission approved centers, cores, and nodes approved as of August 1, 1999.

Notwithstanding numerous extensions to existing approved centers, the State Planning Commission adopted a resolution aligning the expiration of those extended center designations with EO 103, which set the expiration of applicable centers to 180 days after the revocation of EO 103 by Governor Murphy. As municipalities were applying for Plan Endorsement in anticipation of this expiration, there was

increased interest in identifying environmentally sensitive areas that lie within the Metropolitan, Suburban, and Fringe Planning Areas or designated centers, cores, and nodes. As a result, the Department began working collaboratively with the Office of Planning Advocacy and the State Planning Commission to develop a new area to be known as Critical Environmental Sites. To be consistent with the purposes of CAFRA and the Coastal Zone Management Rules, environmentally sensitive areas should not only be identified, but protected where there is not legally existing impervious cover on the site. Accordingly, proposed N.J.A.C. 7:7-13.17 and 13.18 will apply more stringent impervious and vegetative cover limits to CAFRA Critical Environmental Sites, including those incorporated by reference and those adopted by the Department subsequent to adoption and in accordance with the process described at N.J.A.C. 7:7-13.16(b). However, Critical Environmental Sites in the CAFRA area established prior to this rulemaking will have been agreed to by applicants without an understanding of this enhanced protection. Therefore, it is not appropriate to incorporate these areas by reference and subject them to enhanced protection.

Pursuant to CAFRA, the Department must closely coordinate the CZM rules with the State Plan (N.J.S.A. 13:19-17). Coordination is achieved by incorporation, where appropriate, of planning area and other boundaries into the CZM rules, with those boundaries used in determining impervious cover and vegetative cover requirements applicable to a site. Accordingly, the existing rules provide for Department evaluation of all formal action by the State Planning Commission for consistency with the purposes of CAFRA and the CZM rules. As part of this rulemaking, the Department is proposing to add new subsection N.J.A.C. 7:7-13.16(f) to further describe the criteria that the Department uses to evaluate formal action by the State Planning Commission, including Critical Environmental Sites, and to require submission of information to assist the Department in making the consistency determination.

N.J.A.C. 7:7-13.16(b) sets forth the process the Department will undertake in reviewing a new or changed planning area boundary, community development boundary, or any new or

changed core or node boundary that result from a formal action by the State Planning Commission. The Department is proposing to amend this subsection to include Departmental review of critical environmental sites approved by the State Planning Commission, provided the boundary was approved by the State Planning Commission after the effective date of this rulemaking. New or changed boundaries that have reached the State Plan process milestone of having an agreed upon boundary, after completion of the Consistency Review by the effective date of this rulemaking, shall be subject to the evaluation process in place prior to adoption. By applying the standards existing prior to the effective date of this rulemaking, the Department is recognizing that the State Planning Commission process can be long and involve considerable effort and investment of time and resources on the part of the municipalities, as well as the State Planning Commission, the Department, and the Office of Planning Advocacy. Accordingly, the Department has determined that it would cause undue burden to apply the new process set forth at subsection (f) to these changes.

The Department is proposing to amend subsection (b) by increasing the Department's review time from the existing 90 days to 120 days to allow for the comprehensive review proposed at new subsection (f). The Department shall publish the required notice of its decision to accept, reject, or reject and revise the boundary of that which resulted from a formal action by the State Planning Commission within the 120-day timeframe. The expiration of a Planning Area boundary, community development boundary, core or node boundary, or critical environmental site boundary previously approved by the State Planning Commission shall be considered a new or changed boundary and subject to evaluation pursuant to this section.

The criteria proposed at N.J.A.C. 7:7-13.16(f) is intended to clarify the types of information that the Department reviews to determine whether the State Planning Commission approved boundaries of Critical Environmental Sites, Planning Areas, Centers, Nodes, and Cores are consistent with the purposes of CAFRA and the CZM rules and do not cause unacceptable harm to the coastal ecosystem or the resources of the built or natural environment. The proposed amendments are intended to provide clarity and certainty for municipalities and the New Jersey Office of Planning Advocacy throughout the plan endorsement process such that the process of reviewing consistency with CAFRA is predictable and simplified. The proposed language is intended to clearly outline the circumstances pursuant to which the Department will review formal action by the State Planning Commission as well.

Proposed N.J.A.C. 7:7-13.16(f)1, 2, and 3 outline the requirements for Department review of a formal action by the State Planning Commission to be approved as a CAFRA planning area boundary, CAFRA center community development boundary, CAFRA core boundary, CAFRA node boundary, or CAFRA Critical Environmental Site boundary by the Department.

At N.J.A.C. 7:7-13.16(f)1, the boundary must be consistent with the coastal goals at N.J.A.C. 7:7-1.1(c). Both the New Jersey Coastal Management Program and the CZM rules have 10 broad coastal goals described in this section. Therefore, for a new or changed boundary to be deemed consistent with the CZM rules, it must comply with all goals listed at N.J.A.C. 7:7-1.1(c). At paragraph (f)2, because State Plan boundaries are the basis for the impervious cover limits and vegetative cover requirements at N.J.A.C. 7:7-13.17 and 13.18, respectively, it is appropriate that the Department review new and changed boundaries for consistency with the CAFRA findings stated at N.J.S.A. 13:19-10 and which are codified at N.J.A.C. 7:7-1.4(b). Finally, at paragraph (f)3, because certain State Planning Commission designated areas encourage growth and because development is discouraged in several special areas at N.J.A.C. 7:7-9, it would be inconsistent to include these special areas in growth focused areas. Accordingly, N.J.A.C. 7:7-13.16(f)3 requires that these special areas listed therein be excluded, to the maximum extent practicable, or be

designated as a critical environmental site. For example, when drafting a proposed designated center boundary during plan endorsement it is typical that the Department will seek to exclude environmentally sensitive areas, such as wetlands, threatened and endangered species habitat, and flood prone areas from a proposed center, core, or node. This may not always be possible as the goal of a center, core, or node is to develop a contiguous area of land for focused development, not disconnected fragments. In a scenario when small or linear areas of environmentally sensitive areas remain within the center, core, or node, the Department will seek placement of a CAFRA critical environmental site overlay on the environmental resource(s) in question, so as to provide appropriate protections despite their inclusion within in the center boundary. Changes to the extent of Metropolitan or Suburban Planning Areas will undergo a similar process.

The above criteria should also be considered by a petitioner to the State Planning Commission, the Office of Planning Advocacy, and the Department during the plan endorsement process or during the review of a proposed planning area change and should be applied to any proposed boundary before formal approval by the State Planning Commission. However, if any formal action by the State Planning Commission does not meet the goals of CAFRA, codifying these requirements at proposed N.J.A.C. 7:7-13.16(f) allows the Department to ensure that the boundary meets the goals of CAFRA before being approved as a CAFRA boundary.

Proposed N.J.A.C. 7:7-13.16(f)4i and ii requires that the entity that petitioned the State Planning Commission for plan endorsement or a planning area change must submit information to demonstrate compliance with the requirements at proposed paragraphs (f)1, 2, and 3. If the changed or new boundary is initiated by the State Planning Commission itself, then the State Planning Commission will provide the required information. Specifically, proposed subparagraphs (f)4i and ii require submission of a narrative that demonstrates compliance with N.J.A.C. 7:7-13.16(f)i, ii, and iii and after consultation with the Department, any additional information that has not already been made available through the State Planning

Commission process and which is necessary to determine compliance with paragraphs (f)1, 2, and 3. This information may include municipal ordinances, planning documents, or other applicable documents submitted as part of plan endorsement. The Department recognizes the effort on the part of a petitioning entity required to successfully complete the plan endorsement or planning area change that results in a new or changed boundary and does not intend for the municipality to duplicate that effort as part of this review. As part of the Plan Endorsement process, the petitioning entity is required to submit a coastal consistency plan. It should be noted that this document may satisfy the requirement at proposed subparagraph (f)4i. Applicants are encouraged to meet with the Department to determine whether supplemental information is required. If the petitioning entity does not provide sufficient documentation addressing any of the requirements at paragraphs (f)1, 2, and 3, the Department reserves the right to deem the submission deficient for the purposes of CAFRA review and require that the petitioning entity supply the requested document(s) in order to complete the review. In such a scenario, the 120-day period for Department review of CAFRA consistency will be paused until the requested documents are submitted. The Department will have 120 days from the submission of all required and requested documents pursuant to subparagraphs (f)4i and ii to review and determine whether the boundary meets the goals of CAFRA and whether or not to approve, reject, or reject and revise the proposed CAFRA boundary.

Recodified N.J.A.C. 7:7-13.16(g) is proposed to be amended to include CAFRA Critical Environmental Sites.

The 1993 amendments to CAFRA, N.J.S.A. 13:19-17(b), required that the rules adopted to implement those amendments be closely coordinated with the State Development and Redevelopment Plan (State Plan). In response to these statutory amendments, the Department adopted new rules for determining impervious cover limits and vegetative cover percentages for sites in the CAFRA area based on the site's location in a CAFRA center, core or node, Coastal Planning Area, or coastal center (see 31 N.J.R. 2042(a); 32 N.J.R. 503(a)) with higher impervious cover allowed in a coastal or CAFRA center. These rules were

intended to encourage development in areas with existing development and infrastructure, discourage sprawl development, and protect sensitive natural resources. At that time, the boundaries of coastal centers located on barrier islands, oceanfront spits, and peninsulas (described at existing N.J.A.C. 7:7 Appendix H) were not given an expiration date because these areas were already intensively developed. However, a five-year expiration date was imposed on the boundaries of coastal centers located on the less developed mainland. These coastal centers were adopted by the Department as an interim measure to accommodate planned imminent development until the municipalities containing coastal centers on the mainland had been given the opportunity to obtain center designation through the State Planning process, which is a prerequisite to obtaining CAFRA center status.

The Department has evaluated the non-mainland coastal centers, considering the impacts of climate change and sea level rise. As sea levels rise, dry land adjacent to the current shoreline will become inundated more frequently and, in some cases, permanently. Current and proposed development in this area, therefore, carries exceptional risk to life and property. The Department is proposing a new special area, the "inundation risk zone" (see discussion at proposed N.J.A.C. 7:7-9.50), which encompasses currently dry land that is expected to be inundated by tidal waters daily or permanently by 2100, based on the findings of the Rutgers STAP report to address development within these hazardous areas. The Department's data indicates that all the non-mainland coastal centers are significantly affected by the proposed inundation risk zone. Accordingly, the Department has determined it appropriate to delete the non-mainland coastal centers, as development should not be directed into these areas. Municipalities in this area have the option of pursuing center designations through the State Planning Commission's plan endorsement process. The comprehensive planning process of the State Planning Commission provides a mechanism to determine whether a particular center is capable of accommodating the long-term growth and development needs of a community while safeguarding the precious coastal resources.

Based on the above, the Department is proposing to delete N.J.A.C. 7:7-13.16(g). As a result of this proposed change, the impervious cover limits for sites located within a non-mainland coastal center will be determined in accordance with N.J.A.C. 7:7-13.17(c), (e), or (f). Further, N.J.A.C. 7:7 Appendix H, listing the boundaries of non-mainland coastal centers in the CAFRA area, is proposed for repeal. N.J.A.C. 7:7 Appendix I, CAFRA Centers, is proposed to be recodified as N.J.A.C. 7:7 Appendix H. The rule rationale at subsection (k) is proposed to be amended to include a discussion regarding Critical Environmental Sites.

N.J.A.C. 7:7-13.17 Impervious Cover Limits for a Site in the CAFRA Area

N.J.A.C. 7:7-13.17(a), which explains how the impervious cover limits are determined for a site in the CAFRA area is proposed to be amended to include new paragraph (a)5, which provides that, for sites located in a CAFRA critical environmental site, the impervious cover limit is determined in accordance with N.J.A.C. 7:7-13.17(g).

Existing N.J.A.C. 7:7-13.17(b)2, which refers to N.J.A.C. 7:7 Appendix H, is proposed for deletion since the Department is proposing to delete the non-mainland coastal centers and existing N.J.A.C. 7:7 Appendix H for the reasons discussed at N.J.A.C. 7:7-13.16(g). N.J.A.C. 7:7-13.17(b)3 is proposed to be recodified at N.J.A.C. 7:7-13.17(b)2 with amendments incorporating CAFRA critical environmental sites and deleting reference to coastal centers for the reasons set forth at N.J.A.C. 7:7-13.19. Existing N.J.A.C. 7:7-13.17(b)4 is proposed to be recodified as paragraph (b)3 without change.

N.J.A.C. 7:7-13.17(d) establishes the impervious cover limits for sites located in the Coastal Metropolitan Planning Area and coastal centers is proposed to be amended to delete reference to coastal centers, as discussed below.

N.J.A.C. 7:7-13.17(e) establishes the impervious cover limits for sites located in a CAFRA center, core, or node, and not in the Coastal Metropolitan Planning area and not located within a coastal center is

proposed to be amended to include CAFRA Critical Environmental Sites and to delete reference to coastal centers.

Proposed new N.J.A.C. 7:7-13.17(g) establishes the impervious cover limit for a site located within a CAFRA critical environmental site. Specifically, the impervious cover limit is the acreage of the net land area of the site, as determined at N.J.A.C. 7:7-13.3(e), multiplied by the percentage listed at Table H. Existing N.J.A.C. 7:7-13.17(g) is proposed to be recodified as subsection (h) without change.

Table H is proposed to be amended to add CAFRA Critical Environmental Sites with an allowable impervious cover limit of three percent, which is the lowest and most protective percentage that exists in the table and is consistent with the impervious cover limit for Coastal Environmentally Sensitive Planning Areas. CAFRA Critical Environmental Sites share the same features as the Coastal Environmentally Sensitive Planning Area but did not meet the size criteria for designation as such. Specifically, planning areas are greater than one square mile in size, while critical environmental sites are less than one square mile. Consistent with the application of the impervious cover limits for the Coastal Environmentally Sensitive Planning Area, the purposes of CAFRA and the CZM rules to protect sensitive environmental resources, it is appropriate to apply the three percent impervious limit to CAFRA critical environmental sites. Finally, the rationale at existing N.J.A.C. 7:7-13.17(h), is to be recodified as subsection (i), and is amended to include a discussion of CAFRA critical environmental sites and the impervious cover limit applicable to these sites.

N.J.A.C. 7:7-13.18 Vegetative Cover Percentages for a Site in the CAFRA Area

N.J.A.C. 7:7-13.18, Table I, which establishes the tree preservation and planting percentages for forested and unforested sites, is proposed to be amended to include vegetative cover percentages for CAFRA critical environmental sites. Specifically, Table I is proposed to require 70 percent tree preservation on forested portions of a CAFRA critical environmental site and five percent tree preservation and/or

planting on unforested portions of a CAFRA critical environmental site. These percentages are the same as the vegetative cover percentages for Coastal Environmentally Sensitive Planning Areas because CAFRA critical environmental sites share the same features as this planning area, which is why both designations receive the same impervious cover limit, as explained in the summary of changes to N.J.A.C. 7:7-13.17. These percentages are appropriate for CAFRA critical environmental sites because they are consistent with vegetative cover percentages for each designated CAFRA location, with the goal of the rules to protect and manage environmental resources.

The rationale at N.J.A.C. 7:7-13.18(d) is proposed to be amended to include an explanation of the addition of the vegetative percentages for CAFRA critical environmental sites.

N.J.A.C. 7:7-13.19 Mainland Coastal Centers

This section provides the criteria for determining impervious cover limits and vegetative cover percentages for sites in the CAFRA area. These requirements are based on the site's location in a CAFRA center, core or node, Coastal Planning Area, or coastal center. A higher impervious cover is allowed in a coastal or CAFRA center mainland coastal center (listed at N.J.A.C. 7:7 Appendix J). A five-year term was established for the boundaries of the mainland coastal centers, with the five-year term originally expiring February 5, 2005. This five-year term was intended to provide sufficient time for municipalities to obtain center designation through the State Planning process and ultimately achieve CAFRA center status. The original 5-year time limit to allow for the municipalities to obtain center designation was extended multiple times with a final expiration for December 31, 2016, for the mainland coastal centers.

Therefore, all mainland coastal centers have now expired. The impervious cover and vegetative cover requirements for the expired mainland coastal centers in the CAFRA area are subject to N.J.A.C. 7:7-13.17(c), (e), or (f). Accordingly, N.J.A.C. 7:7-13.19 and 7:7 Appendix J are proposed for repeal, as they are no longer necessary.

SUBCHAPTER 15. USE RULES

N.J.A.C. 7:7-15.2 Housing

The standards relevant to the development of one- or two single-family homes or duplexes and/or accessory development at N.J.A.C. 7:7-15.2(e) and the standards relevant to the expansion, or reconstruction (with or without expansion) of a legally constructed single-family home or duplex and/or accessory development at subsection (f) are proposed to be amended to reflect the addition of the new inundation risk zone rule at N.J.A.C. 7:7-9.50. For the same reasons as described in the summary of proposed amendments at N.J.A.C. 7:7-6.4(f) and 6.5(d), the Department is proposing to amend N.J.A.C. 7:7-15.2(e)4i(3) and (f)2i(3) to reflect the change in methodology for determining whether the beach area adjacent to the proposed development is either naturally stable without beach nourishment or naturally accretional without beach nourishment. For the same reasons explained at N.J.A.C. 7:7-6.4(h), the Department evaluated the infill criteria at existing N.J.A.C. 7:7-15.2(e)6i and determined it is not appropriate to continue these provisions in the new inundation risk zone rule and has, therefore, proposed to delete this provision. For the same reasons explained at N.J.A.C. 7:7-6.5(f), the Department is proposing to add the requirement to comply with the inundation risk zone at N.J.A.C. 7:7-15.2(f)4 and has evaluated the infill criteria at existing (f)4i and determined it is appropriate to continue the exemption from the inundation risk zone rule. In addition, consistent with the amendments proposed at N.J.A.C. 7:7-6.4(n) and 6.5(l), the Department is proposing to amend the setback requirements at existing N.J.A.C. 7:7-15.2(e)12 and (f)11 for non-oceanfront sites with existing or proposed shore protection structures to clarify that the setback on a coastal bluff cannot be reduced to less than 10 feet, consistent with the requirements at N.J.A.C. 7:7-15.2(e)13i and (f)11i.

Finally, the Department is proposing to remove the word “habitable” from N.J.A.C. 7:7-15.2(f) since single-family homes and duplexes are specifically identified in the new proposed definition of

“habitable,” and to add the requirement from the current definition of “habitable” that the housing "has been or could have been legally occupied in the most recent five-year period” to preserve the intent that these standards only apply to such structures.

N.J.A.C. 7:7-15.11 Coastal Engineering

The existing Coastal Engineering rule at N.J.A.C. 7:7-15.11 states that coastal engineering measures include a variety of non-structural, hybrid, and structural shore protection and storm damage reduction measures to manage water areas and protect the shoreline from the effects of erosion, storms, and sediment and sand movement. Consistent with the amendments relating to nature-based solutions at N.J.A.C. 7:7-12.23, at N.J.A.C. 7:7-15.11(a), the Department is proposing to replace the reference to living shoreline with nature-based solution.

The Department is also proposing new N.J.A.C. 7:7-15.11(d), to clearly address requirements for non-structural, hybrid, and structural shore protection. Specifically, proposed N.J.A.C. 7:7-15.11(d)1 requires that shoreline protection structures cannot cause significant adverse impacts on local shoreline sand supply, N.J.A.C. 7:7-15.11(d)2 states that such structures cannot create net adverse shoreline sand movement downdrift, including erosion or shoaling, and N.J.A.C. 7:7-15.11(d)3 requires that the structure cause minimum feasible adverse impact to living marine and estuarine resources. This clarification is necessary because existing rules may suggest that such requirements only apply when using Federal or State funding.

In addition, the Department is proposing new requirements at recodified N.J.A.C. 7:7-15.11(e)1 and 3. Currently, recodified N.J.A.C. 7:7-15.11(e)1 addresses bulkheads in the V-zone, while N.J.A.C. 7:7-15.11(e)2 addresses maintenance and reconstruction of an existing bulkhead. Proposed N.J.A.C. 7:7-15.11(e)3 contains provisions for construction of a new bulkhead that is not in a V zone. At recodified N.J.A.C. 7:7-15.11(e)1, the amendments add the same requirements as proposed new N.J.A.C. 7:7-

15.11(d), for bulkheads located in V zones. Namely, at proposed N.J.A.C. 7:7-15.11(e)1i, that the bulkhead cannot result in significant adverse impacts on local shoreline sand supply; at proposed N.J.A.C. 7:7-15.11(e)1ii, that the bulkhead cannot create net adverse shoreline sand movement downdrift, including erosion or shoaling; and at proposed N.J.A.C. 7:7-15.11(e)1iii, that the structure may only cause minimum feasible adverse impact to living marine and estuarine resources. Similarly, proposed N.J.A.C. 7:7-15.11(e)3i states that a new bulkhead cannot result in significant adverse impacts on local shoreline sand supply; proposed N.J.A.C. 7:7-15.11(e)3ii states that the structure cannot create net adverse shoreline sand movement downdrift, including erosion or shoaling; and proposed N.J.A.C. 7:7-15.11(e)3iii requires that the structure may only cause minimum feasible adverse impact to living marine and estuarine resources. In total, the proposed amendments clarify that any shore-protection structure must be undertaken with a clear understanding and demonstration that a proposed shore protection feature minimizes impacts to the natural shoreline sand systems at and within the area of the individual project site and on a regional basis.

Finally, the rationale at recodified N.J.A.C. 7:7-5.11(i) is being amended to replace the term "living shoreline" with nature-based solution, for consistency with the rest of the proposed amendments.

SUBCHAPTER 16. RESOURCE RULES

N.J.A.C. 7:7-16.2 Marine Fish and Fisheries

The marine fish and fisheries rule, N.J.A.C. 7:7-16.2, is intended to protect the natural functions of marine fish and fisheries. For the purposes of this section, marine fish are marine and estuarine animals other than marine mammals and birds. Marine fisheries means marine fish stocks that can be treated as a unit for conservation and management purposes, and which are identified on the basis of geographical, scientific, technical, recreational, and economic characteristics. The catching, taking, or harvesting of marine fish is also a marine fishery.

N.J.A.C. 7:7-16.2(c) sets forth activities that are conditionally acceptable, provided the activity complies with the appropriate general water area rule at N.J.A.C. 7:7-12. Existing N.J.A.C. 7:7-16.2(c)4 addresses the establishment of living shorelines within marine fish and fisheries areas. Consistent with the proposed changes throughout this chapter, the term "living shorelines" is proposed to be replaced with "nature-based solutions."

With New Jersey's commitment to the pursuit of increased expansion of its renewable energy resources, the development of renewable energy facilities in the Atlantic Ocean is fast becoming a reality for achieving New Jersey's objectives on producing clean energy. However, with the creation of these facilities, there are associated environmental and ecological impacts. Accordingly, the Department is proposing to amend N.J.A.C. 7:7-16.2(c) to add the construction of renewable energy facilities and associated infrastructure, excluding solar panels as a conditionally acceptable activity within marine fish and fisheries areas, at proposed N.J.A.C. 7:7-16.2(c)6. Floating solar arrays are excluded from this provision because solar energy development has an inherently alternate upland location and, therefore, these non-water dependent uses should not be located within marine fish and fisheries areas. In addition to complying with the submerged cable rule at N.J.A.C. 7:7-12.21, the construction of renewable energy facilities and associated infrastructure must also demonstrate that a proposed renewable energy facility has no practicable or feasible alternative alignment; there is no disturbance to existing oyster reef shellfish habitat; and that impacts are minimized and mitigation is provided for any unavoidable adverse impacts to marine fish and fisheries. Impacts from such development are anticipated to be greatest during the construction and operation phases, both of which have the potential to produce short- and long-term impacts on marine fish and fisheries. In addition, the potential for short- or long-term adverse impacts to those whose livelihood depend on the ocean are also likely, which could occur through the creation of hazards from the structures to navigation, impairment of commercial fishing activities, changes to the ecosystem, and modification or removal of benthic habitat. Accordingly, measures must be implemented to minimize

and compensate for impacts to marine fish and fisheries. Such measures may include avoiding placement of structures and cables in critical habitat areas and migration corridors; using materials and layout designs conducive to minimizing negative impacts; reducing noise and vibration impacts by requiring soft start procedures and/or bubble curtains; minimizing the footprint size of the facility and construction schedules to minimize negative impacts; requiring the burying and ongoing monitoring of power cables to reduce electromagnetic fields; and compensation for loss of the resource.

The rule rationale at N.J.A.C. 7:7-16.2(d) is proposed to be amended to address the potential impacts of renewable energy facilities on marine fish and fisheries and ways to minimize and mitigate such impacts. The rationale is also proposed to be amended to reflect the replacement of "living shorelines" with "nature-based solutions."

N.J.A.C. 7:7-16.12 Traffic

The Traffic rule, N.J.A.C. 7:7-16.12, requires that coastal development be designed, located, and operated to cause the least possible disturbance to existing traffic systems. Level of service means the operating conditions along a State highway, street, or a particular intersection. The level of service designations ranges from a best case of "A" to a worst case of "F" and reflect factors such as speed, travel time, freedom to maneuver, traffic interruptions, and delay. N.J.A.C. 7:7-16.12(d) discourages development that results in a roadway operating in excess of capacity Level D. Traffic planning must consider movements during peak times. Ensuring that roadway capacity remains at Level D preserves air quality by avoiding emissions from a lower level of service.

The Department is proposing amendments to clarify that the Level D requirement is applicable to all portions of the affected roadways, including areas with turning movements, and any development that increases the likelihood of Level D periodically being exceeded is discouraged, not just development that causes regular exceedance of capacity Level D. Further, the subsection is amended to clarify that if a

roadway is currently operating in excess of Level D capacity, the applicant is responsible for ensuring that the proposed development does not result in any change in the pre-development level of service. Specifically, the proposed amendments allow the Department to plan for increased traffic for the pendency of the permit. Hence, the proposed development would be reviewed based on what the development causes, given the existing and projected conditions during the pendency of the permit as per New Jersey Department of Transportation (NJDOT) or use of its methodology.

SUBCHAPTER 17. MITIGATION

N.J.A.C. 7:7-17.5 Property Suitable for Mitigation

N.J.A.C. 7:7-17.5 provides the criteria for a suitable mitigation site, and subsection (g) describes the existing requirement to ensure that before a site is used for mitigation it is assessed for ecological risk. Within this subsection, a definition of ecological risk is provided. As this definition was originally included in the rules, extensive work has been done by the Department to define the process of ecological risk assessment. Therefore, the definition of ecological risk assessment in the mitigation rules is proposed for revision to make it consistent with the description of ecological risk in the Department's "Ecological Evaluation Technical Guidance Manual Volume 2.0," developed by the New Jersey Department of Environmental Protection Site Remediation and Waste Management Program, dated August 2018.

N.J.A.C. 7:7-17.7 Basic Requirements for Mitigation Proposals

N.J.A.C. 7:7-17 provides the standards for evaluating a mitigation proposal. As the effects of climate change and sea level rise are increasing, the Department must take these issues into consideration when it comes to mitigation. When evaluating a site for mitigation potential, it is important to consider both the short-term success and the long-term viability of the mitigation site when considering changing climate conditions. To try to make an informed determination, an assessment of the vigor of the surrounding

(reference) resource, such as coastal wetlands, should be considered. For example, if the target coastal wetland type is forested, are forests in the vicinity of the mitigation site healthy or showing signs of decline? Is there greater flood inundation than would support a forested condition, or are neighboring sites too dry? Is that due to precipitation, subsidence, or other causes? Applicants should provide their best professional assessment of the local conditions and any factors that could affect a mitigation project. This is important, regardless of whether the cause is a changing climate or something else, because, without such an assessment, the short- and long-term success of the proposed mitigation project may be jeopardized.

At N.J.A.C. 7:7-17.7(h), which is part of a list of basic requirements for mitigation proposals, the Department is proposing to add the requirement that applicants provide a discussion regarding the future of the site and any special considerations that may be necessary to address the effects of climate change on the site. The Department is proposing that applicants include a discussion and assessment of the site anticipating the effects of climate change and sea level rise by year 2100. Climate change models for New Jersey indicate that by 2100, there will be five feet of sea level rise above the present mean higher high-water elevation. Therefore, to evaluate the future of a mitigation site, it is necessary to consider where the site will be in the landscape with these anticipated changes in water elevation. For example, if future predictions indicate a site would be frequently inundated, the applicant should consider that future condition when determining the type of wetland plants to install. For long-term success and sustainability, a high marsh wetland system would be preferred in this circumstance, since high marsh has a greater potential to remain wetlands into the future, while a low marsh will more likely become open water. While this provision may have the most applicability to mitigating for tidal wetland systems, freshwater wetlands exist in upland reaches of tidal systems. Therefore, the applicability of this provision will depend on the location of the site an applicant is contemplating using for mitigation.

In addition, the patterns of precipitation will change, including an increase in the timing, intensity, and amount of precipitation, and a potential increase in summertime drought. Freshwater wetlands are

dependent upon hydrology, which includes surface or ground water, and precipitation, so it is important to consider the effects of potential changes in precipitation patterns when planning a mitigation project for non-tidally influenced wetlands in the coastal zone. Forested systems can be especially sensitive to hydrology, especially when newly planted. Young trees cannot survive with too much or too little water. Therefore, when trying to provide forested mitigation, it is critically important to assess the vigor of reference forested systems to try to identify any local factors that may affect the success of the project.

N.J.A.C. 7:7-17.9 Requirements for Shellfish Habitat Mitigation

N.J.A.C. 7:7-17.9 sets forth the requirements for mitigation required pursuant to N.J.A.C. 7:7-9.2 for impacts to shellfish habitat. The existing section addresses mitigation for impacts to shellfish habitat associated with the construction of a dock, pier, mooring, or marina. New subsection (c) is proposed to establish the mitigation requirements for coastal development projects other than a dock, pier, boat mooring, or marina. Pursuant to proposed N.J.A.C. 7:7-17.9(c), mitigation for all other coastal development, where mitigation is required, will consist of a monetary contribution to the Department's dedicated account for shellfish habitat mitigation. The amount of each monetary contribution will be based on the total area of shellfish habitat impacts, the documented shellfish density within the project footprint, and the commercial value of the shellfish resource. Pursuant to this rulemaking, dredging for the installation of all submerged cables within shellfish habitat requires mitigation. This amendment will ensure that unavoidable impacts are adequately mitigated through contribution to the Department's dedicated account for shellfish habitat mitigation.

Proposed new N.J.A.C. 7:7-17.9(d) sets forth the mitigation requirements for impacts to oyster reef shellfish habitat. The Department has determined that specific mitigation standards should apply to disturbances to oyster reef shellfish habitat to ensure the continued viability of this specific habitat. Specifically, proposed paragraph (d)1 requires restoration of the habitat in accordance with scientifically

documented reef enhancement and seed transplanting methods. This requirement ensures that the mitigation is being conducted in accordance with the best available science. Further, proposed paragraph (d)2 requires the restoration of the disturbed area to its preconstruction bathymetric relief, shell and oyster density, and population conditions. This includes reef reconstruction, oyster seeding, replanting, and monitoring of the disturbed area. Annual monitoring of the compensatory habitat is required for a minimum of three years to demonstrate persistence of the compensatory habitat. Proposed paragraph (d)3 requires restoration of oyster reef shellfish habitat within the disturbed area, where practicable. This will ensure that the area where the damage has occurred is restored. Proposed paragraph (d)4 requires a monetary contribution for unavoidable impacts to oyster reef shellfish habitat in cases where the Department determines that the requirements at proposed paragraphs (d)1, 2, and 3 cannot practicably be met. This is necessary to ensure that, in all scenarios, the Department is obtaining mitigation for impacts to oyster reef shellfish habitat.

SUBCHAPTER 23. APPLICATION REQUIREMENTS

N.J.A.C. 7:7-23.1 Purpose and Scope

N.J.A.C. 7:7-23.1 sets forth the requirements for applying for an authorization pursuant to a general permit-by-certification, a general permit, or an individual permit. Application requirements for other approvals and determinations pursuant to the CZM rules are found elsewhere in the chapter as explained at N.J.A.C. 7:7-23.1(b). Pursuant to this rulemaking, this section is proposed to be amended to add new N.J.A.C. 7:7-23.1(b)3 for permits-by-registration, which can be found at N.J.A.C. 7:7-3.5.

N.J.A.C. 7:7-23.2 General Application Requirements

The requirements at proposed N.J.A.C. 7:7-23.2(g)2 include all other activities within a right-of-way or easement, other than described at paragraph (g)1 and set requirements for how written consent shall

be provided. For the holder of any right-of-way or easement other than described at paragraph(g)1, proposed paragraph (g)2 requires written consent, which shall consist of one of the following: documentation that the holder of the right-of-way or easement does not object to the submittal of an application to the Department for the proposed activities with the right-of-way or easement, with the understanding that said activities may commence upon the receipt of all necessary approvals; or a copy of certified mail receipt that the applicant requested documentation pursuant to subparagraph (g)2i and the holder of the right-of-way or easement failed to provide said documentation within 30 calendar days; and a copy of the instrument establishing the right-of-way or easement, which indicates that the proposed activities are permitted as a condition of the right-of-way or easement.

The Department proposes new N.J.A.C. 7:7-23.2(h) to address permitting timelines for State agencies exercising eminent domain. For this proposed subsection, private and quasi-private entities would not be included as a "State agency." Proposed N.J.A.C. 7:7-23.2(h) allows a State agency that does not yet own, possess title to, or have a right of access to private land, to apply for a permit without first obtaining the written permission of the current holder of the property. However, to submit such an application, the applicant must provide notice sufficient to comply with N.J.A.C. 7:7-24.3(b)6, regardless of any notice exceptions at N.J.A.C. 7:7-24.3(c), and if site access is necessary for the Department to complete its technical review of the application, the applicant would be required to obtain such right sufficient to constitute consent pursuant to proposed N.J.A.C. 7:7-23.2(n) prior to the Department declaring the application is complete for review. For CAFRA individual permits, notice shall be given in accordance with N.J.A.C. 7:7-24.4, regardless of whether the project meets the requirements at N.J.A.C. 7:7-26.4(c).

N.J.A.C. 7:7-23.3 Additional Application Requirements for an Authorization Pursuant to a General Permit-By-Certification

Proposed amendments at N.J.A.C. 7:7-23.3(a) provide that an application for an authorization pursuant to a general permit-by-certification must be submitted electronically using the Department's online system.

N.J.A.C. 7:7-23.3(b)4 has been amended to reflect the recodification of general permit-by-certification 10 as general permit-by-certification 1.

N.J.A.C. 7:7-23.3(b) sets forth the information required for submission as part of the online application. At N.J.A.C. 7:7-23.3(b)5, the Department is proposing to require that applicants for general permits-by-certification provide contact information for both the municipal clerk and the county clerk for each municipality and county in which the proposed project is located. As general permits-by-certification are applied for, and approved, electronically, for greater transparency, the Department will use the information to provide notification to the municipality and county upon issuance. As permits-by-certification are issued through the online service and, therefore, do not have a raised seal, verifying authenticity has been cause for concern for some municipalities. Receiving direct notification from the Department when a general permit-by-certification has been issued will assure the municipality and county that the permit-by-certification is valid.

N.J.A.C. 7:7-23.3(b)6iii requires the applicant to certify that they are the property owner or that they have obtained written consent from the property owner to submit the registration on the property owner's behalf.

N.J.A.C. 7:7-23.4 Additional Application Requirements for an Authorization pursuant to a General Permit or for an Individual Permit

N.J.A.C. 7:7-23.4 sets forth the application requirements for a general permit authorization or for an individual permit. At N.J.A.C. 7:7-23.4(b)5, the Department is proposing to require that applicants for general permits and individual permits provide contact information for both the municipal clerk and the

county clerk for each municipality and county in which the proposed project is located because general permits are applied for, and approved, electronically. For greater transparency, the Department will use the information to provide notification to the municipality and county upon issuance. N.J.A.C. 7:7-23.4(c)4iii requires that the submitted site plan include the existing and proposed topography where necessary to demonstrate that the proposed development meets the requirements of the CZM rules. This existing provision specifies that all topography must reference the National Geodetic Vertical Datum (NGVD) or include the appropriate conversion factor. Reference to NGVD is proposed to be replaced with the National geodetic vertical datum (NAVD), as this is the current reference datum for all surveying, topography, and elevation. A definition of NAVD 88 is proposed at N.J.A.C. 7:7-1.5.

The Department is proposing several new rules aimed to increase public awareness and education of the risk of building in the flood hazard area. Given the increased likelihood of flooding in fluvial and tidal areas due to climate change, providing information to future owners of properties being developed today allows them to make informed decisions. To this end, proposed N.J.A.C. 7:7-23.4(c)9 and (d) introduce a new requirement for owners of any site on which activities are proposed in the flood hazard area pursuant to a general permit or individual permit. Particularly, such owners must provide a written "Acknowledgement of Potential Flood and Inundation Risk" that identifies potential economic and other costs to the current or future property owners, including government entities for activities on public land, associated with the projected present or future flooding and inundation risk. Construction within flood hazard areas carries inherent and specific long-term risks that are likely to be severely exacerbated due to a changing climate. It is important that the owner of the site, not the applicant or agent, provide a written record attesting to the realities of said risk. The requirements for this acknowledgement mirror the same new requirement proposed in the FHACA rules at N.J.A.C. 7:13-18.9, as discussed in the summary of that section. An exception is made for improvements undertaken by a public transportation entity along a public roadway, railroad, or parking area. Whereas, as other types of development involve work on privately

owned land, and the choices made by private developers, as well as the potential flood risk taken by said developers, should be communicated to future owners of the development through the proposed acknowledgment required pursuant to this section, there are no future property owners to consider for work along a public roadway or railroad. Therefore, rather than require public transportation entities to provide an acknowledgement pursuant to this section to communicate flood risk, it is appropriate to instead require signage along public roadways that discloses the potential for limited or impeded access during flood conditions, pursuant to the FHACA rules at N.J.A.C. 7:13-12.7(d)2, which is discussed below.

Proposed N.J.A.C. 7:7-23.4(d)1 sets forth who is required to sign the acknowledgement required pursuant to this section. For projects not proposed by a government entity, the owner, or owners of the site on which the regulated activity is proposed must sign the acknowledgement. The Department believes it is critically important for the owners of a site to acknowledge that undertaking a proposed activity in a flood hazard area carries certain inherent risks, in some cases substantial risks, for current occupants and, furthermore, that these risks will very likely increase significantly due to climate change, thereby affecting all future owners and occupants. Where work is proposed by a government entity, an individual with the executive level signatory authority for said entity shall sign the acknowledgement. It is similarly important for government entities who are proposing capital improvement projects and other expenditures of public funds to acknowledge the vulnerability of their assets.

Proposed N.J.A.C. 7:7-23.4(d)2 explains that the person signing the acknowledgement will be required to complete a checklist provided by the Department that specifically acknowledges the significant risks associated with undertaking the project within the flood hazard area. The checklist will require the signatory to recognize, though not calculate, several categories of potential impacts, including: (1) potential economic and other costs to owners or government entities associated with the projected present and future flooding and inundation risk; (2) any potential increased cost of flood insurance within the lifespan of any structures being constructed, reconstructed, or modified; and (3) the cost of restoration and cleanup

following flooding to the climate-adjusted flood elevation. It is the Department's intention that by acknowledging these risks associated with undertaking the project, owners and government entities will be encouraged to thoughtfully consider the short- and long-term costs and ultimately make wiser, better-informed decisions.

SUBCHAPTER 24. REQUIREMENTS FOR AN APPLICANT TO PROVIDE PUBLIC NOTICE OF AN APPLICATION

N.J.A.C. 7:7-24.3 Contents and Recipients of Public Notice of an Application

Existing N.J.A.C. 7:7-24.3 describes the contents and recipients of public notice for an application. Existing subsection (b) lists the persons or entities to which notice of an application is required to be provided at paragraphs (b)1 through 7. In keeping with the Department's goal of being transparent about public safety and welfare, proposed new paragraph (b)8 requires public notice to be delivered to emergency first responders servicing the project area, including the police department, fire department, emergency medical services, and office of emergency management, if the application is subject to the requirements of the inundation risk zone at proposed N.J.A.C. 7:7-9.50. This additional notice allows the entities who will be responding to floods or other emergencies that may arise during a flood to be made aware of additional risk they will be managing for planning purposes and also gives them the opportunity to provide comments on proposed permit applications to the Department for consideration during the review process. The activities within an inundation risk zone not subject to the special area requirements and those listed at proposed subsection (b) generally have low potential to add additional burden to the community at large and therefore do not warrant the additional notice.

Existing N.J.A.C. 7:7-24.3(d)1 sets forth the information required to be included in the public notice. Proposed subparagraph (d)1ii requires that, for activities occurring in the inundation risk zone that

are subject to the inundation risk zone special area requirements at N.J.A.C. 7:7-9.50, the public notice must include a description of the activities proposed within the inundation risk zone.

The public notice requirements applicable to submarine cable applications seeking to install cable in the ocean are set forth at N.J.A.C. 7:7-24.3(f). This provision is proposed to be amended to replace "submarine" with "submerged" when referencing cables in the ocean. The CZM rules' submerged cable rule, at N.J.A.C. 7:7-12.21, as proposed to be amended, defines submerged cables as underwater telecommunication and electric transmission cables.

The installation of electric transmission cables is likely to have similar impacts on New Jersey's fishing industry as the installation of telecommunication cables as the cables have the potential to traverse fishing grounds. Accordingly, commercial fisheries, such as surf clams and ocean quahog fisheries, are likely to have a substantial interest in these projects. Since representatives of these industries do not typically receive individual notice of a pending application for this activity that could have an impact on their industry, the Department is proposing to require notice be provided, thereby ensuring that the affected parties have been afforded the opportunity to participate in the public process set forth in this section. To facilitate this change, N.J.A.C. 7:7-24.3(f) is proposed to be amended to replace "submarine" with "submerged" and to reference the submerged cable rule at N.J.A.C. 7:7-12.21.

N.J.A.C. 7:7-24.4 Additional Requirements for Public Notice of an Application for a CAFRA Individual Permit

Existing N.J.A.C. 7:7-24.4 sets forth additional public notice requirements for a CAFRA individual permit and N.J.A.C. 7:7-24.4(b) lists the persons or entities to which the public notice must be provided. Similar to, and for the same reasons discussed at proposed N.J.A.C. 7:7-23.4(b)8, proposed new N.J.A.C. 7:7-24.4(b)5 requires public notice to be delivered to emergency first responders servicing the project area, including the police department, fire department, emergency medical services, and office of emergency

management if the application is subject to the requirements of the inundation risk zone at proposed N.J.A.C. 7:7-9.50. Existing N.J.A.C. 7:7-24.4(d) sets forth the information required to be included in the public notice. Similar to, and for the same reasons previously discussed for proposed N.J.A.C. 7:7-24.3(d)1ii, proposed N.J.A.C. 7:7-24.4(d)2 requires that, for activities occurring in the inundation risk zone which are subject to the inundation risk zone requirements at N.J.A.C. 7:7-9.50, the public notice must include a description of the activities proposed within the inundation risk zone.

N.J.A.C. 7:7-24.5 Content and Format of Newspaper Notice

Existing N.J.A.C. 7:7-24.5 sets forth the content required to be provided within the newspaper notices required pursuant to the various circumstances identified at existing subsections (b), (c), and (d). Proposed new N.J.A.C. 7:7-24.5(b)5, (c)2, and (d)2 require that, for activities occurring in the inundation risk zone that are subject to the inundation risk zone requirements, the newspaper notice must include a description of the activities proposed within the inundation risk zone, for the reasons previously discussed.

SUBCHAPTER 25. APPLICATION FEES

N.J.A.C. 7:7-25.1 Application Fees

N.J.A.C. 7:7-25.1(a) identifies the types of actions for which an application fee is required. Proposed new paragraph (a)2 adds authorizations pursuant to a general permit-by-certification as an action for which a fee is required. In addition, the reference to the general permits at recodified paragraph (a)3 is being updated to reflect the addition of the new general permits; thus, the updated reference refers to the general permits being codified at N.J.A.C. 7:7-6.1 through 6.33. Further, this provision excepts from the requirement of a permit fee, the general permit for habitat creation, restoration, enhancement, and living shoreline activities at N.J.A.C. 7:7-6.24. This exception is proposed to be replaced with a reference to N.J.A.C. 7:7-25.1(b)5, which identifies determinations, authorizations, and permits that have no application

fee, since the Department has determined not to require an application fee for three additional general permits: general permit for shoreline stabilization using suitable vegetation at N.J.A.C. 7:7-6.17; general permit for the establishment of a living shoreline at N.J.A.C. 7:7-6.24; and, general permit for nature-based solutions research at N.J.A.C. 7:7-6.33. The Department has determined to not charge an application fee for these general permits as they authorize environmentally beneficial projects that are intended to protect, restore, and enhance New Jersey's wetlands and upland edges.

N.J.A.C. 7:7-25.1(b) sets forth the determinations, authorizations, and permits that have no application fee. N.J.A.C. 7:7-25.1(b)4, which identifies the permits-by-certification that do not have a fee, is expanded to include the permits-by-certification for the installation of an elevated timber dune walkover at N.J.A.C. 7:7-5.3, an at-grade dune walkover at a commercial development at N.J.A.C. 7:7-5.4, shoreline stabilization using suitable native vegetation at N.J.A.C. 7:7-5.11, and shoreline stabilization shellfish and/or shell bags at N.J.A.C. 7:7-5.12. As the Department seeks to encourage responsibly constructed walkovers to facilitate public access and use of the waterfront while preserving the integrity of the beach and dune system, no fee for the general permit-by-certification at proposed N.J.A.C. 7:7-5.3 and 5.4 is proposed. Further, an application fee for the permits-by-certification at N.J.A.C. 7:7-5.11 and 5.12 is not required since these projects are intended to stabilize the existing shoreline from further impacts from climate change and sea level rise. Similarly, the Department is seeking to encourage shoreline stabilization using coir logs or vegetation, the use of nonstructural or hybrid nature-based solution activities, and nature-based solution research. Therefore, no fee is proposed at N.J.A.C. 7:7-25.1(b)5 for the general permits at N.J.A.C. 7:7-6.17, 6.24, and 6.33, respectively. Table A, Application fees is proposed for amendment to reflect these changes as well.

SUBCHAPTER 27. PERMIT CONDITIONS; MODIFICATION, TRANSFER, SUSPENSION, AND TERMINATION OF AUTHORIZATIONS

AND PERMITS

N.J.A.C. 7:7-27.2 Conditions Applicable to All Coastal Permits

Existing N.J.A.C. 7:7-27.2 enumerates the conditions that apply to authorizations and permits pursuant to the chapter, which are necessary to ensure that the standards and requirements at N.J.A.C. 7:7 are met during the conduct, and upon completion, of authorized activities. Specifically, the Department is proposing amendments to the conditions listed at N.J.A.C. 7:7-27.2(d), which apply to all general permit-by-certifications, general permits, and individual permits, to require the permittee to register online both prior to commencing and upon completion of authorized activities, and to establish additional reporting requirements related to certain construction activities associated with a habitable building, roadway, or railroad within a flood hazard area. The proposed requirements mirror the reporting requirements for activities authorized pursuant to a permit-by-registration pursuant to proposed N.J.A.C. 7:7-3.5, as discussed above.

Existing N.J.A.C. 7:7-27.2(d)14 requires the permittee to submit written notification to the Bureau of Coastal and Land Use Compliance and Enforcement at least three working days prior to the commencement of regulated activities. This notice is intended to assist compliance and enforcement staff in scheduling site inspections while construction is occurring. The Department is proposing to amend the timing of the notice and to require the notice to be provided through the Department's online system rather than in writing. Specifically, the Department is proposing to require that notice be provided online no more than 14 calendar days prior to undertaking an authorized or permitted activity. It has been the Department's experience that the existing requirement makes it difficult for staff to schedule inspections, since the existing condition does not limit how much time before construction commences that notice can be provided. In some cases, permittees file the construction notice immediately after issuance of the permit, sometimes years before actual construction begins, in order to ensure that notice has been filed at least three days prior to construction. Further, the proposed online registration process will enable tracking of

cumulative impacts within a community or watershed, which aligns with FEMA's requirement to record and track approvals pursuant to the National Flood Insurance Program. Pursuant to the proposed condition, notice of construction must be completed by either the permittee or a person designated, in writing, by the permittee to register on their behalf, such as an engineer, attorney, or consultant. The registration additionally requires the owner or designee to indicate the Department file number, the anticipated date authorized activities will begin, and contact information for the registrant. The registrant must additionally certify that they are the permittee or that the permittee has provided written consent to register.

The Department is proposing a new standard condition at N.J.A.C. 7:7-27.2(d)15 that addresses the situation where an approval authorizes the construction, repair, reconstruction, rehabilitation, addition placement, or other improvement of any habitable building, roadway, or railroad within a flood hazard area. In such a case, permitted activities must commence within 180 days of approval issuance, which is necessary to ensure that approved activities are based on the most recent flood data available and to align the chapter's requirements with minimum NFIP standards. After an authorization or permit is issued, a new or revised Department delineation or FEMA flood mapping, which indicates a higher level of risk associated with a specific development than was understood at the time of the Department's approval of the authorization or permit, may become available. In this circumstance, the design of the development as initially contemplated and approved may not be adequately protective of public health, safety, and welfare in consideration of this new information. For this reason, communities participating in the National Flood Insurance Program are required to issue permits and authorizations for activities within FEMA's special flood hazard area that are valid for no more than 180 days, unless construction commences.

Proposed N.J.A.C. 7:7-27.2(d)15i additionally clarifies that, where the approved activities have not commenced within 180 days of issuance, said activities may not commence unless and until the permittee takes one of three actions set forth at N.J.A.C. 7:7-27.2(d)15i(1), (2), or (3). These requirements are necessary to remain consistent with the NFIP, ensure that current and future flood hazard risks are

considered and based on the best available information, and to be suitably protective of public health, safety, and welfare. The proposed options are intended to ensure compliance with FEMA requirements at 44 CFR 60.3 which, as noted above, is necessary in order to ensure that approved activities comply with minimum NFIP standards.

N.J.A.C. 7:7-27.2(d)15i(1) provides that, where the approved activities have not commenced within 180 days of issuance, said activities may not commence unless and until the permittee registers online and certifies that the climate-adjusted flood elevation, floodway limits, and flood zone designation for the site have not been amended by the Department or FEMA since the date of the initial authorization.

In cases where the climate-adjusted flood elevation, floodway limits, and/or flood zone designation for the site has changed since issuance of the permit or authorization, the permittee can take one of two actions. Pursuant to proposed N.J.A.C. 7:7-27.2(d)15i(2), the permittee must demonstrate that the amended climate-adjusted flood elevation, floodway limits, and/or flood zone designation for the site does not alter compliance with this chapter as applied in the issued authorization or permit. Through this provision, the Department recognizes that there can be situations where amended flood mapping does not affect compliance with the requirements of this chapter. For example, an amended floodway line could be adopted, which is located on a project site but does not encroach on the proposed development. In such a case, the amended floodway line would not alter the project's compliance with this chapter since all development remains outside the revised floodway limits.

In cases where the amended climate-adjusted flood elevation, floodway limits, and/or flood zone designation for the site does impact the authorized activities, the permittee must, pursuant to proposed N.J.A.C. 7:7-27.2(d)15i(3), demonstrate that the project has been revised where necessary to comply with the amended climate-adjusted flood elevation, floodway limits, and/or flood zone designation for the site. Pursuant to either N.J.A.C. 7:7-27.2(d)15i(2) or (3), the Department must determine, in writing, that the permittee is correct before authorized activities may commence.

Proposed N.J.A.C. 7:7-27.2(d)15ii and iii establish, for the purposes of N.J.A.C. 7:7-27.2(d)15, what constitutes commencement of authorized activities. The proposed description mirrors language required by FEMA at 44 CFR 60.3, which, as noted above, is necessary in order to ensure that approved activities comply with minimum NFIP standards. Proposed N.J.A.C. 7:7-27.2(d)15iv explains that, where a permittee intends to demonstrate that either N.J.A.C. 7:7-27.2(d)15ii or iii apply to an authorization or permit, the permittee must provide the Department with all necessary information supporting the permittee's assertion. The proposed provision further states that commencement of activities authorized by the Department pursuant to the permit or authorization cannot occur unless and until the Department concurs with the permittee's assertion in writing. Proposed N.J.A.C. 7:7-27.2(d)15v describes the process by which a registrant may contest the re-registration requirement, in accordance with the procedures at N.J.A.C. 7:7-28, Requests for adjudicatory hearings.

Proposed N.J.A.C. 7:7-27.2(d)16 sets forth a new requirement upon completion of authorized activities, which mirrors similar language at proposed N.J.A.C. 7:7-3.5 for permits-by-registration. Pursuant to the proposed condition, the permittee or a person designated, in writing, by the permittee to provide such notice on their behalf, such as an engineer, attorney, or consultant, shall indicate said completion through the Department's online system.

N.J.A.C. 7:7-27.9 Deed Notice Requirement for an Authorization Pursuant to a General Permit-By-Certification or General Permit, or an Individual Permit

As explained in the summary at N.J.A.C. 7:7-23.4, the Department is proposing several new rules to increase public awareness and education on the risks of building in the flood hazard area. As part of the suite of regulatory changes proposed to increase awareness of these risks, the Department is adding new N.J.A.C. 7:7-27.9, which requires the permittee to file a deed notice for an authorization pursuant to a general permit-by-certification, general permit, or individual permit by requiring robust and comprehensive deed noticing, the Department seeks to vastly increase the public's awareness of the serious risks associated

with flooding, particularly where roads and buildings will be subject to flooding or for projects proposed in the inundation risk zone.

Proposed N.J.A.C. 7:7-27.9(a) requires that the applicant, upon being granted an authorization pursuant to a general permit-by-certification, general permit, or an individual permit, shall submit specific information to the Office of the County Clerk or the registrar of deeds and mortgages in which the site is located, and have said information recorded on the deed of each lot referenced in the approval. Proof of recordation must additionally be provided to the Department in accordance with proposed N.J.A.C. 7:7-27.9(c) and (d), as discussed below. Exceptions to the requirement to execute a deed notice are listed at proposed N.J.A.C. 7:7-27.9(b).

The information required in the deed notice is set forth at N.J.A.C. 7:7-27.9(a)1 through 7 and includes information related to the authorization or permit. For projects in the flood hazard area, a statement that the activity is likely to be subject to periodic inundation and associated flood damage must be included in the deed notice. This statement must include the expected depth of inundation that results from flooding to the climate-adjusted flood elevation. Similarly, for any authorized or permitted activity located in an inundation risk zone, the deed notice must contain a statement that the activity is likely to be subject to permanent inundation during any structure's anticipated lifetime. Key to this statement is a disclosure of the depth of inundation expected due to sea level rise through the year 2100.

Proposed N.J.A.C. 7:7-27.9(a)6 sets forth additional information requirements for projects involving a habitable or critical building, including the climate-adjusted flood elevation and associated depth of flooding at the building and the approximate frequency at which the building is anticipated to be impacted by floodwaters. The deed notice must also contain a prohibition on habitation of any enclosure below the lowest floor of any building in the flood hazard area, as well as a statement that converting the enclosure into a habitable area may subject the property owner to enforcement pursuant to this chapter.

Finally, proposed N.J.A.C. 7:7-27.9(a)7 requires that, for any private roadway or parking area that is proposed to be constructed or raised to less than one foot above the climate-adjusted flood elevation, the deed for each lot on which the private roadway or parking area is constructed, as well as any lot served by the private roadway or parking area, and each lease or rental agreement for a unit within a multi-residence building served by a private roadway or parking area that lies below the climate-adjusted flood elevation, shall be modified to explain that the private roadway or parking area is likely to be inundated by floodwaters, which may result in damage and/or inconvenience. The deed must further be modified to disclose the climate-adjusted flood elevation and associated depth of flooding, as well as the approximate frequency at which the private roadway or parking area is anticipated to be impacted by floodwaters.

Proposed N.J.A.C. 7:7-27.9(b) sets forth three classes of activities that are not subject to the deed notice requirements for this section due to the nature of the activity or the type of land to which the notice would be applied. Where the Department approves a verification within a State right-of-way or easement, there is not likely a lot and block that has a deed. Similarly, where the Department approves a permit or authorization to undertake regulated activities on public land by a State agency, the deed notice, if possible to record, would simply be alerting the State to what it has already approved, which is not necessary. Finally, where a permit or authorization to undertake sediment and debris removal activities, there is no construction or permanent improvement that would warrant a deed notice.

Proposed N.J.A.C. 7:7-27.9(c) requires that the permittee provide proof to the Department that the deed notice requirements at proposed N.J.A.C. 7:7-27.9(a) have been satisfied. Such proof shall be provided to the Department in accordance with proposed N.J.A.C. 7:7-27.9(d) prior to the start of any site disturbance and no more than 90 calendar days after the issuance of the approval.

Finally, proposed new N.J.A.C. 7:7-27.9(d) requires proof that the information required at proposed N.J.A.C. 7:7-27.9(a) has been recorded on the deed of each lot referenced in the approval. This proof shall be in the form of either a copy of the complete recorded document or a receipt from the clerk or other proof

of recordation provided by the recording office. However, if the initial proof provided to the Department is not a copy of the complete recorded document, a copy of the complete recorded document must be provided to the Department within 180 calendar days of the issuance of the verification, authorization, or permit.

SUBCHAPTER 29. ENFORCEMENT

N.J.A.C. 7:7-29.5 Civil Administrative Penalties for Failure to Obtain a Permit Prior to Conducting Regulated Activities

N.J.A.C. 7:7-29.5(f) sets forth the daily base penalty amount based on the points derived from the conduct and seriousness of the violations. The Department is proposing to restructure the Base Penalty Points Table to increase the deterrence effect of assessed civil administrative penalties and to provide greater consistency across the Department's CZM, FHACA, and FWPA Rules in the penalty assessed for activities of similar levels of impact to environmental resources of concern. In 2008, Governor Corzine signed into law the Environmental Enforcement Enhancement Act (EEEA), which amended CAFRA, the Waterfront Development Act, and the Wetlands Act of 1970 to authorize the Department to assess civil administrative penalties of up to $25,000 per day per violation of each of those statutes. Additionally, the EEEA requires that the amount of a civil administrative penalty assessment fall within a range to be established by regulation based upon violations of a similar type, seriousness, and conduct. The amendments implementing the EEEA within the CZM Rules were adopted on June 2, 2015, with an effective date of July 6, 2015. Since the effective date of those amendments, the average assessed daily based penalty was approximately $5,400. Over that time, the Department documented over 550 unauthorized activities undertaken in violation of the CZM Rules. Adjusting the penalty matrix to increase the overall deterrence of Civil Administrative Penalties will encourage overall compliance with the

Department's rules and further advance the goal of this rulemaking to mitigate the impacts of climate change.

Examples of how the proposed changes would increase the deterrence from the existing rules include the following (note: to enable a direct comparison, the examples all assume Moderate Conduct):

- Violation consisting of the development of a hotel and parking lot impacting approximately 96,000 square feet of the CAFRA zone in a flood hazard area special area.
    - 13 points: $8,000 base daily penalty under the current rules, $15,000 base daily penalty under the proposed rules.
- Violation consisting of the construction of a concrete pavilion with a bathroom and patio/stairs onto a beach, excavating a coastal bluff and the waterward expansion of a concrete revetment impacting approximately 4,200 square feet of the CAFRA zone in a coastal high hazard area, erosion hazard area, beach, flood hazard area, and coastal bluff special areas.
    - 12 points: $6,000 base daily penalty under the current rules, $10,000 base daily penalty under the proposed rules.
- Violation consisting of unpermitted road construction and development of nine residential lots impacting approximately 750,000 square feet of the CAFRA zone in endangered or threatened wildlife or plant species habitat and critical wildlife habitat special areas.
    - 17 points: $15,000 base daily penalty under the current rules, $25,000 base daily penalty under the proposed rules.
- Violation consisting of the unpermitted clearing, excavation, and grading in an upland waterfront development area impacting approximately 13,500 of a coastal bluff.
    - 10 points: $3,000 base daily penalty under the current rules, $9,000 base daily penalty under the proposed rules.

Violations of those statutes or these rules contravene and undermine their intent and purpose and cause negative environmental, ecological, social, or health impacts. The Department is charged with and responsible for the implementation, oversight, and enforcement of those statutes through these rules and with protecting the environmental benefits they provide to the citizens of New Jersey.

N.J.A.C. 7:7 Appendix H Boundaries of Non-Mainland Coastal Centers in the CAFRA Area, N.J.A.C. 7:7 Appendix I CAFRA Centers, and N.J.A.C. 7:7 Appendix J Boundaries of the Mainland Coastal Centers in the CAFRA Area Re-Established under the Permit Extension Act of 2008 as Amended January 18, 2010, September 18, 2012, and December 26, 2014

Existing N.J.A.C. 7:7 Appendix H, Boundaries of non-mainland coastal centers in the CAFRA area, is proposed for repeal, as it has been determined that development should not be directed into these areas since as sea levels rise, dry land adjacent to the current shoreline will become inundated more frequently and, in some cases, permanently. Current and proposed development in this area, therefore, carries exceptional risk to life and property. For further discussion see N.J.A.C. 7:7-13.16.

Existing N.J.A.C. 7:7 Appendix I, CAFRA Centers, is proposed to be recodified as N.J.A.C. 7:7 Appendix H.

Existing N.J.A.C. 7:7 Appendix J, Boundaries of the mainland coastal centers in the CAFRA area re-established under the Permit Extension Act of 2008 as amended January 18, 2010, September 18, 2012, and December 26, 2014, is proposed for repeal, as all mainland coastal centers have now expired. For further discussion see N.J.A.C. 7:7-13.19.

N.J.A.C. 7:7A FRESHWATER WETLANDS PROTECTION ACT RULES

The Department is proposing new rules and amendments to the Freshwater Wetlands Protection Act rules, N.J.A.C. 7:7A, among the proposed amendments and new rules are proposed changes designed

to be part of the Department's comprehensive effort to amend its rules to implement EO 100 and AO No. 2020-01 relating to climate change. Consistent with the new rules and amendments proposed to the CZM rules and FHACA rules, the overall goal of the climate change amendments and new rules is to enable government, businesses, and residents to effectively respond to climate threats, and reduce future climate impacts through a targeted regulatory reform effort.

The impact of climate change on freshwater wetlands is complex. Climate influenced changes to hydrology impact all the critical functions and ecosystem services provided by freshwater wetlands. Two key indicators of a changing climate, temperature, and precipitation, impact freshwater wetlands directly. The New Jersey Climate Science Report finds that annual precipitation and surface temperature are expected to increase in New Jersey due to climate change. However, an important nuance to this expected increase in precipitation and temperature is the change in frequency and intensity of these key indicators of climate change. For example, even though the overall annual amount of precipitation in New Jersey is expected to increase by four to 11 percent by year 2050, small decreases in the amount of precipitation may occur in the summer months, which could result in greater potential for more frequent and prolonged droughts. These longer periods of drought between more frequent and intense precipitation events, which are projected to occur two to five times more often and with more intensity than in the last century, could have detrimental impacts on freshwater wetland systems and the biota that rely upon them, particularly those that rely upon the hydrologic patterns that have been historically present in this region.

Degradation of wetlands results in the diminishment or loss of the functions that wetlands provide. Some of these functions include: water quality protection, wildlife habitat, moderation of stream levels and base flows, and protection from flooding. Additionally, wetlands store carbon (also known as carbon sequestration) binding the carbon and making it unavailable to become carbon dioxide, which is a greenhouse gas. "Wetlands may also be more important than formerly believed as sinks of carbon produced from upland agriculture, forestry, and other land uses and not simply carbon fixed by photosynthesis within

wetlands. Carbon from watershed sources in the form of soil organic carbon, leaves, tree trunks (major floods), and other materials is washed into low lying wetland areas throughout the landscape … By acting as sinks and storing carbon produced throughout wetland drainage areas, wetlands may magnify the importance of carbon sequestering by upland agriculture and forestry activities."

Temperature directly affects evapotranspiration and ground water levels, particularly in productive ecosystems like forested swamps, where increased temperatures and lower water levels allow for the oxidation of organic soils and subsequent release of carbon. Conversely, increased flooding and waterlogged organic soils, which may result from more prolonged and intense periods of precipitation, increase the potential storage or sequestering of carbon. Seasonal and annual fluctuations in the timing and intensity of precipitation complicate the response of ecosystems, creating the potential for wetlands to serve both as carbon source and sink. Therefore, the protection of freshwater wetlands plays a role in protecting against climate change. The proposed amendments and new rules are intended to provide increased protection for land and water resources, specifically freshwater wetlands and waters.

Finally, throughout the Freshwater Wetland Protection Act rules, at N.J.A.C. 7:7A-1.4, 14.3, 20.6, and 21.1, the Department is amending the program's name from the "Division of Land Use Regulation" to the "Division of Land Resource Protection" to reflect its reorganization and name change.

SUBCHAPTER 1. GENERAL PROVISIONS

N.J.A.C. 7:7A-1.1 Purpose and scope

As previously noted in the "Alignment of purpose and scope" above, proposed amendments at N.J.A.C. 7:7-1.1(a), this rulemaking seeks to align the purpose and scope of the CZM rules at N.J.A.C. 7:7-1.1(a), the FWPA rules at N.J.A.C. 7:7A-1.1(a), and FHACA rules at N.J.A.C. 7:13-1.1(b) to provide consistency and reflect the Department's wholistic approach to application review.

N.J.A.C. 7:7A-1.3 Definitions

The Department is proposing to add punctuation and subcodification to the existing definition of "compelling public need" in order to clarify the structure and meaning of the definition, without changing the intent or meaning of the definition. Identical definitions are proposed to be added to the FHACA rules as discussed in the sections of this rulemaking pertaining to those rules.

Consistent with the proposed amendments to the Coastal Zone Management and Flood Hazard Area Control Act Rules, a definition for the commonly used acronym "NAVD 88" is proposed to describe the North American Vertical Datum of 1988, which is the predominant datum for surveying used in the United States, as described by the National Geodetic Survey. This datum is proposed to be used for all surveying, topography, and elevation datum used in this chapter. Accordingly, the references to "NGVD" at N.J.A.C. 7:7A-16.7(a)4iii are proposed to be replaced with "NAVD 88."

SUBCHAPTER 2. APPLICABILITY AND ACTIVITIES FOR WHICH A PERMIT IS REQUIRED

N.J.A.C. 7:7A-2.7 Stormwater management

N.J.A.C. 7:7A-2.7 addresses stormwater management requirements applicable to proposed activities subject to the FWPA rules. The Department is proposing to amend N.J.A.C. 7:7A-2.7 to eliminate the distinction between projects using individual versus general permits and to add a reference to activities requiring a transition area waiver.

The existing rules differentiate between requirements applicable depending upon whether the activity requires an individual permit or a general permit. With reference to activities requiring an individual permit, determination as to whether the entire project is subject to requirements specified in the Stormwater Management rules, N.J.A.C. 7:8, is based upon whether the entire project (as opposed to the portions within wetlands or transition areas) is considered to be "major development" as that term is defined in the Stormwater Management rules. In contrast, for activities requiring a general permit, the applicability

of the Stormwater Management rules to the entire project depends upon whether the regulated activity covered by the permit (as opposed to the entire project) is a "major development." Amended N.J.A.C. 7:7A-2.7(a) removes the distinction, so that any project in its entirety that meets the definition of a major development is subject to the Stormwater Management rules regardless of whether it requires an individual or general permit, or transition area waiver. While not always the case, an activity that qualifies for a general permit or transition area waiver could be part of a larger development that clearly meets the definition of "major development." Therefore, evaluating the whole project to determine applicability of the Stormwater Management rules is necessary, and consistent with the implementation of the Stormwater Management rules.

Newly codified N.J.A.C. 7:7A-2.7(b) continues, without amendment, the recognition that additional, more stringent requirements may be applicable in areas subject to the jurisdiction of the Pinelands Commission.

SUBCHAPTER 4. LETTERS OF INTERPRETATION

N.J.A.C. 7:7A-4.7 Conditions that Apply to an Issued Letter of Interpretation Delineation or Verification

The Department is proposing to amend the notification language required of applicants requesting a letter of interpretation (LOI) at N.J.A.C. 7:7A-4.7(a)5, to include a reference to State open waters, so that those receiving notice know that an LOI determination also provides information regarding the location and boundaries of State open waters on a site.

SUBCHAPTER 5. GENERAL PROVISIONS FOR GENERAL PERMITS-BY-CERTIFICATION AND GENERAL PERMITS

N.J.A.C. 7:7A-5.4 Use of More Than One General Permit or General Permit-By-Certification on a Single Site

Proposed new N.J.A.C. 7:7A-5.4(a)5 sets forth mitigation requirements for general permits. The Department is proposing to add a mitigation requirement when the combined impact to wetlands, State open waters, and transition areas that are not required for access to the regulated activity and are not part of an averaging plan, totals 0.1 acres or greater. The proposed requirement would apply to the combined impacts from the permits for underground utility lines, at N.J.A.C. 7:7A-7.2, non-tributary wetlands, at N.J.A.C. 7:7A-7.6, transition areas adjacent to non-tributary wetlands, at N.J.A.C. 7:7A-7.6A, human-made ditches or swales in headwaters, at N.J.A.C. 7:7A-7.7, house additions, at N.J.A.C. 7:7A-7.8, very minor road crossings, at N.J.A.C. 7:7A-7.10A, minor road crossings, at N.J.A.C. 7:7A-7.10B, outfalls and intake structures, at N.J.A.C. 7:7A-7.11, surveying and investigating, at N.J.A.C. 7:7A-7.12, lake dredging, at N.J.A.C. 7:7A-7.13, water monitoring devices, at N.J.A.C. 7:7A-7.14, trails and boardwalks, at N.J.A.C. 7:7A-7.17, non-motorized, multiple-use paths, at N.J.A.C. 7:7A-17A, dam repair, at N.J.A.C. 7:7A-7.18, docks and piers, at N.J.A.C. 7:7A-7.19, above ground utility lines, at N.J.A.C. 7:7A-7.21, spring developments, at N.J.A.C. 7:7A-7.23, malfunctioning individual subsurface sewage disposal (septic) systems, at N.J.A.C. 7:7A-24, and minor channel or stream cleaning for local government agencies, at N.J.A.C. 7:7A-7.25.

The FWPA requires that general permits have minimal individual and cumulative impacts. The Department assesses general permit impacts as part of its annual reporting requirements to the USEPA. The existing rules require mitigation individually for those general permits responsible for the greatest amount of cumulative impacts, and mitigation is required when such impacts exceed 0.1 acres. While other general permits may have lesser impacts individually, if combined those impacts also exceed 0.1 acres on a site, it is consistent to require mitigation for those cumulative impacts.

In addition, transition areas play a vital role in the protection of wetlands. The loss of transition areas has an indirect negative impact to the adjacent wetland and, therefore, it is appropriate to include the loss of transition areas when assessing the total impacts for which mitigation is required.

N.J.A.C. 7:7A-5.7 Conditions Applicable to an Authorization Pursuant to a General Permit-By-Certification or a General Permit

At N.J.A.C. 7:7A-5.7(b)1, the Department is proposing to add a further clarification to the requirements that must be met for the Department to approve the use of a general permit. Currently, the rule states that the Department will not approve a general permit unless the request for a general permit is associated with a proposed project. This requirement is being reiterated by stating that a general permit cannot be used to eliminate a natural resource to avoid regulation and shall be necessary for the conduct of the proposed project. While the rules already contain an explanation for what the "proposed project" means in this context, the proposed amendments add a further explanation for the phrase "necessary for the conduct of the proposed project." Specifically, the proposed rule states that "necessary for the conduct of the proposed project" means that there is no other practicable onsite configuration for the proposed project that would avoid or reduce the impacts to wetlands or State open waters. While many applicants already evaluate their sites in this way, the proposed amendment seeks to ensure that, regardless of whether the activity meets the criteria for a general permit, if there are practicable onsite options that avoid or further minimize wetland impacts, those options are used.

N.J.A.C. 7:7A-5.7(c) provides a table containing timing restrictions that are necessary to protect the fishery resources and/or the spawning of the fish population from any activity that may introduce sediment into a stream or cause a stream to become turbid. These timing restrictions and the proposed amendments are established by the Department's Fish and Wildlife biologists based on the best available science and the biologists experience in managing the fishery resource.

As discussed above, the timing restrictions that apply to trout production waters set forth at Table 5.7 are proposed for amendment. The proposed changes clarify that the timing restriction for trout production waters where Brook and/or Brown Trout are present is from September 15 through March 15; the timing restriction for trout production waters where only Rainbow Trout are present is from February 1 through April 30; and the timing restriction for trout production waters where Brook and/or Brown Trout in addition to Rainbow Trout are present is from September 15 through April 30.

For non-trout waters, the Department is proposing to amend Table 5.7 and to replace the term "general game fish" with "warm water species," as this term more accurately reflects the species to be protected. In addition, for regulated waters that support warm water species located south of Interstate 195, the timing restriction is proposed to be changed from May 1 through June 30 to April 1 through June 30. This change reflects that warm water species spawn prior to May 1. Amendments to the timing restrictions for regulated waters that support pickerel are also proposed. For regulated waters located north of Interstate 195 that support pickerel, the timing restriction is proposed to be changed from "ice out" through April 30 to March 15 or ice out, whichever is earlier, through April 30. "Ice out" means the disappearance of ice from the surface of a waterbody, such as a lake, due to thawing. As the climate changes and temperatures rise, waters in northern New Jersey do not always freeze during the winter months. Therefore, the timing restriction is proposed to be modified to address situations where the waters do not freeze. Therefore, where ice fails to cover a regulated water in a given year, ice out will be considered March 15. Last, the timing restriction of March 1 through May 30 for regulated waters that support walleye, is proposed for deletion. New Jersey's walleye population is supported by New Jersey Fish and Wildlife's stocking program and not spawning. Therefore, the timing restriction is no longer necessary.

Currently, the timing restriction for anadromous waters at Table 5.7 is based on the location of the proposed activity. The Department is proposing to simplify the timing restriction for waters supporting anadromous fish by having one timing restriction, from March 1 through June 30, that applies to all

anadromous waters. This change is protective of the fishery resource and is consistent with the National Oceanic and Atmospheric Administration's National Marine Fisheries Service's anadromous fish timing restriction.

SUBCHAPTER 6. GENERAL PERMITS-BY-CERTIFICATION

N.J.A.C. 7:7A-6.1 General Permit-By-Certification 8 – Construction of an Addition to a Lawfully Existing Residential Building

The use of general permits-by-certification is reserved for activities that the Department can be reasonably sure will not result in serious negative impacts to wetlands or waters, because the application process for obtaining a permit-by-certification is minimal, does not require submittal of an engineering plan, and does not require review and consideration of alternatives and minimization.

At N.J.A.C. 7:7A-6.1, the Department is proposing amendments to the general permit-by-certification related to residential dwellings. The current general permit-by-certification references "additions," "extensions," and "disturbances" when describing permitted impacts relating to residential dwellings. The Department is proposing to amend those references to consistently use the term "expansion of the footprint" of a lawfully existing residential dwelling. The same amendment is proposed at paragraphs (a)2 and 4.

In addition, the Department is proposing new subsection (b) to limit the use of the general permit-by-certification by not authorizing its use for the construction of appurtenant structures including, but not limited to, sheds, swimming pools, and driveways.

If a residence is existing, expanding the footprint of that residence by 750 square feet should result in no more than 750 square feet of additional impacts to wetlands and transition areas, thus ensuring that impacts have been minimized and are located in an area that has already been disturbed. However, there may be greater flexibility in siting appurtenant structures since they are not physically attached to a

residential structure. They may more appropriately be placed outside of wetlands and transition areas. Further, if there are streams or open waters on a site, and an appurtenant structure is poorly located, it may cause unanticipated impacts such as flooding. Thus, it is necessary for the Department to evaluate, on a permit-by-permit basis, whether proposed impacts associated with siting appurtenant structures have been minimized and comply with all rules. This evaluation can best be accomplished through the review of a general permit or individual permit application, and not by way of a permit-by-certification.

SUBCHAPTER 7. GENERAL PERMITS

N.J.A.C. 7:7A-7.1 General Permit 1—Maintenance and Repair of Existing Features

At N.J.A.C. 7:7A-7.1(b), the Department is proposing to provide greater detail regarding the criteria for maintenance of an off-stream stormwater system, pursuant to the general permit for maintenance and repair of existing features. The existing rule allows the removal of sediment and debris, as well as for the mowing of vegetation. Proposed new subparagraph (b)3iii, allows the removal of sediment and debris and nuisance vegetation. The existing rule suggests that mowing of vegetation is all that is needed to keep vegetation under control for the continued function of a stormwater system. However, if regular maintenance has not been undertaken, it may be necessary to completely remove nuisance vegetation if it is interfering with the proper function of a stormwater management system.

Although the general permit for maintenance and repair of existing features already includes reconstruction of a previously authorized, currently serviceable stormwater management facility, the proposed rule language explicitly allows stabilization of an eroded structure, which is often the reason that reconstruction is needed. The existing rule states that maintenance does not include enlargement of a stormwater management structure or any other change in its design. Proposed new subparagraph (b)3ii expands that statement to clarify that expansion, enlargement, or other modifications, and additional discharge points are not permitted pursuant to this general permit. Proposed new subparagraph (b)iv and v

further clarify that clearing, cutting, and/or removal of wetland or transition area vegetation outside the structure or conveyance feature is generally prohibited with limited exception. Particularly, such disturbance is only allowed pursuant to this general permit if it is unavoidable and necessary to gain access to the structure or conveyance feature and any necessary disturbance is minimized. In no case does the general permit authorize the removal of trees in a wetland or transition area outside the structure or conveyance feature. The proposed changes were made to clarify and restructure the general permit, using similar terminology to that contained within the equivalent permit pursuant to the FHACA rules for maintenance of stormwater facilities because applicants often need permits pursuant to both chapters to conduct these activities.

N.J.A.C. 7:7A-7.2 General Permit 2 - Underground Utility Lines

At N.J.A.C. 7:7A-7.2, the general permit for underground utility lines, the Department is proposing to amend subsection (b), which exempts jacking and horizontal directional drilling that does not result in surface disturbance to wetlands, State open waters, or transition areas. Since the existing rule was adopted, several projects have been proposed in New Jersey using horizontal directional drilling. As a result, the Department has gained extensive experience reviewing the outcomes of horizontal directional drilling. This experience has revealed that there may be the potential to negatively affect wetlands and waters when such construction techniques are used. The existing rule allows an applicant to assert that a proposed utility line installation using horizontal directional drilling will not result in surface disturbance to regulated features without providing the opportunity for the Department to review and evaluate details of that project. It is important for the Department to be afforded the opportunity to review a utility line installation that includes horizontal directional drilling because such installations have the potential to alter wetland vegetation if there is an "inadvertent return" during installation. An "inadvertent return" occurs when the bentonite-based drilling fluid used during the horizontal directional drilling process seeps up through fractures in the

soil. Since the existing rule was implemented, several inadvertent returns have occurred in New Jersey. Therefore, the proposed amendment requires that the applicant demonstrate that horizontal drilling to install utility lines will not adversely impact or result in a discharge into these regulated areas. Underground utilities installed through jacking continue to be exempt from requiring authorization pursuant to this chapter, provided the requirements at N.J.A.C. 7:7A-7.2(b) addressing impacts to freshwater wetlands, transition areas, and State open waters are met.

The Department is additionally proposing amendments at N.J.A.C. 7:7A-7.2(c) that provide demonstrable standards to comply with this amendment. Specifically, the Department is proposing new requirements for drilling operations to increase protections for wetlands and State open waters by avoiding potential environmental degradation that could occur during drilling operations. These requirements were obtained from experts in the Department's New Jersey Geological and Water Survey.

Proposed new N.J.A.C. 7:7A-7.2(c)6 requires the permittee to use potable water when drilling, paragraph (c)7 requires the permittee to use NSF 60/61 certified drilling fluids and additives to conduct drilling operations, paragraph (c)8 requires the permittee to submit a contingency plan that details processes for minimizing environmental degradation in case of a failure during drilling operations, including an "inadvertent return" scenario, and paragraph (c)9 requires the permittee to fill all abandoned boreholes, including portions that are within 25-feet of the surface, with grouts approved by the New Jersey State Well Drillers and Pump Installers Examining and Advisory Board. Due to the proximity to wetlands and other waters, the Department is requiring the use of potable water during drilling to ensure that if an inadvertent return or other accident does occur, the drilling water will not contaminate the wetlands or waterway. Further, since very few of the drilling fluids and additives used by the drilling industry meet New Jersey safety standards for working near wetlands or waters, the use of NSF certified materials ensures that the pipeline installers are aware of, and follow, all New Jersey standards. NSF 60/61 is the American National Standard for evaluation of water treatment chemicals and is required by law in most U.S. states, including

New Jersey. This standard was created by a committee of industry experts. Many categories of water treatment chemicals, as well as well-drilling aids, fall under the scope of this standard. By requiring the use of NSF 60/61 certified fluids, the Department ensures that those fluids will not contaminate the water. Preparing a contingency plan to minimize environmental damage if there is a drilling failure or inadvertent return is a critical, proactive step to ensuring protection of wetlands and waters.

Requiring filling of abandoned boreholes with board-certified grouts ensures that there is no easy pathway between surface or ground water and that the borehole does not provide a pathway or conduit, which could result in draining the wetlands or allow contamination to migrate. The New Jersey State Well Drillers and Pump Installers Examining and Advisory Board reviews grouts and, upon determining they are acceptable, includes them in the Well Construction and Maintenance; Sealing of Abandoned Wells rules at N.J.A.C. 7:9D. The Department is also proposing to require that grout be placed through either a drill rod or tremie extended down the borehole from the entry point until it reaches a vertical depth of 25 feet plus the hole diameter below the land surface. A "tremie" is a grout line or hose used to pump grout, under pressure, into the borehole and annular space (the area between the pipe and the bore hole). Using this method ensures that all spaces are filled. Finally, the requirement at proposed N.J.A.C. 7:7A-7.2(c)9ii to grout the top five vertical feet of all entry and exit points is intended for safety, so that holes on the ground's surface do not remain open. The Department is proposing the use of approved grouts specifically for the upper 25 feet plus diameter of pipe distance because that is the area closest to the wetland and waterway thus necessitating the highest level of protection.

Existing N.J.A.C. 7:7A-7.2(d) is proposed to be amended to change the reference to pipes "laid" to pipes "installed" through wetlands, transition areas, or State open waters. "Installed" is a broader term that more appropriately encompasses varying methods used to place pipes in, under, or above the ground.

Existing N.J.A.C. 7:7A-7.2(e) is proposed to be amended to clarify, and explicitly state, that mitigation is required for all temporary impacts. The Department currently requires that all temporary

impacts to freshwater wetlands, State open waters, and transition areas associated with general permits be mitigated, understanding that mitigation in the case of temporary impacts is achieved by restoring the site. By definition, a temporary impact is one for which "the disturbed areas are restored to their original topography, and all necessary measures are implemented to ensure that the original vegetative cover onsite is restored to its previous (or improved) condition." However, because this was not explicitly stated as part of the mitigation condition, applicants overlook this requirement. The proposed amendment to this general permit, together with the proposed amendments at N.J.A.C. 7:7A-11.8 makes this clear.

N.J.A.C. 7:7A-7.4 General Permit 4 - Hazardous Site Investigation and Cleanup and N.J.A.C. 7:7A-7.5 General Permit 5 - Landfill Closures

Proposed amendments to the general permit for hazardous site investigation and cleanup, N.J.A.C. 7:7A-7.4(a)2, and the general permit for landfill closures, N.J.A.C. 7:7A-7.5(b), are also clarifications to specify and distinguish between mitigation for permanent versus temporary impacts. As previously stated, the Department currently requires that all temporary impacts to wetlands, State open waters, and transition areas associated with general permits be mitigated, understanding that mitigation in the case of temporary impacts is achieved by restoring the site. The proposed amendment to these general permits, at proposed N.J.A.C. 7:7A-7.4(a)2iii and 7.5(b)3, together with the proposed amendments at N.J.A.C. 7:7A-11.8 make this clear. In addition, the Department is proposing a new provision at N.J.A.C. 7:7A-7.4(a)2ii and 7.5(b)2 requiring mitigation for permanent impacts to transition areas in limited circumstances.

Unlike most general permits, the permits for hazardous site investigation and cleanup, and for landfill closures, have no set limits of disturbance because the Department recognizes that these activities have mostly positive environmental benefits, depending upon how they are implemented. Removal of contamination or landfill materials and restoration of a wetland, State open water, or transition area has a positive environmental benefit. However, a permanent loss of wetlands, State open waters, or transition

area results when contamination is not removed but is instead capped in place. Although this addresses an important contamination issue, the wetland and its functions and benefits are reduced or eliminated, depending on the type of wetland affected. For example, if an herbaceous wetland is capped, and herbaceous vegetation is re-established on top of the cap, while the vegetation no longer connects with the groundwater and no longer has the ability to recharge or filter groundwater, the herbaceous vegetation may perform limited surface water quality functions as water runs off the surface of the vegetated cap. If a forested wetland is remediated and capped, trees cannot be replanted on the cap, thereby eliminating the important functions that forested vegetation provides. Therefore, in the case of permanent impacts to freshwater wetlands and State open waters, proposed amendments at N.J.A.C. 7:7A-7.4(a)2i require mitigation to replace the lost values and functions.

As defined in the Freshwater Wetlands Protection Act, a transition area is "an ecological transition zone from uplands to freshwater wetlands which is an integral portion of the freshwater wetlands ecosystem, providing temporary refuge for freshwater wetlands fauna during high water episodes, critical habitat for animals dependent upon but not resident in freshwater wetlands, and slight variations of freshwater wetland boundaries over time due to hydrologic or climatologic effects; and a sediment and storm water control zone to reduce the impacts of development upon freshwater wetlands and freshwater wetlands species." (See N.J.S.A. 13:9B-16).

Most cleanup projects involve both wetlands and transition areas. If an applicant's project will cause a permanent impact to a wetland, when that wetland is replaced through mitigation, the mitigated wetland, by definition, has a transition area. Thus, in the case of a permanent wetland impact, the Department does not require separate replacement of affected transition areas because those areas will automatically exist adjacent to the mitigated wetland.

However, in the rare case where a cleanup may occur entirely within the transition area, the affected transition area is forested, and the remediation or landfill closure method will result in permanent impacts

(which results when the selected remediation method is clearing and capping), the Department is proposing to require mitigation if the impact is 0.1 acre or greater. Like permanent impacts to wetlands, capping transition areas also reduces or eliminates the ability of the transition area to continue to provide important functions including protection for the adjacent wetlands. As it is a common practice to replant herbaceous plants atop a cap, capping herbaceous transition area may have limited impacts to the adjacent wetlands. However, when capping forested transition areas, because trees cannot be replanted on the cap, the important functions that forested transition areas provide for the adjacent wetlands are lost. Thus, the proposed amendment at N.J.A.C. 7:7A-7.4(a)2ii recognizes the importance of forested transition areas for the protection of the adjacent wetland, is consistent with the general permit requirements for mitigation, and will ensure that these activities will result in minimal permanent forested transition area losses.

N.J.A.C. 7:7A-7.6 General Permit 6 — Non-Tributary Wetlands

At N.J.A.C. 7:7A-7.6, the general permit for fill in non-surface water connected wetlands, at new paragraph (a)4, the Department is proposing that, if a wetland is found to contain obligate or facultative vernal habitat species, as enumerated at N.J.A.C. 7:7A Appendix 1 of the Freshwater Wetland rules, and filling activities would extirpate a local population of such species, the applicant shall demonstrate that the proposed configuration will minimize the impacts to the species that could not be addressed with a different project design that still meets the project purposes. Consistent with the purpose and intent of the Act, the proposed language requires that applicants verify that the proposed impacts to wetlands are the minimum necessary to accomplish the desired project.

Non-surface water connected wetlands provide habitat for vernal species. In accordance with N.J.S.A. 13:9B-2, the FWPA is intended to "preserve the purity and integrity of freshwater wetlands from random, unnecessary or undesirable alteration or disturbance." Currently, when an application is received, the Department determines whether a wetland is a vernal habitat that contains obligate or facultative species

and if the proposed development would result in the extirpation of such species. In those cases, the Department asks applicants whether they can minimize their impacts to decrease the impact on the species. In other cases, if it is evident that due to the location of the vernal habitat in relation to the desired development, reconfiguration cannot provide the desired development while at the same time protecting the species in question, the Department deems the impacts "necessary" and does not require minimization. The proposed rule codifies the Department's practice.

N.J.A.C. 7:7A-7.10A General Permit 10A — Very Minor Road Crossings and N.J.A.C. 7:7A-7.10B General Permit 10B — Minor Road Crossings

At N.J.A.C. 7:7A-7.10A, the general permit addressing certain very minor road crossings, and 7.10B, the general permit for certain minor road crossings, the Department is proposing an amendment to clarify that these permits can be used for one or more new, linear access roads. This amendment is meant to clarify the intent of both general permits to provide access to buildable areas that would otherwise be inaccessible without crossing through freshwater wetlands, transition areas, and/or State open waters. Throughout the history of the general permit for road crossings and specifically in 2001 in the response to comments when general permit 10 for road crossings was split into general permit 10A (very minor road crossings) and 10B (minor road crossings), the Department has stated that these permits are intended to provide access to upland areas that are otherwise inaccessible without crossing wetlands, State open waters, or transition areas (see 32 N.J.R. 2713(a)). The intent was further emphasized by the addition in 2001 of the language that prevents skirting along the edge of a wetland and/or transition area to increase developable area. That language remains in the rule today at N.J.A.C. 7:7A-7.10A(c) and 7.10B(b)1.

Despite efforts by the Department to make this intent clear, the road crossing permits are still frequently misinterpreted, and applicants often mistakenly seek approval pursuant to this general permit for internal loops roads that do not serve the function of providing access to developable uplands which

otherwise would be inaccessible. These permits are also frequently used to increase the footprint of development, for example, by siting a building in the transition area, with an internal loop road around the building or parking lot, resulting in increased impacts to the transition area and freshwater wetlands. Thus, the current amendment is the Department's continued effort to clarify the purpose and intent of the road crossing general permits.

Finally, the Department is proposing amendments to the general permits for very minor and minor road crossings at N.J.A.C. 7:7A-7.10A(f), and 7.10B(e), to specify that mitigation is also required for temporary impacts, and to direct applicants to the new proposed provision that specifically addresses the requirements for temporary restoration. As previously stated, the Department currently requires that all temporary impacts to wetlands, State open waters, and transition areas associated with general permits be mitigated, understanding that mitigation in the case of temporary impacts is achieved by restoring the site. The proposed amendment to this general permit, together with the proposed amendments at N.J.A.C. 7:7A-11.8, clarifies this requirement.

N.J.A.C. 7:7A-7.11 General Permit 11 — Outfalls and Intake Structures

The only proposed substantive change to the general permit for outfalls and intake structures is at N.J.A.C. 7:7A-7.11(i), and is the same clarification previously discussed above to specify and distinguish between mitigation requirements for permanent versus temporary impacts. As in prior instances, the proposed amendment to this general permit, together with the proposed amendments at N.J.A.C. 7:7A-11.8 will make this clear. The Department is also amending the reference to the "Standards for Soil Erosion and Sediment Control in New Jersey" to the "State Soil Conservation Committee standards" to reflect the current reference to the updated document.

N.J.A.C. 7:7A-7.13 General Permit 13 — Lake Dredging

The Department is proposing amendments to the general permit for lake dredging. The existing rules state that the Department may require testing of dredged material if there is reason to suspect that the material is contaminated. At N.J.A.C. 7:7A-7.13(f), the Department is providing factors for consideration as the Department determines whether testing is required. The information is important both for assessing potential impacts during dredging operations, and for determining where it is appropriate to dispose of dredged material. When an application is made for lake dredging, the Department evaluates the following information: the proximity of combined sewer overflows points, and other surface and stormwater outfalls; and the potential for human/ecological exposure of the proposed end use for sediments. By including this information in the amendments, applicants will understand what type of information the Department needs to determine if additional dredged material testing will be required.

N.J.A.C. 7:7A-7.14 General Permit 14 — Water Monitoring Devices

At N.J.A.C. 7:7A-7.14(b), the Department is proposing minor amendments to update the name of the Division within the Department that is responsible for overseeing some types of site remediation projects, and to add a reference to the licensed site remediation program that is responsible for overseeing other types of site remediation projects. These changes are consistent with the references pursuant to the general permit for hazardous site investigation and cleanup, for which water monitoring devices are often a component.

N.J.A.C. 7:7A-7.15 General Permit 15 — Mosquito Control Activities

The Department is proposing amendments at N.J.A.C. 7:7A-7.15, the general permit for mosquito control activities, to update it and to make it consistent with changes for similar activities being proposed pursuant to the FHACA rules at N.J.A.C. 7:13-9.2.

At N.J.A.C. 7:7A-7.15(b), the Department is proposing to amend the rules to require not only that an application for mosquito control activities be submitted to the State Office of Mosquito Control Coordination, but that the office also provides certification that the activities included in the project are necessary to control a documented mosquito problem. This proposed requirement will ensure that the Department obtains a written concurrence of the mosquito concern from the agency overseeing mosquito control before reviewing the permit application.

At N.J.A.C. 7:7A-7.15(c)1, the Department is updating the reference to cite the mosquito control and best management practices document that directs mosquito control practices in freshwater wetlands and is also providing the website address where the document can be obtained.

The Department is proposing new N.J.A.C. 7:7A-7.15(c)5 to require applicants to adhere to fisheries timing restrictions at N.J.A.C. 7:7A-5.7(c). Work involving dredging or earth removal, such as that implemented to control mosquitos, can result in sedimentation or turbidity that is detrimental to fish. Therefore, these activities should only occur outside of critical spawning periods.

The Department is also proposing to amend N.J.A.C. 7:7A-7.15(d) to require that any material removed from a regulated area as a result of an activity authorized pursuant to this proposed permit must be placed outside any regulated area. This new standard allows the Department to better protect the environments of any regulated area from being disturbed by the placement of silt, sediment, trash, and debris, providing better protection for the surrounding area and water quality.

N.J.A.C. 7:7A-7.16 General Permit 16 —Creation, Restoration, and Enhancement of Habitat and Water Quality Functions and Values

The Department is proposing new N.J.A.C. 7:7A-16(a)6 to explicitly permit fencing, for habitat connectivity projects or barriers to prevent wildlife/vehicle mortality, either on its own and/or if used in conjunction with a proposed or existing culvert or bridge. Animals must be able to move through the

landscape to find food, water, shelter, mates, and other resources necessary for their survival. Roadways fragment wildlife habitat. A critical step in restoring wildlife habitat connectivity is facilitating the movement of animals across roads. Installation of crossing structures with wildlife fencing is an effective means of reducing wildlife vehicle collisions and allowing safe movement across road barriers, thus maintaining connectivity. These wildlife passage systems can be in the form of new structures and fencing or retrofits to existing culverts or bridges. At N.J.A.C. 7:7A-7.16(b), the Department is proposing to delete the requirement that all projects proposing creation, restoration, and enhancement of habitat and water quality functions and values have a sponsor. The Department has concluded that this provision is not needed because the Department is reviewing the applications when submitted for the general permit. Further, requiring a sponsor can sometimes inhibit an applicant's ability to perform these activities, which are intended to be environmentally beneficial. Therefore, while it may be desirable for an applicant to have support of an interested agency, it should not be a requirement for obtaining the permit. The Department is proposing to delete N.J.A.C. 7:7A-7.16(b)5 because it causes confusion when read together with N.J.A.C. 7:7A-7.16(b)6. N.J.A.C. 7:7A-7.16(b)6 is proposed to be recodified as N.J.A.C. 7:7A-7.16(b)5. In addition, the Department is proposing to add new language stating that the permit should not trade one environmental benefit for another. For example, while the creation or enhancement of fisheries habitat may be desirable, it would not be beneficial if such habitat was created by destroying forested wetlands.

The Department is also proposing to amend N.J.A.C. 7:7A-7.16(f) to delete the reference to an activity being "part of a program included in (b) above" since the removal of the sponsor requirements eliminates the inference to programs those sponsors may implement.

N.J.A.C. 7:7A-7.20 General Permit 20 - Bank Stabilization

The general permit for bank stabilization is proposed to be amended to make it more consistent with the bank stabilization criteria found in the Flood Hazard Area Control Act rules. Bank stabilization activities, by definition, occur adjacent to waterbodies that are also subject to the FHACA. While the existing general permit criteria is similar to that in the FHACA rules, they do not contain the detail necessary to determine whether the proposed activities are warranted, or to clearly prioritize the use of natural and bioengineering mechanisms. The following amendments are intended to make the requirements more explicit and to provide a clear prioritization of bank stabilization methods.

At N.J.A.C. 7:7A-7.20(a), the Department proposes replacing the phrase "reduce or prevent" with "correct existing" erosion. The proposed change ensures that the scope of a project is focused on the area of concern and does not extend beyond what is needed to address the current erosion problem. Further, the term "stream" has been replaced with "waterbody" since "waterbody" is a broader term that encompasses rivers, lakes, and streams, all of which would potentially qualify for this bank stabilization general permit.

Existing N.J.A.C. 7:7A-7.20(a)1 has been deleted and replaced with proposed new subsections (b) and (c). Proposed new subsection (b) requires that the applicant conduct an in-depth assessment of the watershed and waterbody to identify and evaluate the cause or causes of the erosional problem before proceeding to propose the mechanism for correction. It is likely that the applicant has already considered and evaluated the factors before applying to the Department. However, by including these provisions in the rules, the applicant is being given explicit guidance on what to evaluate and what must be provided with an application.

Proposed new subparagraphs (b)1i, ii, and iii identify information that must be provided as part of the permit application. The information requirements are designed to ensure that any proposed project fully analyzes the existing problems, including consideration of why any previous attempts to remedy the problem were not successful, the range of options to address the existing problem, and what measures will be needed to ensure that the proposed remedies correct the problem both in the short and long term.

Proposed subparagraph (b)1i requires information and analysis of the cause and history of erosion, instability, or ecological degradation. The required information includes analysis of why any previous attempts to address the issues at the site were not successful. This information serves as a starting point to the determination of what potential method will best address the issue and helps ensure that the chosen method will be successful.

After information on the existing problem is gathered and analyzed, proposed new subparagraph (b)1ii requires the applicant to gather and analyze information designed to demonstrate that the stabilization or restoration method(s) chosen is the most suitable to resolve the issue, considering factors unique to the area within which the site is located. Proposed sub-subparagraphs (b)1ii(1) and (2) require the applicant to evaluate issues, such as the location of any sudden changes in stream bed elevation and any other upstream or downstream stressors that may have contributed to and/or exacerbated any erosion, instability, or ecological degradation, which should be addressed as part of the project. To ensure that other future changes in the area surrounding the proposed project will not impact the success of the project in the future, proposed new sub-subparagraph (b)1ii(3), requires the applicant to consider the effects of future development in the watershed and how it may impact the bank and the proposed stabilization and/or restoration. Finally, proposed new N.J.A.C. 7:7A-7.20(b)1ii(4) ensures that the application includes an analysis of the anticipated life of the proposed stabilization or restoration.

After the analyses required at N.J.A.C. 7:7A-7.20(a)1i and ii ensure that the applicant has fully considered all factors that impact the site and has demonstrated that the project proposed in the application represents the best method to address the problem, proposed subparagraph (a)1iii addresses the future of the bank stabilization by requiring a maintenance and monitoring plan to ensure that the proposed project will continue to provide the benefits for which it was designed throughout the anticipated lifetime of the stabilization or restoration. The proposed rules require that such plan include an action plan in case of future

failure of the project and a plan to reduce the likelihood of future erosion, instability, and ecological degradation onsite.

The information and analysis required pursuant to proposed N.J.A.C. 7:7A-7.20(b)1i, ii, and iii help ensure that any project undertaken considers all factors that could impact the short- and long-term viability of the method chosen to address the existing erosion problem, and that any unanticipated issues that may develop in the future are rapidly identified and addressed.

Reflecting the specialized knowledge needed to adequately address the issues covered by this general permit, proposed new N.J.A.C. 7:7A-7.20(b)2 requires documentation that the individual who prepares the bank stabilization plan have specific knowledge and experience relating to fluvial geomorphology and soil bioengineering (if such will be used on site).

Proposed new N.J.A.C. 7:7A-7.20(c) establishes a hierarchy for stabilization methods, addressing stability issues in the manner most ecologically beneficial to the wetland and riparian system. Accordingly, paragraph (c)1, the preferred option, requires that a localized eroded bank or destabilized channel be restored solely by cutting back the bank to a stable slope and planting with native, non-invasive plant species suitable for stabilization. It further notes that a slope of no greater than 50 percent (a ratio of two horizontal to one vertical) is recommended to stabilize an eroded bank. While this maximum slope is recommended, a greater slope is not precluded if the applicant can demonstrate that site specific conditions will sustain a stabilization project with a greater slope.

If cutting back the bank to a stable slope and planting with native, non-invasive species is not feasible or will not result in successful bank stabilization, proposed new N.J.A.C. 7:7A-7.20(c)2 requires the use of soil bioengineering methods that follow the practices set out in the NRCS Engineering Field Handbook, published December 1996 (650.1601(d)(2) in Chapter 16). As part of this rulemaking, the Department is incorporating this document by reference into these rules. This document has been previously incorporated by reference into the Flood Hazard Area Control Act Rules. Further, in designing soil

bioengineering installations, the existing soil characteristics, the bank's physical structure, and the hydrologic conditions on site must be considered.

Finally, if vegetative and bioengineering methods are not suitable or sufficient to address the bank stabilization issue, proposed new N.J.A.C. 7:7A-7.20(c)3 will permit the use of revetments, retaining walls, or other armoring to stabilize the bank. Existing N.J.A.C. 7:7A-7.20(a)4 has been recodified as N.J.A.C. 7:7A-7.20(c)6 with a proposed amendment. At recodified N.J.A.C. 7:7A-7.20(c)6iii, the Department is proposing to add, to the statement that says the Department shall allow replacement of previously eroded material as part of the bank stabilization if the applicant demonstrates that such replacement would be environmentally beneficial, that such replacement must also be evaluated to ensure that it will not cause, redirect, or exacerbate flooding. While placement of materials may contribute positively to fish or wildlife habitat, it may still have the unintended consequence of contributing to, or redirecting, flooding.

N.J.A.C. 7:7A-7.21 Above Ground Utility Lines

Existing N.J.A.C. 7:7A-7.21(e) is proposed to be amended to clarify, and explicitly state, that mitigation is required for all temporary impacts. The Department currently requires that all temporary impacts to freshwater wetlands, State open waters, and transition areas associated with general permits be mitigated, understanding that mitigation in the case of temporary impacts is achieved by restoring the site. In fact, by definition, a temporary impact is one for which "the disturbed areas are restored to their original topography, and all necessary measures are implemented to ensure that the original vegetative cover onsite is restored to its previous (or improved) condition." However, because this was not explicitly stated as part of the mitigation condition, applicants overlook this requirement. The proposed amendment to this general permit, together with the proposed amendments at N.J.A.C. 7:7A-11.8, makes this clear.

N.J.A.C. 7:7A-7.25 General Permit 25 — Minor Channel or Stream Cleaning for Local Government Agencies

N.J.A.C. 7:7A-7.25, Minor channel or stream cleaning for local government agencies, specifies the activities that may be conducted pursuant to this general permit, as well as conditions and limitations applicable to the conduct of activities pursuant to the general permit. Such conditions and limitations include specification of requirements, such as how any materials removed from a channel or stream pursuant to the general permit must be handled and the specification that the general permit may not be utilized for activities in a stream classified as a category one water pursuant to the Surface Water Quality Standards, N.J.A.C. 7:9B.

The Department is proposing to add a reference to the Stream Cleaning Act (N.J.S.A. 58:16A-67), which provides requirements for the activities that have been incorporated into this general permit, to delete the reference to "local" government agencies, and allow State agencies and public transportation entities to undertake activities authorized by this general permit. Public transportation entities, defined in both the Flood Hazard Area Control Act Rules, at N.J.A.C. 7:13-1.2, and the Stormwater Management Rules, at N.J.A.C. 7:8-1.2, are tasked with keeping their transportation networks in safe, working order. This includes ensuring that bridges and culverts are not clogged with accumulated sediment and debris, which can obstruct flood flows and cause increased flood damage potential for nearby properties, as well as the bridge or culvert itself. State agencies in general can also have this obligation to maintain bridges and culverts, such as those situated in State parks. Given the prior general permit authorizes other government entities to undertake these activities, often for the same reason (counties and municipalities have to maintain their bridges and culverts as well), and given the limitations and protections afforded by the requirements of this general permit, it is appropriate to expand the general permit authorization to include activities by a State agency or public transportation entity.

In addition, the Department is proposing to add to the list of requirements for sediment removal from a channel with a natural bed, the need to comply with timing restrictions that protect fisheries. Work involving dredging or earth removal from a stream channel can result in sedimentation or turbidity that is detrimental to fish. Therefore, these activities should only occur outside of critical spawning periods.

N.J.A.C. 7:7A-7.26 General Permit 26 - Redevelopment of Previously Disturbed Areas

At N.J.A.C. 7:7A-7.26, the general permit for redevelopment of previously disturbed areas, the Department is proposing to remove the provision allowing an applicant to disturb up to one acre of wetlands or State open waters if the feature is not a water of the United States. The effect of the proposed change is to limit the use of the permit to the disturbance of 0.5 acres of wetlands or State open waters. Previously, the Department determined that it was appropriate to maximize the area of wetlands or State open waters that could be disturbed using this general permit, by allowing up to one acre. However, in order to remain as stringent as the Federal permitting program, existing paragraph (a)7 makes clear that, if the wetland or water is a water of the United States and, thus, subject to the Federal program, the upper limit could not exceed the 0.5-acre limit established pursuant to the Federal program. Upon further consideration, the Department determined that disturbed or degraded wetlands continue to provide some functions and values and it is, therefore, more appropriate to establish an upper limit of 0.5 acres for all freshwater wetlands and/or State open waters. In addition, the same change proposed at N.J.A.C. 7:7A-7.2(e) clarifying the requirement to mitigate for temporary impacts is proposed at N.J.A.C. 7:7A-7.26(b).

SUBCHAPTER 8. TRANSITION AREA WAIVERS

N.J.A.C. 7:7A-8.1 General Provisions for Transition Area Waivers

At N.J.A.C. 7:7A-8.1(b), the Department is proposing to add a new condition for transition area waivers to ensure that an activity does not result in a substantial impact on the adjacent wetlands. The

proposed condition with limited exceptions, requires the removal and replanting with native plants of the impervious surface within 25 feet of the freshwater wetland. In addition, the proposed new paragraph requires that the replanted transition area within 25 feet of the freshwater wetland boundary be protected from future development by a conservation restriction.

It is well documented and widely accepted that vegetated upland buffers adjacent to wetlands provide an essential role in the function and survival of wetlands. Among other things, wetland buffers remove pollutants and sediment from surface water runoff, uptake nutrients, and contaminants from surrounding land cover, and provide organic material to the wetland. Some of the benefits provided by wetland buffers, such as nutrient and sediment removal, have been observed within the first 15 to 30 feet of a vegetated wetland buffer. However, this is widely considered to be the minimum distance to provide a nutrient and sediment removal function to the wetland. Effective buffer distances that prevent nutrient and sediment saturation of the buffer and provide value to wildlife generally range from 30 to 300 feet. The proposed condition will further protect wetlands and their buffers and will also improve transition areas that have been degraded.

In recognition that transition areas minimize adverse impacts to the wetland or serve as an integral component of the wetlands ecosystem, except for ordinary resource value wetlands, the Freshwater Wetlands Protection Act establishes a minimum width of 25 feet for transition areas. Thus, to ensure this area provides its protective functions, it is important to ensure that the area within 25 feet of a wetland remains available, or is restored, to provide those important functions, to the extent possible. However, the Department recognizes that it will not always be feasible to provide improvement to the inner 25 feet of the transition area by removing pavement and replanting. Therefore, proposed new N.J.A.C. 7:7A-8.1(b)5i, ii, and iii provide exceptions that allow all, or a portion of, existing impervious surface within 25 feet of the wetland to be left in place in certain limited circumstances, as discussed below.

N.J.A.C. 7:7A-8.1(b)5i provides an exception if an applicant demonstrates that removing and replanting all, or a portion of, the existing impervious surface would likely exacerbate flooding or erosion, expose hazardous substances or solid waste, or otherwise threaten public health, safety, welfare, and/or the environment. Further, proposed subparagraph (b)5ii allows an exception if an applicant demonstrates that removing and replanting all, or a portion of, the existing impervious surface would prevent reasonable use or access to the site and/or cause an unreasonable burden upon the applicant. The rulemaking additionally provides an example of a circumstance that would meet this criterion and for which the Department would not require removal and replanting of the entire area located within 25 feet of a freshwater wetland. The exception will only apply to the portion of the site meeting the criteria. For example, if an applicant demonstrated that removal of impervious surface in only one portion of the site within 25 feet of the freshwater wetland would likely exacerbate flooding or erosion, but that issue was not applicable to the transition area in another portion of the site, the impervious surface area within 25 feet of the freshwater wetlands on those other portions of the site would need to be removed and replanting with native, non-invasive species. Finally, N.J.A.C. 7:7A-8.1(b)5iii provides an additional exception to the removal of existing impervious surface within 25 feet of freshwater wetlands, to address situations where a public transportation entity asserts that removing impervious surface associated with a lawfully existing railroad or public roadway is impracticable or would result in an unsafe condition. This exception is implied in the existing FHACA rules at recodified N.J.A.C. 7:13-11.2(b)3ii, and the Department has previously excepted public roadways and railroads from this requirement using the existing provision. However, the proposed new provision clarifies the Department's intent for public transportation entities working in transition areas adjacent to freshwater wetlands.

The proposed amendments are similar to analogous standards for the conduct of activities in a riparian zone pursuant to the Flood Hazard Area Control Act Rules at N.J.A.C. 7:13-11.2(b)3, which requires that onsite impervious surface within 25 feet of the top of bank of a watercourse be removed and

the area be replanted. Both the above-described amendments at N.J.A.C. 7:7A-8.1(b)5, and the proposed amendment at N.J.A.C. 7:7A-8.2(c) described below, will promote naturalized vegetated buffers within 25 feet of wetland boundaries by deterring disturbance and restoring native vegetation in these areas.

Finally, and consistent with the changes being proposed at N.J.A.C. 7:7A-2.7, the Department is proposing new subsection (j) that reiterates that if the project of which the transition area waiver activities are a part meets the definition of "major development" at N.J.A.C. 7:8-1.2, then the project in its entirety shall comply with the Stormwater Management rules at N.J.A.C. 7:8.

N.J.A.C. 7:7A-8.2 Transition Area Averaging Plan Waiver

N.J.A.C. 7:7A-8.2(c) describes certain activities that are presumed to have a substantial impact on the adjacent wetland when such activities are performed in an intermediate resource value transition area. Such activities preclude the issuance of a transition area waiver averaging plan. Currently, the rules at subparagraph (c)2i allow the reduction of a portion of the transition area to 10 feet as part of an averaging plan for an intermediate resource value wetland. The Department is proposing to increase the minimum remaining transition area from the current 10 feet to a minimum of 25 feet. As indicated above, studies have found that wetland buffers must have a minimum width to provide many of their functions and values. Generally, studies indicate the transition area should be at least 30 feet wide. The FWPA specifies that an intermediate resource value wetland should have a 50-foot wide transition area but allows a reduction to 25 feet. Therefore, the Department has determined that this is the minimum width needed to protect the adjacent wetland. As a result of the proposed amendment to require a minimum 25-foot transition area to an intermediate resource value wetland, the Department is proposing to delete subparagraphs (c)2ii, iii, iv, and vi, since each of those provisions is no longer needed because proposed changes at paragraph (c)2 will subsume these provisions.

At N.J.A.C. 7:7A-8.2(f), the Department is proposing to require that averaging plans be conditioned on the recording of a conservation restriction, in accordance with the requirements at N.J.A.C. 7:7A-12, which restricts future activities in the "entire transition" area. The current subsection was adopted in 2017 and only requires that the added portion of the transition area (added to balance the reduced portion elsewhere), be protected by a conservation restriction. However, upon further consideration, the Department has determined it is more appropriate to protect the entire transition area once its boundaries have been averaged. The Freshwater Wetlands Protection Act allows "averaging" of a transition area, meaning that the transition area can be reduced in some locations, as long as the same square footage is added to the transition area in another location. This is permitted provided the averaged transition area continues to perform the functions and values attributed to all transition areas. The primary function of a transition area is to provide protection to the adjacent wetland. The square footage added to the upland edge of the transition area as part of the averaging plan cannot independently provide all the values and functions of the transition area. Rather, the entire transition area, including the reduced and expanded portions, works together as one unit to provide all values and functions. Thus, it is important to protect the entire transition area to ensure that the transition area continues to provide all values and functions to protect the adjacent wetland.

SUBCHAPTER 11. MITIGATION

N.J.A.C. 7:7A-11.2 General Mitigation Requirements

At N.J.A.C. 7:7A-11.2(a), the rules provide an overview of mitigation requirements, goals, and objectives. The rule further provides a list of several considerations to assist applicants when defining and evaluating if mitigation will be sufficient when assessing in-kind mitigation and equal ecological value. The Department is proposing to sub-codify the subsection to make it easier to read.

N.J.A.C. 7:7A-11.4 Property Suitable for Mitigation

N.J.A.C. 7:7A-11.4 provides both administrative and technical criteria for selecting a mitigation site. To ensure that future conditions are considered in determining an appropriate location for mitigation, proposed new subsection (k) requires that an assessment be performed. When evaluating a site for mitigation potential, it is important to consider both the short-term success and the long-term viability of the mitigation site, including consideration of how changing climate conditions will impact the proposed site. For example, how frequently and to what elevation inundation can be expected. If the target wetland type is forested, determine if the mitigation site's forests are in good health. Evaluate if inundation would inhibit forests onsite or if neighboring conditions are too dry to support forests. Applicants must provide their best professional assessment of the local conditions and any factors that could affect a mitigation project. This is important, regardless of whether the cause is a changing climate or something else, because without such an assessment, the short- and long-term success of the proposed mitigation project may be jeopardized.

N.J.A.C. 7:7A-11.6 Basic Requirements for Mitigation Proposals

At N.J.A.C. 7:7A-11.6(h), the Department is proposing to add to the list of basic mitigation requirements that applicants provide a discussion regarding the future of the site and any special considerations that may be necessary to address the effects of climate change on the site. The Department is proposing that applicants include a discussion and assessment of the site anticipating the effects of climate change and sea level rise by year 2100. Climate change models for New Jersey indicate that by 2100, there will be five feet of sea level rise above the mean higher high water elevation as it currently exists. Therefore, to evaluate the future of a mitigation site, it is necessary to consider where the site will be with these anticipated changes in water elevation. While this provision may have the most applicability to mitigating for tidal wetland systems, freshwater wetlands exist in upland reaches of tidal systems. Additionally, due

to increased precipitation, floodplains are expanding. Therefore, the analysis will depend on the location of the proposed mitigation site within the watershed.

In addition, while studies may extrapolate based on current and past data changes in precipitation because of climate change, experts agree precipitation patterns are changing already. These changes include an increase in the timing, intensity, and amount of precipitation, and a potential increase in summertime drought. As freshwater wetlands are dependent upon hydrology, which includes surface or ground water, and precipitation, it is important to consider the effects of potential changes in precipitation patterns when planning a mitigation project. Finally, forested systems can be especially sensitive to hydrology, especially when newly planted. Young trees cannot survive with too much or too little water. Therefore, when trying to provide forested mitigation, it is critically important to assess the vigor of reference forested systems to try to identify any local factors that may affect the success of the project.

N.J.A.C. 7:7A-11.8 Mitigation for a Temporary Disturbance

Existing N.J.A.C. 7:7A-11.8 describes the mitigation requirements for temporary disturbances. The Department is proposing new paragraph (a)3 to explicitly provide requirements for transition area mitigation understanding that mitigation in the case of temporary impacts is achieved by restoring the site. In fact, by definition, a temporary impact is one for which "the disturbed areas are restored to their original topography, and all necessary measures are implemented to ensure that the original vegetative cover onsite is restored to its previous (or an improved) condition." (See N.J.A.C. 7:7A-1.3). However, because this was not explicitly stated as part of the mitigation conditions for certain general permits, applicants overlooked this requirement. The proposed amendment should make this clear. A reference to this section is proposed to be added to the overall standards for general permits at N.J.A.C. 7:7A-5.7(b), and to the requirements for the following general permits: underground utility lines at N.J.A.C. 7:7-7.2, hazardous waste cleanups at N.J.A.C. 7:7-7.4, solid waste facilities at N.J.A.C. 7:7A-7.5, fill of non-surface water connected wetlands

at N.J.A.C. 7:7A-7.6, very minor road crossings at N.J.A.C. 7:7A-7.10A, minor road crossings at N.J.A.C. 7:7A-7.10B, outfall structures at N.J.A.C. 7:7A-7.11, above-ground utility lines at N.J.A.C. 7:7A-7.21, and redevelopment activities at N.J.A.C. 7:7A-7.26.

In addition, the Department is proposing to add new N.J.A.C. 7:7A-11.8(b) to enumerate the requirements for a restoration plan for temporary impacts. Those requirements are the same as have been routinely requested by the Department as it reviews applications, and include a planting plan specifying the number, type, and quantity of each species to be planted; identification of the components of any seed mixes proposed to be used; a narrative description of the restoration plan; and an invasive species control plan.

SUBCHAPTER 12. CONSERVATION RESTRICTIONS

N.J.A.C. 7:7A-12.2 Property Owners' Reservation of Rights

The rules at N.J.A.C. 7:7A-12.2(b) allow the applicant who has recorded a conservation restriction to abandon the project and permit, thus enabling the Department to release the conservation restriction in its entirety. This amendment is intended to provide applicants with some level of assurance that, although they have properly filed a restriction, if the project is subsequently abandoned, the conservation restriction may be vacated provided the permit is voided, and the request is made prior to the effective date of the conservation restriction.

The rules already refer to the "effective date" of the conservation restriction. However, the Department is proposing to make that language more explicit and to define the effective date as the start of any site disturbance, including pre-construction earth movement, removal of vegetation or structures, or construction on the property or of the project. Upon commencement of any of these activities, the Department considers that the conservation restriction is no longer revocable because the applicant has begun the activities approved by the permit, thereby accepting all terms and conditions of the permit, including the requirement to record the conservation restriction.

In cases where an applicant wants to abandon a project and remove a conservation restriction, the property owner or grantor must inform the Department, in writing, that it is abandoning the project and request that the Department void the permit. Only when the Department confirms that no site disturbance, including pre-construction earth movement, removal of vegetation or structures, or any other type of construction has occurred, will the Department release the conservation restriction.

SUBCHAPTER 16. APPLICATION REQUIREMENTS

N.J.A.C. 7:7A-16.2 General Application Requirements

The proposed amendments at N.J.A.C. 7:7A-16.2(g)2 expand upon the existing requirements at paragraph (g)1 to include applications that involve activities within a right-of-way or easement other than the existing requirements for gas pipelines located within a municipally owned right-of-way. These proposed requirements at N.J.A.C. 7:7A-16.2(g)2 include all other activities within a right-of-way or easement, other than described at paragraph (g)1 and set requirements for how written consent shall be provided. For the holder of any right-of-way or easement other than described at paragraph (g)1, N.J.A.C. 7:7A-16.2(g)2 requires that written consent shall consist of one of the following: documentation that the holder of the right-of-way or easement does not object to the submittal of an application to the Department for the proposed activities with the right-of-way or easement, with the understanding that said activities may commence upon the receipt of all necessary approvals; or a copy of certified mail receipt that the applicant requested documentation pursuant to subparagraph (g)2i and the holder of the right-of-way or easement failed to provide said documentation within 30 calendar days; and a copy of the instrument establishing the right-of-way or easement, which indicates that the proposed activities are permitted as a condition of the right-of-way or easement.

The Department proposes new N.J.A.C. 7:7A-16.2(h) to address permitting timelines for State agencies exercising eminent domain. For this proposed subsection, private and quasi-private entities would

not be included as a "State agency." Proposed new N.J.A.C. 7:7A-16.2(h) allows a State agency that does not yet own, possess title to, or have a right of access to private land to apply for a permit to conduct governmental or public safety activities without first obtaining the written permission of the current holder of the property. However, to submit such an application, the applicant must provide notice sufficient to comply with N.J.A.C. 7:7A-17.3(b)6, regardless of any notice exceptions at N.J.A.C. 7:7A-17.3(c) and if site access is necessary for the Department to complete its technical review of the application, the applicant would be required to obtain such right sufficient to constitute consent pursuant to proposed new N.J.A.C. 7:7A-16.2(n) prior to the Department declaring the application is complete for review.

N.J.A.C. 7:7A-16.6 Additional Application Requirements for an Authorization Pursuant to a General Permit-By-Certification

At N.J.A.C. 7:7A-16.6(b)5, the Department is proposing to require an applicant for a general permit-by-certification to provide contact information for both the municipal clerk and the county clerk for each municipality and county in which the proposed project is located. As general permits-by-certification are applied for and approved electronically, in addition to greater transparency, the Department will use the information to provide notification to the municipality and county upon issuance. Receiving direct notification from the Department when a general permit-by-certification has been issued will assure the municipality and county that the permit-by-certification is valid. As permits-by-certification are issued through the online service and, therefore, do not have a raised seal, verifying authenticity has been cause for concern for some municipalities.

N.J.A.C. 7:7A-16.7 Additional Application Requirements for an Authorization Pursuant to a General Permit, for an Individual Permit, or for a Transition Area Waiver

On April 5, 2021, amendments were adopted that will require electronic submission of applications for all general permit authorizations, individual permits, and freshwater wetland transition area waivers, effective October 5, 2021. (See 52 N.J.R. 1522(a); 53 N.J.R. 514(b)) These amendments also included a requirement for applicants to provide contact information for the municipal clerk for each municipality in which the proposed project is located but did not require contact information for the county clerk. Therefore, the Department is proposing a requirement at N.J.A.C. 7:7A-16.7(b)5 for applicants for general permits, individual permits, and transition area waivers to provide contact information for the county clerk for each county in which the proposed project is located. Like the amendment described above for general permits-by-certification, requiring this contact information provides for greater transparency, and the Department will use the information to send notification to the county upon issuance of authorizations, permits, and transition area waivers. Approved general permit authorizations, individual permits, and transition area waivers will be issued in a digital format as part of the Department's initiative to transition to an entirely paperless process. As these digital approvals will not have a raised seal, receiving direct notification from the Department when they are issued will assure the county that the authorization, permit, or transition area waiver is valid.

N.J.A.C. 7:7A-16.10 Additional Requirements Specific to an Application for a Transition Area Waiver

N.J.A.C. 7:7A-16.10 sets forth the additional application requirements that must be submitted for a transition area waiver. The Department is proposing to amend N.J.A.C. 7:7A-16.10(b)1 to specifically exclude the transition area waiver for redevelopment from the requirement to obtain a letter of interpretation issued pursuant to N.J.A.C. 7:7A-4.5 and add new language at N.J.A.C. 7:7A-16.10(b)2, specifically for transition area waivers for redevelopment. The proposed new provision would allow applicants for a redevelopment waiver to provide a footprint of development LOI, if they have obtained that instead of a

line delineation or line verification LOI. For the Department to issue any transition area waiver, the Department needs to know where the wetlands are located. A footprint of development showing no wetlands provides sufficient information to evaluate a proposed waiver for redevelopment.

Also, the Department is adding language at N.J.A.C. 7:7A-16.10(b)1 to clarify that the appropriate fee is necessary to be submitted, in addition to all other LOI materials if the transition area waiver application does not have a currently valid LOI.

SUBCHAPTER 20. PERMIT AND WAIVER CONDITIONS; EXTENSION, MODIFICATION, TRANSFER, SUSPENSION, AND TERMINATION OF AUTHORIZATIONS AND PERMITS

N.J.A.C. 7:7A-20.2 Conditions that Apply to all Permits

Existing N.J.A.C. 7:7A-20.2 enumerates the conditions that apply to authorizations and permits pursuant to the chapter, which are necessary to ensure the chapter's standards and requirements are met during the conduct, and upon completion, of authorized activities. Specifically, the Department is proposing amendments to the conditions listed at N.J.A.C. 7:7A-20.2(c), which apply to all general permit-by-certifications, general permits, and individual permits, to require the permittee to register online both prior to commencing and upon completion of authorized activities.

Existing N.J.A.C. 7:7A-20.2(c)27 requires the permittee to submit written notification to the Bureau of Coastal and Land Use Compliance and Enforcement at least three working days prior to the commencement of regulated activities. This notice is intended to assist compliance and enforcement staff in scheduling site inspections while construction is occurring. The Department is proposing to amend the timing of the notice and to require the notice to be provided through the Department's online system, rather than in writing. Specifically, the Department is proposing to require that notice be provided online no more than 14 calendar days prior to undertaking an authorized or permitted activity. It has been the Department's experience that the existing requirement makes it difficult for staff to schedule inspections, since the

existing condition does not limit how much time before construction commences that notice can be provided. In some cases, permittees file the construction notice immediately after issuance of the permit, sometimes years before actual construction begins, in order to ensure that notice has been filed at least three days prior to construction. Further, the proposed online registration process will enable tracking of cumulative impacts within a community or watershed, which aligns with FEMA's requirement to record and track approvals pursuant to the NFIP. Pursuant to the proposed condition, notice of construction must be completed by either the permittee or a person designated, in writing, by the permittee to register on their behalf, such as an engineer, attorney, or consultant. The registration additionally requires the owner or designee to indicate the Department file number, the anticipated date authorized activities will begin, and contact information for the registrant. The registrant must additionally certify that they are the permittee or that the permittee has provided written consent to register.

Proposed new N.J.A.C. 7:7A-20.2(c)28 sets forth a new requirement upon completion of authorized activities. Pursuant to the proposed condition, the permittee or a person designated, in writing, by the permittee to provide such notice on their behalf, such as an engineer, attorney, or consultant, shall indicate said completion through the Department's online system.

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N.J.A.C. 7:8 STORMWATER MANAGEMENT

SUBCHAPTER 1. GENERAL PROVISIONS

N.J.A.C. 7:8-1.2 Definitions

At N.J.A.C. 7:8-1.2, the Department is replacing the term "Board of Chosen Freeholders" within the definition of County Review Agency with the term "Board of County Commissioners." P.L. 2020, c. 67, changed the name of the Board of Chosen Freeholders to the Board of County Commissioners and this amendment is proposed for consistency.

The Department is proposing to amend the definition of "disturbance" to enumerate the type of maintenance and public safety activities that should not be considered disturbance for the purposes of this chapter. Pursuant to both the existing and proposed definition, "disturbance" includes any activity that would result in: (1) the placement or reconstruction of impervious surface or motor vehicle surface; (2) the exposure and/or movement of soil or bedrock; or (3) the clearing, cutting, or removing of vegetation." The existing definition further notes that "milling and repaving is not considered disturbance for the purposes of this definition," which is appropriate since milling and repaving existing pavement would not result in any of the three activities listed in the existing definition. After consultation with public transportation entities, the Department recognized that a number of other maintenance and public safety activities additionally should not meet the definition of disturbance and should, therefore, be listed in the definition.

The addition of activities that would not constitute "disturbance" would similarly result in these activities not constituting a "major development" pursuant to this chapter, and, therefore, not trigger the need to provide stormwater management for these activities. This is appropriate, as the added exempt activities would result in a *de minimis* impact on the quality and quality of stormwater runoff. Further, due

to the nature and scope of these activities, there is no feasible opportunity to provide additional stormwater management. For example, milling and repaving a roadway is a common maintenance activity intended to extend the useful life of pavement. However, milling and repaving does not present an opportunity to improve the quality or quantity of runoff without installation of new stormwater management BMPs. The Department, therefore, believes that facilitating these maintenance and public safety activities will benefit public health, safety, and welfare without exacerbating flooding or further impairing water quality.

The amended definition adds six categories of activities that are proposed to be exempt. The first category includes activities related to repair of existing pavement or other structures, which are similar to milling, repaving, or resurfacing, such as patching broken pavement or pipes/culverts, sealing or filling cracks or joints, and bridge deck overlays. The second category focuses on repair or replacement of certain public safety structures, such as median barriers, sidewalks, certain stormwater conveyance structures, curbing, and guiderails. The third category of activities includes the repair or replacement of certain traffic, utility, and ITS structures on poles. Examples include signage, cameras, radios, traffic signal equipment, and supporting cabinetry. The fourth category includes repair or replacement of certain structures related to maintenance of existing rail lines and the fifth category focuses on geotechnical and archeological investigation activities, as well as the installation of monitoring wells, gauges, and weirs. Finally, the sixth category involves the removal of accumulated sediment and debris from a channel.

The Department is proposing a new definition "independent State authority." The existing rules provide a mechanism for applicants seeking to enlarge an existing public roadway to apply for a waiver of strict compliance from the groundwater recharge, stormwater runoff quantity, and stormwater runoff quality requirements of the rules, provided certain specified conditions are met. However, the rules do not explicitly define what extent of a "public roadway or railroad" should be considered when an applicant is making the demonstrations required to qualify for the waiver of strict compliance (see below). Further, the definition of "public transportation entity" uses the term "independent State authority," which is undefined. To better

identify the specific category of public roadway or railroad projects to which the increased flexibility will apply, the Department is proposing to define the terms "independent State authority," and, as discussed further below, "public roadway or railroad project limits." The Department recognizes that public roadway and railroad projects are essential to maintain the health, safety, welfare, and economic vitality of the public. Management of stormwater runoff from roadways is also critical to prevent increases in flooding, minimize the discharge of pollutants from the roadway, and maintain groundwater recharge.

The Department is proposing to make the definition of "major development" consistent between the developments subject to the State's review pursuant to the Stormwater Management rules and the developments subject to a municipality's review pursuant to municipal stormwater control ordinance(s). Currently, a development that creates one-quarter acre of regulated motor vehicle surface, but does not disturb one or more acres of land, is a major development that is subject to the design and performance standards set forth at N.J.A.C. 7:8-5. However, if reviewed by a municipality, a project may not be considered as a major development, and, thus, may not be subject to the design and performance standards set forth at N.J.A.C. 7:8-5.

The inconsistency is caused by a narrowing of the definition of major development at N.J.A.C. 7:8-4.2(a) to include only those projects that ultimately disturb more than one acre of land. At N.J.A.C. 7:8-4, a municipality must implement the design and performance standards through the adoption of a municipal stormwater management plan and stormwater control ordinance(s). However, N.J.A.C. 7:8-4.2(a) states that, for the purposes of N.J.A.C. 7:8-4, a major development is limited to projects that ultimately disturb one or more acres of land and excludes the creation of one-quarter acre or more of "regulated motor vehicle surface" or "regulated impervious surface." As a result, under a municipality's stormwater control ordinance, a project that creates one-quarter acre or more of "regulated motor vehicle surface" or "regulated impervious surface," but does not ultimately disturb one or more acres of land, is not subject to the design and performance standards of the Stormwater Management rules. This would not be the case if a

municipality has voluntarily adopted a more stringent definition of major development than what is required by this chapter. This has caused confusion in the applicability of the design and performance standards during the local and State reviews of stormwater management.

This issue has also created a gap in the level of protection for water quality and prevention of flooding. Projects that create one-quarter acre or more of "regulated motor vehicle surface" or "regulated impervious surface" but do not ultimately disturb one or more acres of land may not be required to incorporate stormwater management measurements to provide water quality treatment or to provide water quantity control when the project is not reviewed by the Department, despite the fact that the impervious surface will contribute increased runoff volume, peak flow rate, and pollutants from the regulated motor vehicle surfaces. Additionally, the contribution of runoff volume and increased peak flow rates will become more significant with increased precipitation resulting from climate change. Therefore, the Department is proposing to remove the phrase, "for purposes of this subchapter, major development is limited to projects that ultimately disturb one or more acres of land" from N.J.A.C. 7:8-4.2(a). The result of the amendment will be that the definition of major development at N.J.A.C. 7:8-1.2 will be applicable to that term as used at njac 7:8-4.

As noted above, a definition is proposed for "new public railroad or roadway" for use at existing N.J.A.C. 7:8-5.2(e), which provides to public transportation entities a waiver of strict compliance from certain requirements of this chapter, as well as at proposed green infrastructure standards at N.J.A.C. 7:8-5.3(h), which references N.J.A.C. 7:8-5.2(e). In both proposed references, the rulemaking clarifies that the existing waiver is intended to apply only to major developments associated with an existing public roadway or railroad, and, therefore, does not apply to new public roadways and railroads. The existing waiver appropriately applies to existing public roadways and railroads, as public transportation entities proposing to improve these existing structures are faced with a number of unique technical and physical challenges that are not generally present with the construction of a new public roadway or railroad.

As further noted above, a definition is proposed for "public roadway or railroad project limits" for use at N.J.A.C. 7:8-5.3, Green infrastructure standards, and 5.5, Stormwater runoff quality standards, to describe the land within or along which public transportation entities would need to investigate available lands for stormwater BMPs. The proposed definition identifies this area as "the segment of public roadway or railroad that is proposed to be constructed or improved, and including the right-of-way associated with the that segment of public roadway or railroad."

The Department is proposing to amend the existing definition of "public transportation entity," which identifies certain public agencies that oversee public roadway or railroad projects, to clarify that interstate agencies, such as the Port Authority of New York and New Jersey and the Delaware River Joint Toll Bridge Commission, are included in the Department's intention pursuant to the definition.

The Department is also proposing a definition of "reconstruction" to clarify that a lawfully existing structure to be replaced, rebuilt, or restored will be counted toward the threshold for a major development unless the activity is covered by the exemptions proposed to be added to the definition of "disturbance" discussed above.

The Department is proposing a definition of "retention" to address the activities that retain stormwater runoff for volumetric reduction standards set forth in the stormwater runoff quantity standards. The activities to retain stormwater runoff generated from development within the boundaries of a site include infiltration, evapotranspiration, or reuse of stormwater runoff without the discharge of the stormwater runoff directly or indirectly to surface waters or to a treatment works.

N.J.A.C. 7:8-1.3 Program Information

The Department proposes to update the contact information from a physical mail address to an electronic mail address to allow questions and submissions concerning the Stormwater Management rules to be addressed more effectively and efficiently.

N.J.A.C. 7:8-1.6 Applicability to Major Development

Existing N.J.A.C. 7:8-1.6(a) through (d) set forth which version of the Stormwater Management rules applies depending on the date that a project was submitted to the reviewing agency (either the Department or the MS4 permittee, whichever is applicable). Consistent with the Department's practice, complete applications submitted before new requirements become effective are subject to the standards in place before those amendments are adopted. However, there have been several recent rulemakings that have amended the requirements of this chapter: March 2, 2020 (effective March 2, 2021) to include green infrastructure standards; July 17, 2023, to incorporate amended precipitation amounts as part of the Inland Flood Protection Rule, and this current rulemaking. Thus, major developments for which a complete application is submitted would potentially be subject to one of three different sets of rules currently, depending on the date the application was submitted. Once the Department adopts this rulemaking, there will be four sets of rules that could apply. Given the above, the Department is proposing to restructure and clarify N.J.A.C. 7:8-1.6.

Additionally, the Department has received a number of inquiries regarding the legacy provisions of the Stormwater Management rules as they apply to various scenarios – projects that need Department approval and municipal approval, projects that need only municipal approval, projects that need only Department approval, and projects that do not need either Department or municipal approval. The Department acknowledges that the application of the stormwater management pursuant to this section can be confusing as it intertwines the direct application of these rules for Department permitting, implementation through MS4 permits, the applicability of the RSIS and municipal ordinances at the local level, and the requirement in the MLUL for municipalities to apply the standards in place at the time of application. Previous attempts to clarify the applicability have attempted to describe additional scenarios that the Department receives inquiries about. However, this may have inadvertently also increased the

complexity of the rule text in this section, which leads to confusion. The Department is now proposing to simplify this section by describing only the legacy provisions for permit applications to the Department. Legacy provisions at the municipal level should follow the requirements set forth in the MLUL, with the minimum timeframe for updates to ordinances set forth in the municipality's MS4 permit. Projects undertaken by MS4 permittees will follow the instruction laid out in their MS4 permits.

Consistent with the above, the Department is proposing to delete existing N.J.A.C. 7:8-1.6(a), which sets forth the scope of the section, and (b), which addresses situations where a major development does not require a Department-approval listed at N.J.A.C. 7:8-1.6(c)1 through 5, which is proposed to be recodified at N.J.A.C. 7:8-1.6(a)1 through 5 without amendment. Proposed new N.J.A.C. 7:8-1.6(a) incorporates, with amendments, N.J.A.C. 7:8-1.6(b)4, which addresses major developments that require one or more of the listed Department approvals. Proposed N.J.A.C. 7:8-1.6(a)2 also incorporates the substance of existing N.J.A.C. 7:8-1.6(c), which notes that a freshwater wetlands transition area waiver constitutes a permit for the purpose of this section.

Proposed N.J.A.C. 7:8-1.6(b) incorporates, with amendments, existing N.J.A.C. 7:8-1.6(d), which provides that an exemption from meeting the stormwater management rules currently in effect, due to the submittal of a complete application prior to the adoption of the proposed new requirements, will expire once the Department approval expires.

Proposed N.J.A.C. 7:8-1.6(c) incorporates, with clarifying amendments, existing N.J.A.C. 7:8-1.6(e), which explains that an exemption from meeting the stormwater management rules currently in effect is limited to the land area and scope of the project addressed by the qualifying applications or subsequent approvals.

Proposed N.J.A.C. 7:8-1.6(d) incorporates, with amendments, existing N.J.A.C. 7:8-1.6(f), which addresses legacy provisions for projects by public transportation entities. Similarly for other projects, the applicability is tied to the effective date of this rulemaking, but rather than being tied to the submission of

a complete application, they are tied to the selection of a preferred alternative or equivalent milestone in their development and design. Those projects that have reached the preferred alternative or equivalent milestone prior to the effective date of this rulemaking will be subject to the Stormwater Management rules in effect on March 2, 2021, and those that select the preferred alternative or equivalent milestone after the effective date of this rulemaking will be subject to the requirements of this chapter in effect on the date the preferred alternative or equivalent milestone is reached.

Proposed new N.J.A.C. 7:8-1.6(e) addresses cases where a public transportation entity initiates a substantial change to a major development that had previously reached a preferred alternative or equivalent milestone, as discussed at existing N.J.A.C. 7:8-1.6(d) and proposed N.J.A.C. 7:8-1.6(f). In such a case, the major development shall be subject to the requirements of this chapter in effect when the amended milestone is reached. This is an appropriate corollary to the various legacy provisions of this chapter, which are based on the understanding that a project that has reached a certain stage in its development does not present a reasonable opportunity to be redesigned to meet the existing standards. Conversely, where an applicant proposes a substantial change in the design of a project, there exists an opportunity for the project to be further amended, so as to meet the standards currently in place. Since the Department is proposing amendments at N.J.A.C. 7:8 in order to better ameliorate flooding and protect and enhance water quality, it is in the best interest of public health, safety, welfare, and the environment to apply the protective standards currently in place, wherever there is a practicable opportunity to do so.

SUBCHAPTER 3. REGIONAL STORMWATER MANAGEMENT PLANNING

SUBCHAPTER 4. MUNICIPAL STORMWATER MANAGEMENT PLANNING

N.J.A.C. 7:8-3.4 Characterization and Assessment of the Regional Stormwater Management Planning Area and N.J.A.C. 7:8-4.2 Municipal Stormwater Management Plan and Elements

At N.J.A.C. 7:8-4.2(a), the Department is proposing to delete the sentence limiting major development to projects that ultimately disturb one or more acres of land to make the definition of major development consistent between State and municipal agencies, as previously described with the proposed changes to the definition of "major development." To effectuate climate resilience planning in local communities, the Department is proposing, at N.J.A.C. 7:8-4.2(c), to require climate resilience planning in the municipal stormwater management plan, as well as the regional stormwater management plan at proposed N.J.A.C. 7:8-3.4(a)7. In the climate resilience plan, a municipality or regional planning agency will be required to evaluate climate change impacts on stormwater management. As part of the evaluation of how changes such as, but not limited to, sea level rise, increased flooding frequency and extent, increased rainfall depth and intensity will impact stormwater management, the municipality will be required to identify areas and stormwater management infrastructure vulnerable to flooding and/or sea level rise, as well as measures, such as green infrastructure, that can be utilized to mitigate the impacts. Through this planning exercise, the local community will be better prepared to adapt to, or mitigate for, the impacts from climate change.

SUBCHAPTER 5. DESIGN AND PERFORMANCE STANDARDS FOR STORMWATER MANAGEMENT MEASURES

7:8-5.2 Stormwater management measures for major development

N.J.A.C. 7:8-5.2(d), which provides limited exemptions from N.J.A.C. 7:8-5.4, 5.5, and 5.6, is proposed to be amended to fix erroneous cross-references and to remove the reference to "linear" since dams (at proposed N.J.A.C. 7:8-5.2(d)4) are not linear. N.J.A.C. 7:8-5.2(d)1 and 2 are proposed to be amended to clarify that utility lines, including information or electricity transmission cables and their supporting infrastructure, and pedestrian accessways can be reconstructed and/or repaired pursuant to this exemption. N.J.A.C. 7:8-5.2(d)3, which addresses the construction of a public pedestrian access in certain

cases is being amended to clarify that this provision also applies to the reconstruction or repair of the access. The Department is also proposing to clarify that the exemptions pursuant to this subsection apply only where vegetated areas temporarily disturbed to conduct the project are, to the maximum extent practicable, revegetated with native, noninvasive vegetation upon completion of the project. This is similar to the requirement at existing N.J.A.C. 7:8-5.2(d)1, for the construction of underground utility lines, which requires areas to be revegetated upon completion of the activity. Since revegetating an area that is temporarily disturbed with native, noninvasive vegetation improves water quality, promotes infiltration, and generally reduces the volume of stormwater runoff, it is appropriate to apply this standard to all exemptions pursuant to this subchapter.

The Department is proposing a new exemption at N.J.A.C. 7.8-5.2(d)4 to allow the maintenance of an existing dam to be exempt from groundwater recharge, stormwater runoff quality, and stormwater runoff quantity requirements at N.J.A.C. 7:8-5.4, 5.5, and 5.6.

The removal of trees surrounding the spillway is one required maintenance activity for existing dams. This activity is necessary to prevent structural damage to the spillway, which could cause failure of the spillway and, depending on the volume of impounded water associated with the dam, potentially catastrophic flooding downstream. The removal of trees can often result in the exceedance of one acre in total land disturbance and, thus, would meet the definition of a major development at N.J.A.C. 7:8-1.2 and require compliance with the groundwater recharge and stormwater runoff quantity standards. However, it is neither practical nor necessary to install stormwater management basins at or near a dam's spillway to provide groundwater recharge and stormwater runoff quantity control. The proximity to the spillway and the slopes surrounding it would, in many cases, make it difficult or impossible to construct a functioning stormwater basin. Even in those situations where it is feasible, the benefit provided would be negligible as the flow over the dam would not be affected by any attenuation provided in the stormwater management basin. Further, any infiltration of stormwater near the dam is unlikely to become groundwater recharge and

is more likely to flow laterally into the impoundment of the dam. Due to the anticipated increases in storm intensity and depth, as well as the increases in extreme weather resulting from climate change, more situations with higher flow in the stream and even flooding conditions are expected. As such, it is more important than ever to ensure existing dams are well maintained. Since it is necessary to create disturbance in maintaining a safe dam and the benefits to water quantity control and groundwater recharge provided by stormwater management facilities at an existing dam are negligible, the Department will not require stormwater management facilities if the disturbance does not increase any regulated impervious surface or motor vehicle surface.

The Department is proposing a fifth class of exempt activities to address certain public safety improvements undertaken by a public transportation entity, which could in some cases qualify as a major development, but which, if undertaken as described at N.J.A.C. 7:8-5.2(d)5i through iv, would have a *de minimis* impact on recharge, water quality, and runoff quantity. The list of proposed exempt activities includes certain public safety improvement activities by a public transportation entity along a lawfully existing public roadway or railroad. Specifically, the proposed exemption applies to the installation of guiderail systems, such as rails, posts, impact attenuators, and non-vegetated treatment surfaces, provided that any pavement utilized consists solely of permeable material; installation of traffic, utility, and ITS structures on poles including sign structures, such as traffic signs, dynamic variable message signs, cameras, radios, traffic signal equipment, and their supporting cabinets; installation of railroad lineside signaling systems; and rockfall mitigation activities that does not result in a net increase of regulated motor vehicle surface or impervious surface.

Existing N.J.A.C. 7:8-5.2(e), which provides a waiver from strict compliance from the green infrastructure, groundwater recharge, stormwater runoff quality, and stormwater runoff quantity requirements for the enlargement of an existing public roadway or railroad, or the construction or enlargement of a public pedestrian access, is proposed to be amended to clarify that the wavier provided in

this subsection is not eligible for the construction of a "new public roadway or railroad," a definition for which is proposed at N.J.A.C. 7:8-1.2.

The existing Stormwater Management rules at N.J.A.C. 7:8-5.2(i)5 require a minimum of two and one-half inch diameter orifice from the intake to the outlet of a stormwater management basin. This may not be suitable for small-scale green infrastructure BMPs, such as roadside rain gardens or planter boxes that have limited space and/or shallow water depth. Further, the onsite retention requirements alternative, where infiltration is not feasible, requires a slow release of stormwater. Releasing the stormwater slowly enough to meet that requirement during the water quality design storm may not be achievable in some cases with a minimum orifice size of two and one-half inches. Moreover, technology has advanced with many innovative flow control devices smaller than two and one-half inches in diameter capable of remaining unclogged during drainage. Therefore, the Department is proposing to lift the minimum size requirement as long as the design of the flow control device in the outlet is proven to prevent clogging and remain functional. The Department will provide examples of acceptable outlet designs in the New Jersey Stormwater BMP Manual, which can be utilized by applicants without the need to provide additional proof of functionality. Applicants can also propose alternative measures to the review agency, but any such application would require additional information to demonstrate that the alternative outlet design is sufficient to prevent clogging.

N.J.A.C. 7:8-5.3 Green Infrastructure Standards

The use of green infrastructure BMPs is an effective means to maintain and mimic pre-construction hydrology, which is one of the goals of the Stormwater Management rules. Proposed amendments to the Stormwater Management rules provide public entities with the flexibility to manage stormwater runoff using Best Management Practices but also provide a comprehensive, hierarchical approach to ensure the implementation of green infrastructure BMPs to the maximum extent, considering the hydrologic and hydraulic conditions of lands within and immediately adjacent to the project limits, and in the upstream

drainage area of the project within the same HUC-14. At N.J.A.C. 7:8-5.3(f), the Department is proposing to add the flexibility to use larger scale green infrastructure BMPs from N.J.A.C. 7:8-5.2 (Table 5-2) in addition to the small-scale green infrastructure BMPs specified in Table 5-1 within the public roadway or railroad project limits to achieve compliance with the design and performance standards for groundwater recharge and stormwater runoff quality. When the green infrastructure BMPs from those tables cannot be used due to unsuitable hydrologic, hydraulic, and/or physical conditions, the Department is providing additional options at proposed new N.J.A.C. 7:8-5.3(g).

In accordance with proposed N.J.A.C. 7:8-5.3(g)1, the applicant who has demonstrated that green infrastructure BMPs from Table 5-1 and Table 5-2 cannot be used within the public roadway or railroad project limits to meet the stormwater runoff quality, stormwater quantity, and groundwater recharge performance standards must look to adjacent disturbed land. Disturbed land immediately adjacent to the project limits, such as lawn areas or farmlands, may have greater available area and hydrologic and hydraulic conditions that are better suited to the installation of green infrastructure BMPs. Therefore, proposed N.J.A.C. 7:8-5.3(g)1 requires the public transportation entity to investigate the feasibility of using green infrastructure BMPs on the land immediately adjacent to the project limits. The public transportation entity would be required to use the adjacent area to install green infrastructure BMPs unless it demonstrates that within the adjacent area, unsuitable hydrologic, hydraulic, or physical conditions prevent the utilization of green infrastructure BMPs to achieve compliance. Proposed N.J.A.C. 7:8-5.3(g)1 specifies that land to be considered for the installation of green infrastructure BMPs shall not include undisturbed wooded areas or preserved farmland. Instead, the investigation of immediately adjacent lands shall be limited to disturbed areas like lawn, farmland, or other disturbed areas. The adjacent lands to be investigated shall also include lands held for recreation and conservation purposes. While there will be circumstances where use of such lands will not be allowed, the proposed amendments leave open the possibility of collaboration occurring where co-benefits can be achieved, such as where the use of green infrastructure BMPs can provide

stormwater quality, quantity, or groundwater recharge treatment for the runoff generated both from the land held for recreation and conservation purposes and from the public roadway or railroad project. For example, if a new roadway project is adjacent to a park that has a flooding issue on its pedestrian trails, an infiltration basin for the roadway project may be installed in the disturbed area (for example, lawn area) of the park, to provide water quality treatment and groundwater recharge for the roadway runoff while also providing water quantity control for the roadway project, thus ameliorating flooding at the park. However, such lands are not required to be used if the proposed green infrastructure solution is inconsistent with, or requires a release or modification of, any recorded restrictions on the property or would otherwise violate the requirements of any State or Federal law.

When an applicant has demonstrated that BMPs cannot be used within, or immediately adjacent to existing project limits, proposed N.J.A.C. 7:8-5.3(g)2 requires investigation of the upstream drainage area of the project and within the HUC-14, to determine whether green infrastructure BMPs can be used to mitigate for the stormwater runoff quality and/or groundwater recharge standards on land owned or controlled by the public transportation entity. The investigation of land in the upstream drainage area is not allowed for the stormwater runoff quantity requirements, as this requirement must be met within the project limits or the disturbed lands immediately adjacent thereto, even if green infrastructure is not feasible, to avoid the potential for adverse impacts from flooding to the area surrounding the major development.

Finally, when the public transportation entity has exhausted each option in the hierarchy without finding suitable land to install green infrastructure BMPs, proposed N.J.A.C. 7:8-5.3(g)3 would allow the public transportation entity to use non-green infrastructure BMPs from Table 5-3 to meet the stormwater runoff quality, groundwater recharge, and stormwater runoff quantity standards without the need to request a waiver from strict compliance (N.J.A.C. 7:8-5.2(e)), provided that the certification required at N.J.A.C. 7:8-5.3(j) is submitted to the Department. The demonstrations required by the hierarchy are equivalent to that required for a waiver of strict compliance and, therefore, once an applicant has been through the

hierarchy it is not necessary to obtain a separate waiver. The certification is discussed in greater detail below.

The rules at N.J.A.C. 7:8-5.2(e) currently allow applicants seeking to enlarge an existing public roadway or railroad to apply for a waiver from strict compliance from the groundwater recharge, stormwater runoff quantity, and stormwater runoff quality requirements, provided certain specified conditions are met. When the applicant has demonstrated that incorporation of BMPs from Table 5-3 within the public roadway or railroad project limits, or within land immediately adjacent, is not sufficient to achieve compliance with the groundwater recharge, stormwater runoff quantity, and stormwater runoff quality requirements, proposed N.J.A.C. 7:8-5.3(h) requires that a waiver from strict compliance be obtained. The reviewing agency will consider a waiver request in accordance with existing standards at N.J.A.C. 7:8-5.2(e) to determine whether the required demonstrations have been satisfied, including addressing that the public need for the project cannot be accomplished by any other means. Consistent with the existing waiver of strict compliance provision, a waiver of strict compliance is not applicable to construction of a new public roadway or railroad.

Proposed N.J.A.C. 7:8-5.3(i) describes the meaning of unsuitable hydrologic, hydraulic, or physical conditions, and the documentation required to demonstrate the green infrastructure options that were considered and rejected in accordance with N.J.A.C. 7:8-5.3(f) and (g). The Department describes a physical, hydrologic, or hydraulic impediment that prevents the installation of a functioning BMP as: high seasonal high water table elevation, slope steeper than the maximum slope allowable for a BMP, karst topography, unavoidable adverse impacts resulting from ground water mounding, or physical impedances caused by existing structures. An assertion of unsuitable hydrologic or hydraulic conditions must be supported by appropriate documentation, typically prepared when designing stormwater management systems, and that complies with the requirements set forth in applicable law, rules, ordinances, and construction codes. Examples of appropriate documents may include soil testing reports, site plans, survey

maps, geological investigation reports, geotechnical reports, or photos, but will depend upon the specific conditions for the site and BMP being discussed. For example, one of the locations considered for installing a small-scale bioretention system may currently contain a sidewalk. However, for the safety of pedestrians, sufficient pedestrian passage must remain after the installation of the stormwater BMPs. If that is not possible, stormwater BMPs cannot be installed within the area of a sidewalk adjacent to the public roadway or railroad.

In accordance with proposed N.J.A.C. 7:8-5.3(j), a public transportation entity is required to provide a certification stating that the entity conducted its analysis in conformance with the previously described hierarchy. The certification must be signed and sealed by one or more design engineers. Proposed N.J.A.C. 7:8-5.3(j) further requires that the certification be endorsed by: the chief executive officer of the public transportation entity; a senior executive officer having responsibility for the overall operations of a principal geographic unit of the public transportation entity (for example, Regional Administrator); or a representative duly authorized by the chief executive officer of the public transportation entity. The certification must include the description of the project, the location of the project, the name and title of the individual with direct knowledge of the review and analysis, and the rationale for the decision. Any, and all information used in determining compliance pursuant to proposed N.J.A.C. 7:8-5.3(f) must be submitted with the certification. Finally, the certification must be provided with the application for any permit listed at N.J.A.C. 7:8-1.6(c) and as part of the annual report that is required to be submitted to the Department under the entity's Municipal Separate Storm Sewer System (MS4) permit.

Public transportation entities are permitted by the Department to discharge pollutants from their storm sewer systems into ground waters or surface waters of the State through the MS4 permitting program. One of the requirements of this program is that all major developments, constructed by those MS4 permittees, must meet the requirements of either the Stormwater Management rules or, in the case of municipalities, the local stormwater control ordinance, which must be at least as stringent as the Stormwater

Management rules. This requires the MS4 permittee to review their project against the Stormwater Management rules or the stormwater control ordinance, as applicable, to ensure that the project meets the applicable standards prior to construction. The MS4 permit requirement is applicable regardless of whether the major development requires approvals from the Department. Since many public transportation entities, such as NJDOT and county highway agencies, self-certify compliance with the Stormwater Management rules for projects not requiring land use permits from the Department, the certification at proposed N.J.A.C. 7:13-5.3(j) will ensure that the Department knows that the rule hierarchy for green infrastructure BMPs was used by the public transportation entity. It also affords the Department the opportunity to review the decisions made by the entity, when it used the hierarchy, during its annual audit of the entity's MS4 permit.

At N.J.A.C. 7:8-5.3(k), the Department is providing consideration for transportation entities that have achieved certain milestones before March 2, 2021. Public roadway or railroad projects require vast resources to search and coordinate with public and private entities to find suitable areas for stormwater management. A public transportation entity may conduct an alternative analysis including a survey of the field and right-of-way, alternative approaches, and conceptual design. For more information, see https://nj.gov/dot/roads/pipe/ for an outline of the NJDOT project delivery process and https://www.state.nj.us/transportation/capital/pd/ for a brief example of the steps undertaken before construction for a specific project. Stakeholders, including the local community, may be involved in the process. A preferred alternative is selected after the alternative analysis is completed. As a result, significant costs and time are invested before a preferred alternative is established.

As significant public funds are allocated to these investigations, it is in the public's interest to avoid requiring redesign of projects that have reached a certain stage of development. Therefore, proposed N.J.A.C. 7:8-5.3(k) states that any public roadway or railroad project that has arrived at a preferred alternative or reached an equivalent milestone by March 2, 2021, shall not be subject to the green infrastructure requirements at N.J.A.C. 7:8-5.3(b), (c), or (d); provided that: the public transportation entity

does not make a substantial change to the design of the project after March 2, 2021; the Department is notified of the project; and that the preferred alternative was selected prior to March 2, 2021. Further, the Department is requiring that within 60 days of the effective date of this rulemaking, a public transportation entity submit to the Department a list of projects for which a preferred alternative has been selected or an equivalent milestone was reached prior to March 2, 2021.

Finally, where it is determined that the design of a project covered in this subsection has undergone a substantial change after March 2, 2021, the project will be subject to the proposed new rules. Examples of a "substantial change" that would subject a project to the proposed new rules include major amendments to the project scope or area of disturbance, such as adding travel lanes; changes in scope from repair to full replacement of major project elements; and replacement of additional bridges or culverts. Conversely, changes that would not be considered "substantial" for the purposes of this subsection include: combining or separating projects that had a preferred alternative or equivalent determined by March 2, 2021; the addition of attendant roadway features such as Intelligent Transportation Systems (ITS), above-ground utilities, traffic signals, sign structures, guiderails, ramps for compliance with Americans with Disabilities Act (ADA), sidewalks, and striping; extending the project area to address local ponding or drainage immediately adjacent to the project limits; and additional repairs that would not alter the project scope.

N.J.A.C. 7:8-5.5 Stormwater Runoff Quality Standards

At N.J.A.C. 7:8-5.5(b), the Department is proposing to require 80 percent Total Suspended Solid removal for the stormwater runoff from both new (already required) and redeveloped motor vehicle surfaces. Since the 2004 adoption of the Stormwater Management rules, the Department has required 80 percent TSS removal for new motor vehicle surfaces but required only a 50 percent TSS removal for redeveloped impervious surfaces. The Department no longer intends to retain the reduced TSS removal

requirement for redeveloped impervious surfaces and intends to require 80 percent TSS removal for all new and redeveloped motor vehicle surfaces.

The pollutant load of suspended solids is generated not only from the new motor vehicle surfaces, but also from the existing, *unmanaged* motor vehicle surfaces. The majority of existing motor vehicle surfaces in the State, particularly those in the State's oldest and most underserved communities, have no water quality treatment. In general, only motor vehicle surfaces constructed after 2004 have associated stormwater management measures to achieve 80 percent TSS removal. Stormwater runoff from those existing, untreated motor vehicle surfaces is one of the largest contributors of water pollution. (USEPA, 1975). Therefore, to protect water quality, it is necessary to apply the TSS removal requirement to the newly constructed motor vehicle surfaces, as well as any existing motor vehicle surfaces that are being disturbed. As existing surfaces that do not currently achieve 80 percent TSS removal are redeveloped, they should be retrofitted to meet the current standard of 80 percent TSS removal. Requiring retrofitting to today's standards as areas are redeveloped also follows typical Department practices and requirements regarding redevelopment. For example, permit conditions at Part IV.F of the Tier A Municipal Stormwater General Permit (MS4 Permit) of the New Jersey Pollutant Discharge Elimination System Rules (NJPDES Rules, N.J.A.C. 7:14A-24) require that storm drain inlets be retrofitted to today's standard when any repaving project is performed adjacent to a storm drain inlet that does not meet the current requirement and the Flood Hazard Area Control Act Rules require buildings to be elevated relative to the current requirements and flood hazard area design flood elevation when they are reconstructed. In both of these cases, certain repairs to the existing structures are allowed without the need to bring the structure up to all of the current standards. Individual potholes can be filled near an inlet without retrofitting it, and buildings can be repaired, as defined pursuant to the Flood Hazard Area Control Act Rules at N.J.A.C. 7:13-1.2, without raising its first floor relative to today's flood hazard area design flood elevation. The requirement to provide 80 percent TSS removal for redeveloped impervious surfaces will function similarly, as milling and repaving of

existing motor vehicle surface, will be permitted without the need to provide 80 percent TSS removal treatment (unless the surface meets the definition of regulated impervious or motor vehicle surface for a separate reason.)

Moreover, redevelopment projects are most often proposed in urbanized areas consisting of a high degree of motor vehicle surfaces, which have been identified as one of the major pollution sources contributing to TSS loadings. (USEPA, 1975). If the redeveloped motor vehicle surface is required to satisfy only a 50 percent TSS removal rate, the costs of damages to the water quality in urban areas will be significantly more than less urbanized areas. Allowing redeveloped motor vehicle surfaces to meet a lower standard or to remain unmanaged would prevent those areas from ever achieving the TSS removal that is necessary to prevent the water quality impacts associated with the runoff from those motor vehicle surfaces. Further, many of the State's overburdened communities have long since been developed with motor vehicle surfaces and burdened with the degraded water quality that results from allowing runoff from those surfaces to enter watercourses unmanaged. Requiring 80 percent TSS removal for redeveloped impervious surfaces in those areas is a necessary measure to provide the residents of those communities with their right to live, work, and recreate in a clean and healthy environment.

N.J.A.C. 7:8-5.5(b) outlines the required TSS removal rates for new and reconstructed motor vehicle surfaces. Specifically, paragraph (b)1 describes that 95 percent TSS removal is required for discharges into category one waters – both directly and through a storm sewer system, and paragraph (b)2 describes that 80 percent TSS removal is required for new and reconstructed motor vehicle surfaces that do not discharge into category one waters.

A limited exception from the 80 percent TSS removal requirement at N.J.A.C. 7:8-5.5(b)2 is proposed at new N.J.A.C. 7:8-5.5(b)2i to address situations where a public transportation entity demonstrates that achieving 80 percent TSS removal would require acquisition of developed or otherwise encumbered land outside of the entity's existing right-of-way along the section of roadway being improved

or constructed. In such a case, the public transportation entity shall provide water quality treatment to the maximum extent practicable, and shall additionally ensure that all new and reconstructed motor vehicle surface is provided a minimum water quality treatment of 50 percent TSS removal. This comports with the Department's existing practice of allowing reconstructed pavement to meet 50 percent TSS removal, which was instituted in 2004 in recognition that it is sometimes impracticable to provide a higher TSS removal rate for reconstructed pavement.

Pursuant to Section 303(d) of the Federal Clean Water Act, 33 U.S.C. § 1313(d), states are required to develop a list of waters that currently do not meet, or are not expected to meet, applicable water quality standards after the implementation of technology-based controls. This list is known as the 303(d) List of Water Quality Limited Waters or, more simply, the "303(d) List." The 303(d) List includes a priority ranking for scheduling TMDLs, which are intended to address waters that are not meeting applicable water quality standards. A TMDL represents the assimilative or carrying capacity of a waterbody, taking into consideration point and nonpoint sources of the pollutant of concern, natural background, and surface water withdrawals. A TMDL quantifies the amount of a pollutant a waterbody can assimilate without violating applicable water quality standards, allocates that loading capacity to known point sources in the form of Waste Load Allocations and to nonpoint sources in the form of Load Allocations (LAs), and includes a margin of safety and optional consideration of reserve capacity. All TMDLs must be calculated to achieve compliance with the applicable adopted surface water quality standard for the pollutant of concern. In addition to WLAs and LAs, TMDLs may contain "additional measures" that are part of the plan to achieve surface water quality standards.

Once the Department establishes a TMDL and the TMDL is approved by the United States Environmental Protection Agency (USEPA), the TMDL is adopted by the Department as an amendment to the applicable areawide water quality management plan(s) (WQMPs) in accordance with the Water Quality Management Planning rules at N.J.A.C. 7:15-5. In accordance with the Water Quality Planning Act at

N.J.S.A. 58:11A-10, all projects and activities within a planning area affecting water quality are required to be developed and conducted in a manner consistent with the adopted areawide plan. Further, the Department is not to grant any permit which conflicts with an adopted areawide plan.

Municipal Separate Storm Sewer Systems (MS4) are regulated as point sources pursuant to NJPDES rules. Loadings from MS4s are identified and included as part of the WLAs with the LAs adjusted accordingly. Therefore, the Department's MS4 permits require a municipality to incorporate additional measures specified in a TMDL(s) into its stormwater program (Part IV.I of the Tier A MS4 permit.) Accordingly, while not explicitly stated in the rules currently, major developments must be designed consistent with the requirements of any applicable TMDL, including any additional measures contained in the TMDL. To ensure designers and applicants are aware of this requirement and account for it when designing proposed developments, the Department is proposing a new provision at N.J.A.C. 7:8-5.5(j) that explicitly references this requirement. Pursuant to the proposed provision, if a municipality is located in a watershed that has an established, approved, or adopted TMDL(s), a major development must incorporate additional measures to address the established, approved, or adopted TMDL(s). Additional measures to be incorporated in a major development can be BMPs that provide treatment and control of the identified pollutants in TMDLs. To ensure that anyone can easily find a TMDL in a given municipality or at a particular major development site, the Department has developed a TMDL look-up tool, which can be used to find all of the TMDLs in a given municipality. The tool can be accessed at https://www.nj.gov/dep/dwq/msrp-tmdl-rh.htm.

N.J.A.C. 7:8-5.6 Stormwater Runoff Quantity Standards

Increased precipitation depth and intensity will generate more stormwater runoff, increase flooding, contribute to additional combined sewer overflow incidents, and degrade water quality. Reduction of runoff volume has been proven to be an effective means of mitigating the impacts of increased precipitation depth

and intensity. (USEPA 2016; Mishra, 2019; ERG, 2014) Accordingly, the Department is proposing, at N.J.A.C. 7:8-5.6(d), that projects provide a reduction of runoff volume equivalent to that which would be generated during the water quality design storm from impervious surfaces associated with redevelopment and new development.

Currently, the Stormwater Management rules require a major development to be designed to provide stormwater runoff quantity control in accordance with N.J.A.C. 7:8-5.6. Specifically, N.J.A.C. 7:8-5.6(b) requires that appropriate stormwater runoff quantity control be established through one of the following:

1. Demonstrate through hydrologic and hydraulic analysis that for stormwater leaving the site, post-construction runoff hydrographs for the two-, 10-, and 100-year storm events do not exceed, at any point in time, the pre-construction runoff hydrographs for the same storm events;

2. Demonstrate through hydrologic and hydraulic analysis that there is no increase, as compared to the pre-construction condition, in the peak runoff rates of stormwater leaving the site for the two-, 10-, and 100-year storm events and that the increased volume or change in timing of stormwater runoff will not increase flood damage at or downstream of the site. This analysis shall include the analysis of impacts of existing land uses and projected land uses assuming full development under existing zoning and land use ordinances in the drainage area;

3. Design stormwater management measures, so that the post-construction peak runoff rates for the two-, 10-, and 100-year storm events are 50, 75, and 80 percent, respectively, of the pre-construction peak runoff rates. The percentages apply only to the post-construction stormwater runoff that is attributable to the portion of the site on which the proposed development or project is to be constructed; or

4. In tidal flood hazard areas, stormwater runoff quantity analysis, in accordance with (b)1, 2, and 3 above, is required unless the design engineer demonstrates through hydrologic and hydraulic analysis that the increased volume, change in timing, or increased rate of the stormwater runoff, or any combination of

the three will not result in additional flood damage below the point of discharge of the major development. No analysis is required if the stormwater is discharged directly into any ocean, bay, inlet, or the reach of any watercourse between its confluence with an ocean, bay, or inlet and downstream of the first water control structure.

The existing quantity control standards at N.J.A.C. 7:8-5.6 that only require detention of stormwater runoff to reduce the peak flow rate, but not to retain stormwater runoff to reduce the discharge volume, will not be sufficient to mitigate the impact from the upward trend in precipitation depth resulting from climate change. By requiring reduction of runoff volume from major developments, a significant portion of stormwater volume, particularly in more frequent, smaller storm events, will not be discharged offsite. As a result, communities will experience less frequent localized flooding during more frequent, smaller storm events. Further, less sediment will be transported offsite, which will reduce the required frequency of sediment removal from downstream catch basins, pipes, and stormwater management basins. Additionally, less overall, pollutant-carrying stormwater runoff will reach downstream waterbodies, which will serve to improve water quality and reduce fluvial flooding. During larger storm events, since the retained volume of stormwater will not be discharged off-site, less runoff will go into the stream and storm sewer system. The streams and storm sewer system will have more capacity to mitigate the increased runoff from increased precipitation due to climate change and reduce the chance of flooding.

Therefore, at N.J.A.C. 7:8-5.6, the Department is proposing a volumetric reduction standard through retention of stormwater runoff as part of the design and performance standards for stormwater runoff quantity, in part, to manage the increased volume of stormwater that is not addressed by the current rules. However, even though the volumetric reduction standard will be incorporated into the stormwater runoff quantity standards, as noted above, it will also provide water quality benefits. Volumetric reduction of stormwater will prevent the discharge of any pollutants carried by that stormwater from reaching downstream surface water bodies. Thus, the adverse impact of discharging those pollutants into those

downstream water bodies will be eliminated for the storm events that are retained within the boundaries of the proposed development or redevelopment. The benefits of reducing runoff volume through retention will be most visible in areas that are already heavily developed. (USEPA, 2021) Those areas are often already subject to degraded water quality or suffer from frequent flooding problems. (USEPA, 2021) Since the volumetric reduction standard will apply to the entire disturbed area of the site (including redeveloped areas), it will have a direct benefit toward improving water quality and reducing flooding as sites are redeveloped. As previously noted, without the volumetric reduction standard, many of these redevelopment projects would otherwise do nothing to improve water quality or reduce flooding since little or no stormwater management would be required to meet the existing groundwater recharge, stormwater runoff quality, and stormwater runoff quantity standards. It should be noted that the existing stormwater runoff quality standard is also proposed for amendment as described above and these amendments will work together to provide water quality improvements in heavily developed areas.

This is of particular importance given the State's commitment to environmental justice. While the impacts caused by centuries of development in our urbanized areas with little, or no stormwater management cannot be reversed quickly, managing stormwater during redevelopment is a necessary step toward improving water quality and reducing flooding in overburdened communities. As such, the Department has determined that requiring volumetric reduction for all disturbed areas of a major development or redevelopment site is a necessary measure to provide the residents of those communities with the right to live, work, and recreate in a clean and healthy environment.

In addition to the increasing depth of rainfall, which will turn into increasing runoff volume, increasingly heavy downpours in a short duration have occurred in the past decade (Kunkel et al, 2013). To address this trend, the Department is proposing, at N.J.A.C. 7:8-5.6(d), that stormwater runoff volume equal to the water quality design storm of one and one quarter inches of rainfall in two hours be reduced by retaining the runoff. The water quality design storm has a variable intensity, with a peak of three and two-

tenths inches per hour. Therefore, the water quality design storm represents a short but intense storm that is likely to occur more frequently in the future because of the increased heavy downpours caused by climate change. The proposed volumetric reduction standard will require the stormwater management measures, of a major development, to be designed to achieve retention of the water quality design storm by incorporating green infrastructure BMPs with some exceptions as set forth at proposed N.J.A.C. 7:8-5.3(d) and 5.4(b)3.

Retention of various rainfall depths is required by many other states including Connecticut, Massachusetts, West Virginia, Tennessee, Minnesota, Hawaii, the District of Columbia, and South Carolina (USEPA, 2016). Instead of creating another design storm for the volumetric reduction standard that may cause confusion, for example, one inch rainfall in 24 hours, the proposed volumetric reduction standard utilizes the current water quality design storm that has a rainfall depth of 1.25 inches in two hours as the volumetric reduction standard design storm, which, as noted above, is a similar overall rainfall total when compared to the other states and jurisdictions that utilize a volumetric reduction standard.

The Department also understands that some site-specific situations may prevent the use of green infrastructure BMPs to achieve the volumetric reduction standard by infiltration, evapotranspiration, and/or reuse of stormwater. Some examples of these situations include stormwater from areas of high pollutant loading or industrial stormwater exposed to source material, low saturated soil hydraulic conductivity, and high seasonal high-water table. In such circumstances, the site must be alternatively designed to hold the runoff and slowly release it to mimic the hydrology of a wooded area. Therefore, where it has been demonstrated that it is technically impracticable, as set forth at proposed N.J.A.C. 7:8-5.6(d)1, to retain the water quality design storm from a major development using green infrastructure, the requirements at proposed N.J.A.C. 7:8-5.6(d)1i must be met: (1) the runoff peak flow rate of the water quality design storm from the site shall be less than the runoff peak flow rate of the water quality design storm from a drainage area, equivalent to the size of the disturbed area of the site, in a woods cover type, in good hydrologic condition and on Hydrologic Soil Group D soil; and (2) the discharge hydrograph duration of the water

quality design storm leaving the site shall be greater than the runoff hydrograph duration of the water quality design storm from a drainage area, equivalent to the size of disturbed areas of the site, in a woods cover type, in good hydrologic condition and on Hydrologic Soil Group D soil. For the purposes of the volumetric reduction standard, a runoff hydrograph duration means the duration between the time that the runoff flow rate starts to be greater than zero to the time that the runoff flow rate becomes zero. This will minimize the downstream effect of not providing the volume reduction for the entire water quality design storm volume.

Alternatively to proposed N.J.A.C. 7:8-5.6(d)1, proposed N.J.A.C. 7:8-5.6(d)2 provides two options to meet the volumetric standard offsite by: (1) removal of existing impervious surface equal to or greater than the impervious surface within the disturbed portions of the major development site; and/or (2) retention of an equivalent or greater volume of stormwater runoff generated by the water quality design storm required pursuant to paragraph (d)1 at an offsite location. The volumetric reduction pursuant to subparagraph (d)2i must occur within the same HUC-14 as the major development. An exception is provided for public transportation entities that demonstrate providing volumetric reduction within the same HUC-14 is technically impracticable, as set forth at N.J.A.C. 7:8-4.6(a)1. In such a case, the public transportation entity shall instead provide volumetric reduction within the same Watershed Management Area as the major development, provided the reduction occurs as practicable to the major development. Pursuant to proposed N.J.A.C. 7:8-5.6(d)2iii, and in order to ensure the offsite alternative is legitimately authorized, permission to perform the offsite alternatives from the property owner of the offsite location must be viewed and approved by the review agency. Furthermore, the offsite alternatives need to be constructed prior to or concurrent with the major development to effectuate the runoff reduction of the runoff generated by the construction progress of the major development.

Proposed new N.J.A.C. 7:8-5.6(d)3 clarifies that the volumetric reduction standards are not applicable to projects that are undertaken by a public transportation entity in cases where the project meets the definition of major development solely because the project results in increased capacity of an existing

stormwater conveyance system. For public roadways, a public transportation entity may have to upgrade an existing stormwater conveyance system to resolve a flooding issue or to accommodate more runoff volume due to other parties' developments in the neighborhood or an increase of runoff volume caused by the impacts of climate change. In such cases, the public transportation entity shall not be required to meet the volumetric reduction standards simply for upgrading the capacity of an existing stormwater conveyance system. In addition to the proposed volumetric reduction standard, the Department also proposes to modify the existing stormwater runoff quantity standard at N.J.A.C. 7:8-5.6(b)2i to eliminate the need for an analysis of downstream flooding impacts when the proposed site meets certain conditions. The conditions are, first, where there is no increase in volume or peak flow of stormwater leaving the site and, second, when the sole reason that the timing of the hydrograph is altered is the installation of BMPs to comply with either the proposed volumetric reduction standard or the stormwater runoff quality standard, except in cases where the review agency determines that there will be increased flooding impacts downstream of the site. This will allow for the installation of BMPs to comply with the stormwater runoff quality and volumetric reduction standards, without requiring peak flowrate reductions in the two-, 10-, and 100-year storms, if those reductions would only otherwise be needed as a result of the change in timing of the hydrograph caused by the installation of those BMPs to comply with the stormwater runoff quality and volumetric reduction standards. In the vast majority of cases, the installation of these BMPs will result in reduced downstream flooding. However, as there may be cases where some adverse downstream effects could occur, the review agency can require an analysis if there is a concern that there may be downstream flooding impacts.

N.J.A.C. 7:8-5.10 Departmental Variance from the Design and Performance Standards for Stormwater Management Measures

Existing N.J.A.C. 7:8-4.6 provides standards for a municipality to grant a variance from the design and performance standards by mitigating the requirement offsite. However, the current rules do not provide a mechanism for the Department to grant a variance as a municipality can. This discrepancy in the ability to grant a variance between municipalities and the Department may create a situation that a project receives a valid variance to mitigate the design and performance standards offsite, but the same offsite mitigation cannot be approved through the Department's stormwater management review when the project also needs a Department permit. Proposed new N.J.A.C. 7:8-5.10 adds flexibility for the Department to grant a variance from meeting certain design and performance standards onsite in cases where the MS4 permittee with review obligations over the project has determined, pursuant to a mitigation plan that meets the Department's requirements, that these standards must instead be provided offsite. This flexibility for the Department to grant a variance after a municipality grants a valid variance with an approved mitigation plan will improve the regulatory consistency and predictability. The proposed language additionally clarifies that the references to municipal mitigation plans or municipal approvals at N.J.A.C. 7:8-4.6 do not apply to projects that are not subject to municipal review, such as a project undertaken by the State. Additionally, although N.J.A.C. 7:8-4.6(a)3vi limits the use of green infrastructure BMPs to those in Table 5-1, the Department is proposing additional flexibility in cases where the applicant is a public transportation entity. In light of the unique challenges and limitations facing linear transportation projects, as discussed above, proposed new N.J.A.C. 7:8-5.10(a)1 allows mitigation projects proposed by public transportation entities to use green infrastructure BMPs listed at either Table 5-1 or Table 5-2; provided all other requirements of this section are met.

N.J.A.C. 7:9A STANDARDS FOR INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEMS

The Standards for Individual Subsurface Sewage Disposal Systems (SISSDS) rules provide the standards for the proper location, design, construction, installation, alteration, repair, and operation of individual subsurface sewage disposal systems. As the location of the flood hazard area plays an important role in the location of the individual subsurface disposal system, the existing rules contained many definitions borrowed from the FHACA rules but that were not updated as the FHACA rules were amended. Therefore, the Department is proposing to delete several definitions from N.J.A.C. 7:9A-2.1 (Definitions) that are no longer part of the FHACA rules, including "delineated stream or delineated floodplain," "encroachment line," and "one hundred year flood plain." The Department is also proposing to amend the "flood hazard area" definition to closely match the definition at N.J.A.C. 7:13.

Similarly, at N.J.A.C. 7:9A-3.18, 4.3, and 4.6, those terms are being deleted and replaced with current terminology from the FHACA rules to clarify references.

Finally, at N.J.A.C. 7:9A-4.6, the Department is proposing to clarify that the FHACA rules prohibit the construction of an individual subsurface disposal system in some cases but will require a permit or other authorization for construction of a system in a regulated area.

N.J.A.C. 7:9D WELL CONSTRUCTION AND MAINTENANCE; SEALING OF ABANDONED WELLS

SUBCHAPTER 2. REQUIREMENTS AND PROCEDURES FOR THE CONSTRUCTION, INSTALLATION, OPERATION, AND MAINTENANCE OF WELLS

N.J.A.C. 7:9D-2.3 Specific Requirements for the Construction and Maintenance of Category 1 and Category 2 Wells

This chapter establishes standards and requirements for all aspects of well construction and decommissioning in order to protect groundwater. While the FHACA rules do not contain specific standards for the construction of wells, N.J.A.C. 7:9D-2.3(b)2ii(1) currently protects Category 1 and Category 2 wells from flooding by requiring wells located within the 100-year flood elevation to be installed with a watertight cap, where feasible, or equipped with a down-facing vent, screened to prevent the entry of insects, and located at least 12 inches above the 100-year flood elevation. For consistency with the amendments to Subchapter 3 of the FHACA rules that redefine the extent of flood hazard areas beyond the 100-year flood elevation, the Department is amending this requirement so that it will apply to Category 1 and Category 2 wells located within a flood hazard area, as defined at N.J.A.C. 7:13. The Department is also amending this standard to require such wells to be located at least 12 inches above the climate-adjusted flood elevation instead of the 100-year flood elevation to help ensure that wells will be protected against future flooding due to climate change.

N.J.A.C. 7:10 SAFE DRINKING WATER ACT RULES

SUBCHAPTER 11. STANDARDS FOR THE CONSTRUCTION OF PUBLIC COMMUNITY WATER SYSTEMS

N.J.A.C. 7:10-11.5 Permit Requirement; Application Contents

The Safe Drinking Water Act Rules implement New Jersey's Safe Drinking Water Program for the purpose of ensuring the provision of safe drinking water to consumers, and enabling the Department to assume primary enforcement responsibility pursuant to the Federal Safe Drinking Water Act, P.L. 93-523, 42 U.S.C. §§ 300f et seq. The Safe Drinking Water Program also ensures that safe water is provided with adequate pressure and volume by implementing portions of the Water Supply Management Act, which does the following: addresses storage, emergency plans, and reduces the amount of water lost in the distribution system; issues physical connection permits pursuant to N.J.S.A. 58:11-9.1 et seq.; and establishes

standards for construction and procedures for certifications, pursuant to the Reality Improvement, Sewerage and Facilities Act, N.J.S.A. 58:11-23 et seq.

N.J.A.C. 7:10-11.5 sets forth the application requirements for public community water systems. N.J.A.C. 7:10-11.5(i)8i(3) currently includes a requirement for each well head to be elevated above a common datum plane and the 100-year flood elevation. The Department is proposing to replace "100-year flood elevation" with "climate-adjusted flood elevation" for consistency with the amendments to Subchapter 3 of the FHACA rules and to ensure that well heads are protected from climate change impacts.

N.J.A.C. 7:10-11.6 General Requirements for Source, Treatment, Storage, and Distribution Components

N.J.A.C. 7:10-11.6(g)2 requires buildings to be constructed so that surface water will not enter or lie against the building. Specifically, it requires that buildings be protected against flooding by locating them above the 100-year flood plain or providing waterproof doors or covers for all openings below that level. As mentioned above, "100-year flood plain" is not a defined term in the FHACA rules. As all buildings located within a flood hazard area must be constructed in compliance with the FHACA rules, regardless of their compliance with the requirements in other rules, N.J.A.C. 7:10-11.6(g)2 is proposed to be amended to require buildings be protected against flooding by locating them above the climate-adjusted flood elevation. This amendment ensures consistency between the requirements in the Safe Drinking Water Act Rules and the FHACA rules with respect to the construction of buildings.

N.J.A.C. 7:10-11.7 Standards for the Construction and Development of Ground Water Sources

N.J.A.C. 7:10-11.7(i)3 currently requires the floor of a pump house to be located above the 100-year flood elevation. As stated in the previous discussion of the amendment at N.J.A.C. 7:10-11.6(g)2, the FHACA rules regulate all buildings located within flood hazard areas, including pump houses. Therefore,

this standard is also proposed to be amended to replace "100-year flood elevation" with "climate-adjusted flood elevation" for consistency between the rules and to ensure that climate change impacts are considered.

N.J.A.C. 7:10-11.8 Standards for the Construction and Development of Surface Water Sources and Ground Water Sources Under the Direct Influence of Surface Water

Existing N.J.A.C. 7:10-11.8(c)7 currently requires all mechanical equipment to be protected against the 100-year flood. The FHACA rules at N.J.A.C. 7:13-12.5 set forth the requirements for the construction of a building, and as explained above, proposed N.J.A.C. 7:13-12.5(b)2 requires all mechanical and electrical equipment for the building to be elevated at least one foot above the climate-adjusted flood elevation, unless such equipment is designed to operate in submerged conditions. Therefore, the Department is also proposing to amend N.J.A.C. 7:10-11.8(c)7 to replace "100-year flood" with "climate-adjusted flood" for consistency with the amended FHACA rules.

N.J.A.C. 7:10-11.9 Standards for the Construction of Pumping Stations

Existing N.J.A.C. 7:10-11.9(b) prohibits pumping stations from being located within the 100-year flood hazard area unless a location outside the 100-year flood hazard area is not feasible. If it is deemed not feasible to build outside the 100-year flood hazard area, the pumping station must be protected against flooding, and all treated water pumping stations must have a floor elevation at least one foot above the highest recorded flood elevation. As the Department does not utilize or define the term "100-year flood hazard area" in the FHACA rules, the "100-year" term is proposed to be deleted, which will leave "flood hazard area" remaining in the rule. The Department is also proposing to replace "highest recorded flood elevation" with "climate-adjusted flood elevation" for consistency with the amendments to Subchapter 3 of the FHACA Rules and to ensure that climate change impacts are considered for the construction of pumping stations.

N.J.A.C. 7:13 FLOOD HAZARD AREA CONTROL ACT RULES

SUBCHAPTER 1. GENERAL PROVISIONS

N.J.A.C. 7:13-1.1 Scope and Purpose

The FHACA rules help prevent and ameliorate the destructive impacts of periodic flooding by establishing standards for disturbance to the land and vegetation in flood hazard areas. Given the State's dense population and extensive level of existing development, flooding causes severe, repetitive, and deleterious social, economic, and environmental impacts. Flooding has and continues to be the most frequent, destructive, and costly natural hazard in New Jersey and is responsible for the majority of disaster-related damage reported in the State. A recent article that compared economic damages of Superstorm Sandy to the tri-State area as they occurred and at a range of lower sea levels found that, "based on total ensemble estimates for anthropogenic sea level rise (ASLR), 13% (7.5–23%) of Sandy damages in the tri-state area are attributable to climate-mediated anthropogenic sea level rise, amounting to $8.1B ($4.7B–$14B)" (Strauss et al., 2021).

New Jersey's vulnerability to chronic flooding and severe flood events is increasing due to the impacts of climate change and sea level rise. According to the 2020 New Jersey Scientific Report on Climate Change, New Jersey has experienced a 7.9 percent increase in annual precipitation over the last 10 years due to climate change, with a further increase of four to 11 percent expected by 2050. As annual precipitation increases, the size and frequency of floods also increases. Additionally, sea levels are rising at a faster rate in New Jersey than in other parts of the world, and the report projects that New Jersey will likely experience at least 0.9 to 2.1 feet of sea level rise between 2000 and 2050, resulting in increased tidal flooding, even on sunny days without any precipitation. In consideration of these concerns, the Department is proposing to amend the description of the purpose of the FHACA rules at N.J.A.C. 7:13-1.1(c) to recognize the impact that permanent inundation due to sea level rise will have as a result of climate change.

N.J.A.C. 7:13-1.2 Definitions

A number of definitions are proposed for amendment or deletion to reflect and effectuate the goals of this rulemaking.

The definition of "anadromous water" is proposed to be amended to address a cross-reference change due to the proposed recodification of N.J.A.C. 7:13-11.5. The citation directs an applicant to N.J.A.C. 7:13-11.6(b) to assist in determining waters that support anadromous fishery resources.

The definition of "applicability determination" is proposed to be amended to exclude the Department's determination of a regulated water which, as discussed in the summary at N.J.A.C. 7:13-2.6, is more appropriately addressed under a flood hazard area verification.

The definition of "barrier island complex," which is used at N.J.A.C. 7:13-2.3(c)1ii to exempt these islands from receiving a riparian zone, is proposed for deletion. As described in the summary of N.J.A.C. 7:13-2.3(c)1, this exemption has led to inequitable water quality protection around several bays, some of which are designated as Category 1 by the Surface Water Quality Standards at N.J.A.C. 7:9B. The deletion of this definition and the language at existing N.J.A.C. 7:13-2.3(c)1ii will establish a riparian zone along the bay side of barrier islands; the Atlantic coastline will continue to not possess a riparian zone, pursuant to N.J.A.C. 7:13-2.3(c)1i.

The definition of "channel" is proposed to be amended to replace the term "manmade" with "human created" for gender inclusivity.

A new definition is proposed for "climate-adjusted flood elevation," which is the proposed regulatory flood hazard elevation set forth at N.J.A.C. 7:13-3. The climate-adjusted flood elevation is the flood elevation that is anticipated to occur because of climate change and sea level rise, using a planning horizon of 2100. The term "flood hazard area design flood elevation" is proposed to be replaced with the term "climate-adjusted flood elevation" to make this distinction regarding the proposed changes in flood

hazard area jurisdictional boundaries. In addition to redefining the extent of the tidal flood hazard area jurisdictional boundaries set forth in Subchapter 3 of the FHACA Rules, the climate-adjusted flood elevation will serve as the basis for offsite flooding standards at proposed N.J.A.C. 7:13-12.1, structural stability standards at proposed N.J.A.C. 7:13-12.4, required floor elevations for buildings at proposed N.J.A.C. 7:13-12.5, and required elevations for railroads, roadways, parking areas, and airport runways and taxiways at proposed N.J.A.C. 7:13-12.6.

A new definition is proposed for "compelling public need," which is identical in meaning to the definition of the same term in the Freshwater Wetlands Protection Act rules at N.J.A.C. 7:7A-1.3, with added punctuation and numbering to clarify the structure and meaning of the existing definition in the FWPA rules. The term is used at existing N.J.A.C. 7:13-11.2 to describe limited situations where disturbance to riparian zone vegetation may justifiably exceed the limits set forth at Table 11.2 and is proposed to be added as a means of eligibility for the Department to consider a hardship exception to strict compliance with one or more design standards at N.J.A.C. 7:13-11 and 12 at proposed new N.J.A.C. 7:13-15.1(b)4. Pursuant to the proposed definition, there is a compelling public need for a regulated activity if undertaking the activity: (1) would serve an essential health or safety need of the local municipality; (2) would result in a benefit to public health and safety; and (3) is required to serve existing needs of the residents of the State. Furthermore, undertaking the regulated activity must be the only means available to meet the established public need. Thus, there is a compelling public need for a regulated activity if adverse impacts to public health, safety, and welfare or the environment are likely to occur if the project or regulated activity is not undertaken as proposed.

The existing definition of "critical building" is proposed to be deleted and replaced with a simplified and expanded definition of the same term to reference and incorporate the definition of Flood Design Class 3 and Class 4 buildings pursuant to the American Society of Civil Engineer's publication "Flood Resistant Design and Construction, ASCE/SEI 24-14." The standards presented in this publication

which, as the title implies, are intended to help ensure that construction within flood hazard areas is resistant to storm and flood-induced damage, are incorporated by the International Code Council into the International Building Code, which is incorporated by reference in New Jersey's Uniform Construction Code at N.J.A.C. 5:23. The existing definition of "critical building" describes buildings that fall under one or both of these Flood Design Classes. However, Flood Design Class 3 and Class 4 as described by ASCE/SEI 24-14, includes a more comprehensive list of buildings than the existing definition of "critical building." Flood Design Class 3 describes buildings and structures that pose a high risk to the public or significant disruption to the community should they be damaged, be unable to perform their intended functions after flooding, or fail due to flooding. Flood Design Class 4 describes buildings and structures that contain essential facilities and services necessary for emergency response and recovery, or that pose a substantial risk to the community at large in the event of failure, disruption of function, or damage by flooding. In order to establish standards that are suitably protective of public health, safety, and welfare, the Department is proposing to expand the definition of "critical building" for use in the requirements for buildings at N.J.A.C. 7:13-12.5, the requirements for a railroad, roadway, parking area, and airport runway and taxiway at N.J.A.C. 7:13-12.6, and the deed notice requirement for a verification, an authorization pursuant to a general permit-by-certification, general permit, or an individual permit at N.J.A.C. 7:13-22.3.

The existing definition of "excavation" describes various activities that can result in topographic changes, such as removal or recovery of soil, minerals, mineral substances, or organic substances. Due to the nature of the activities included within excavation, the changes resulting from excavation could exacerbate flooding or adversely impact the environment. Standards for excavation, fill, and grading activities are set forth at N.J.A.C. 7:13-12.3. The existing definition exempts the removal or recovery of vegetation, whether from the land surface or beneath the land surface. It has been the Department's experience that removal of the roots of vegetation, such as extraction of tree stumps, can alter the topography, change local drainage patterns, and lead to increased erosion and sedimentation of regulated

waters if improperly stabilized. Therefore, the Department proposes to amend the definition of "excavation" to remove the exemption for the removal or recovery of vegetation.

A new definition for "exempt activity" is proposed to describe a new class of activities that are proposed to be converted to exempt activities at proposed new N.J.A.C. 7:13-2.5 (see summary below). For an activity to be exempt from the FHACA rules, it must either lie outside the jurisdictional area of the chapter or meet the requirements enumerated at proposed N.J.A.C. 7:13-2.5, which describe a suite of maintenance, repair, and other minor activities that would not exacerbate flooding or adversely impact the environment if undertaken as described. As described in the summary at N.J.A.C. 7:13-2.5, 14 activities that are currently permitted-by-rule and/or referenced within the rules as not requiring authorization pursuant to this chapter are proposed to be converted to exemptions.

The definition of "FEMA flood mapping" is proposed to be amended to provide clarification regarding which FEMA flood mapping products are appropriate for use pursuant to this chapter. The existing definition establishes that applicants shall use FEMA flood mapping "adopted as part of the most recent effective FEMA Flood Insurance Study, dated on or after January 31, 1980, or any more recent advisory or proposed (preliminary) flood mapping, if the more recent advisory or proposed (preliminary) mapping results in higher flood elevations, wider floodway limits, or greater flow rates than depicted in the most recent effective FEMA Flood Insurance Study, or indicates a change from an A zone to a V zone or coastal A zone."

Pursuant to the process established at 44 CFR 60.3, FEMA can amend an effective map and publish revised mapping for public review and comment on a preliminary basis. FEMA's process generally entails publishing revised mapping with advisory or preliminary base flood elevations and inviting public comments on the proposed revisions. This affords communities enrolled in the National Flood Insurance Program, as well as affected parties, the right to contest information on those flood maps before they become effective and are used for flood insurance rate determinations. At the end of the comment process,

FEMA ultimately adopts the revised mapping and considers them effective for the purposes of flood insurance. Pursuant to the existing FHACA rules, the Department utilizes FEMA mapping in all its forms (effective, advisory, preliminary, and pending) when evaluating the extent and height of flooding on any given site. Of these maps, the Department selects the ones that have the highest 100-year flood elevation, the widest floodway limit, and the more severe flood zone designation (Coastal A zone, VE zone). However, the definition in the current rules has led to some confusion as to which FEMA map should be used pursuant to this chapter. The Department's intention is for applicants to utilize FEMA's effective map, or the most recent mapping product provided it is more protective (higher flood elevation, wider floodway limit, more severe flood zone designation) than the effective map. If FEMA issues a preliminary map and subsequently revises it, the revised map represents the best available data and should, therefore, be used even if flood elevations are lower than depicted on previously issued preliminary mapping. However, in no case should a preliminary or pending mapping product be utilized if it depicts a lower flood elevation or less protective floodway limit than established on the effective map that precedes it. The definition is additionally amended to align terminology with FEMA with regard to mapping products and A and V Zone designations. The definition further clarifies that, where a regulated water is depicted on FEMA flood mapping but lacks a flood profile or other identifying flood information in the Flood Insurance Study, the FEMA flood mapping cannot be used pursuant to this chapter to determine flood elevations or floodway limits for that regulated water. This clarification is appropriate as the climate-adjusted flood elevation, which establishes the extent of the flood hazard area, and the extent of the regulatory floodway cannot be determined from a FEMA mapping product that does not provide a flood elevation or floodway limits.

The definition of "flood hazard area" is proposed for amendment to address the change from the existing reference to "flood hazard area design flood elevation" to the proposed "climate-adjusted flood elevation" as proposed in this rulemaking. The amended definition also addresses that tidal flood hazard areas include a newly proposed jurisdictional boundary, the inundation risk zone, as summarized in detail

below. A descriptive note is further added to explain that fluvial flood hazard areas and some tidal flood hazard areas include the jurisdictional area known as the "floodway," standards for which are set forth at N.J.A.C. 7:13-11.3. Additional clarification is added regarding areas that are subject to both tidal and fluvial flooding. As noted in the summary at N.J.A.C. 7:13-2.3, specifically with regard to proposed Figure 2.3D, an area can be subject to both fluvial and tidal flooding. The dynamics of flooding differ greatly in fluvial and tidal areas. Whereas, flooding in tidal areas is more easily predicted, and affected residents generally have sufficient time to evacuate, fluvial areas can be subject to flash flooding that provides little or no time to evacuate. Further, the velocity of floodwaters in fluvial areas is generally higher than tidal areas, leading to increased erosion and structural damage. In some cases, flooding along regulated waters that lie in close proximity to tidal waters can be subject to both types of flooding. As described in the summary below for the flood storage displacement (net-fill) standards at N.J.A.C. 7:13-11.4 and standards for buildings at N.J.A.C. 7:13-12.5, these provisions are proposed to be clarified to acknowledge that an area subject to tidal flooding can additionally be subject to fluvial flooding, which requires additional standards to be met.

The definitions of "flood hazard area design flood" and "flood hazard area design flood elevation" are both proposed for deletion. The flood hazard area design flood elevation is proposed to be replaced with the term "climate-adjusted flood elevation" and, therefore, would no longer be used in the chapter. Due to the close association of the terms "flood hazard area design flood" and "flood hazard area design flood elevation," abandonment of "flood hazard aera design flood elevation" necessitates the abandonment of "flood hazard area design flood."

The definition of "habitable building" is proposed to be amended to include trailers intended for human residence, which are set on a foundation and/or connected to utilities, such as those in a mobile home park that remain on site for more than 180 days, in order to align the FHACA rules with minimum NFIP standards. Specifically, 44 CFR 60.3(c)14 and 60.3(e)9 establish that such vehicles must be situated

for less than 180 days or be fully licensed and ready for highway use, or else be treated as "manufactured homes."

A definition is proposed for the "inundation risk zone" to describe the portion of a tidal flood hazard area for which protective new standards are proposed in this rulemaking, as set forth at Subchapters 11 and 12, and as described below. As tidal flood hazard areas also fall within the jurisdictional boundaries of the Coastal Zone Management Rules, these protective new standards are also being incorporated into those rules at proposed N.J.A.C. 7:7-9.50. Land within the inundation risk zone is at significant risk for future permanent or daily inundation and therefore represents a high level of hazard for existing or proposed development or habitation. The limits of the inundation risk zone on a particular site are determined using the methods set forth at N.J.A.C. 7:13-3 and 7:7-9.50.

The definition of "jacking" is proposed for amendment to clarify that horizontal directional drilling does not qualify as jacking pursuant to the definition. As discussed below, the Department acknowledges prior assumptions about the safety and environmental protection benefits of horizontal directional drilling for the installation of utilities have been updated by more current information which compels the Department to increase review of certain underground utility line permitting. Therefore, amendments are proposed to existing promulgated permits related to jacking and horizontal directional drilling, and a proposed general permit for the placement of an underground utility line using horizontal directional drilling is proposed at N.J.A.C. 7:13-9.12. The definition is also amended to note that jacking can occur under any regulated area and not simply the channel, as is implied by the existing definition.

The definition of "low flow aquatic passage" is proposed to be amended to replace the term "manmade" with the gender-neutral term "human created."

A definition for "mean higher high water" is proposed as it is an essential component in determining the location of the proposed new inundation risk zone in cases where an applicant wishes to determine the inundation risk zone based on site-specific survey information pursuant to N.J.A.C. 7:13-3.4(c). Generally,

the mean higher high water represents the average elevation of the higher of the two high tides each day over a 19-year period. The definition specifies the factors that go into calculating the mean higher high tide for a particular water.

The definitions for "Method 1" through "Method 6" are proposed for deletion as these terms are not used in the proposed FHACA rules. These methods refer to means by which the flood hazard area design flood elevation and/or floodway limits can be determined using State or Federal flood mapping, calculations or, in limited cases, approximation. The essence of these methods is continued in proposed N.J.A.C. 7:13-3 with the added language informing how to determine the climate-adjusted flood elevation as opposed to the flood hazard design flood elevation.

The definition for "modification" is proposed for amendment to update the cross-reference to N.J.A.C. 7:13-22.5 and 6, which are proposed for recodification as N.J.A.C. 7:13-22.6 and 7.

A definition for the commonly used acronym "NAVD 88" is proposed to describe the North American Vertical Datum of 1988, which is the predominant datum for surveying used in the United States, as described by the National Geodetic Survey. The existing FHACA rules reference the National Geodetic Vertical Datum of 1929 (NGVD), which is often the datum used for Department delineations prior to the Department's January 24, 2013, emergency rulemaking to amend the FHACA rules. Since newer State and Federal flood mapping and topographic surveys generally reference NAVD 88, this datum is proposed to be utilized for purposes of establishing jurisdictional boundaries and determining compliance with the requirements of this chapter. The existing definition of NGVD is proposed for deletion as this term is not used in the proposed FHACA rules.

The definition of "100-year flood" is proposed to be amended to explain that this flood event is commonly depicted by FEMA on its Flood Insurance Studies as the "one person annual chance flood."

The definition of "100-year flow rate" is proposed to be deleted, as it is proposed to be no longer used in this chapter.

The Department is proposing to amend the existing definition of "public transportation entity," which identifies certain public agencies that oversee public roadway or railroad projects, to clarify that interstate agencies, such as the Port Authority of New York and New Jersey and the Delaware River Joint Toll Bridge Commission are included in the Department's intention pursuant to the definition.

The definition of "regulated activity" or "activity" is proposed for amendment to incorporate the proposed new term "permits-by-registration." The term "permit-by-rule," which is not defined, is proposed to be replaced throughout the chapter with the new term "permit-by-registration," which requires user registration and submittal of compliance information to the Department through its online portal pursuant to proposed new N.J.A.C. 7:13-6.5 and described in detail in the summary below of that section.

The definitions for "substantial damage" and "substantial improvement" are proposed for amendment to require that, when calculating the cost of repairing damage or of making improvements, all investments made in the structure cumulatively after the effective date of this rulemaking shall be included. Pursuant to N.J.A.C. 7:13-12.5, buildings that are substantially damaged or substantially improved trigger additional design and construction standards necessary to ensure continued public safety. Specifically, such buildings must be modified to meet current flood design criteria including the lowest floor elevation and the type of foundation appropriate pursuant to the UCC and NFIP. Damage and improvements that fall below this monetary threshold are not subject to these standards since requiring an entire building to be significantly modified when only minor repairs and improvements are being proposed is likely to be burdensome. However, it has been the Department's experience that a series of smaller improvements made to a building over time can cumulatively result in conditions equivalent in cost to a substantial improvement. Further, by intentionally spreading out improvements over time, individuals have previously been able to circumvent the need to modify their building to meet current flood design criteria. The calculation of cost pursuant to these terms should, therefore, appropriately include the costs of improvements made after the effective date of this rulemaking.

The amended definition of "verification" is proposed to clarify that the climate-adjusted flood elevation and inundation risk zone are now included as a portion of a flood hazard area verification, pursuant to N.J.A.C. 7:13-5.

The definition of "water" is proposed to be amended to replace the term "manmade" with "human created" for gender inclusivity.

The definition of "water control structure" is proposed to be amended to replace the term "design flood elevation" with the proposed new term "climate-adjusted flood elevation" as described in the summary at N.J.A.C. 7:13-3.

The definition of "water surface elevation" is proposed to be amended to refer to the proposed new term NAVD 88, which, as described above, is the proposed reference datum for flood mapping and topographic surveys pursuant to this chapter.

N.J.A.C. 7:13-1.3 Forms, Checklists, Information, Technical Manual; Department Address and Website

Updated references to the Division of Land Resource Protection and to the new type of approval, permit-by-registration, as described at N.J.A.C. 7:13-6 and set forth at N.J.A.C. 7:13-7, are proposed to be included. Since undertaking an activity pursuant to a permit-by-rule does not currently require an application to the Department, no direction for application submission was necessary pursuant to this section. With the change to require that registration be required for the types of activities previously covered by permits-by-rule, the proposed amendment provides the necessary link to where on the Department's website such registration will be accomplished. The amendment also includes a reference to the proposed new requirement to document the commencement and/or completion of authorized activities discussed at N.J.A.C. 7:13-22.2(d).

SUBCHAPTER 2. APPLICABILITY AND ACTIVITIES FOR WHICH A PERMIT OR AUTHORIZATION IS REQUIRED

N.J.A.C. 7:13-2.1 When a Permit or Authorization is Required

Existing N.J.A.C. 7:13-2.1(a) establishes the requirement to obtain the appropriate flood hazard area approval before undertaking an activity regulated by this chapter and existing subsection (b) lists the approvals available pursuant to N.J.A.C. 7:13. Limited exemptions from the approval requirement are set forth at existing N.J.A.C. 7:13-2.1(c). As discussed below, the Department is proposing to amend N.J.A.C. 7:13-2.1(b) to acknowledge a new class of activities that would be exempt from this chapter, which is being proposed at N.J.A.C. 7:13-2.5. The Department is also proposing to amend N.J.A.C. 7:13-2.1(b) to reflect the changes being made throughout to update the term “permit-by-rule" to “permit-by-registration" and to amend the conditions pursuant to which a person is not subject to this chapter at N.J.A.C. 7:13-2.1(c).

Existing N.J.A.C. 7:13-2.1(b) establishes the six types of authorizations that satisfy the requirement at N.J.A.C. 7:13-2.1(a) to obtain the appropriate approval for a regulated activity in a regulated area. Existing N.J.A.C. 7:13-2.1(b)6 provides that a permit issued pursuant to the Department’s Coastal Zone Management rules at N.J.A.C. 7:7 satisfies this requirement provided two conditions are met. First, the application for the coastal permit must not have been declared complete for review prior to November 5, 2007, and second, the applicant must satisfy the requirement to obtain a verification in the cases set forth at N.J.A.C. 7:13-5.5(a). In the Department’s November 5, 2007 rulemaking, jurisdiction pursuant to N.J.A.C. 7:13 expanded to include flood hazard areas and riparian zones that in some cases lie within CAFRA or Waterfront Development jurisdiction. Rather than require applicants to seek both a flood hazard area permit and a coastal permit for an activity that is subject to both N.J.A.C. 7:13 and 7:7, N.J.A.C. 7:7-9.25(f) requires activities proposed within a flood hazard area, which require a coastal permit, to meet the substantive requirements at N.J.A.C. 7:13. Similarly, N.J.A.C. 7:7-9.26 in the CZM rules requires activities proposed within a riparian zone, which require a coastal permit, to meet the riparian zone requirements at

N.J.A.C. 7:13 unless exempted from such rules. As Department staff reviews and determines compliance with N.J.A.C. 7:13 pursuant to its coastal permit review pursuant to N.J.A.C. 7:7, there is no need for a separate flood hazard area approval to be obtained within the coastal zone, provided the application for a coastal permit was declared complete for review on or after November 5, 2007, when N.J.A.C. 7:13 was incorporated into N.J.A.C. 7:7, as described above. The reference to November 5, 2007, is proposed for deletion since any coastal permit application that may still be active would necessarily have been received after this date. The reference to satisfy N.J.A.C. 7:13-5.5(a) is also proposed for deletion as the subsection is proposed to be amended to clarify that obtaining a verification is necessary for projects located in tidal flood hazard areas, as well as fluvial flood hazard areas.

Existing N.J.A.C. 7:13-2.1(c) sets forth four situations pursuant to which a flood hazard area approval pursuant to N.J.A.C. 7:13-2.1(b) is not required in order to undertake a regulated activity in a regulated area. As discussed below, the Department is proposing to delete the provision at N.J.A.C. 7:13-2.1(c)3 related to regulated activities located in the Meadowlands District and to amend the remaining three provisions to reflect the changes to tidal flood hazard areas proposed in this rulemaking.

Existing N.J.A.C. 7:13-2.1(c)1 exempts regulated activities that are part of a project that was complete for review prior to the Department's adoption of amendments to this chapter pursuant to the Inland Flood Protection rulemaking described above, and which was subsequently approved pursuant to N.J.A.C. 7:13. As this rulemaking establishes new flood elevations in tidal areas, exemptions from which are addressed pursuant to the proposed amendments to existing N.J.A.C. 7:13-2.1(c)2 discussed below, N.J.A.C. 7:13-2.1(c)1 is amended to clarify that this exemption relates to projects in fluvial flood hazard areas only.

Existing N.J.A.C. 7:13-2.1(c)2 exempts regulated activities that are part of a project in a tidal flood hazard area that was deemed complete for review prior to November 5, 2007, and which was subsequently approved pursuant to N.J.A.C. 7:7. On November 5, 2007, the Department adopted a rulemaking that fully

incorporated tidal flood hazard areas in the FHACA rules, which caused regulated activities in those areas to be newly subject to the requirements at N.J.A.C. 7:13. The current rulemaking proposes to establish a new climate-adjusted flood elevation along tidal waters, which would, like the Department's November 5, 2007 rulemaking, expand the geographic area subject to this chapter in tidal areas, projects within which would generally require authorization pursuant to either the Department's CZM rules or FHACA rules. In recognition that individuals may have applied for a permit or authorization pursuant to the CZM or FHACA rules prior to this rulemaking, which may have included elements outside the current tidal flood hazard area but within the expanded tidal flood hazard area that would be effectuated by this rulemaking, and to mirror the provision at N.J.A.C. 7:13-2.1(c)1 for fluvial areas, the existing exemption at N.J.A.C. 7:13-2.1(c)2 is proposed to be amended to reference the effective date of this rulemaking. The paragraph is also proposed to be amended to reference the FHACA rules in addition to the CZM rules. Pursuant to N.J.A.C. 7:13-2.1(b), a project that requires authorization pursuant to the CZM rules does not require a separate authorization pursuant to the FHACA rules. While it is generally the case that projects within tidal flood hazard areas require authorization pursuant to the CZM rules, the tidal flood hazard area in some cases extends beyond the jurisdiction of the CZM rules, in which case a flood hazard area permit, or authorization is required prior to undertaking the activity. Thus, N.J.A.C. 7:13-2.1(c)2 is proposed to be amended to reference both sets of rules.

Existing N.J.A.C. 7:13-2.1(c)3 exempts regulated activities that are part of a project that was subject to neither N.J.A.C. 7:13 or 7:7 prior to November 5, 2007, and which was authorized pursuant to a valid zoning certificate issued by the New Jersey Meadowlands Commission (predecessor to the New Jersey Sports and Exposition Authority) prior to November 5, 2007, pursuant to N.J.A.C. 19:4-4.2. This provision was adopted in 2007 to address projects within the Meadowlands District that may have been affected by the expansion of the flood hazard area that occurred on November 5, 2007, for the same reasons discussed in the summary at N.J.A.C. 7:13-2.1(c)2. N.J.A.C. 7:13-2.1(c)3 is proposed to be deleted for

three reasons. First, most, if not all, approvals in the Meadowlands District that would have qualified for exemption pursuant to N.J.A.C. 7:13-2.1(c)3 have expired, rendering the provision generally unnecessary. Second, an activity exempted pursuant to N.J.A.C. 7:13-2.1(c)3 would necessarily have been contemplated and approved prior to November 5, 2007, indicating that it is unlikely to have been designed to be suitably flood-resistant, therefore, possibly adversely impacting public health, safety, and welfare, and the environment if constructed as designed. Therefore, should a project still currently qualify for exemption pursuant to N.J.A.C. 7:13-2.1(c)3, it is appropriate to ensure that the project is revised to meet the proposed design and construction standards, which are necessary to ameliorate adverse impacts to and from flooding. Finally, amended N.J.A.C. 7:13-2.1(c)1, which exempts certain activities that were located outside a fluvial flood hazard area prior to July 17, 2023, and amended N.J.A.C. 7:13-2.1(c)2, which exempts certain activities that were located outside a tidal flood hazard area prior to the effective date of this rulemaking, adequately cover projects in all flood hazard areas of the State. N.J.A.C. 7:13-2.1(c)3 is, therefore, proposed for deletion.

Pursuant to existing N.J.A.C. 7:13-2.1(c)4, which is proposed to be recodified as N.J.A.C. 7:13-2.1(c)3, a regulated activity that is part of a project that did not need a FHACA or CZM authorization prior to the adoption of amendments to this chapter pursuant to the Department's July 17, 2023 Inland Flood Protection rulemaking, is exempt from the requirements of this chapter provided the activity received all necessary Federal, State, and local approvals prior to the effective date of this rulemaking, and provided construction commenced prior to this date as outlined at existing N.J.A.C. 7:13-2.1(c)4ii. Similar to the amendments proposed at N.J.A.C. 7:13-2.1(c)1 and 2, this provision is proposed to be amended to account for the proposed expansion of the tidal flood hazard area that is the subject of this rulemaking. Specifically, the amended provision addresses regulated activities that were located outside a fluvial flood hazard area prior to July 17, 2023, or which were located outside a tidal flood hazard area prior to the effective date of this rulemaking.

N.J.A.C. 7:13-2.1(d) addresses cases where a regulated activity that meets the requirements at N.J.A.C. 7:13-2.1(c) is subsequently revised. N.J.A.C. 7:13-2.1(d) is proposed to be amended to clarify that an exemption pursuant to N.J.A.C. 7:13-2.1(c) remains in effect, provided the qualifying Federal, State, and/or local approvals listed at N.J.A.C. 7:13-2.1(c)1, 2 or 3, as appropriate, remain valid and provided the Department determines that the regulated activity has not been revised such that one or more of the conditions at N.J.A.C. 7:13-2.1(d)1, 2, 3, or 4 is met.

N.J.A.C. 7:13-2.2 Regulated Waters

N.J.A.C. 7:13-2.2 sets forth the waters that are subject to N.J.A.C. 7:13. Amendments are proposed to clarify and amend the Department's regulated area pursuant to this chapter as described below.

N.J.A.C. 7:13-2.2(a) explains that all of the waters in New Jersey are regulated pursuant to this chapter, except for features falling under the four categories set forth at N.J.A.C. 7:13-2.2(a)1, 2, 3, and 4. Pursuant to N.J.A.C. 7:13-2.3, every regulated water possesses a flood hazard area and/or a riparian zone. N.J.A.C. 7:13-2.2(a) is proposed to be amended to establish that every tidal water that is subject to this chapter additionally possesses an inundation risk zone as set forth at proposed N.J.A.C. 7:13-3.4.

N.J.A.C. 7:13-2.2(a)1 currently exempts "any manmade canal" from the requirements of this chapter. Since the term "canal" is not defined, it is the Department's experience that applicants sometimes inappropriately apply this provision to waters and/or activities not intended by the Department to be exempt from N.J.A.C. 7:13. Canals were constructed by humans to facilitate commerce and navigation, sometimes across several watersheds, and, therefore, do not possess the attributes of naturally occurring surface waters, such as a flood hazard area or riparian zone.

The purpose of the current exemption at N.J.A.C. 7:13-2.2(a)1, therefore, is to establish that canals do not possess their own flood hazard area and riparian zone. However, where a segment of a canal passes through the flood hazard area or riparian zone of another water that is regulated by this chapter, then all

activities within the flood hazard area and riparian zone of that regulated water are subject to the requirements of this chapter. (See 38 N.J.R. 3965) This important distinction is sometimes misunderstood in cases where an entire canal lies within the flood hazard area of another regulated water. For example, the entirety of the Cape May Canal lies within the flood hazard area of the Atlantic Ocean. It is not the Department's intent to exempt activities within the flood hazard area of the ocean that happen to lie within the confines of the Cape May Canal. Therefore, in order to clarify the purpose of the existing provision, the Department is proposing to limit the exemption to the Delaware and Raritan Canal. The Delaware and Raritan Canal provides drinking water to a large portion of central New Jersey and is maintained by the New Jersey Water Supply Authority. Additionally, the Delaware and Raritan Canal Commission regulates development in proximity to the canal and within the drainage area of the Delaware and Raritan Canal State Park, pursuant to N.J.A.C. 7:45. Given these protections and the fact that the Delaware and Raritan Canal does not possess its own flood hazard area or riparian zone pursuant to the current and proposed rules, it is appropriate to exempt this human created structure. However, where the Delaware and Raritan Canal passes through the flood hazard area or riparian zone of another water that is regulated pursuant to this chapter, activities within and adjacent to the canal are subject to the requirements of this chapter.

N.J.A.C. 7:13-2.2(a)3 currently exempts any section of water that has a drainage area of less than 50 acres, provided at least one of three listed criteria apply. Where a water has no discernible channel, such as a feature that meets the definition of a "swale" in the Freshwater Wetlands Protection Act Rules at N.J.A.C. 7:7A-1.4, the water is exempt pursuant to N.J.A.C. 7:13-2.2(a)3i. Where a water is confined within a lawfully existing, manmade conveyance structure or drainage feature, not including any water that historically possessed a naturally occurring, discernible channel that has since been altered by human activity, it is similarly exempt pursuant to N.J.A.C. 7:13-2.2(a)3ii. Finally, N.J.A.C. 7:13-2.2(a)3iii exempts isolated ponds or depressions that have no outlet and are, therefore, not connected to a regulated water by a channel or pipe.

It has been the Department's experience that applicants sometimes misinterpret existing N.J.A.C. 7:13-2.2(a)3 and believe that the drainage area limitation does not apply to all three provisions or else that all three criteria must be met for a water to be exempted from this chapter. Therefore, the Department is proposing to merge existing N.J.A.C. 7:13-2.2(a)3i into N.J.A.C. 7:13-2.2(a)3 with clarifying amendments that do not alter the current meaning. The Department is similarly proposing to recodify existing N.J.A.C. 7:13-2.2(a)3ii as proposed new N.J.A.C. 7:13-2.2(a)4 and to clarify that an artificial pond is a type of human made conveyance structure or drainage feature that can qualify for exemption pursuant to this provision. N.J.A.C. 7:13-2.2(a)3iii is proposed for deletion as discussed below.

Existing N.J.A.C. 7:13-2.2(a)3iii excludes isolated waters that drain less than 50 acres because of the assumption that disturbing or filling small features that are isolated from other surface waters would have no adverse effect on flooding or water quality. This is true where an isolated water is constructed by humans, such as a ditch or pipe, which is exempt pursuant to N.J.A.C. 7:13-2.2(a)3ii. However, in areas where specific geologic formations are present, streams can disappear into sinkholes only to reappear and connect to a regulated water a short distance away. For example, this occurs in areas with karst topography, where the surface is underlain by soluble rocks, such as limestone, dolomite, marble, and limestone-clast conglomerate. According to the New Jersey Geological Survey, karst topography covers approximately 350 square miles in the Valley and Ridge, Highlands, and Piedmont Areas of the State and an additional 100 square miles in the coastal plain. See "Karst Features in New Jersey" https://www.state.nj.us/dep/njgs/enviroed/infocirc/karst.pdf (Dalton, 2014). In these areas, it is not uncommon for a naturally occurring surface water with a discernible channel to form, dissolve, and reform, carrying surface runoff that infiltrates through the soluble rock, reappears on the surface, and eventually discharges to other surface waters of the State. In order to ensure that these surface waters continue to provide their important water quality benefits to both surface and groundwater in these regions, the Department is proposing to delete the exemption at existing N.J.A.C. 7:13-2.2(a)3iii. This amendment will

ensure that any naturally occurring surface water with a discernible channel would be suitably protected pursuant to this chapter. Specifically, where such waters drain less than 50 acres, a riparian zone and its attendant water quality protections would be in place around these waters. Where such waters lie within the HUC-14 watershed of a Category One water, they would possess a 300-foot riparian zone pursuant to N.J.A.C. 7:13-4.1(c)1. Similarly, such waters that support threatened and endangered species or are associated with trout would possess a 150-foot riparian zone pursuant to N.J.A.C. 7:13-4.1(c)2. All other waters would possess a 50-foot riparian zone pursuant to N.J.A.C. 7:13-4.1(c)3.

N.J.A.C. 7:13-2.3 Regulated Areas

N.J.A.C. 7:13-2.3 establishes that each regulated water, as identified at N.J.A.C. 7:13-2.2, possesses a flood hazard area and/or a riparian zone. N.J.A.C. 7:13-2.3(b) explains that every regulated water with a drainage area of 50 acres or more possesses a flood hazard area, and N.J.A.C. 7:13-2.3(c) explains that a riparian zone exists along both sides of every regulated water with certain exceptions provided at N.J.A.C. 7:13-2.3(c)1. The Department is proposing to amend these provisions to reference the proposed new inundation risk zone, as well as to amend the list of regulated waters that do not possess a riparian zone, as described below.

N.J.A.C. 7:13-2.3(b)1 explains that the flood hazard area is comprised of a flood fringe and a floodway, except for the Atlantic Ocean and other non-linear tidal waters, which do not have a floodway. A reference is added to indicate that every tidal water possesses an inundation risk zone. N.J.A.C. 7:13-2.3(b)2 is also amended to include the inundation risk zone in the list of jurisdictional areas that can be calculated using the methodologies described at N.J.A.C. 7:13-3.

N.J.A.C. 7:13-2.3(c)1, which provides a list of regulated waters that do not possess a riparian zone, is proposed to be amended to delete two specific references. First, the exemption along New Jersey's barrier island complex at N.J.A.C. 7:13-2.3(c)1ii is proposed for deletion. When riparian zones were first adopted

in 2007, the Department's understanding was that the existing Coastal Zone Management rules at N.J.A.C. 7:7 would sufficiently protect the resources along and around the State's barrier island complex. As noted at N.J.A.C. 7:13-2.3(c)1i, the Atlantic Ocean does not possess a riparian zone, which is appropriate as there is generally no vegetated areas immediately adjacent to the ocean to protect as with other regulated waters and, where vegetation does exist in close proximity to the ocean, it is protected by N.J.A.C. 7:7. However, on the bay side of the barrier islands, due to the exemption at N.J.A.C. 7:13-2.3(c)1ii, there is currently no riparian zone. This establishes a complicated and inequitable situation in which the mainland side of a bay possesses a riparian zone, but the barrier island side does not. For example, along Barnegat Bay, which is designated as a Category One water pursuant to the Department Surface Water Quality Standards at N.J.A.C. 7:9B-1.15, there currently exists a 300-foot riparian zone on the mainland side, but no riparian zone on the barrier island side. As a result, individuals discharging stormwater into Barnegat Bay from the barrier island side of the bay would not be required to meet the 95 percent TSS removal rate required for Category One waters pursuant to N.J.A.C. 7:13-11.2(j)3 and the Department's Stormwater Management rules at N.J.A.C. 7:8-5.5(i). Furthermore, riparian zones provide a buffer to regulated waters, which helps in attenuating the encroachment of floodwaters on development and the potential flood damages that would result.

In order to adequately protect the State's surface waters and to further ensure that water quality protections are equal along all sides of each regulated water, the Department is proposing to delete the exemption from riparian zones along barrier islands. While the ocean side of these islands would continue be exempt pursuant to N.J.A.C. 7:13-2.3(c)1i, through this amendment, a riparian zone would exist along the bay side of the barrier islands, which is necessary to protect existing vegetation from indiscriminate disturbance and to inform and encourage redevelopment projects to increase water quality protections and to find opportunities to restore lost habitat, improve water quality, and enhance other attendant benefits of riparian zones, such as protection against flood risks.

Existing N.J.A.C. 7:13-2.3(c)1iii is amended to replace the term “manmade” with “human created” for gender inclusivity and is also proposed for recodification as N.J.A.C. 7:13-2.3(c)1ii due to the proposed deletion of existing N.J.A.C. 7:13-2.3(c)1ii, discussed above.

The Department is similarly proposing to delete N.J.A.C. 7:13-2.3(c)vi, which states that a “manmade open channel that was created to convey stormwater” does not possess a riparian zone “provided the channel is fully lined with manmade impervious material.” It has been the Department's experience that vegetation often lies immediately outside of such features and that this vegetation performs the same important benefits as any other riparian zone vegetation along regulated waters. For example, it is not uncommon for a ditch to be lined with concrete or asphalt and, pursuant to this provision, no riparian zone protections are afforded to this feature. It should be noted that human-created features that have a drainage area of less than 50 acres do not possess a riparian zone as these waters are not regulated pursuant to N.J.A.C. 7:13-2.2(a)3. However, in cases where a human created feature drains over 50 acres, it possesses a flood hazard area pursuant to N.J.A.C. 7:13-2.3(b) as noted above but would not possess a riparian zone due to the existing exemption at N.J.A.C. 7:13-2.3(c)vi. Regardless of whether a feature is lined with impervious surface material, the vegetation along and adjacent to the feature provides important water quality and other attendant benefits. Therefore, the Department is proposing to delete this exemption in order to place riparian zones along all human-created waters that drain over 50 acres, irrespective of whether the feature is lined with impervious material, except for the Delaware and Raritan Canal, which is exempt from possessing a flood hazard area or riparian zone for reasons discussed in the summary at N.J.A.C. 7:13-2.2(a)1.

Finally, Figures 2.3A and 2.3B are proposed to be replaced with updated graphics (proposed Figures 2.3A, 2.3B, 2.3C, and 2.3D), which more clearly depict the extent of the chapter’s regulated areas, as well as subsets to those areas such as the floodway and the new inundation risk zone. Whereas existing and proposed Figures 2.3A and 2.3B depict the flood hazard area and riparian zone, respectively, proposed

Figure 2.3C illustrates the various components of a tidal flood hazard area, and proposed Figure 2.3D depicts the scenario where a tidal flood hazard area overlaps a fluvial flood hazard area. As noted in the proposed drawing, this is common in the lower reaches of a regulated water near its confluence with the ocean or another tidal waterbody. In Figure 2.3D, the climate-adjusted flood elevation of the tidal water downstream is higher than the flood elevation of the fluvial water. As such, the entire area below the climate-adjusted flood elevation lies within the flood hazard area and is subject to the requirements of this chapter. However, additional standards related to flood storage displacement at N.J.A.C. 7:13-11.4 and dry access during flood events at N.J.A.C. 7:13-12.5 and 12.6, as described below in the summary of these sections, may apply within the fluvial portion of the flood hazard area.

N.J.A.C. 7:13-2.4 Regulated Activities

N.J.A.C. 7:13-2.4(a) sets forth the six classes of activities that are regulated pursuant to this chapter. Existing N.J.A.C. 7:13-2.4(b) explains that a person undertaking an activity not listed at N.J.A.C. 7:13-2.4(a) does not require approval pursuant to this chapter. A reference to the proposed new exemptions at N.J.A.C. 7:13-2.5 is added at N.J.A.C. 7:13-2.4(a) to explain that exempt activities are not subject to the need for an authorization or permit pursuant to N.J.A.C. 7:13-2.4(b).

N.J.A.C. 7:13-2.5 Exempt Activities

The Department is proposing to identify, at proposed N.J.A.C. 7:13-2.5, 14 classes of activities that would otherwise qualify as a regulated activity pursuant to N.J.A.C. 7:13-2.4(a), but which would be exempt from the requirements of this chapter, even if the activity is undertaken within a flood hazard area or riparian zone.

As noted above, the Department is proposing to convert existing permits-by-rule to permits-by-registration and, in limited cases, general permits-by-certification, general permits, or individual permits.

By requiring online activity registration or, in some cases described below, site-specific review of activities currently authorized pursuant to permits-by-rule, the Department will be better able to monitor, enforce, and report on activities in a community or watershed. However, some existing permits-by-rule cover normal maintenance and other minor activities that cannot exacerbate flooding or adversely impact the environment, and which may be required to fulfill the requirements of a permit or authorization. For example, permit-by-rule 1 at existing N.J.A.C. 7:13-7.1 authorizes normal property maintenance activities such as: pruning; selective tree cutting, such as removing a dead, fallen, or unsafe tree; planting native, non-invasive plant species; periodic clearing, cutting, and or removal of vegetation within an actively disturbed are, such as mowing and clearing nuisance vegetation; and removing trash, debris, and dead vegetation by hand. Requiring property owners to register with the Department before undertaking such activities would not provide meaningful data with which to monitor or enforce. Further, it would be burdensome on property owners to be required to register with the Department before mowing a lawn or removing a dead, fallen, or unsafe tree. The Department is, therefore, proposing to convert and, in some cases, combine a number of permits-by-rule into proposed new exemptions at proposed N.J.A.C. 7:13-2.5(a)1 through 14.

The Department is proposing an exemption at proposed N.J.A.C. 7:13-2.5(a)1 for normal property maintenance. This exemption will incorporate the activities and standards from permit-by-rule 1 for normal property maintenance at existing N.J.A.C. 7:13-7.1 and permit-by-rule 7 for placement of no more than five cubic yards of landscaping material at existing N.J.A.C. 7:13-7.7 with no changes to the substantive standards. The exemption additionally covers removing accumulated sediment, debris, or nuisance vegetation from stormwater management structures and associated conveyances, such as basins and storm sewers. This is currently authorized pursuant to the general permit-by-certification for maintenance of existing manmade stormwater management structures and conveyances at N.J.A.C. 7:13-8.11. Removing accumulated sediment, debris, and nuisance vegetation is essential for ensuring that stormwater management systems function as designed, is required as part of the maintenance of the system in

accordance with the Stormwater Management rules at N.J.A.C. 7:8-5.8 and cannot result in adverse impacts to flooding or the environment, it is appropriate to include this activity pursuant to normal property maintenance at proposed N.J.A.C. 7:13-2.5(a)1.

The Department is also proposing to convert permit-by-rule 2 for the repair of a lawfully existing structure at existing N.J.A.C. 7:13-7.2 to an exemption at proposed N.J.A.C. 7:13-2.5(a)2 with no substantive changes to the standards and requirements.

Permit-by-rule 5 for the removal of accumulated sediment and debris from a regulated water by hand at existing N.J.A.C. 7:13-7.5 is proposed to be converted to an exemption at proposed N.J.A.C. 7:13-2.5(a)3 with amendments as follows. All standards from the existing permit-by-rule have been relocated to the proposed exemption and additional standards have been incorporated at proposed subparagraphs (a)3ii, viii, and ix. Specifically, at proposed N.J.A.C. 7:13-2.5(a)3ii, the sediment and debris removal operation must be necessary to maintain positive flow through either a lawfully existing structure or through the channel. It is the need to maintain positive flow that is the primary driver of sediment and debris removal operations. Otherwise, flow within the regulated water cannot move unimpeded from upstream to downstream. At proposed N.J.A.C. 7:13-2.5(a)3viii, the Department proposes a new standard for removal of sediment and debris adjacent to bridges, culverts, and outfall structures owned or controlled by a public entity, that work is limited to within 100-feet upstream or downstream of the structure, which is currently a standard pursuant to general permit-by-certification 9 for sediment and debris removal within and/or adjacent to a bridge, culvert, or outfall by a public entity at existing N.J.A.C. 7:13-8.9(a)4. Thus, some activities that were covered pursuant to this general permit-by-certification are included in the proposed exemption provided the work is performed by hand and meets all other criteria. Publicly owned bridges, culverts, and outfall structures require regular clearing of debris and sediment to maintain functionality of the structure and typically provides water quality benefits to the watercourse. This standard will allow for limited maintenance of watercourses and these publicly owned structures within a reasonable distance of

the structure without the need for a permit or registration. Finally, at proposed N.J.A.C. 7:13-2.5(a)3ix, the Department proposes a new standard that work being done pursuant to proposed N.J.A.C. 7:13-2.5(a)3 is being performed with the full consent of the owner of any property upon which the project is undertaken, which is currently required at existing N.J.A.C. 7:13-8.9(a)6. Watercourses typically span multiple public and private properties, as well as more than one municipal and/or county boundary, which means that, depending upon the extent of the project, these sediment and debris removal activities can involve several properties with different ownership. This standard will help to ensure that the entities conducting these sediment and debris removal activities receive full consent from the owner(s) of any property upon which the project is undertaken.

Permit-by-rule 6, for the removal of major obstructions from a regulated water with machinery at existing N.J.A.C. 7:13-7.6, is proposed to be converted to an exemption at proposed N.J.A.C. 7:13-2.5(a)4. The new exemption maintains all existing standards in permit-by-rule 6 but includes a new specification at proposed N.J.A.C. 7:13-2.5(a)4i that this exemption is intended to be used when removal of the obstruction by hand is not practicable to clarify the limitations pursuant to which this exemption is intended to apply. The exemption also includes a new standard at proposed N.J.A.C. 7:13-2.5(a)4vi, which requires all work to be conducted from one bank and that the existing tree canopy on the more southerly or westerly bank is preserved to minimize impacts to the existing tree canopy, riparian zone vegetation, and stream bank stability and to preserve shading of the watercourse to the maximum extent possible.

An exemption is proposed for exploratory site investigation at proposed N.J.A.C. 7:13-2.5(a)5 that will include the activities currently authorized pursuant to permit-by-rule 44 for surveying activities (existing N.J.A.C. 7:13-7.44), permit-by-rule 45 for geotechnical and archeological investigation activities (existing N.J.A.C. 7:13-7.45), and permit-by-rule 46 for installation of one or more monitoring wells (existing N.J.A.C. 7:13-7.46) as well as general permit-by-certification 12 for surveying and geotechnical and archeological investigation activities at existing N.J.A.C. 7:13-8.12. The proposed exemption combines

the standards of all four existing authorizations into one comprehensive exemption because of the broad similarities between them, but it limits any disturbances to those necessary to complete the specified activity. Furthermore, it has been the Department's experience that riparian zone impacts pursuant to general permit-by-certification 12 are not consistently minimized due to the broad language of the existing permit. The proposed exemption, therefore, states that all surveying must be completed with hand-held equipment, all geotechnical and archeological investigations must be no more than three feet in diameter, no grading or topographical changes may occur in a flood hazard area, all necessary pathways through riparian zone vegetation are limited to 10 feet in width, and trees may only be cut if they obstruct access or be cleared if they are dead or dying. These limitations are necessary to ensure that disturbance to riparian zone vegetation is avoided where possible and minimized.

The Department is proposing an exemption for the general storage of unsecured material at proposed N.J.A.C. 7:13-2.5(a)6 that will include the activities and standards from permit-by-rule 48 for the temporary storage of unsecured construction material outside a floodway at existing N.J.A.C. 7:13-7.48, permit-by-rule 49 for storage of unsecured material associated with a single-family home or duplex at existing N.J.A.C. 7:13-7.49, permit-by-rule 50 for storage of unsecured material associated with a habitable building or facility, other than a single-family home or duplex at existing N.J.A.C. 7:13-7.50, and permit-by-rule 51 for storage of unsecured material associated with a facility that stores and distributes material at existing N.J.A.C. 7:13-7.51. Due to the similar standards in these permits-by-rule, the Department is consolidating them into a comprehensive exemption that also includes the unique standards of each so that the exemption is equally protective and more efficient. The exemption emphasizes and promotes safe practices of the property owner to protect their materials from being lost to floodwaters and to protect those downstream from potential debris in the event of a flood. Therefore, the proposed exemption allows the storage of unsecured material in actively disturbed areas of the site in an amount that is typical for the existing use of the site, whether that be a single-family home, lumberyard, store or business, vehicle

dealership, or any other use that meets the requirements. The proposed exemption allows the storage of hazardous materials if they are essential to the function of the facility, isolated from floodwaters, and stored in accordance with all applicable Federal, State, and local requirements. Unsecured materials may not be stored in a floodway or within 25 feet from any top of bank unless the material was lawfully situated there before November 5, 2007. Finally, the peak volume of stored material may not increase unless the storage is associated with an authorized construction activity, in which case all the material is removed, and the storage area is returned to its prior topography and condition within six months of the material being placed.

Permit-by-rule 52 for the placement, storage, or processing of hazardous substances at existing N.J.A.C. 7:13-7.52 and permit-by-rule 53 for the placement, storage, or processing of solid waste or recyclable materials at a lawfully existing facility at existing N.J.A.C. 7:13-7.53 are proposed as an exemption at proposed N.J.A.C. 7:13-2.5(a)7. The existing permits-by-rule contain similar standards and were, therefore, consolidated into one exemption for efficiency with no change in the permitted substantive standards. Pursuant to the existing permits-by-rule and the proposed exemption, certain facilities that have been in continuous operation since prior to the November 5, 2007, rulemaking may continue to operate without the need for a flood hazard area approval provided all activities are lawfully undertaken and any potential impacts to flooding and the environment have not been increased after this date.

Portions of permit-by-rule 54, for continuation of lawfully existing agricultural activities, at existing N.J.A.C. 7:13-7.54, and permit-by-rule 55 for the commencement of new agricultural activities at existing N.J.A.C. 7:13-7.55 are proposed to be incorporated as an exemption at proposed N.J.A.C. 7:13-2.5(a)8 with substantive changes necessary to ensure the activities pursuant to the exemption will not exacerbate flooding or adversely impact water quality. Existing permit-by-rule 54 authorizes the continuation of lawfully existing agricultural activities, on land that is actively farmed, provided the activities do not result in the displacement of flood storage volume or the construction of an aboveground structure within a flood hazard area. Existing permit-by-rule 55 similarly authorizes the commencement of

new agricultural activities, on land that is not actively farmed, provided the same standards are met, with the additional requirement that any clearing, cutting, and/or removal of riparian zone vegetation is limited to actively disturbed areas. This added standard is not required pursuant to permit-by-rule 54, since actively farmed areas are considered actively disturbed areas pursuant to the definition at N.J.A.C. 7:13-1.2. The proposed exemption combines and simplifies the requirements of these permits-by-rule. Specifically, an existing or proposed agricultural activity is proposed to be exempt from the requirements of this chapter provided the existing ground elevation is not raised within any flood hazard area, that activities within any riparian zone are limited to actively disturbed areas, and no above-ground structure is erected within a regulated area. These limitations ensure that existing or proposed new agricultural activities will not adversely impact the environment or increase flooding. It should be noted that, pursuant to the existing permits-by-rule, grading within a flood hazard area is permitted; provided that the activities do not displace flood storage volume. For example, the ground could be raised in one location and lowered in another to compensate for the raised area. However, it is not generally possible to determine that zero flood storage displacement has occurred on a site unless an engineer analyzes the existing and proposed topography. As this is beyond the scope of exempted activities proposed to be incorporated by this rulemaking, the proposed exemption is appropriately limited to require that the ground is not raised in any flood hazard area. This ensures that flood storage displacement will not occur. Should an existing or proposed new agricultural activity involve raising the ground in a flood hazard area, that activity would require a permit pursuant to this chapter.

The Department is proposing an exemption for the repair, maintenance, and/or dredging of the channel and/or embankments of the Delaware and Raritan Canal at proposed N.J.A.C. 7:13-2.5(a)9 that will incorporate the standards from existing permit-by-rule 27 for repair, maintenance, and/or dredging of a manmade canal at existing N.J.A.C. 7:13-7.27. While proposed N.J.A.C. 7:13-2.2(a)1 provides that the Delaware and Raritan Canal is not itself a regulated water and, therefore, does not possess its own flood

hazard area or riparian zone, the Delaware and Raritan Canal passes through the flood hazard area and riparian zone of many regulated waters. For example, portions of the canal parallel the Delaware, Millstone, and Raritan Rivers and are situated within the flood hazard areas of these rivers. The existing permit-by-rule and proposed exemption are necessary to facilitate the normal operation of the Delaware and Raritan Canal in those portions that lie within the regulated area of another water that is regulated pursuant to this chapter. The exemption applies only to the Delaware and Raritan Canal as work on or to the Delaware and Raritan Canal is overseen by the Delaware and Raritan Canal Commission and/or New Jersey Water Supply Authority, and all work must, therefore, be completed in accordance with the applicable requirements of the Delaware and Raritan Canal State Park Review Zone rules at N.J.A.C. 7:45. As such, even though the flood hazard area and/or riparian zone of other regulated waters may overlap the project area, these activities do not require additional review pursuant to N.J.A.C. 7:13.

The Department is proposing an exemption at proposed N.J.A.C. 7:13-2.5(a)10 that incorporates elements of existing permit-by-rule 33 at N.J.A.C. 7:13-7.33 for the placement of one or more utility poles and permit-by-rule 43 for the placement of traffic safety structures on poles. The proposed exemption covers the placement of one or more utility poles, such as telephone and electric poles, or structures on poles intended to facilitate safe travel along a public roadway, such as overhead signs, variable message signs, streetlights, and traffic signal equipment, in such a way that no adverse impacts to flooding or the environment will occur. Specifically, pursuant to the proposed exemption, no disturbance can be located within 25 feet of any top of bank of a watercourse, except where the pole is replacing an existing structure that cannot be feasibly relocated. Further, no trees are permitted to be cleared, cut, and/or removed in a riparian zone. Activities pursuant to the proposed exemption are more limited than those authorized pursuant to permits-by-rule 33 and 43. Activities that do not meet the proposed exemption will require authorization pursuant to a permit-by-registration, general permit-by-certification, general permit, or individual permit, as appropriate.

Permit-by-rule 40, for milling, repaving, and/or resurfacing of a lawfully existing pavement, at existing N.J.A.C. 7:13-7.40, is proposed as an exemption at proposed N.J.A.C. 7:13-2.5(a)11 with added restrictions to ensure that the activity will not adversely impact flooding or the environment. The proposed exemption mirrors the existing permit-by-rule, except that no riparian zone vegetation may be cleared, cut, or otherwise removed in order to ensure the most *de minimis* impact on flooding and the environment, which is necessary for an activity to qualify for an exemption. In addition, the exemption does not allow for the area of the pavement to be expanded or the elevation of the pavement to be raised more than three inches cumulatively, which will help limit environmental and flooding impacts that result from this activity.

Existing N.J.A.C. 7:13-12.11(b) provides that activities related to the construction, replacement, repair, or removal of certain dams, as well as certain regulated activities performed in association with the removal of those dams, does not require a permit pursuant to this chapter; provided all applicable requirements of the Dam Safety Standards, N.J.A.C. 7:20, are met. This existing exemption is relocated to proposed N.J.A.C. 7:13-2.5(a)12 with the added requirement that the conditions at N.J.A.C. 7:13-2.5(b) are met, as described below.

Permits-by-rule 36, 37, and 39 at existing N.J.A.C. 7:13-7.36, 37, and 39, respectively, are related to the installation of underground utility lines. As discussed below, these existing permits-by-rule broadly include all types of utility lines, such as drinking water, stormwater and sewer lines, natural gas lines, cables, and electric lines. The Department is acknowledging in this rulemaking that prior assumptions about the safety and environmental protection benefits of horizontal directional drilling for the installation of utilities have been updated by more current information and experiences that compel the Department to more closely review the permitting of the placement of certain underground utility lines. Therefore, as discussed in further detail below, these existing permits-by-rule have been converted to a proposed exemption for certain installations that are not accomplished through horizontal directional drilling and a proposed general permit for placement of an underground utility line using horizontal directional drilling

at N.J.A.C. 7:13-9.12. However, the Department additionally acknowledges that there are a class of underground utility lines that can be installed using jacking or open trench construction, which pose significantly less risk of environmental harm when undertaken within carefully circumscribed limits as compared to other types of utilities, whose installation can be considered exempt activities. At proposed N.J.A.C. 7:13-2.5(a)13, the placement of one or more underground utility lines is proposed; provided that no permanent disturbance occurs to any riparian zone, flood hazard area, or channel. The proposed exemption mirrors the existing permit-by-rule at N.J.A.C. 7:13-7.36, with added restrictions that are necessary to ensure that the installation will not exacerbate flooding or adversely impact the environment. Specifically, the utility line cannot be installed using horizontal directional drilling, no excavation, open trench cutting, or other disturbance to land and vegetation may occur within any regulated water or within 25 feet of any top of bank, disturbance to riparian zone vegetation is limited to actively disturbed areas, and all disturbed flood hazard areas are restored to pre-construction topography upon completion of the regulated activity. Additional standards that mirror the provisions of permits-by-rule 36, 37, and 39 related to the placement of manholes, the integrity of the nearby channel and sealing utility line are continued from these permits-by-rule as well.

Permit-by-rule 4, for removal of any lawfully existing fill or structures, at existing N.J.A.C. 7:13-7.4, is proposed as an exemption at proposed N.J.A.C. 7:13-2.5(a)14. The proposed exemption includes the existing requirements from the permit-by-rule 4 that the fill or structure to be removed is not located within a floodway and is to be disposed of outside of any regulated area and in accordance with all applicable Federal, State, and local requirements. However, the proposed exemption simplifies the existing permit-by-rule requirements relating to riparian zone disturbance into one standard that requires that disturbance to riparian zone vegetation is limited to actively disturbed areas.

Proposed N.J.A.C. 7:13-2.5(b) sets forth standard conditions that apply to all exempt activities listed at proposed N.J.A.C. 7:13-2.5(a). These conditions are incorporated from existing N.J.A.C. 7:13-

6.7(b), which applies to authorization pursuant to a permit-by-rule, general permit-by-certification, and general permit, with amendments described below.

Proposed N.J.A.C. 7:13-2.5(b)1 incorporates the requirement at N.J.A.C. 7:13-6.7(b)1 that any new, reconstructed, enlarged, or elevated structure within a flood hazard area shall be secured to resist flotation, collapse, and displacement due to hydrostatic and hydrodynamic forces from floodwaters. An additional provision is proposed that would require structures pursuant to the proposed exemptions to comply with the applicable design and construction standards of the Uniform Construction Code, N.J.A.C. 5:23 and the Federal flood reduction standards, 44 CFR Part 60. These added references mirror the requirement at N.J.A.C. 7:7-9.25(f) for activities pursuant to a coastal permit in a flood hazard area and will help to ensure that exempt activities do not violate local construction codes or municipal floodplain ordinances.

Proposed N.J.A.C. 7:13-2.5(b)2 through 5 incorporate the conditions at existing N.J.A.C. 7:13-6.7(b)2 through 5, respectively, with no change in meaning and with amendments necessary to apply the conditions to the proposed exemptions rather than promulgated permits.

N.J.A.C. 7:13-2.6 Applicability Determination

Pursuant to existing N.J.A.C. 7:13-2.5, a person may request an applicability determination from the Department to determine the applicability of this chapter to a segment of water or to one or more proposed activities. Obtaining an applicability determination is not mandatory but is helpful to persons seeking to undertake activities near the State's waterways in determining their obligations with respect to obtaining a flood hazard area authorization or permit. An applicability determination provides a snapshot of the site conditions and rules applicable at the time of the request. The provision for applicability determinations pursuant to this chapter at N.J.A.C. 7:13-2.5 is proposed to be recodified as N.J.A.C. 7:13-2.6 with substantive amendments discussed below.

Pursuant to this rulemaking, recodified N.J.A.C. 7:13-2.6(a) is proposed to be clarified and amended to better focus on the purpose and scope of an applicability determination. As noted above, an applicability determination is currently available to persons seeking the Department's determination on: (1) whether a regulated activity requires a permit or authorization; and/or (2) whether a feature is considered a regulated water. Pursuant to existing N.J.A.C. 7:13-2.5, the Department could, therefore, determine that a water is (or is not) regulated and, therefore, determine that a flood hazard area or riparian zone exists (or does not exist) not only on the site for which the applicability determination was requested, but potentially on neighboring parcels as well.

However, determining whether a feature constitutes a regulated water pursuant to this chapter depends on a variety of factors, including the drainage area to the feature at various points across the site in question, the topography and drainage patterns of the site, the presence of structures, such as pipes and culverts, whether the feature is human-created or naturally occurring, and whether the feature possesses a discernible channel with bed and banks. It has been the Department's experience that the level of site investigation required to make these determinations is generally beyond the scope of an applicability determination and that applicants seeking to determine whether a feature constitutes a regulated water should instead apply for a verification pursuant to N.J.A.C. 7:13-5. Further, while the applicability determination only represents the Department's findings as to authorizations needed to conduct activities on the property that is the subject of the request, where a request relates not to a particular activity, but more generally to whether a water is or is not a regulated water, the Department's determination effectively determines the applicability of the rules not just to that specific property, but also potentially to neighboring properties along that water. Accordingly, the Department is proposing to amend recodified N.J.A.C. 7:13-2.6(a) to limit applicability determinations to whether a proposed activity requires a permit or authorization pursuant to this chapter.

Recodified N.J.A.C. 7:13-2.6(a) is additionally proposed to be amended to explain that where the Department determines a review of engineering calculations is necessary to make a decision on an applicability determination, or where the applicant's intent is for the Department to determine whether a water is regulated and/or to confirm one or more jurisdictional boundaries applicable to this chapter, the applicant must apply for a flood hazard area verification pursuant to N.J.A.C. 7:13-5. The limitation on the types of determination intended to be made through the applicability determination process is currently specified at existing N.J.A.C. 7:13-2.5(b), which provides that the Department will not undertake a site inspection or review engineering calculations in the context of an applicability determination. However, N.J.A.C. 7:13-2.5(b) is not clear as to whether an applicant in such cases should apply instead for a verification. Given the limited scope of an applicability determination, the Department cannot undertake a review of calculations to make its determination. The existing reference to a site inspection is not continued at proposed N.J.A.C. 7:13-2.6 because, in select circumstances, a site visit by Department staff may be warranted to determine whether a verification is necessary.

The Department is proposing to recodify existing N.J.A.C. 7:13-2.5(c) as 2.6(b) with amendments to delete references to application material related to determining whether a feature constitutes a regulated water, consistent with the proposed amendments at N.J.A.C. 7:13-2.5(a). Furthermore, existing N.J.A.C. 7:13-2.5(d) and portions of existing N.J.A.C. 7:13-2.5(e) are proposed for deletion due to their request for specific information from the applicant to determine whether a water is or is not regulated since, as noted above, the most appropriate vehicle for the Department to make this determination is through the analysis conducted in response to an application for a verification.

Proposed N.J.A.C. 7:13-2.6(b) includes the requirements at existing N.J.A.C. 7:13-2.5(e)1, 2, and 3, which are proposed to be recodified as N.J.A.C. 7:13-2.6(b)4, 5, and 6, respectively. No amendments are proposed to these existing requirements, except that the reference at existing N.J.A.C. 7:13-2.5(e)3 to "NGVD" is proposed to be replaced at new N.J.A.C. 7:13-2.6(b)6 with "NAVD 88" which, as discussed in

the summary above, is the vertical datum established for vertical control surveying based upon the General Adjustment of the North American Datum of 1988.

Pursuant to existing N.J.A.C. 7:13-2.5(d), supplementary information is requested where an applicant seeks to determine whether a water is regulated. Since, as noted above, applying for a flood hazard area verification is the appropriate vehicle to make such determinations, and to reflect the revised scope of an applicability determination, existing N.J.A.C. 7:13-2.5(d) is proposed for deletion.

Existing N.J.A.C. 7:13-2.5(f), which sets forth the Department's process for reviewing and responding to a request for an applicability determination, is proposed to be recodified with amendments as proposed N.J.A.C. 7:13-2.6(c). In addition to updated cross-references, proposed N.J.A.C. 7:13-2.6(c) will be supplemented to reflect the changes proposed to permits-by-registration pursuant to proposed N.J.A.C. 7:13-7 and exemptions pursuant to proposed N.J.A.C. 7:13-2.5.

Existing N.J.A.C. 7:13-2.5(g), which explains to applicants that applicability determinations are subject to change if the Department becomes aware of new information or the proposed regulated activities have changed since the date of the determination's issuance, is continued at proposed N.J.A.C. 7:13-2.6(d) with amendments to reflect the revised scope of applicability determinations.

SUBCHAPTER 3. DETERMINING THE FLOOD HAZARD AREA, FLOODWAY, AND INUNDATION RISK ZONE

Existing N.J.A.C. 7:13-3 sets forth the methods by which the limits of the flood hazard area and floodway are determined based on existing State and Federal flood mapping, by approximation, or by calculation. Specifically, Subchapter 3 sets forth six methods for determining these jurisdictional boundaries upon which the design and construction standards of the chapter are set. The terminology of "Methods 1" through "Method 6" is proposed to be deleted and replaced with a simpler format that establishes additional options for prospective applicants and clarifies the use of mapping resources.

However, the basic concepts of the existing subchapter are continued in the proposed rules, with amendments necessary to include methods for determining the limits of the inundation risk zone and for determining the extent of the flood hazard area and floodway in light of climate change. As noted in the summary above, the Department is incorporating throughout this chapter standards designed to protect public safety, property, and the environment in areas that are likely to be subject to periodic or permanent inundation from sea level rise, as well as increased precipitation expected to occur due to a warming atmosphere.

Pursuant to proposed Subchapter 3, the method for determining the climate-adjusted flood elevation, from which the extent of the flood hazard area is determined, is described. Existing N.J.A.C. 7:13-3.1, General provisions for determining the flood hazard area and floodway along a regulated water, 3.2, Selecting a method for determining the flood hazard area and floodway along a regulated water, and 3.4, Flood hazard area and floodway based on FEMA flood mapping (Methods 2 through 4), are proposed for repeal. In their place, new methods are proposed utilizing Department delineations, FEMA flood mapping, and calculations to determine the regulatory extent of the climate-adjusted flood elevation and the flood hazard area and floodway limits. Methods are additionally proposed for determining the inundation risk zone based on mapping provided by the Department or by site-specific survey work.

The proposed subchapter is structured as follows. Proposed new N.J.A.C. 7:13-3.1 provides a roadmap for the contents of the subchapter, including a reference to proposed N.J.A.C. 7:13-3.4, which specifies the procedure for determining the proposed inundation risk zone, and reestablishes general provisions for determining the extent of the areas regulated pursuant to this chapter. Proposed new N.J.A.C. 7:13-3.2 and 3.3 establish the framework for determining the flood hazard area and floodway, respectively, along a regulated water and proposed new N.J.A.C. 7:13-3.4 sets forth two methods for determining the extent of the new inundation risk zone. Recodified N.J.A.C. 7:13-3.5 amends existing N.J.A.C. 7:13-3.3, which addresses how to obtain and interpret flood data from a Department delineation considering the

impacts of climate change. Proposed new N.J.A.C. 7:13-3.6 similarly addresses how to obtain and interpret flood data from available FEMA flood mapping with an added factor of safety to consider climate impacts. Recodified N.J.A.C. 7:13-3.7 amends existing N.J.A.C. 7:13-3.5 and sets forth the method by which the climate-adjusted flood elevation can be approximated in limited cases. Recodified N.J.A.C. 7:13-3.8 amends existing N.J.A.C. 7:13-3.6, which establishes the parameters and methods for determining the climate-adjusted flood elevation and floodway limit along a regulated water through hydrologic and hydraulic calculations. Finally, recodified N.J.A.C. 7:13-3.9 amends the application process for revising a Department delineation, which is set forth at existing N.J.A.C. 7:13-3.7, and N.J.A.C. 7:13-3.10 is recodified without change from N.J.A.C. 7:13-3.8, which sets forth the process by which the Department can revise or suspend the use of a Department delineation.

N.J.A.C. 7:13-3.1 General Provisions for Determining the Flood Hazard Area, Floodway, and Inundation Risk Zone Along a Regulated Water

As indicated above, proposed N.J.A.C. 7:13-3.1 provides a roadmap of the location of general provisions included within the subchapter for determining the flood hazard area, floodway, and inundation risk zone along a regulated water.

Proposed N.J.A.C. 7:13-3.1(a) establishes that there are four sources of data that can be used to determine the flood hazard area and floodway and includes a cross-reference as to where further information as to each method is codified. Specifically, the use of a Department delineation to determine the climate-adjusted flood elevation and floodway is set forth at proposed N.J.A.C. 7:13-3.5. Similarly, the climate-adjusted flood elevation and floodway can be determined from FEMA flood mapping as set forth at proposed N.J.A.C. 7:13-3.6, the climate-adjusted flood elevation can be approximated pursuant to proposed N.J.A.C. 7:13-3.7, and an applicant can determine the climate-adjusted flood elevation and floodway using calculations pursuant to proposed N.J.A.C. 7:13-3.8.

Proposed N.J.A.C. 7:13-3.1(b) explains that the procedure for determining the inundation risk zone is set forth at proposed N.J.A.C. 7:13-3.4.

Proposed N.J.A.C. 7:13-3.1(c), which incorporates existing N.J.A.C. 7:13-3.1(c) and explains that the terms used for jurisdictional areas pursuant to this chapter may differ from the terms used by other entities, is proposed to be amended to include a reference to a "drainage easement," which is a commonly used term that can have a variety of meanings, and "inundation risk zone," which is a proposed new term that could be defined by other entities differently from proposed new N.J.A.C. 7:13-3.4.

Proposed N.J.A.C. 7:13-3.1(d), incorporates the substance of existing N.J.A.C. 7:13-3.2(a) into the proposed new section and explains that there are numerous factors that influence an applicant's selection of a method for determining the flood hazard area and floodway on a given site. The language of the existing subsection is proposed to be amended for clarity.

N.J.A.C. 7:13-3.2 Determining the Flood Hazard Area Along a Regulated Water

Proposed N.J.A.C. 7:13-3.2 establishes the means of determining the climate-adjusted flood elevation, from which the limits of the flood hazard area can be determined. Proposed N.J.A.C. 7:13-3.2(a) explains that the flood hazard area is comprised of any land, and the space above that land, on a site that lies below the climate-adjusted flood elevation.

Proposed N.J.A.C. 7:13-3.2(b) specifies how the climate-adjusted flood elevation along a tidal regulated water is determined with two options provided. Particularly, that elevation can be based on available flood mapping pursuant to proposed N.J.A.C. 7:13-3.2(b)1 or, if the applicant so chooses, by calculation, irrespective of the availability of flood mapping pursuant to N.J.A.C. 7:13-3.2(b)2.

Where the applicant chooses to determine the climate-adjusted flood elevation in tidal areas using available flood mapping, proposed N.J.A.C. 7:13-3.2(b)1 establishes that the climate-adjusted flood elevation is five feet above the 100-year flood elevation depicted on either a Department delineation or on

FEMA flood mapping, whichever results in a higher flood elevation, to account for projected sea level rise in New Jersey. Further, as explained in the definition of "FEMA flood mapping" at N.J.A.C. 7:13-1.2, an applicant using FEMA's 100-year flood elevation shall use the higher of the most recent effective map or any newer advisory, preliminary, or pending map, whichever is most recent.

As noted above, FEMA's flood mapping, as well as Department delineations, are based on data that considers only past flood events and do not anticipate a changing climate. As such, many homes, businesses, roads, and properties lie outside the existing flood hazard area limits but lie within the adjacent area that is anticipated to be within the 100-year floodplain by 2100 (Kopp et al., 2019). There are currently no protections in place for individuals proposing activities in this future flood hazard area. As discussed in the overview of this rulemaking above, it is imperative that roads, buildings, and other structures upon which communities and individuals depend are designed and constructed in flood prone areas not only to withstand the depth and frequency of flooding anticipated today based on analyses of past precipitation and flood data, but also to be appropriately flood resistant for anticipated future flood events. The Rutgers STAP report referenced above concludes that there is a 50 percent probability that sea level rise in New Jersey will exceed 3.3 feet and a 17 percent probability that sea level rise in New Jersey will exceed 5.1 feet by the year 2100 using a moderate emissions scenario. Given that there is a 50 percent probability that sea level rise will exceed 3.3 feet, structures designed to this elevation would have a 50 percent probability of failure, which is not appropriately protective of public health, safety, and welfare. The Department is, therefore, proposing to use the 17 percent probability of 5.1 feet of sea level rise, rounded in the rulemaking to five feet for simplicity, which greatly reduces the likelihood that structures built to the climate-adjusted flood elevation will sustain flood damage in the future. Since most buildings and infrastructure built today are likely to be occupied and/or serviceable in 2100, the FHACA and CZM rules will require structures to be protected from today's flood risks and reasonably foreseeable flooding risks in the future. Pursuant to the rulemaking, new, reconstructed, and modified roads and buildings would be designed to be flood

resistant to the climate-adjusted flood elevation which, in tidal areas, is the FEMA 100-year flood elevation plus five feet, which approximates the 17 percent probability of exceedance discussed above. (For specific design and construction standards, see proposal summary and rule text below for N.J.A.C. 7:13-12.5, Requirements for a building, and 12.6, Requirements for a railroad, roadway, parking area, or airport runway or taxiway) One of the important functions of this forward-looking flood hazard area would be to increase public awareness of the inherent risk in building in these areas that will likely be subject to sunny-day or complete inundation by the year 2100.

Proposed N.J.A.C. 7:13-3.2(b)1 additionally incorporates the substance of existing N.J.A.C. 7:13-3.3(b)1, which provides for a potential future scenario in which the Department revises or promulgates a new delineation to account for changes in flood elevations due to anticipated increases in sea level rise. In such a case, it would not be necessary to add five feet to the flood profile and the climate-adjusted flood elevation in this scenario would simply be that which is shown on the revised or new flood profile of the Department delineation.

Pursuant to N.J.A.C. 7:13-3.2(b)2, prospective applicants can alternately calculate the climate-adjusted flood elevation based on the data and methodologies utilized by FEMA to determine its most recent 100-year flood elevation, but which includes new topographic or other relevant data for the region and/or site being analyzed, pursuant to N.J.A.C. 7:13-3.8, as discussed below. The calculated climate-adjusted flood elevation cannot, however, be less protective than minimum NFIP standards, as established in the municipal floodplain ordinance for each community in which the site is located. This is necessary to ensure that activities authorized pursuant to the FHACA and CZM rules do not conflict with standards established pursuant to the Federal flood reduction standards at 44 CFR 60.3. An exception is made where the applicant is a State agency since State projects would not be subject to municipal flood ordinances. In such a case, compliance with this chapter shall constitute compliance with minimum NFIP standards for the purpose of the proposed paragraph.

Proposed N.J.A.C. 7:13-3.2(c) establishes the method by which the climate-adjusted flood elevation in fluvial areas is determined based upon available State or Federal flood mapping or, alternately, in certain cases by approximation, or in any case at the applicant's choosing by calculation.

Where the applicant chooses to determine the climate-adjusted flood elevation in fluvial areas using available flood mapping, proposed N.J.A.C. 7:13-3.2(c)1 establishes that the climate-adjusted flood elevation is the higher of either: (1) the design flood elevation from State flood maps plus a two-foot factor of safety; or (2) FEMA's 100-year flood elevation plus a three-foot factor of safety. An exception to the additional two feet factor of safety on State flood maps in cases where, subsequent to its Inland Flood Protection rulemaking, the Department revises or adopts a new flood profile in accordance with proposed N.J.A.C. 7:13-3.10 to account for changes in flood elevations due to increased precipitation. Should the Department undertake such a remapping effort, the climate-adjusted flood elevation would be that which is shown on the revised flood profile. Alternately, along waters for which FEMA mapping is not available, or where a party disputes the accuracy of FEMA mapping or a Department delineation, future precipitation projections for the 100-year event can be used to calculate flood flows and associated flood elevations as discussed below.

Proposed N.J.A.C. 7:13-3.2(c)2 provides that the climate-adjusted flood elevation is to be approximated in accordance with N.J.A.C. 7:13-3.7, when no Department delineation or FEMA flood mapping exists, and the applicant does not wish to calculate a climate-adjusted flood elevation in accordance with proposed N.J.A.C. 7:13-3.8 as allowed pursuant to proposed N.J.A.C. 7:13-3.2(c)3. This is the same process established in the existing FHACA rules, whereby applicants cannot approximate flood elevations in cases where the State or Federal government has developed detailed flood mapping, which would generally be more accurate than the elevations provided in the approximate method and which additionally must be utilized as a minimum design flood by communities participating in the National Flood Insurance Program.

Proposed N.J.A.C. 7:13-3.2(c)3 provides that, irrespective of the availability of flood mapping, the climate-adjusted flood elevation may be determined by calculation in accordance with N.J.A.C. 7:13-3.8. As with calculating the climate-adjusted flood elevation in tidal areas, the resulting flood elevation cannot be less protective than minimum NFIP standards as established in by rule or floodplain ordinance for the NFIP-participating community in which the site is located. As with proposed N.J.A.C. 7:13-3.2(b)2, an exception is made where the applicant is a State agency since State projects would not be subject to municipal flood ordinances.

N.J.A.C. 7:13-3.3 Determining the Floodway Along a Regulated Water

Similar to proposed N.J.A.C. 7:13-3.2, which establishes the methods by which the climate-adjusted flood elevation can be determined in tidal and fluvial areas, proposed N.J.A.C. 7:13-3.3 sets forth the methods by which the floodway limits can be determined. Proposed N.J.A.C. 7:13-3.3(a) explains that proposed N.J.A.C. 7:13-3.3(b) addresses tidal areas and proposed N.J.A.C. 7:13-3.3(c) addresses fluvial areas.

Proposed N.J.A.C. 7:13-3.3(b)1 consolidates and continues with clarifying amendments, the provisions at existing N.J.A.C. 7:13-3.2(b)2 for Department delineations and existing N.J.A.C. 7:13-3.4(d)2 where FEMA flood mapping is utilized, which establish that the floodway limits are as depicted by these maps, as well as existing N.J.A.C. 7:13-3.2(c)1, which provides that the flood map with the wider floodway limit shall be used. Proposed N.J.A.C. 7:13-3.3(b)1i reiterates N.J.A.C. 7:13-2.3(b)1, which establishes that the Atlantic Ocean and other non-linear tidal waters such as bays and inlets do not possess a floodway. Finally, proposed N.J.A.C. 7:13-3.3(b)1ii continues existing N.J.A.C. 7:13-3.4(d)2, which establishes that, where FEMA flood mapping does not provide a floodway limit for the section of regulated water in question, the floodway limit shall be equal to the top of bank along the regulated water or channel. An added provision at N.J.A.C. 7:13-3.3(b)1ii addresses cases where the Department concludes that the

floodway determined in this manner would not be suitably protective of public health, safety, and welfare. In such a case, the floodway shall be determined by calculation in accordance with proposed N.J.A.C. 7:13-3.3(b)2.

Similar to proposed N.J.A.C. 7:13-3.2(b)2 for determining the climate-adjusted flood elevation in tidal areas, proposed N.J.A.C. 7:13-3.3(b)2 provides that the floodway limit in tidal areas may be determined by calculation in accordance with N.J.A.C. 7:13-3.8, irrespective of the availability of flood mapping. As with calculating the climate-adjusted flood elevation, the resulting floodway limit cannot be less protective than minimum NFIP standards as established in by rule or floodplain ordinance for each community in which the site is located. Where the applicant is a State agency, compliance with this chapter shall constitute compliance with minimum NFIP standards for the purpose of this section since State projects would not be subject to municipal flood ordinances. The floodway limit determined in this manner may additionally not be situated inside the top of bank on either side of a channel since this would conflict with the definition of "floodway" at N.J.A.C. 7:13-1.2, which provides that "the floodway always includes the channel and often includes land adjacent to the channel."

Proposed N.J.A.C. 7:13-3.3(c) provides two methods for determining the floodway limit along fluvial regulated water. Pursuant to proposed N.J.A.C. 7:13-3.3(c)1, the floodway limit is equal to the floodway line that is farther outward from the channel at any given point along the regulated water as depicted on a Department delineation or FEMA flood mapping. Where no floodway line is depicted on either map, or the floodway limit must be known for the Department to determine compliance with a proposed regulated activity, the floodway limit must be determined by calculation in accordance with N.J.A.C. 7:13-3.3(c)2. This provision mirrors proposed N.J.A.C. 7:13-3.3(b)1 for determining the floodway limit in tidal areas utilizing State or Federal flood mapping and continues the procedure outlined at existing N.J.A.C. 7:13-3.2(c)1, which provides that the flood map with the wider floodway limit shall be used.

Proposed N.J.A.C. 7:13-3.3(c)2 provides that, irrespective of the availability of flood mapping, the floodway limit may be determined by calculation, subject to the same rationale and conditions established at proposed N.J.A.C. 7:13-3.3(b)2 for determining the floodway in tidal areas.

N.J.A.C. 7:13-3.4 Determining the Inundation Risk Zone Along a Regulated Water

As discussed in the introduction to this rulemaking above, the Department proposes to create a new regulatory area referred to as the "inundation risk zone," which encompasses currently dry land that is expected to be inundated by tidal waters daily or permanently by 2100, based on the findings of the Rutgers STAP report (Kopp et al., 2019). As sea levels rise, dry land adjacent to the current shoreline will become inundated more frequently and, in some cases, permanently. Current and proposed development in the inundation risk zone, therefore, carries exceptional risk to life and property. The Department is, therefore, proposing to adopt a new, highly protective regulatory framework to evaluate proposed development in the inundation risk zone. Standards for development within the inundation risk zone are set forth at proposed N.J.A.C. 7:13-11.5, including a written "inundation risk assessment" that evaluates potential economic and other costs to current or future property owners, including government entities for activities on public land, associated with the projected present or future flooding and inundation risk.

Proposed N.J.A.C. 7:13-3.4(a) explains that the limit of the inundation risk zone may be established using mapping provided by the Department pursuant to N.J.A.C. 7:13-3.4(b) or by using detailed site-specific and local topography pursuant to N.J.A.C. 7:13-3.4(c).

Proposed N.J.A.C. 7:13-3.4(b) provides a link to an interactive mapping tool available from the Department at https://dep.nj.gov/inland-flood-protection-rule/flood-tool/. This mapping, which was adapted from an online tool developed by Rutgers University, is based upon a likely occurrence of expected sea level rise by the year 2100 assuming a greenhouse gas emissions scenario that approximately corresponds to a continuation of current global climate policies. (See https://www.njfloodmapper.org for

more information on Rutgers' mapping tools and ongoing efforts to raise awareness of the impacts of climate change.) The Department's mapping identifies all land that lies within five feet of the elevation of the mean higher high water line proximate to the area in question. For example, if the elevation of the mean higher high water line at a given location is 2.3 feet NAVD 88, the Department's map would depict all nearby land that lies below elevation 7.3 feet NAVD 88. As with all mapping tools that depict the horizontal extent of an area based on elevation contours, the accuracy of the map is directly related to the resolution of the underlying topographic data. In cases where an applicant chooses to base the inundation risk zone on site-specific topography, N.J.A.C. 7:13-3.4(c) establishes a means by which the inundation risk zone can be established for the applicant's site.

Pursuant to proposed N.J.A.C. 7:13-3.4(c), an applicant asserting that determining the inundation risk zone based on Department mapping pursuant to N.J.A.C. 7:13-3.4(b) would result in an incorrect location for the inundation risk zone on a given site, can alternately determine the limits of the inundation risk zone based on site specific survey data, as set forth at proposed N.J.A.C. 7:13-3.4(c)1 and 2. Pursuant to this method, a New Jersey licensed professional land surveyor must determine the elevation of the ground at the mean higher high water line along the tidal waterway(s) in proximity to the site in question to the nearest 0.1 foot. In cases where multiple elevations determined in this manner are within proximity of the site, the highest ground elevation of the surveyed points shall be selected. For example, tidal water may possess several tributaries that encompass or lie near a site. In such a case, the inundation risk zone is determined by identifying any land on the site in question that lies within five feet of the elevation of the mean higher high water line determined in this manner. An example is provided, which is repeated above, to illustrate how to utilize this method.

N.J.A.C. 7:13-3.5 Determining the Flood Hazard Area and Floodway from a Department Delineation

Existing N.J.A.C. 7:13-3.3, Flood hazard area and floodway based on a Department delineation (Method 1), is proposed to be recodified with amendments as N.J.A.C. 7:13-3.5 with a new heading that better describes the purpose of the section.

N.J.A.C. 7:13-3.5(a) continues existing N.J.A.C. 7:13-3.3(a) and sets forth the scope of the section. The subsection is amended to explain that N.J.A.C. 7:13-3.2 and 3.3 establish the procedure for determining the climate-adjusted flood elevation and floodway, respectively, from State and Federal mapping products. Contact information for the Department is additionally updated.

N.J.A.C. 7:13-3.5(b) continues existing N.J.A.C. 7:13-3.3(b) and explains how to interpret flood information from a Department delineation. Language added as part of the Inland Flood Protection Rule on July 17, 2023, which adds two feet to the design flood elevation, is proposed to be relocated to proposed N.J.A.C. 7:13-3.2(b) and (c), pursuant to which the proposed climate-adjusted flood elevation is equal to two feet above the design flood elevation depicted on a Department delineation.

Added references to the climate-adjusted flood elevation at N.J.A.C. 7:13-3.2 and floodway at N.J.A.C. 7:13-3.3 are included here as well. N.J.A.C. 7:13-3.5(c) continues, without amendment, existing N.J.A.C. 7:13-3.3(c), which establishes that effective FEMA flood mapping that includes the Department's flood hazard area design flood elevation are incorporated into this chapter as the Department delineation of the regulated water. N.J.A.C. 7:13-3.5(d) continues, without amendment ,existing N.J.A.C. 7:13-3.3(d), except for an updated cross-reference for applicants seeking to modify a Department delineation, to reflect restructuring of the subchapter. Finally, N.J.A.C. 7:13-3.5(e) continues, without amendment, existing N.J.A.C. 7:13-3.3(e), which explains how calculations based on a Department delineation should be utilized.

N.J.A.C. 7:13-3.6 Determining the Flood Hazard Area and Floodway from FEMA Flood Mapping

Proposed N.J.A.C. 7:13-3.6 replaces existing N.J.A.C. 7:13-3.4, which establishes three methods pursuant to which FEMA flood mapping may be utilized to determine the flood hazard area and floodway. The proposed section continues the concepts set forth at existing N.J.A.C. 7:13-3.4 with amendments necessary to adapt the use of FEMA flood mapping to determine the proposed climate-adjusted flood elevation and floodway limits.

Proposed N.J.A.C. 7:13-3.6(a) sets forth the scope of the section and explains that FEMA flood mapping can be used to determine the climate-adjusted flood elevation and floodway pursuant to proposed N.J.A.C. 7:13-3.2 and 3.3, respectively.

Proposed N.J.A.C. 7:13-3.6(b) continues the concepts set forth at existing N.J.A.C. 7:13-3.4 for interpreting the 100-year flood elevation and floodway limits from FEMA flood mapping. FEMA flood mapping generally contains a profile of each stream or river included in the community's Flood Insurance Study, showing the exact flood elevation along the water in question. FEMA flood mapping also typically contains a Flood Insurance Rate Map that approximates the extent of the floodplain based on the elevation shown on the flood profile at various locations. For purposes of determining the extent of jurisdiction pursuant to this chapter, it is critical that the most accurate flood data be utilized. Thus, existing N.J.A.C. 7:13-3.4 and proposed N.J.A.C. 7:13-3.6 both direct applicants to refer to the flood profile to determine the limits of the flood hazard area on a given site rather than using the approximation of the extent of flooding depicted on Flood Insurance Rate Map, which comports with the Department's longstanding practice, and which is supported by FEMA. However, a different approach is taken at proposed N.J.A.C. 7:13-3.6(b)2 for determining the floodway, which continues the methods set forth at N.J.A.C. 7:13-3.4(d)2 and (e)2. Since the floodway is a mathematically calculated subset of the flood hazard area, which is determined using complex hydrologic and hydraulic calculations, the regulatory floodway limit for the purposes of this chapter is exactly as depicted on FEMA flood mapping and is not affected by the accuracy of the underlying

topography. As with the method of determining the floodplain limits above, this comports with the Department's longstanding practice and is supported by FEMA.

Proposed N.J.A.C. 7:13-3.6(c) continues the concepts set forth at existing N.J.A.C. 7:13-3.4(c)1 and 2. Consistent with those existing paragraphs, the proposed subsection specifies that it is not possible to determine the flood elevation from FEMA flood mapping if a flood depth or flood elevation is not depicted. In some cases, the extent of flooding is approximated by FEMA based on historical observation or other means in what is referred to as an unnumbered A-zone. Since such mapping provides no elevation or depth information, it is not possible to use such mapping to determine the climate-adjusted flood elevation, flood hazard area, or floodway.

Finally, proposed N.J.A.C. 7:13-3.6(d) directs applicants who assert that FEMA flood mapping on their site is incorrect to contact FEMA and to seek to have the map revised through FEMA's process. Pursuant to the existing rules, applicants asserting that FEMA flood mapping is incorrect can apply for a flood hazard area verification based on Method 6, pursuant to which the Department would review hydrologic and hydraulic calculations of the flood hazard area and floodway. Pursuant to existing Method 6, where the Department determines the applicant's proposed mapping is more accurate, the applicant would be authorized to utilize the flood hazard area and floodway calculated in that manner for the purposes of determining compliance with the requirements of this chapter. However, FEMA has asserted that pursuant to the existing process the Department could verify and approve activities based on mapping that does not meet minimum NFIP standards for the community in question. In order to better align the FHACA rules with FEMA's standards, and in recognition that FEMA is the appropriate agency to interpret and, where necessary, revise its flood mapping products, the Department is proposing to require applicants contesting FEMA flood mapping to appeal to FEMA instead of the Department in such cases. However, applicants will remain able to calculate the flood plain themselves through these rule standards, without requesting map revisions from FEMA.

N.J.A.C. 7:13-3.7 Determining the Flood Hazard Area by Approximation

Existing N.J.A.C. 7:13-3.5, Flood hazard area determined by approximation (Method 5), is proposed to be recodified as N.J.A.C. 7:13-3.7 with clarifying amendments that do not change the intent of the existing section and with a new heaing that better describes its purpose. References to the existing methods are proposed to be updated and the term "flood hazard area design flood elevation" is replaced with "climate-adjusted flood elevation" as is proposed throughout the chapter. Proposed N.J.A.C. 7:13-3.7(b)1 consolidates existing N.J.A.C. 7:13-3.5(b)1 and 2, which explain that flood elevations cannot be approximated where a Department delineation or FEMA flood mapping exists, as these mapping products will provide a more accurate assessment of flood risks.

N.J.A.C. 7:13-3.8 Determining the Flood Hazard Area and Floodway by Calculation

Existing N.J.A.C. 7:13-3.6, Flood hazard area determined by calculation (Method 6), is proposed to be recodified as N.J.A.C. 7:13-3.8 with clarifying amendments that do not change the intent of the existing section, as well as substantive changes discussed below, and with a new heading that better describes its purpose. As with other methods proposed to be amended, the term "flood hazard area design flood elevation" is replaced with the new term "climate-adjusted flood elevation."

Proposed N.J.A.C. 7:13-3.8(a) sets forth the scope of the section with minor clarifying amendments to existing N.J.A.C. 7:13-3.6(a). Proposed N.J.A.C. 7:13-3.8(b) consolidates and incorporates, with clarifying amendments, existing N.J.A.C. 7:13-3.6(b), which establishes cases in which the method set forth in this section is the only means by which the flood hazard area and floodway limits can be determined.

Recodified N.J.A.C. 7:13-3.8(c) recodifies with amendments existing N.J.A.C. 7:13-3.6(c) relating to determining the flood hazard area along tidal and fluvial regulated waters, pursuant to N.J.A.C. 7:13-3.8(c)1 and 2, respectively.

Recodified N.J.A.C. 7:13-3.8(c)1 sets forth the method for determining the flood hazard area and floodway limits in a fluvial flood hazard area. The method set forth is equivalent to the method for determining the flood hazard area design flood elevation established at existing N.J.A.C. 7:13-3.6(c)1 with amendments to citations based on restructuring of the section and the inclusion of the term climate-adjusted flood elevation.

Recodified N.J.A.C. 7:13-3.8(c)2 sets forth the method for determining the flood hazard area and floodway limits in a tidal flood hazard area. The method set forth is equivalent to the method established at existing N.J.A.C. 7:13-3.6(c)2 with the added requirement that the climate-adjusted flood elevation is five feet above the calculated 100-year flood elevation. This is consistent with the climate-adjusted flood elevation established at proposed N.J.A.C. 7:13-3.2(b)1, as discussed above.

Proposed new N.J.A.C. 7:13-3.8(d) provides considerations and parameters for the hydrologic and hydraulic analyses set forth at proposed N.J.A.C. 7:13-3.8(c). Proposed new N.J.A.C. 7:13-3.8(d)1 provides guidance on determining peak flow rates for use pursuant to this section based on the rainfall-runoff method developed by the USDA's Natural Resources Conservation Service (NRCS). The most common method submitted for Department review is that which is described in the NRCS publication Technical Release 55 (TR-55), Urban Hydrology for Small Watersheds, which establishes procedures to calculate storm runoff volumes, peak discharge rates, and hydrographs required for flood analyses and delineations. It uses a hypothetical design storm and an empirical nonlinear runoff equation to compute runoff volumes and a dimensionless unit hydrograph to convert those volumes into runoff hydrographs. Proposed N.J.A.C. 7:13-3.8(d) outlines the considerations and parameters that are to be applied to proposed N.J.A.C. 7:13-3.8(c) above.

Proposed N.J.A.C. 7:13-3.8(d)1 explains which unit hydrograph is to be used pursuant to the NRCS method. A hydrograph is a plot of flow rate versus time at a specific point in a watercourse. A unit hydrograph is a hydrograph resulting from one inch of excess precipitation generated uniformly throughout

a watershed at a uniform rate over a specified period of time. Historically, the standard unit hydrograph (commonly known as the 484 unit hydrograph) has been utilized when calculating flow rates in New Jersey. In recent years, an additional unit hydrograph, called the Delmarva unit hydrograph, has been utilized in specific watersheds in the Coastal Plain characterized by flat topography, low relief, and significant surface storage. While both unit hydrographs will compute the same volume of runoff for any given storm event, the standard unit hydrograph produces a higher peak flow rate than the Delmarva unit hydrograph. The Department supports the use of NRCS methodologies in accordance with NRCS's guidelines, which permit the Delmarva unit hydrograph to be used in these limited cases. Proposed N.J.A.C. 7:13-3.8(d)2 establishes that hydrologic calculations pursuant to this section are not to be based on the Rational Method or Modified Rational Method. As noted above, the NRCS Methodology has NRCS as an authoritative source to update the theory, input parameters, calculations, and design methods in response to the ongoing scientific studies for new developments in hydrology, which improves the accuracy of the modeling of runoff volume, flow rate, and hydrographs. In contrast, the decades-old Rational Method and Modified Rational Method were based on oversimplification of a complicated hydrological process. They also lack a unified authoritative source for the input parameters and the updates of the methods to the new scientific studies related to the development of hydrology. In light of the extreme weather that results from the upward trend of precipitation depth and more frequently intense storms, a hydrologic methodology that provides more accurate calculations and updates to ongoing studies of climate change is preferred. Therefore, the Department is making clear that the Rational Method and the Modified Rational Method cannot be utilized for the purposes of this section.

N.J.A.C. 7:13-3.8(d)3 through 6 are recodified from the existing N.J.A.C. 7:13-3.6(c)3 through 6 without substantive amendment and provide additional parameters for calculations pursuant to this section.

N.J.A.C. 7:13-3.9 Revision of a Department Delineation by Application

Existing N.J.A.C. 7:13-3.7, which establishes the process by which a Department delineation can be amended by application to the Department, is proposed to be recodified with amendments as proposed N.J.A.C. 7:13-3.9. A new provision is proposed at N.J.A.C. 7:13-3.9(b), which mirrors the provision at proposed N.J.A.C. 7:13-3.6(d) relating to amendments to FEMA mapping products. As described at existing N.J.A.C. 7:13-3.3(c) and proposed N.J.A.C. 7:13-3.5(c), FEMA can, in some cases, map the flood hazard area design flood elevation and corresponding flood hazard area limits on Flood Insurance Rate Maps. Should a person wish to contest such mapping, they are directed to appeal to FEMA directly.

N.J.A.C. 7:13-3.10 Revision or Suspension of a Department Delineation by the Department

Existing N.J.A.C. 7:13-3.8, which establishes the process by which the Department can revise or suspend the use of a Department delineation, is recodified as proposed N.J.A.C. 7:13-3.10 with amendment to update a cross-reference to reflect other proposed changes.

SUBCHAPTER 4. DETERMINING THE RIPARIAN ZONE

N.J.A.C. 7:13-4.1 The Riparian Zone

Existing N.J.A.C. 7:13-4.1(c)2 identifies regulated waters that are subject to a 150-foot-wide riparian zone. Existing N.J.A.C. 7:13-4.1(c)2iii, which makes the 150-foot-wide riparian zone applicable to segments of a regulated water flowing through an area that contains threatened or endangered species, or their habitat, that are "critically dependent on the water for survival," is proposed for amendment to clarify and expand the criteria for stream segments to be considered for 150-foot-wide riparian zone designation and define threatened and endangered species that are critically dependent on the regulated water for survival for the purposes of the subparagraph. With the proposed amendments, this provision would state that any segment of a water flowing through a flood hazard area that contains a threatened or endangered species, which is critically dependent on the regulated water for survival, and/or present or

documented habitat for those species, and all upstream waters (including tributaries) located within one mile of such habitat (measured along the length of the regulated water) will be afforded a 150-foot riparian zone. The proposed amendment to qualify the "area" that a segment of water flows through as a flood hazard area, rather than just an "area," will clarify situations where threatened or endangered species that are critically dependent on the regulated water for survival and/or present or documented habitat for these species are present on one side of the stream, but not necessarily on the other. An area that contains a threatened or endangered species that is critically dependent on the regulated water for survival and/or present or documented habitat for those species, should be given adequate riparian zone protections, regardless of whether that habitat exists on one or both sides of the stream segment.

N.J.A.C. 7:13-4.1(c)2iii is also amended to align with the proposed definition for threatened or endangered species that are critically dependent on the regulated water for survival at newly codified N.J.A.C. 7:13-4.1(c)2iii(1).The proposed definition states that, a critically dependent species means an endangered or threatened fauna or flora species that breeds, rests, or feeds within a regulated water or its associated flood hazard area and which is dependent on the maintenance of specific stream flows, water quality, and/or hydrologic and flooding regimes for their continued existence and propagation. Historically, the absence of a definition for threatened or endangered species that are critically dependent on the regulated water for survival has contributed to confusion and an apparent disconnect between how the Flood Hazard Area Control Act rules and Freshwater Wetland Protection Act rules regulate threatened and endangered species and their habitat. The proposed definition of threatened or endangered species that are critically dependent on the regulated water for survival acknowledges the fact that, in addition to the regulated water itself, many of these species are dependent upon associated functions of a regulated water including specific stream flows, water quality, and/or hydrologic and flooding regimes for their existence and propagation.

The expected pressures from climate change on regulated waters and flood hazard areas, some of which include endangered and threatened species habitat, include sea level rise, saltwater intrusion, and

changes in stream flow regime resulting from greater variation and intensities in precipitation associated with climate change. These pressures, combined with the existing pressures on streams and flood hazard areas from development, including water quality impairment, loss of stream shading and vegetative ground cover, increased erosion of stream banks, and lowered seasonal stream base flows, result in degradation and loss of habitat for threatened and endangered species. The compounding pressures on endangered and threatened species habitat from climate change and development adversely impact all threatened and endangered species that breed, rest, or feed within regulated waters and/or their flood hazard areas for some aspect of their habitat or life cycle.

The presence of vegetated buffers along a watercourse is known to provide a myriad of ecological benefits to water quality and the habitat of species that utilize the watercourse and its associated flood hazard area for various aspects of their life cycle. The Department has provided for protections of these vegetated buffers, which have been defined as riparian zones in the FHACA rule since 2007, along watercourses for decades due to the well-established benefits they provide to regulated waters and flood hazard areas. The proposed amendments at N.J.A.C. 7:13-4.1(c)2iii and (c)2iii(1), will continue the legacy of protection that riparian zones have provided to the State's waterways and will help to ameliorate the pressures on streams and riparian zones from climate change and development discussed above, by applying 150-foot riparian zones to these features, which can provide services such as nutrient uptake, bank stability, shading, and habitat for many species, including threatened and endangered species.

SUBCHAPTER 5. VERIFICATIONS

N.J.A.C. 7:13-5.2 General Provisions

Existing N.J.A.C. 7:13-5.2(a) sets forth general provisions related to obtaining a verification of the flood hazard area, floodway, and riparian zone on a site. The existing reference to the flood hazard area design flood elevation is proposed to be amended to reflect the new term climate-adjusted flood elevation

as discussed above. A reference is also proposed to be made to the new inundation risk zone, a delineation of which is proposed to be required where present on a site.

Existing N.J.A.C. 7:13-5.2(c) directs applicants to the appropriate sections of the FHACA rules to determine the flood hazard area design flood elevation, flood hazard area, floodway limits, and riparian zone limits. This subsection is proposed to be deleted and replaced with updated cross-references and a reference to the new inundation risk zone.

N.J.A.C. 7:13-5.3 Duration of a Verification

Existing N.J.A.C. 7:13-5.3(e) provides for reliance on the Department's determinations made pursuant to a verification with certain qualifications. A reference to the new inundation risk zone is proposed to be added and additional examples of situations where an applicant may not rely on the verification as approved are provided to more fully reflect the Department's intent that verifications based upon outdated information not be relied upon.

Existing N.J.A.C. 7:13-5.3(e) addresses reliance upon an issued verification and the ability of the Department to void an issued verification and issue a replacement verification in certain circumstances. Particularly, a verification may be voided and replaced where the verification is found to be based on inaccurate or incomplete information. While this could include a situation where inaccurate information is supplied by an applicant that is only discovered to be inaccurate after issuance of the verification, situations may arise where, subsequent to the issuance of a verification, a Department delineation or FEMA flood mapping is revised, more accurate topography becomes available, or other mapping may become available that illustrate a change in the location of the flood hazard area, floodway, riparian zone, and new inundation risk zone. A change in these areas, if not properly reflected by a verification, can lead to threats to public health, safety, and welfare, and the environment. The existing subsection includes examples to reflect some of the situations that can result in a verification being voided, including to address a need to reflect that

additional areas have been determined to be appropriately designated as flood hazard areas or riparian zones after issuance of the verification. The Department is proposing to amend the examples provided at N.J.A.C. 7:13-5.3(e) to more fully describe the types of situations that can lead to such a determination, including updated delineations and flood mapping that changes the boundaries of the areas delineated/mapped. These proposed clarifications reinforce the intent of the rules to ensure protection of public health, safety, and the environment by ensuring that regulated activities are only undertaken based upon the best available current scientific information.

N.J.A.C. 7:13-5.4 Reissuance of a Verification

Existing N.J.A.C. 7:13-5.4 provides for the reissuance of a verification concurrent with the approval of a general permit authorization or individual permit that references or relies upon the verification. The Department shall automatically reissue the verification upon approval of the authorization or permit to align the expiration date of the verification with the expiration date of the authorization or permit, provided the conditions at N.J.A.C. 7:13-5.4(a)1, 2, and 3 are met.

Existing N.J.A.C. 7:13-5.4(a)2 provides that the reissued verification must reflect any alterations to the flood hazard area design flood elevation, flood hazard area limit, and/or floodway limit that will result from the authorization or permit. This provision is proposed to be amended to refer to the new climate-adjusted flood elevation and inundation risk zone, as well as to address situations where changes to these regulatory limits have occurred since its initial approval, examples of which are enumerated at proposed N.J.A.C. 7:13-5.3(a), as discussed above.

N.J.A.C. 7:13-5.5 When a Verification is Required for Issuance of an Authorization Pursuant to a General Permit or an Individual Permit

Pursuant to existing N.J.A.C. 7:13-5.5, a verification of the flood hazard area design flood elevation, and floodway limit, where present, must be obtained for the project area in order for the Department to determine compliance with the requirements of this chapter and issue an authorization pursuant to a general permit or an individual permit. Existing N.J.A.C. 7:13-5.5(a) sets forth cases where a verification is obtained prior to or concurrent with an authorization or permit, as well as two cases where a verification of the flood hazard area and/or floodway is not necessary. As discussed below, clarifications and amendments related to the new climate-adjusted flood elevation and inundation risk zone are proposed, as well as the deletion of existing N.J.A.C. 7:13-5.5(a)4 and (c), which provides for cases where a delineation of only the floodway is necessary.

N.J.A.C. 7:13-5.5(a) is proposed to be amended to require a verification of the climate-adjusted flood elevation, riparian zone, inundation risk zone, and floodway limit, where present. The existing provision requires only the flood hazard area design flood elevation and floodway limit to be verified. However, the proposed new design and construction standards for activities within the inundation risk zone necessitate knowledge of its location in order to determine compliance with this chapter. Furthermore, the verification of the riparian zone is essential in determining jurisdictional boundaries due to their varying widths and the permissible disturbance limits associated with each regulated activity. Cross-references are proposed to be added to N.J.A.C. 7:13-9 and 10 for general permit authorizations and individual permits, respectively, as well as a reference to coastal permits, since a verification would be required pursuant to these permits based on the amendments at N.J.A.C. 7:13-2.1(b)6. References to the climate-adjusted flood elevation and inundation risk zone are similarly added at N.J.A.C. 7:13-5.5(a)1 and 2 and, for reasons outlined below, N.J.A.C. 7:13-5.5(a)4 is proposed for deletion.

N.J.A.C. 7:13-5.5(b) provides for three cases where obtaining a verification is not required prior to the issuance of an authorization pursuant to a general permit or an individual permit. This provision is necessary to reflect the Department's acknowledgement that, in limited situations, a verification of the

regulatory limits pursuant to this chapter would not inform or change the outcome of a permit review. For reasons discussed above, additional references to the climate-adjusted flood elevation and inundation risk zone are proposed to be included at N.J.A.C. 7:13-5.5(b)3i and ii, respectively.

N.J.A.C. 7:13-5.5(c) provides for a situation where obtaining a verification of only the flood hazard area design flood elevation and not the floodway limit is required prior to the issuance of an authorization pursuant to a general permit or an individual permit. Specifically, only the flood hazard area design flood elevation must be verified where the Department determines, based on a visual inspection of submitted site plans and without a review of calculations, that no fill or aboveground structure is proposed within a floodway and compliance with the flood storage displacement requirements does not require knowledge of the location of the floodway. However, this provision is rarely used and, in tidal areas, is no longer relevant with the addition of the inundation risk zone, since these limits would need to be known as well. Additionally, the Department believes that the three cases set forth at N.J.A.C. 7:13-5.5(b) sufficiently capture the situations where it is appropriate to not require a verification. As such, N.J.A.C. 7:13-5.5(c) is proposed for deletion.

N.J.A.C. 7:13-5.6 Conditions that Apply to an Issued or Reissued Verification

Existing N.J.A.C. 7:13-5.6 requires that certain information related to the Department's issuance of a verification be recorded on the deed for any lot (other than a publicly owned right-of-way) that is referenced in the approval. The purpose of this provision is to alert existing and future owners of the site, as well as insurance companies, lending institutions, and government agencies, to the particular flood hazards and environmental constraints that the Department has determined are present onsite or are anticipated to occur. The recorded information additionally memorializes the date, file number, and other aspects of the verification, so that it may be more easily retrieved from the Department's records where necessary. At amended N.J.A.C. 7:13-5.6(a)7 and new N.J.A.C. 7:13-5.6(a)6, references to the climate-

adjusted flood elevation, floodway, and inundation risk zone are proposed to be added, as well as a reference to the possibility of requiring a coastal permit, since that would be relevant in tidal areas.

SUBCHAPTER 6. GENERAL PROVISIONS FOR PERMITS-BY-REGISTRATION, GENERAL PERMITS-BY-CERTIFICATION, AND GENERAL PERMITS

N.J.A.C. 7:13-6.1 Purpose and Scope; 6.2 Standards for Issuance, by Rulemaking, of Permits-By-Rule, General Permits-By-Certification, and General Permits

As set forth at existing N.J.A.C. 7:13-6.1, Subchapter 6 sets forth the standards for the Department to issue, by rulemaking, permits-by-rule, general permits-by-certification, and general permits, as well as the use of these permits to conduct authorized activities, the standards governing the use of more than one of these permits on a single site, the duration of authorizations pursuant to these permits, and the conditions that apply to these permits. As noted above, the Department is proposing to replace each adopted permit-by-rule with a new class of permits known as permits-by-registration at N.J.A.C. 7:13-7 and, in some circumstances, limited exemptions at N.J.A.C. 7:13-2.4, general permits-by-certification at N.J.A.C. 7:13-8, general permits at N.J.A.C. 7:13-9, or individual permits at N.J.A.C. 7:13-10. By requiring online registration of activities or, in some cases described below, site-specific review of activities currently authorized pursuant to permits-by-rule, the Department will be able to more closely monitor, enforce, and report on activities in a community or watershed. Additionally, N.J.A.C. 7:13-6.1 and 6.2 are proposed to be amended to change the existing term "permit-by-rule" to the proposed language "permit-by-registration" with no other substantive changes. These amendments are proposed throughout Subchapter 6. An additional reference to the National Flood Insurance Program at N.J.A.C. 7:13-6.2(b)1 ensures that the Department will not promulgate a permit unless the minimum standards at 44 CFR 60.3 are met.

N.J.A.C. 7:13-6.3 Use of a Permit-By-Registration, or an Authorization Pursuant to a General Permit-By-Certification or a General Permit to Conduct Regulate Activities

N.J.A.C. 7:13-6.3 is proposed to be amended to reference the proposed new registration process for permits-by-registration set forth at proposed new N.J.A.C. 7:13-6.5 and to mirror the new provision at N.J.A.C. 7:13-18.3 requiring that an application for authorization pursuant to a general permit-by-certification be submitted electronically only by an architect or engineer, as appropriate, on behalf of the person proposing to conduct the activity, through the Department's online permitting system. These proposed amendments are discussed more fully in the summaries at N.J.A.C. 7:13-6.5 and 18.3 below.

N.J.A.C. 7:13-6.5 Procedure for Registering to Undertake an Activity Authorized Pursuant to a Permit-By-Registration

Existing N.J.A.C. 7:13-6.5, Duration of an authorization under a general permit-by-certification, is proposed to be repealed and its substance combined with N.J.A.C. 7:13-6.6 as described below. The Department is proposing a new N.J.A.C. 7:13-6.5 that establishes the process by which a person registers to undertake an activity authorized pursuant to a permit-by-registration. Pursuant to the existing rules, a person can undertake an activity authorized by a permit-by-rule without prior notification to the Department. Except where a person interested in undertaking an activity is told by the Department through an applicability determination that the activity qualifies for a permit-by-rule, the Department is not generally aware of when and where activities authorized pursuant to a permit-by-rule are taking place. As a result, the Department cannot inspect the authorized activities after completion or determine how much work is taking place within a given municipality or watershed. Local governments are additionally unaware of these activities, which often require municipal building permits or other local approvals.

The Department is, therefore, proposing a no-fee, online registration process to enable tracking of cumulative impacts within a community or watershed, which aligns with FEMA’s requirement to record

and track approvals pursuant to the National Flood Insurance Program. Such tracking additionally enables the Department to propose future amendments to adjust regulatory standards to reflect the State's planning goals, as well as to ensure, as required pursuant to N.J.A.C. 7:13-6.2(b)1, that the "regulated activity will cause only minimal adverse impacts on flooding and the environment when performed separately and will have only minimal cumulative adverse impacts on flooding and the environment." Tracking further enables the Department to address waters appearing on the List of Water Quality Limited Waters (the 303(d) List) pursuant to the Federal Clean Water Act at 33 U.S.C. § 1313(d), the New Jersey Water Quality Planning Act at N.J.S.A. 58:11A-7, and the Water Quality Management Planning rules at N.J.A.C. 7:15-5.4, and those for which a TMDL has been developed in accordance with those same provisions.

Proposed new N.J.A.C. 7:13-6.5(a) sets forth the scope of the section, explains where permits-by-registration are promulgated, and clarifies that undertaking an activity authorized pursuant to a permit-by-registration is not subject to the chapter's application requirements, public notice requirements, or application fees pursuant to N.J.A.C. 7:13-18, 19, and 20, respectively.

Proposed N.J.A.C. 7:13-6.5(b) establishes the procedure for registering to undertake an activity authorized pursuant to a permit-by-registration. Persons interested in undertaking an activity authorized pursuant to a permit-by-registration are required to register the intended activity prior to commencement. This will enable Department staff to inspect the site while the activities are conducted. Additionally, registration must be completed by either the owner of a site on which the activity will take place, or a person designated, in writing, by the owner to register on their behalf, such as an engineer, attorney, or consultant. Registration is made through the Department's online permitting system, pursuant to which the owner or designee must indicate which permit-by-registration is being sought, provide a name or other identifier, such as a county bridge number, for the proposed development or project, provide a brief description of the proposed activity including anticipated start and completion dates, identify the location of the proposed activity, and provide contact information for both the property owner and any designated registrant. The

owner or registrant must additionally certify that the site identified in the registration is the actual location of the project and that the registrant has obtained written consent from the property owner that the registration can be made on the property owner's behalf using the PIN issued to the registrant upon registration. There is no fee required for a permit-by-registration. The substance of the certification, set forth at N.J.A.C. 7:13-6.5(b)6, mirrors the certification required for applications pursuant to N.J.A.C. 7:13-18.2(j) as part of the general permit application requirements. A person registering to use the registration system must provide personal identification information and is issued a PIN when they register. This PIN must be provided as part of the certification process to help verify that the person registering does have the owner's authorization to act. By collecting this data, the Department can track development within communities and watersheds and assess what impact, if any, authorized activities may have on water quality or flooding. Department staff can also inspect the progress of activities and contact the registrant if problems arise.

Once the online registration process is completed, proposed N.J.A.C. 7:13-6.5(c) explains that documentation of the registration will be accessible to the applicant through the Department's online permitting system and that upon completion of the registration, the registrant must provide a copy of the documentation provided by the Department to the local construction official and floodplain administrator. This will enable local governments to track and report on activities authorized within the special flood hazard area, which is required as part of a community's participation in the National Flood Insurance Program. An exception is made where the registrant is a State agency and is, therefore, not subject to municipal review.

Proposed N.J.A.C. 7:13-6.5(d) provides that activities pursuant to the permit-by-registration shall commence within 180 days of the date of registration pursuant to proposed N.J.A.C. 7:13-6.5(b). This is necessary to ensure that activities being undertaken are based on the most recent flood data available. After registration, a new or revised Department delineation or FEMA flood mapping may become available,

which indicates a higher level of risk associated with a specific development than was understood at the time of registration. In this circumstance, the design of the development as initially contemplated and registered may not be adequately protective of public health, safety, and welfare in consideration of this new information. For this reason, communities participating in the National Flood Insurance Program are required to issue permits and authorizations for activities within FEMA's special flood hazard area that are valid for no more than 180 days unless construction commences. In order to remain consistent with the NFIP, ensure that current and future flood hazard risks are considered and activities are undertaken based on the best available information, and to be suitably protective of public health, safety, and welfare, proposed N.J.A.C. 7:13-6.5(d) provides that where authorized activities have not commenced within 180 days of registration, said activities may not commence unless and until the activity is registered anew. Otherwise, the registered activities, if commenced within 180 days of registration, can continue unless and until the permit-by-registration pursuant to which activities are being undertaken is repealed or modified by the Department.

Proposed N.J.A.C. 7:13-6.5(e) requires the registrant to indicate when activities are completed through the Department's online system.

Finally, proposed N.J.A.C. 7:13-6.5(f) describes the process by which a registrant may contest the re-registration requirements, in accordance with the procedures at N.J.A.C. 7:13-23 – requests for adjudicatory hearings.

N.J.A.C. 7:13-6.6 Duration of a Validated Permit-By-Registration or an Authorization Pursuant to a General Permit-By-Certification

Existing N.J.A.C. 7:13-6.5 and 6.6 set forth the duration of an authorization pursuant to a general permit-by-certification and general permit, respectively. The Department is proposing to combine these two sections as proposed N.J.A.C. 7:13-6.6 with amendments described below.

Proposed N.J.A.C. 7:13-6.6(a) provides that an authorization pursuant to a general permit-by-certification or general permit is valid for five years from issuance, continuing existing N.J.A.C. 7:13-6.5(a) and 6.6(a). Proposed N.J.A.C. 7:13-6.6(b) continues existing N.J.A.C. 7:13-6.5(b) and 6.6(b), which establish that an authorization pursuant to a general permit-by-certification cannot be extended and that an authorization pursuant to a general permit can be extended one time for five years pursuant to proposed N.J.A.C. 7:13-22.4.

Proposed N.J.A.C. 7:13-6.6(c) combines the substance of existing N.J.A.C. 7:13-6.5(c) and 6.6(c), requiring that if an authorization pursuant to a general permit-by-certification expires, authorized activities must cease immediately. Proposed N.J.A.C. 7:13-6.6(d) similarly combines the substance of existing N.J.A.C. 7:13-6.5(d) and 6.6(d), providing that if a person intends to commence or continue the regulated activities after expiration, that person shall obtain a new authorization or permit. Proposed N.J.A.C. 7:13-6.6(d)1 and 2 continues existing N.J.A.C. 7:13-6.6(d)1 and 2, which describe the Department's process should a new authorization be sought, and work has or has not begun. While the existing provisions apply only to authorizations pursuant to a general permit, the concept is equally applicable to authorizations pursuant to a general permit-by-certification, even though the existing FHACA rules do not address the issue. For clarity, proposed N.J.A.C. 7:13-6.6(d) applies to both general permits-by-certification and general permits. If no regulated activities have commenced prior to expiration, the project must be revised, where necessary, to comply with the current requirements of this chapter. However, if some regulated activities have occurred, the project must, to the extent feasible, be revised to comply with the current requirements of this chapter. The section further indicates that a determination of the feasibility of meeting the new requirements shall consider the amount of construction that has been completed, the reasonable financial investment that has been made in the original design, and whether continuing construction as approved pursuant to the original permit would have adverse impacts on flooding or the environment.

N.J.A.C. 7:13-6.7 Conditions Applicable to a Permit-By-Registration or to an Authorization Pursuant to a General Permit-By-Certification or a General Permit

In addition to amendments to terminology and citations as described above, the Department is proposing to amend N.J.A.C. 7:13-6.7(c), which provides that regulated activities authorized pursuant to a permit-by-registration, a general permit-by-certification, or a general permit, in combination with all proposed activities, shall not constitute a major development, as defined in the Stormwater Management rules. This is necessary to ensure that projects that have the potential to increase offsite flooding or impair water quality are appropriately reviewed pursuant to an individual permit. However, due to the nature of two particular authorized activities, the condition does not apply to normal property maintenance pursuant to N.J.A.C. 7:13-7.1 (which is proposed to be recodified as N.J.A.C. 7:13-2.5(a)1) and forest management activities pursuant to N.J.A.C. 7:13-7.26 (which is proposed to be recodified as N.J.A.C. 7:13-7.18). The Department is proposing to remove the reference to permit-by-rule for normal property maintenance, since it is proposed to be converted to an exemption, and to add a new activity to which this condition would not apply. The general permit at N.J.A.C. 7:13-9.4 authorizes the creation, restoration, and enhancement of habitat and water quality values and functions, which generally necessitates the removal of vegetation and subsequent replanting of native, noninvasive species. In some cases, more than one acre of land could be disturbed pursuant to this general permit, technically qualifying it as a major development. However, given the limitations and requirements placed on this permit, the authorized activities do not have a potential to exacerbate flooding or degrade water quality and, in fact, are designed to ameliorate flooding, improve water quality, and promote infiltration. Therefore, the Department is proposing to exempt activities pursuant to the general permit at N.J.A.C. 7:13-9.4 from the requirement to meet the Stormwater Management rules.

N.J.A.C. 7:13-6.8 Obligations Pursuant to the National Flood Insurance Program

A new section is proposed at N.J.A.C. 7:13-6.8 to ensure that the State's commitment to uphold minimum NFIP standards is met, as articulated at existing N.J.A.C. 7:13-6.7(b)1ii(2). Identical requirements are being proposed at new N.J.A.C. 7:13-10.4 below for individual permits, as well as in the Department's CZM rules at new N.J.A.C. 7:7-3.9 for permits-by-registration, general permits-by-certification, and general permits, and new N.J.A.C. 7:7-8.4 for individual permits.

Proposed N.J.A.C. 7:13-6.8 focuses on development located within two specific areas mapped by FEMA. For a given community, FEMA-adopted flood insurance rate mapping generally depicts both the limits of FEMA's 100-year (or one-percent probability) "special flood hazard area," as well as regulatory floodway limits along the studied section of water. This section applies to development located within a FEMA-adopted regulatory floodway, as well as within a FEMA-adopted special flood hazard area that does not include a FEMA-mapped regulatory floodway, as required pursuant to 44 CFR 60.3. While the FHACA rules generally prohibit development within floodways, certain activities are permitted because it is understood they would not exacerbate flooding. Thus, satisfying the requirements of this section is necessary before an applicant undertakes activities within these FEMA-defined areas in order to meet minimum NFIP standards.

Proposed N.J.A.C. 7:13-6.8(b) explains that before a person undertakes an activity authorized pursuant to a permit-by-registration, and prior to the Department issuing an authorization pursuant to a general permit-by-certification or general permit, the registrant or applicant must take certain actions. First, pursuant to N.J.A.C. 7:13-6.8(b)1, where activities are proposed within a FEMA-adopted regulatory floodway, and the activities would result in "no net increase" to the 100-year flood elevation, the registrant or applicant must provide an engineering certification to the local floodplain administrator having jurisdiction over the site confirming that the project will meet FEMA's no rise criteria. This is important to ensure that development within and adjacent to delineated floodways does not exacerbate flooding. Second, pursuant to N.J.A.C. 7:13-6.8(b)2, where activities are proposed within a FEMA-adopted regulatory

floodway, which would result in a net increase to the 100-year flood elevation, the registrant or applicant must apply for and obtain a Conditional Letter of Map Revision from FEMA. In both scenarios, a "net increase" in the flood elevation is equated with any anticipated change in the water surface profile of greater than 0.00 feet.

A third scenario is presented, in which activities are proposed within a FEMA-adopted special flood hazard area that does not include mapping of the regulatory floodway. In this case, if a project, when combined with all other existing and anticipated development within the flood hazard area, would result in a cumulative increase of greater than 0.20 feet in the 100-year flood elevation, the registrant or applicant shall apply for and obtain a CLOMR from FEMA, similar to N.J.A.C. 7:13-6.8(b)2. When mapping floodway limits in New Jersey, the Department and FEMA both utilize calculations that define the floodway as causing no more than a 0.20-foot rise in the 100-year flood elevation. Thus, should a project within a FEMA-mapped 100-year floodplain cause flood elevations to rise more than this amount, it would not meet the standards set forth in this chapter to protect people and property from increased flooding due to development. (See N.J.A.C. 7:13-12.1(g)5ii.)

Pursuant to proposed new N.J.A.C. 7:13-6.8(c), hydraulic calculations undertaken to demonstrate compliance with this section must be rounded to the nearest one-hundredth (0.01) of a foot. Two examples are provided to demonstrate how this standard should be applied. As with any type of modeling, there are limitations on the precision of the calculations. In other sections of the FHACA rules, calculations are to be rounded to the nearest one-tenth (0.1) of a foot. (See N.J.A.C. 7:13-12.1(g), 12.7(b)1, and 12.14(d)5.) However, since FEMA considers the accuracy of the calculations to the nearest one-hundredth (0.01) of a foot, this standard is necessary to demonstrate compliance with this section in order to ensure that the requirements of the NFIP are met.

Proposed N.J.A.C. 7:13-6.8(d) requires registrants for permits-by-registration and applicants for general permits-by-certification or general permits to upload a copy of the required no rise certification or

approved CLOMR, as required pursuant to proposed N.J.A.C. 7:13-6.8(b), to the Department's online portal at https://www.nj.gov/dep/online prior to the issuance of the individual permit. This facilitates the Department's ability to track and report to FEMA actions pursuant to this section and subchapter.

Proposed N.J.A.C. 7:13-6.8(e) further underscores that the requirements of this proposed section shall not be construed to contradict or obviate the requirements of the National Flood Insurance Program. Since the purpose of this section is to ensure that NFIP standards are met, and is furthermore being proposed based on the Department's understanding of FEMA's requirements pursuant to 44 CFR 60.3 and related sections, it is appropriate to include this provision.

SUBCHAPTER 7. PERMITS-BY-REGISTRATION

Based on an evaluation of the 63 permits-by-rule currently available pursuant to this chapter, the Department is proposing to convert and/or combine 21 permits-by-rule into 13 proposed exemptions. The Department is also proposing to convert 26 permits-by-rule to permits-by-registration and 11 permits-by-rule to general permits-by-certification. Five permits-by-rule are proposed to be bifurcated with certain activities to be authorized pursuant to an exemptions and others pursuant to a permit-by-registration, general permits-by-certification or, in one case each, a general permit and an individual permit.

The following table summarizes the relocation and resulting recodification of the existing permits-by-rule as exemptions, permits-by-registration, general permits-by-certification, and/or general permits.

Table of Citations, Recodifications, and Proposed Changes

Current citation **N.J.A.C.**	**Regulated activity**	**Proposed citation** **N.J.A.C.**	**Proposed change(s)**

7:13-7.1	Normal property maintenance	7:13-2.5(a)1	Repealed; converted to exemption
7:13-7.2	Repair of a lawfully existing structure	7:13-2.5(a)2	Repealed; converted to exemption
7:13-7.3	In-kind replacement of a lawfully existing structure	7:13-7.1	Recodified and amended; Converted to permit-by-registration
7:13-7.4	Removal of any lawfully existing fill or structures	7:13-2.5(a)14	Repealed; converted to exemption
7:13-7.5	Removal of accumulated sediment and debris from a regulated water by hand	7:13-2.5(a)3	Repealed; converted to exemption
7:13-7.6	Removal of major obstructions from a regulated water with machinery	7:13-2.5(a)4	Repealed; converted to exemption
7:13-7.7	Placement of no more than five cubic yards of landscaping material	7:13-2.5(a)1	Repealed; converted to exemption (folded into exemption for normal property maintenance)

7:13-7.8	Construction at or below grade in a fluvial flood hazard area	7:13-7.2	Recodified and amended; converted to permit-by-registration
7:13-7.9	General construction activities in a tidal flood hazard area	7:13-7.3	Recodified and amended; converted to permit-by-registration
7:13-7.10	General construction activities located outside a flood hazard area in a riparian zone	7:13-7.4	Recodified and amended; converted to permit-by-registration
7:13-7.11	Reconstruction, relocation, and/or elevation of a lawfully existing building	7:13-8.1	Repealed and folded into general permit-by-certification
7:13-7.12	Construction of an addition(s) to a lawfully existing habitable building	7:13-8.2	Repealed and folded into general permit-by-certification
7:13-7.13	Construction of a non-habitable building(s)	7:13-7.5	Recodified and amended; converted to permit-by-registration
7:13-7.14	Construction of a partially open structure(s)	7:13-7.6	Recodified and amended; converted to permit-by-registration

7:13-7.15	Construction of barrier-free access to a building	7:13-7.7 and 8.11	Bifurcated into a permit-by-registration and a general permit-by-certification
7:13-7.16	Construction of a deck	7:13-7.8	Recodified and amended; converted to permit-by-registration
7:13-7.17	Construction of a dock, pier, or boathouse	7:13-8.5	Repealed; converted to general permit-by-certification
7:13-7.18	Construction of a boat launching ramp	7:13-7.9	Recodified and amended; converted to permit-by-registration
7:13-7.19	Replacement, renovation, or reconstruction of certain water dependent structures	7:13-7.10	Recodified and amended; converted to permit-by-registration
7:13-7.20	Construction of a fence	7:13-7.11	Recodified and amended; converted to permit-by-registration
7:13-7.21	Construction of a swimming pool associated with residential use	7:13-7.12 and 8.6	Bifurcated into a permit-by-registration for in-ground pools and a general permit-by-certification for residential above-ground pools
7:13-7.22	Construction of a trail and/or boardwalk	7:13-7.13	Recodified and amended; converted to permit-by-registration

7:13-7.23	Construction of a footbridge	7:13-7.14	Recodified and amended; converted to permit-by-registration
7:13-7.24	Construction of a tank	7:13-7.15	Recodified and amended; converted to permit-by-registration
7:13-7.25	Construction of an aboveground athletic and/or recreational structure	7:13-7.16	Recodified and amended; converted to permit-by-registration
7:13-7.26	Forest management activities	7:13-7.17	Recodified and amended; converted to permit-by-registration
7:13-7.27	Repair, maintenance, and/or dredging of a manmade canal	7:13-2.5(a)9	Repealed; converted to exemption
7:13-7.28	Filling of an abandoned raceway	7:13-8.7	Repealed; converted to general permit-by-certification
7:13-7.29	Placement of one to three wind turbines	7:13-8.8	Repealed; converted to general permit-by-certification
7:13-7.30	Placement of solar panels and associated equipment	7:13-7.18	Recodified and amended; converted to permit-by-registration
7:13-7.31	Placement of a floating aerator in an impounded water	7:13-7.19	Recodified and amended; converted to permit-by-registration

7:13-7.32	Construction of an aquatic habitat enhancement device	7:13-8.9	Repealed; converted to general permit-by-certification
7:13-7.33	Placement of one or more utility poles	7:13-2.5(a)10	Repealed; converted to exemption
7:13-7.34	Placement of one or more utility open-frame towers	7:13-7.20	Recodified and amended; converted to permit-by-registration
7:13-7.35	Placement of one or more utility monopole towers	7:13-8.10	Repealed; converted to general permit-by-certification
7:13-7.36	Placement of an underground utility line using horizontal directional drilling or jacking	7:13-2.5(a)13 and 9.12	Repealed; bifurcated to exemption and a general permit
7:13-7.37	Placement of an underground utility line beneath existing pavement	7:13-2.5(a)13	Repealed; converted to an exemption
7:13-7.38	Attachment of a utility line to a lawfully existing roadway or	7:13-8.12	Repealed; converted to general permit-by-certification

	railroad that crosses a regulated water		
7:13-7.39	Placement of an underground utility line that does not cross a regulated water	7:13-2.5(a)13 9.12	Repealed; bifurcated into an exemption and a general permit
7:13-7.40	Milling, repaving, and/or resurfacing of a lawfully existing pavement	7:13-2.5(a)11	Repealed; converted to exemption
7:13-7.41	Placement of a guiderail along a lawfully existing public roadway	7:13-7.21	Recodified and amended; converted to permit-by-registration
7:13-7.42	Reconstruction of all or part of a lawfully existing bridge superstructure	7:13-8.13	Repealed; converted to general permit-by-certification
7:13-7.43	Placement of traffic safety structures on poles	7:13-2.5(a)10	Repealed; converted to exemption
7:13-7.44	Surveying activities	7:13-2.5(a)5	Repealed; converted to exemption

7:13-7.45	Geotechnical and archeological investigation activities	7:13-2.5(a)5	Repealed; converted to exemption
7:13-7.46	Installation of one or more monitoring wells	7:13-2.5(a)5	Repealed; converted to exemption
7:13-7.47	Construction of a gauge, weir, or similar device	7:13-8.14	Repealed; converted to general permit-by-certification
7:13-7.48	Temporary storage of unsecured construction material outside a floodway	7:13-2.5(a)6	Repealed; converted to exemption
7:13-7.49	Storage of unsecured material associated with a single-family home or duplex	7:13-2.5(a)6	Repealed; converted to exemption
7:13-7.50	Storage of unsecured material associated with a habitable building or facility, other than a single-family home or duplex	7:13-2.5(a)6	Repealed; converted to exemption
7:13-7.51	Storage of unsecured material associated with	7:13-2.5(a)6	Converted to exemption

	a facility that stores and distributes material		
7:13-7.52	Placement, storage, or processing of hazardous substances	7:13-2.5(a)7	Repealed; converted to exemption
7:13-7.53	Placement, storage, or processing solid waste or recyclable materials at a lawfully existing facility	7:13-2.5(a)7	Repealed; converted to exemption
7:13-7.54	Continuation of lawfully existing agricultural activities	7:13-2.5(a)8	Repealed; converted to exemption
7:13-7.55	Commencement of new agricultural activities	7:13-2.5(a)8	Repealed; converted to exemption
7:13-7.56	Continuation or commencement of natural resource conservation practices associated with agricultural activities	7:13-7.22	Recodified and amended; converted to permit-by-registration

7:13-7.57	Construction of a non-habitable building for agricultural purposes	7:13-7.23 and 12.5	Bifurcated into a permit-by-registration and individual permit
7:13-7.58	filling or modification of a manmade regulated water for freshwater wetlands restoration	7:13-7.24	Recodified and amended; converted to permit-by-registration
7:13-7.59	Creation of a ford across a regulated water to manage livestock	7:13-7.25	Recodified and amended; converted to permit-by-registration
7:13-7.60	Construction of a fence along and/or across a regulated water to manage livestock	7:13-7.26	Recodified and amended; converted to permit-by-registration
7:13-7.61	Construction of a pump and/or water intake structure in or along a regulated water for livestock	7:13-7.27	Recodified and amended; converted to permit-by-registration
7:13-7.62	Construction of a manure management structure for livestock or horses	7:13-7.28	Recodified and amended; converted to permit-by-registration

7:13-7.63	Application of herbicide within riparian zones to control invasive plant species	7:13-7.29	Recodified and amended; converted to permit-by-registration

Proposed Deletion of Relaxation of Prohibition on Disturbance Within 25 Feet of the Top of Bank Where a Project Lies Adjacent to a Lawfully Existing Bulkhead, Retaining Wall, or Revetment Along a Tidal Water or Impounded Fluvial Water

Throughout the FHACA rules, the Department proposes to delete the relaxation of the previous prohibition on disturbance within 25 feet of the top of bank where a proposed project is located adjacent to a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or an impounded fluvial water. This is being done in order to provide an added measure of flood resilience. The primary reason for the 25-foot setback was to protect structures from failure should the bank of a regulated water erode over time or erode at once as a result of a large rain event. Given that engineered structures, such as bulkheads, retaining walls, revetments, and impoundments are meant to minimize the threat of erosion, the Department believed that the prohibition on disturbance was unnecessary. However, given that engineered structures can fail, and given that more and heavier rains are expected to result due to climate change, the prohibition on disturbance is necessary to safeguard structures from failure due to the threat of bank erosion.

Deleting the relaxation of the prohibition on disturbance within 25 feet of the top of bank affects 26 permits-by-rule that will be converted to either exemptions, permits-by-registration, general permits-by-certification, or general permits. These include permits-by-rule 7 through 14, 16, 22, 24, 29, 30, 33 through 39, 41, 43, 49, 50, 57, and 62 (existing N.J.A.C. 7:13-7.7 through 7.14, 7.16, 7.22, 7.24, 7.29, 7.30, 7.33 through 7.39, 7.41, 7.43, 7.49, 7.50, 7.57, and 7.62).

Proposed Conversions to Exemptions

As indicated above, the Department is proposing to convert and/or combine activities currently authorized pursuant to 21 permits-by-rule into 13 proposed new exemptions at N.J.A.C. 7:13-2.4. Particularly, those existing permits-by-rule proposed to become exemptions include permits-by-rule 1, 2, 4, 5, 6, 7, 27, 33, 37, 40, 43, 44, 45, 46, and 48 through 55 (existing N.J.A.C. 7:13-7.1, 7.2, 7.4, 7.5, 7.6, 7.7, 7.27, 7.33, 7.37, 7.40, 7.43, 7.44, 7.45, 7.46, and 7.48 through 7.55).

Proposed Permits-by-Registration

While 25 permits-by-rule are proposed to be converted to permits-by-registration as referenced above, the Department is proposing amendments to the substantive standards for the majority of these authorizations in order to incorporate more protective standards. Those existing permits-by-rule that are being converted to permits-by-registration, without change other than to change references from "permit-by-rule" to "permit-by-registration" are not specifically discussed below. Those include existing permits-by-rule 3, 18, 19, 31, 58, 59, and 61 (existing N.J.A.C. 7:13-7.3, 7.18, 7.19, 7.31, 7.58, 7.59, and 7.61). Finally, general permit-by-certification 11 for maintenance of existing manmade stormwater management structures and conveyances at existing N.J.A.C. 7:13-8.11 is proposed to be converted to a permit-by-registration at proposed N.J.A.C. 7:13-7.30.

Permit-by-rule 8 for construction at or below grade in a fluvial flood hazard area (existing N.J.A.C. 7:13-7.8), permit-by-rule 9 for general construction activities in a tidal flood hazard area (existing N.J.A.C. 7:13-7.9), and permit-by-rule 10 for general construction activities located outside a flood hazard area in a riparian zones (existing N.J.A.C. 7:13-7.10) are proposed as permits-by-registration at proposed N.J.A.C. 7:13-7.2, 7.3, and 7.4, respectively. Each of these proposed permits-by-registration is amended to delete the relaxation that allows disturbance within 25 feet of the top of bank when the project lies adjacent to a

lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water. This deletion is discussed above.

Additionally, the permit-by-registration for general construction activities in a tidal flood hazard area at proposed N.J.A.C. 7:13-7.3 amends existing permit-by-rule 9 to clarify that no non-habitable building housing livestock may be constructed pursuant to this permit-by-registration. While existing language prohibits the construction of habitable buildings, it is silent with respect to non-habitable buildings. Typically, non-habitable buildings do not need to be elevated to a specific height, which would put livestock at risk. Therefore, as a result of this rulemaking, a person proposing to construct a building to house livestock in a flood hazard area would be required to apply for an individual permit pursuant to N.J.A.C. 7:13-12.5.

The Department is proposing to recodify permit-by-rule 13 for construction of a non-habitable building(s) at N.J.A.C. 7:13-7.13 as a permit-by-registration as proposed N.J.A.C. 7:13-7.5 with amendments. Specifically, the proposed amendments include deleting storage areas, because these areas are not buildings, as well as deleting the provision that allows disturbance within 25 feet of the top of bank when the project lies adjacent to a lawfully existing bulkhead, retaining wall, revetment, or impoundment for reasons specified above. Permit-by-rule 14 for construction of a partially open structure(s) at N.J.A.C. 7:13-7.14 is proposed as a permit-by-registration as N.J.A.C. 7:13-7.6 with an amendment that disallows enclosures below the climate-adjusted flood elevation as opposed to the flood hazard elevation. This updates the existing standards to reflect the fact that the FHACA rules will regulate to the proposed climate-adjusted flood elevation instead of the existing flood hazard elevation. The section is additionally amended to prohibit any disturbance within 25 feet of top of bank, regardless of whether the project is adjacent to a bulkhead or similar structure along a tidal water or impounded fluvial water for the reasons discussed above

Existing permit-by-rule 15 for the construction of a barrier-free access to a building is proposed as a permit-by-registration at N.J.A.C. 7:13-7.7 with an amendment clarifying that the access may not be

constructed in a floodway. This contrasts with current rule language, which allows the access to be constructed within a floodway in cases where locating the structure outside of the floodway cannot be avoided. This change is proposed because construction in the floodway will generally obstruct the flow of floodwaters, exacerbate flooding, and cause erosion. Should access need to be constructed in a floodway, further consideration is necessary in the context of an individual permit review.

Permit-by-rule 16 for construction of a deck at N.J.A.C. 7:13-7.16 is proposed as a permit-by-registration at N.J.A.C. 7:13-7.8 with amendments. Pursuant to this permit-by-registration, any deck constructed in a flood hazard area with protective or decorative fencing, banisters, or latticework or rails is required to be open to allow for the passage of flood waters. Specifically, these openings must be no less than six inches apart. These open spaces in any fencing, banister, or latticework allow for the safe passage of flood water and any debris that may be carried by flood waters, reducing the potential for damage to the structure. In addition, standards were added clarifying that stairways used to connect the deck to ground level must similarly be open.

Permit-by-rule 20 for construction of a fence at N.J.A.C. 7:13-7.20 is proposed as a permit-by-registration at N.J.A.C. 7:13-7.11 with amendments to the authorization that specify that any fence located in a floodway is required to have openings of no less than six inches to allow the safe passage of debris so that floodwaters are not obstructed. This amendment will clarify what is considered to be an opening "sufficiently large" to allow that passage to occur.

As indicated in the table above, existing permit-by-rule 21, which currently addresses construction of swimming pools associated with residential use that meet specified conditions, currently codified at N.J.A.C. 7:13-7.21, is proposed to be bifurcated into a permit-by-registration for in-ground pools, at proposed N.J.A.C. 7:13-7.12, and a general permit-by-certification for above-ground pools, at proposed N.J.A.C. 7:13-8.6, asdiscussed below. The proposed permit-by-registration continues all requirements applicable to in-ground pools pursuant to the existing permit-by-rule without amendment.

The Department is proposing permit-by-rule 22, for construction of a trail and/or boardwalk, at N.J.A.C. 7:13-7.22, as a permit-by-registration at proposed N.J.A.C. 7:13-7.13 with amendments that delete the relaxation discussed above of the required setback distance from any top of bank based upon the trail or boardwalk being located adjacent to a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water. Permit-by-rule 23 for construction of a footbridge at N.J.A.C. 7:13-7.23 is proposed as a permit-by-registration at N.J.A.C. 7:13-7.14, which is amended to require any handrails to have openings of no less than six inches to allow for the safe passage of floodwaters and debris for the same reasons discussed in the summary of changes to existing permit-by-rule 16 for construction of a deck and permit-by-rule 20 for construction of a fence (proposed permits-by-registration at proposed N.J.A.C. 7:13-7.8 and 7.11, respectively) above.

Permit-by-rule 24, for construction of a tank, at N.J.A.C. 7:13-7.24, is proposed as a permit-by-registration at N.J.A.C. 7:13-7.15 and is amended to limit authorization pursuant to the permit-by-registration to the installation of an underground tank. Aboveground tanks are subject to damage from debris carried by floodwaters. Due tothe attendant risks associated with such an installation, the Department has determined that aboveground tanks proposed to be located within a flood hazard area should be subject to Department review. Accordingly, aboveground tanks proposed in a flood hazard area will be required to obtain approval pursuant to the existing general permit at N.J.A.C. 7:13-9.7 for the placement of storage tanks. The proposed permit-by-registration for underground tanks requires that any tank located in a flood hazard area be designed to remain watertight and to resist buoyancy during a flood event. Aboveground tanks located in a riparian zone, but outside of the flood hazard area, may still qualify for the proposed permit-by-registration. Finally, the proposed permit-by-registration continues the existing cumulative footprint limit of all tanks constructed pursuant to authorization of the FHACA rules to a maximum of 5,000 square feet since November 5, 2007, with the limit amended to apply to the footprint of underground tanks as a result of the removal of aboveground tanks from consideration pursuant to this permit.

The Department is also proposing to convert permit-by-rule 25, for construction of an aboveground athletic and/or recreational structure, at N.J.A.C. 7:13-7.25, permit-by-rule 30 for placement of solar panels and associated equipment at N.J.A.C. 7:13-7.30, and permit-by-rule 34 for placement of one or more utility open-frame towers at N.J.A.C. 7:13-7.34 to permits-by-registration at proposed N.J.A.C. 7:13-7.16, 7.18, and 7.20, respectively, with amendments to delete the relaxation of the required setback distance from any top of bank for the reasons discussed in the "additional concepts applied throughout" portion of the summary above. In addition to the above, the proposed permit-by-registration for the placement of solar panels and associated equipment is amended to clarify that it does not allow the construction of ancillary structures, such as roadways that will provide access or facilitate maintenance of the panels. Such work needs to be authorized through other permitting mechanisms in the FHACA rules, including potentially an individual permit.

Permit-by-rule 26, for forest management activities, at N.J.A.C. 7:13-7.26, is proposed as a permit-by-registration at N.J.A.C. 7:13-7.17 with an amendment to require any fencing located in a floodway to have openings of no less than six inches to allow for the safe passage of floodwaters and debris.

Existing permit-by-rule 30, which authorizes placement of solar panels and associated equipment subject to certain limitations, specifies that panels, cross-bracing, and other structural components, except for vertical support poles, need to be elevated at least one foot above the flood hazard area design flood elevation. An amendment is made at proposed N.J.A.C. 7:13-7.19 to require that such components be elevated one foot above the climate-adjusted flood elevation consistent with the changes made throughout the chapter replacing the term "flood hazard area design flood elevation" with the term "climate-adjusted flood elevation" to ensure that development occurs in a manner that is protective of public health, safety, and the environment not only at the time of initial construction, but over the life of the structure, as discussed above.

Similarly, existing permit-by-rule 34, is being amended in the same manner as existing permit-by-rule 30. Specifically, permit-by-rule 34 for the placement of one or more utility open-frame towers is being proposed to be recodified as a permit-by-registration at N.J.A.C. 7:13-7.20 and amended to reflect that elevation requirements will reflect the climate-adjusted flood elevation as opposed to the flood hazard design flood elevation. The reasons for the amendments are identical to the amendments proposed in permit-by-rule 30.

Permit-by-rule 41, for placement of a guiderail along a lawfully existing public roadway, at N.J.A.C. 7:13-7.41, is proposed as a permit-by-registration at N.J.A.C. 7:13-7.21, with an amendment to delete the relaxation of the required setback distance from any top of bank related to bulkheads, retaining walls, and revetments for the reasons discussed above.

Permit-by-rule 43, for placement of traffic safety structures on poles, at N.J.A.C. 7:13-7.43, is proposed to be folded into the proposed exemption at N.J.A.C. 7:13-2.5(a)10, with amendments. The existing permit-by-rule allows footings that extend partially above ground in the floodway, structures within 10 feet of a top of bank (or closer if along a bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water), and some riparian zone disturbance. The proposed exemption is more limited and requires that structures be located at least 25 feet of any top of bank, except where the pole or structure replaces an existing pole or structure that cannot feasibly be relocated outside this area, and requires that no trees are cleared, cut, and/or removed in a riparian zone. These added limitations are necessary to prevent adverse impacts to flooding or the environment.

The Department is also proposing to convert permit-by-rule 56, for continuation or commencement of natural resource conservation practices associated with agricultural activities, at N.J.A.C. 7:13-7.56, to a permit-by-registration at proposed N.J.A.C. 7:13-7.22 with amendments. The proposed permit-by-registration is expanded to include examples of the types of natural resource conservation practices that may be conducted pursuant to this permit-by-registration. The area of disturbance to riparian zone

vegetation that is permitted is proposed to be increased from 2,000 square feet to 5,000 square feet in order to facilitate a wider range of these beneficial activities, which can provide significant water quality benefits and are overseen by NRCS and/or the local soil conservation district to ensure success. Additionally, the proposed permit-by-registration will incorporate the requirement from existing N.J.A.C. 7:13-8.3 that the area-specific fishery resource timing restrictions at N.J.A.C. 7:13-11.5(d) (proposed to be recodified at N.J.A.C. 7:13-11.6(d)) be observed.

Permit-by-rule 57, for construction of a non-habitable building for agricultural purposes, is proposed to be converted to a permit-by-registration at N.J.A.C. 7:13-7.23 with an amendment to clarify that buildings that houses livestock are not authorized within a flood hazard area. A building housing livestock within a flood hazard area will require authorization pursuant to an individual permit, which will ensure that the building is suitably elevated or flood-proofed and that the flood storage volume displacement limits in the rules are met. Finally, the relaxation of the prohibition from disturbing the land within 25 feet of the top of bank in cases where bulkheads, retaining walls, revetments, or impoundments exist is proposed for deletion. The reason for this deletion has been previously stated above, and it enables better protection from erosion that may occur should any bulkhead, retaining wall, or revetment fail for any reason.

Permit-by-rule 60, for construction of a fence along and/or across a regulated water to manage livestock, at N.J.A.C. 7:13-7.60, is proposed as a permit-by-registration at N.J.A.C. 7:13-7.26 and is amended to require any fence that is constructed pursuant to the permit-by-registration to have openings of no less than six inches to allow the safe passage of debris so that floodwaters are not obstructed.

Permit-by-rule 62, for construction of a manure management structure for livestock or horses, at N.J.A.C. 7:13-7.62, is proposed as a permit-by-registration at N.J.A.C. 7:13-7.28 with amendments. The proposed permit-by-registration reduces the allowable footprint of any manure management structure from 1,000 square feet to no more than 400 square feet. Manure has the potential to significantly affect water quality in the event of a flood and could lead to harmful algal blooms, which is a major and growing problem

in New Jersey that the Department is actively attempting to address. Reducing the size of manure management structures in the flood hazard area reduces the amount of manure that could potentially be exposed in a flood, therefore, reducing the threat to water quality. The proposed permit-by-registration also eliminates the potential for a structure to be authorized in the floodway through this permit process, as may be allowed pursuant to the existing permit-by-rule in certain circumstances. As the floodway is generally regarded as the more dangerous portion of the flood hazard area when compared with the flood fringe, amending the standard to prohibit the placement of a manure management structure within the floodway will help protect the structure from damage from floodwaters while reducing the potential for inappropriate impacts to water quality. Where such structures are unavoidably proposed to be located within a floodway, the applicant can request a hardship exception pursuant to an individual permit. Finally, the amended standards delete the relaxation that allows a structure to be located within 25 feet of the top of bank. The reason for this has been previously explained above.

Permit-by-rule 63, for application of herbicide within riparian zones to control invasive plant species, at N.J.A.C. 7:13-7.63, is proposed as a permit-by-registration at proposed N.J.A.C. 7:13-7.29 with an amendment to allow for the application of herbicides within a 300-foot riparian zone. As the authorization requires all activities to be conducted pursuant to the appropriate permits issued by the Bureau of Licensing and Pesticide Operations, the Department believes the application of herbicide should not pose a threat to a 300-foot riparian zone. When properly applied, the herbicide should remove invasive or harmful species without affecting native species or water quality.

Bifurcation of Permits-by-Rule into Exemptions, Permits-by-Registration, and/or General Permits-by-Certification

Two permits-by-rule are proposed to be bifurcated into a permit-by-registration for some activities currently authorized pursuant to the permit-by-rule and a general permit-by-certification for other activities currently authorized pursuant to the permit-by-rule.

Permit-by-rule 15, for construction of barrier-free access to a building, at N.J.A.C. 7:13-7.15, is proposed to be bifurcated into a permit-by-registration at proposed N.J.A.C. 7:13-7.7, which will authorize barrier-free access structures outside the floodway only, and a general permit-by-certification for construction of barrier-free access within a floodway at proposed N.J.A.C. 7:13-8.11. This bifurcation is intended to incentivize safe construction of barrier-free access outside of high risk areas, like the floodway. While the standards for the proposed permit-by-registration for barrier-free access outside a floodway remain the same as the standards from the existing permit-by-rule, the Department is proposing amendments in the new general permit-by-certification for barrier-free access within a channel or floodway. The proposed general permit-by-certification requires the access to be open underneath the floor of the access to allow the passage of flood waters and requires that any handrail have balusters placed no less than six inches apart. These open spaces allow for the safe passage of floodwater and any debris that may be carried by floodwaters, reducing the potential for obstructions and damage to the barrier-free access. The proposed general permit-by-certification also prohibits any barrier-free access from being constructed in a channel.

Permit-by-rule 21, for construction of a swimming pool associated with residential use, at N.J.A.C. 7:13-7.21, is proposed to be bifurcated into a permit-by-registration at proposed N.J.A.C. 7:13-7.12 that will provide for the construction of an in-ground swimming pool associated with residential use and a general permit-by-certification at proposed N.J.A.C. 7:13-8.6 for the construction of aboveground swimming pools associated with residential use. The Department is proposing to require authorization pursuant to a general permit-by-certification for the construction of an aboveground pool because aboveground pools have a more significant impact on flood storage volume displacement than in-ground

swimming pools. The Department finds it necessary to limit this type of impact in the flood hazard area because of the potential effect to surrounding properties. The rulemaking also includes amendments to the standards for both the permit-by-registration and the general permit-by-certification.

The permit-by-registration for in-ground swimming pools at proposed N.J.A.C. 7:13-7.12 continues the prohibition in the existing permit-by-rule against ground elevation being raised in a floodway, as well as the requirement that any in-ground pool located in a fluvial flood hazard area lie at or below the existing grade, except for portions of the structure that lie aboveground, such as railings and diving boards. Further, the proposed permit-by-registration continues to require that any excavated material be removed from the flood hazard area. By constructing the in-ground pool at or below the existing grade, there is no significant loss of flood storage volume and, therefore, the pool would not displace floodwaters. Further, the proposed permit-by-registration aims to protect existing riparian zone vegetation by limiting any clearing, cutting, or removal of such vegetation to actively disturbed areas and does not allow the activity to result in the loss of more than 5,000 square feet of riparian zone vegetation. This vegetation is critical to the stability of the watercourse, provides habitat to wildlife, and can help reduce floodwater velocity.

The general permit-by-certification at proposed N.J.A.C. 7:13-8.6 for aboveground swimming pools associated with residential use requires the swimming pool to be located outside the floodway and prohibits the existing ground elevation from being raised in a floodway. The proposed authorization allows for no more than 50 cubic yards of flood storage volume displacement in a fluvial flood hazard area due to the pool itself or any associated grading, in contrast to the 100 cubic yards of flood volume displacement allowed pursuant to the existing permit-by-rule. The Department is concerned that continuing to allow 100 cubic yards of flood volume displacement for an aboveground pool will result in exacerbated flooding along a regulated water as more and more pools are constructed. By limiting the flood volume displacement over what the permit-by-rule currently allows, the Department will be better able to guard against exacerbated flooding. The Department notes that an allowance of 50 cubic yards is sufficient to allow for the

construction of an aboveground pool that is six-feet in height with a diameter of up roughly 17 feet. Should an applicant propose a larger aboveground pool, then the general permit-by-certification cannot be used. An individual permit would be required to ensure that flood storage compensation is provided. Further, the proposed general permit-by-certification limits any clearing, cutting, or removal of riparian zone vegetation to actively disturbed areas in order to minimize environmental impacts. Although this authorization for aboveground pools will be subject to the application requirements for general permits-by-certification, no fee is proposed for this general permit-by-certification.

Proposed Conversions to General Permits-by-Certification

The Department is proposing to convert nine permits-by-rule to general permits-by-certification. Permit-by-rule 28 for the filling of an abandoned raceway at N.J.A.C. 7:13-7.28, and permit-by-rule 29 for the placement of one to three wind turbines at N.J.A.C. 7:13-7.29, are proposed as general permits-by-certification at N.J.A.C. 7:13-8.7 and 8.8, respectively, with no change to the substantive standards for authorization.

It has been the Department's experience that these particular activities warrant a certification from an architect or engineer, as appropriate, to ensure that public health, safety, and welfare are protected. Converting these permits-by-rule to general permits-by-certification allows the Department to have appropriate oversight in ensuring that the activities will not exacerbate flooding or adversely impact the environment. For example, activities pursuant to permit-by-rule 28 could have significant impacts on hydrology/hydraulics of the regulated water if not performed correctly. Permit-by-rule 29 has highly detailed standards regarding the size and total area that may be covered by turbines placed pursuant to this authorization that are appropriately overseen and certified by a design professional.

The Department is proposing amendments to the substantive standards for seven permits-by-rule that are proposed to be converted to general permits-by-certification. Permit-by-rule 17 for construction of

a dock, pier, or boathouse at N.J.A.C. 7:13-7.17 is proposed as a general permit-by-certification at N.J.A.C. 7:13-8.5 with an amendment clarifying that any boathouse constructed pursuant to the general permit-by-certification must be used solely for the purpose of storing boats and related boating accessories, and not used for habitation. The Department believes this clarification is necessary to protect human life in the event of a flood as a boathouse constructed pursuant to this permit is not intended to meet construction code requirements necessary for human habitation. Although the nature of the structure authorized pursuant to this general permit-by-certification is water-dependent, there is still inherent risk to construction in or near a regulated water. By converting this activity to a general permit-by-certification and thereby requiring a certification from an engineer or architect that the standards are met, it is the goal of the Department to limit structural damage of a dock, pier, or boathouse in the event of a flood or from creating debris carried by floodwaters.

The Department is proposing to convert permit-by-rule 32 for the construction of an aquatic habitat enhancement device at N.J.A.C. 7:13-7.32 to a general permit-by-certification at proposed N.J.A.C. 7:13-8.9 with an amendment to include aquatic habitat enhancement devices approved by the USDA Natural Resource Conservation Service in addition to any such device approved by the U.S. Fish and Wildlife Service and/or the Department's Division of Fish and Wildlife. Given the potential adverse impacts on flooding if the activities are not designed and constructed correctly, it is appropriate for a design professional to certify that the activities qualify for authorization and will not exacerbate flooding or adversely impact the environment. No fee is proposed for this general permit-by-certification in order to encourage environmentally beneficial projects.

Permit-by-rule 35 for placement of one or more utility monopole towers at N.J.A.C. 7:13-7.35 is proposed as a general permit-by-certification at N.J.A.C. 7:13-8.10 with an amendment to delete the relaxation of the required setback distance from any top of bank for the reasons explained above.

Permit-by-rule 38 for attachment of a utility line to a lawfully existing roadway or railroad that crosses a regulated water at N.J.A.C. 7:13-7.38 is proposed to be converted to a general permit-by-certification at proposed N.J.A.C. 7:13-8.12. Similar to the proposed general permit-by-certification for placement of an underground utility line beneath existing pavement, this general permit-by-certification is amended to delete the relaxation of the required setback distance from any top of bank. It has also been amended to require manholes be placed no closer to the top of bank than 25 feet, where practicable, for reasons discussed in the prior paragraph.

The Department is proposing to convert permit-by-rule 42 for reconstruction of all or part of a lawfully existing bridge superstructure at N.J.A.C. 7:13-7.42 into a general permit-by-certification at proposed N.J.A.C. 7:13-8.13 with amendments to include new standards relating to protection of fishery resources. Specifically, the rulemaking imposes the area-specific fishery resource requirements relating to timing restrictions at N.J.A.C. 7:13-11.5(d) (proposed to be recodified as N.J.A.C. 7:13-11.6(d)) for any in-water work. Due to the possible adverse impacts to flooding that could occur if the activities pursuant to this permit are not designed correctly, the Department is proposing to convert the permit-by-rule to a general permit-by-certification so that an engineer can certify that the standards are met.

Finally, permit-by-rule 47 for construction of a gauge, weir, or similar device at N.J.A.C. 7:13-7.47 is proposed as a general permit-by-certification at N.J.A.C. 7:13-8.14, which additionally incorporates portions of existing general permit-by-certification at N.J.A.C. 7:13-8.14 for placement of water monitoring devices, which is proposed to be repealed.

The requirements at existing N.J.A.C. 7:13-7.47(a)1 through 6 are continued at proposed N.J.A.C. 7:13-8.14(a)1 through 6, respectively, with amendments as follows that are necessary to ensure that activities pursuant to this permit will not cause adverse impacts to flooding or the environment. Proposed N.J.A.C. 7:13-8.14(a)3 replaces the term flood hazard area design flood elevation with climate-adjusted flood elevation and requires that no rise occur during this flood event as a result of the activities pursuant

to this permit. Proposed N.J.A.C. 7:13-8.14(a)5 continues the requirement that no more than 2,000 square feet of riparian zone vegetation is cleared, cut, and/or removed with the added requirement that such disturbance be limited to actively disturbed areas where possible. Proposed N.J.A.C. 7:13-8.14(a)6 continues the requirement that appropriate timing restrictions be observed, with an updated reference to N.J.A.C. 7:13-11.6(d).

The proposed general permit-by-certification additionally continues, without amendment, the requirements at existing N.J.A.C. 7:13-8.14(a)2 and 5 as proposed N.J.A.C. 7:13-8.14(a)7 and 8, respectively. Existing N.J.A.C. 7:13-8.14(a)7 is continued as proposed N.J.A.C. 7:13-8.14(a)9, without the reference to an engineering certification as it is proposed that any application for authorization pursuant to a general permit-by-certification requires that an engineer or architect, as appropriate, certify the requirements of the permit are met. Proposed N.J.A.C. 7:13-8.14(a)9 is additionally amended to require that any utility shelter is located outside the inundation risk zone, designed to resist the forces of floodwaters, standing water, and buoyancy resulting from flooding to at least one foot above the climate-adjusted flood elevation, and stores equipment inside the shelter at least one foot above the climate-adjusted flood elevation or designing the equipment to operate in submerged conditions. By incorporating standards from N.J.A.C. 7:13-8.14 that allow for the construction of a structure to be authorized as part of the activity, the potential for impacts to the riparian zone or damage to the structure itself necessitate that the activity be authorized as a general permit-by-certification. The Department believes there are many beneficial uses that can result from the devices considered pursuant to this proposed general permit-by-certification, and, therefore, is not proposing a fee for this authorization.

Proposed Conversion of Permit-by-Rule 36 to New General Permit 12

The Department is proposing to convert permit-by-rule 36, for placement of an underground utility line using horizontal directional drilling or jacking, at N.J.A.C. 7:13-7.36, to a general permit at proposed

N.J.A.C. 7:13-9.12. Horizontal directional drilling is a method of installing underground pipes generally without the need to dig open trenches. Although horizontal directional drilling construction methods are preferable to open trenching with respect to protecting above-ground resources due to a lesser footprint of ground disturbance, the Department has determined, based upon its experiences with these activities, that more extensive review and monitoring are necessary than the activities would receive pursuant to a permit-by-registration or general permit-by-certification. Increased monitoring will help ensure that all necessary precautions are taken to protect against any contamination of the regulated water, soil, groundwater, or other regulated area. The proposed general permit includes the requirements from the existing permit-by-rule, but also includes several new and amended provisions. Since the existing rule was adopted, several projects have been proposed in New Jersey using horizontal directional drilling. As a result, the Department has gained extensive experience reviewing the outcomes of horizontal directional drilling and this experience shows that there is the potential to negatively affect waterways when such techniques are used.

Jacking is also authorized pursuant to this general permit. "Jacking," as defined at proposed amended N.J.A.C. 7:13-1.2, means the placement of an underground utility line beneath a regulated area by means of horizontally pushing or otherwise forcing the utility through the earth below the regulated area in such a way that the ground above is not disturbed. In certain cases, a utility line can be installed through jacking pursuant to the exemption at proposed N.J.A.C. 7:13-2.5(a)13. Where proposed jacking does not meet the limitations of the exemption, an applicant may rely on this proposed general permit or obtain an individual permit.

Pursuant to the new general permit, the Department is proposing to include a requirement that any receiving pits that are part of the activity are located outside of the floodway and riparian zone. This standard will help avoid the release of excess sediment and soil into the regulated water while the activity is taking place. Additionally, any manhole constructed as part of the project to access the utility line must be located at least 25 feet from any top of bank, where practicable, an increase from the 10 feet standard

contained in the existing permit-by-rule, in order to ensure the manhole remains stable in the event of erosion. Consistent with other changes made throughout the chapter, discussed above, the proposed general permit eliminates the exception currently part of the permit-by-rule that allows encroachment in the area adjacent to the top of bank where the project is adjacent to a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water.

The proposed general permit mirrors the proposed amendments to freshwater wetlands general permit 2 at N.J.A.C. 7:7A-7.2 and requires the permittee to use potable water when drilling at N.J.A.C. 7:13-9.12(a)10, use NSF 60/61 certified drilling fluids and additives to conduct drilling operations at N.J.A.C. 7:13-9.12(a)11, and submit a contingency plan that details processes for minimizing environmental degradation in case of a failure during drilling operations, including an "inadvertent return" scenario at N.J.A.C. 7:13-9.12(a)12. Further, at N.J.A.C. 7:13-9.12(a)13, the permittee must fill all abandoned boreholes, including portions that are within 25-feet of the surface, with grouts approved by the New Jersey State Well Drillers and Pump Installers Examining and Advisory Board. Due to the proximity to wetlands and other waters, the Department is requiring the use of potable water during drilling to ensure that if an inadvertent return or other accident does occur, the drilling water will not contaminate the wetlands or waterway. Further, since very few of the drilling fluids and additives used by the drilling industry meet New Jersey safety standards for working near wetlands or waters, the use of NSF certified materials ensures that the pipeline installers are aware of, and follow, all New Jersey standards. NSF 60/61 is the American National Standard for evaluation of water treatment chemicals and is required by law in most U.S. states, including New Jersey. This standard was created by a committee of industry experts. Many categories of water treatment chemicals, as well as well-drilling aids, fall within the scope of this standard. By requiring the use of NSF 60/61 certified fluids, the Department ensures that those fluids will not contaminate the water. Preparing a contingency plan to minimize environmental damage if there is a drilling failure or inadvertent return is a critical, proactive step to ensuring protection of wetlands and waters. Requiring

filling of abandoned boreholes with board-certified grouts ensures that there is no easy pathway between surface or ground water and that the borehole does not provide a pathway or conduit, which could result in draining the wetlands or allow contamination to migrate. The New Jersey State Well Drillers and Pump Installers Examining and Advisory Board reviews grouts and upon determining they are acceptable, includes them in the Well Construction and Maintenance; Sealing of Abandoned Wells rules at N.J.A.C. 7:9D. The Department is also proposing to require that grout be placed through either a drill rod or tremie extended down the borehole from the entry point until it reaches a vertical depth of 25 feet plus the hole diameter below the land surface. A "tremie" is a grout line or hose used to pump grout, under pressure, into the borehole and annular space (the area between the pipe and the bore hole). Using this method ensures that all spaces are filled. Finally, the requirement at proposed N.J.A.C. N.J.A.C. 7:13-9.12(a)13ii to grout the top five vertical feet of all entry and exit points is intended for safety so that holes on the ground's surface do not remain open. The Department is proposing the use of approved grouts specifically for the upper 25 feet plus diameter of pipe distance because that is the area closest to the wetland and waterway thus necessitating the highest level of protection.

Proposed Repeal of Permit-by-Rule 11 and Permit-by-Rule 12

The Department is proposing to repeal permit-by-rule 11 for the reconstruction, relocation, and/or elevation of a lawfully existing building at N.J.A.C. 7:13-7.11. This permit-by-rule is duplicative with existing general permit-by-certification 5 for the reconstruction, relocation, expansion, and/or elevation of a building outside a floodway at N.J.A.C. 7:13-8.5 (proposed to be recodified at N.J.A.C. 7:13-8.1). The chief difference between these two authorizations is the limit in the increase in the building's footprint that may result from the regulated activities. Permit-by-rule 11 allows the footprint of the building to increase up to 400 square feet cumulatively since November 5, 2007, while general permit-by-certification 5 allows an increase of up to 750 square feet cumulatively since November 5, 2007. The Department is proposing

to remove the redundancy of these two authorizations by repealing the permit-by-rule and maintaining the footprint for any expansion pursuant to the general permit-by-certification at 750 square feet.

Permit-by-rule 12 for construction of an addition(s) to a lawfully existing habitable building at N.J.A.C. 7:13-7.12 is proposed to be repealed because it is duplicative with general permit-by-certification 8 for the construction of an addition to a lawfully existing building at N.J.A.C. 7:13-8.8 (proposed to be recodified at N.J.A.C. 7:13-8.2). The main difference between these two authorizations is the limit in the increase in the building's footprint that may result from the regulated activities. Permit-by-rule 12 allows the footprint of the building to increase up to 400 square feet cumulatively since November 5, 2007, while general permit-by-certification 8 allows the footprint of the building to increase up to 750 square feet cumulatively since November 5, 2007. The Department is proposing to remove the redundancy of these two authorizations by repealing the permit-by-rule and requiring that the activity be authorized pursuant to proposed N.J.A.C. 7:13-8.2 and maintaining the footprint of any expansion pursuant to the general permit-by-certification at 750 square feet.

SUBCHAPTER 8. GENERAL PERMITS-BY-CERTIFICATION

Pursuant to this rulemaking, the Department is proposing to expand the types of activities subject to authorization pursuant to a general permit-by-certification. As discussed above, nine existing permits-by-rule are proposed to be converted to general permits-by-certification. Furthermore, three permits-by-rule are proposed to be bifurcated into a permit-by-registration and a general permit-by-certification, one permit-by-rule is proposed to be bifurcated into an exemption and a general permit-by-certification, and one permit-by-rule is proposed to be bifurcated into an exemption and a general permit. The Department determined that the activities authorized pursuant to these existing permits-by-rule have a greater potential to exacerbate flooding and to impact public health, safety, and welfare, and the environment such that they warrant additional scrutiny and stringency in the form of an authorization pursuant to a general permit-by-

certification. In addition, the Department conducted a review of the 16 existing general permits-by-certification to determine whether it is appropriate for the general permit-by-certification to be converted to an exemption, a permit-by-registration, or a general permit and whether amendments are required. Based upon that evaluation, the Department is proposing to convert one general permit-by-certification to an exemption, one to a permit-by-registration, and one to a general permit. The Department is also proposing to repeal nine general permits-by-certification for the reasons discussed below.

The following table summarizes the relocation and resulting recodification of the existing general permits-by-certification as exemptions, permits-by-registration, general permits-by-certification, and/or general permits. Only four of the existing general permits-by-certification are proposed to be continued with amendments (existing general permits-by-certification 5, 8, 15, and 16). The remaining 12 are proposed to be repealed, the substance of many is folded into other types of authorizations as described below.

Table of citations, recodifications, and proposed changes

Current citation N.J.A.C.	**Subject matter**	**Proposed citation N.J.A.C.**	**Proposed change(s)**
7:13-8.1	Removal of accumulated sediment and debris from a regulated water for agricultural purposes	7:13-9.1(d)	Repealed; Standards incorporated into general permit

7:13-8.2	Construction of an agricultural roadway crossing	Repealed	Repealed
7:13-8.3	Agricultural bank stabilization and/or bank restoration activities	7:13-7.22	Repealed; Some standards incorporated into permit-by-registration
7:13-8.4	Enhancement of a riparian zone through the planting of native, non-invasive plant species	Repealed	Repealed
7:13-8.5	Reconstruction, relocation, expansion, and/or elevation of a building outside a floodway	7:13-8.1	Recodified and amended; Amendments described below
7:13-8.6	Construction of one single-family home or duplex in a tidal flood hazard area	Repealed	Repealed

7:13-8.7	Removal of accumulated sediment and debris from an engineered channel	7:13-2.5(a)3	Repealed; Some standards incorporated into exemption
7:13-8.8	Construction of an addition to a lawfully existing building	7:13-8.2	Recodified and amended; amendments described below
7:13-8.9	Sediment and debris removal within and/or adjacent to a bridge, culvert, or outfall by a public entity	7:13-2.5(a)4	Repealed; Some standards incorporated into exemption
7:13-8.10	In-kind replacement of a culvert	Repealed	Repealed
7:13-8.11	Maintenance of existing manmade stormwater management structures and conveyances	7:13-7.30	Repealed; Converted to permit-by-registration
7:13-8.12	Surveying and geotechnical and archeological investigation activities	7:13-2.5(a)5	Repealed; Converted to exemption

7:13-8.13	Placement of solar panels	7:13-9.11	Repealed; Converted to general permit
7:13-8.14	Placement of water monitoring devices	No citation change	Repealed; Some standards incorporated into new general permit-by-certification
7:13-8.15	In-kind replacement of public infrastructure	7:13-8.3	Recodified and amended; amendments described below
7:13-8.16	Construction of a footbridge	7:13-8.4	Recodified and amended; amendments described below

Proposed Repealed General Permits-by-Certification

As mentioned above, the Department is proposing to repeal 12 general permits-by-certification. An analysis of applications received over the past four years revealed that a number of these permits are rarely, if ever, used. Given the costs associated with maintaining the Department's online permit application portal, it is not prudent to support online applications for permits that have been demonstrated to have limited utility.

General permit-by-certification 1 for removal of accumulated sediment and debris from a regulated water for agricultural purposes at N.J.A.C. 7:13-8.1 and general permit-by-certification 7 for removal of accumulated sediment and debris from an engineered channel at N.J.A.C. 7:13-8.7 are both proposed for repeal. Their standards are proposed to be incorporated into the newly proposed general permit for the removal of accumulated sediment and debris from a regulated water at N.J.A.C. 7:13-9.1, which is

discussed in the Summary below. Specifically, the standards from general permit-by-certification 1 are proposed at N.J.A.C. 7:13-9.1(d) for actively farmed land and the standards from general permit-by-certification 7 are proposed at N.J.A.C. 7:13-9.1(a)3.

The Department is also proposing to repeal general permit-by-certification 2 for construction of an agricultural roadway crossing at N.J.A.C. 7:13-8.2. The Department has not received any applications for this general permit-by-certification since its creation in 2016. Given the potential for adverse impacts on flooding or the environment if built incorrectly, and the lack of utility of the general permit-by-certification, the Department has determined that it is more appropriate that this activity be regulated pursuant to an individual permit.

General permit-by-certification 3, for agricultural bank stabilization and/or bank restoration activities, at N.J.A.C. 7:13-8.3, is also proposed for repeal. The Department has not received any applications for this permit, first established in 2016, since 2018, demonstrating the lack of usefulness of this general permit-by-certification. As mentioned above, some agricultural bank stabilization and/or restoration activities will be authorized pursuant to the permit-by-registration for the continuation or commencement of natural resource conservation practices associated with agricultural activities at proposed N.J.A.C. 7:13-7.26, which is expanded to incorporate bank stabilization and bank restoration activities. Bank stabilization and bank restoration activities that do not meet the requirements of the proposed permit-by-registration will be required to meet the individual permit standards for bank stabilization and channel restoration activities pursuant to N.J.A.C. 7:13-12.14, as they have a greater potential to exacerbate flooding or adversely impact the environment, which warrant additional stringency and oversight.

The Department is also proposing to repeal general permit-by-certification 4 for enhancement of a riparian zone through the planting of native, non-invasive plant species at N.J.A.C. 7:13-8.4. Though this permit was established in 2016, the Department has not received any applications for this permit since 2018 and, therefore, does not find it necessary to retain. Like general permit-by-certification 3 above, the

Department has not received any applications for this permit in the past four years, demonstrating the lack of usefulness of this general permit-by-certification. The planting of non-invasive plant species is generally something that the Department encourages. If associated with normal property maintenance, the proposed rules exempt the activity from this chapter. However, the activities covered pursuant to the existing general permit-by-certification have the potential to adversely impact the function of the riparian zone if done improperly, such as by removing healthy trees or disturbing documented threatened or endangered species habitat. The goals and standards of this existing general permit-by-certification are similar to those in the general permit at N.J.A.C. 7:13-9.4 for the creation, restoration, and enhancement of habitat and water quality values and function within the flood hazard area, riparian zone, and/or inundation risk zone, which require the activities to be approved by a government resource protection agency or charitable conservancy to ensure all potential impacts are fully considered. As such, the general permit-by-certification is duplicative. In order to be more protective of the environment, the Department believes these activities warrant additional review under the existing general permit or an individual permit.

General permit-by-certification 6, first established in 2016, for construction of one single-family home or duplex in a tidal flood hazard area at N.J.A.C. 7:13-8.6 is proposed for repeal, as the Department has received only two applications for this general permit-by certification in the past four years, demonstrating the lack of usefulness of this general permit-by-certification. The goals and standards of this existing general; permit-by-certification are similar to those in the general permit for the construction of one single-family home or duplex, and one associated driveway that does not cross a regulated water at N.J.A.C. 7:13-9.6, indicating that this general permit-by-certification is duplicative. Given the potential impacts to public health, safety, and welfare, and the environment associated with the activities covered pursuant to this general permit-by-certification, the Department feels these activities warrant review by the Department.

General permit-by-certification 9, first established in 2016, for sediment or debris removal within and/or adjacent to a bridge, culvert, or outfall by a public entity at N.J.A.C. 7:13-8.9 is proposed for repeal because the Department has not received any applications for this general permit-by-certification since 2018, demonstrating the lack of usefulness of this general permit-by-certification. However, some standards from this general permit-by-certification are incorporated into the exemption at N.J.A.C. 7:13-2.5(a)3, specifically those standards that regulate work adjacent to bridges, culverts, and outfall structures owned and controlled by public entities, as explained above. Sediment and debris removal activities that do not meet the requirements of the proposed exemption, such as activities that utilize heavy machinery, will instead be subject to the requirements of the proposed general permit at N.J.A.C. 7:13-9.1 for the removal of accumulated sediment and debris from a regulated water, discussed below. Those sediment and debris removal activities that cannot meet the requirements of either the proposed exemption at N.J.A.C. 7:13-2.5(a)3 or the proposed general permit at N.J.A.C. 7:13-9.1 will necessarily require an individual permit as there is a greater potential to adversely impact the environment or exacerbate flooding that warrants additional permitting stringency.

The Department is also proposing to repeal general permit-by-certification 10 for in-kind replacement of a culvert at N.J.A.C. 7:13-8.10. These activities will now require an individual permit. The general permit-by-certification does not require terrestrial wildlife fragmentation to be addressed as part of the application. Habitat fragmentation is a leading cause for loss of species diversity, especially in New Jersey's highly developed landscape, in particular for New Jersey's bobcats who require large territorial ranges. In addition, vehicular-related mortality of certain threated or endangered species, such as wood turtles and pine snakes, threaten populations with extirpation. Therefore, the Department believes that it is necessary to analyze whether culvert replacement projects could potentially enhance environmental value by adding or improving existing wildlife crossings to preserve habitat, wildlife corridors, and populations

of threatened or endangered species. Such an analysis is more appropriately conducted pursuant to an individual permit.

The Department is proposing to repeal and convert general permit-by-certification 11 for maintenance of existing manmade stormwater management structures and conveyances at N.J.A.C. 7:13-8.11 to a permit-by-registration at proposed N.J.A.C. 7:13-7.30 in order to facilitate these beneficial activities. The activities authorized pursuant to the existing general permit-by-certification, which are limited to removal of accumulated sediment, debris, or nuisance vegetation, stabilization of an eroded structure, or the repair and/or in-kind replacement of certain stormwater management structures and conveyances, are necessary for the proper operation of stormwater management facilities and have limited potential to exacerbate flooding or adversely impact the environment. Therefore, the Department believes that it is unnecessary for those responsible for maintaining stormwater management facilities, which are often required as a condition of a Department permit, to apply for a general permit-by-certification. The Department is additionally proposing to allow the replacement of filter media, such as sand or soil at the bottom of a BMP in order to maintain its functionality. The existing general permit-by-certification additionally authorizes the repair and/or in-kind replacement of a stormwater management basin constructed for purposes other than to satisfy a freshwater wetlands mitigation requirement. This is captured at proposed N.J.A.C. 7:13-7.30(a) and (a)3, which references basins without the existing limitations. Finally, in order to ensure that flooding is not exacerbated and the requirements at N.J.A.C. 7:8 are met, the permit is amended to clarify that the capacity of the existing stormwater conveyance system cannot be increased.

The proposed permit-by-registration does not authorize the repair or in-kind replacement of a culvert along a manmade channel, or a tidegate, levee, or pump station along a regulated water that is separated from tidal influence by such structures. With respect to culverts, it has been the Department's experience that the existing rule language is often misconstrued, leading an applicant to inappropriately use

the general permit-by-certification to replace a culvert that is not a part of a stormwater conveyance. Such an activity typically needs to be authorized pursuant to either a general permit or an individual permit. In order to avoid such confusion, protect an applicant from a potential enforcement action, and to better guard against an inadvertent exacerbation of offsite flooding, the Department proposes to delete language referencing culvert replacement from the permit-by-registration. For similar reasons, the Department proposes to delete reference to repairs or replacement of tide gates, levees, and pump stations.

The remaining regulated activities authorized pursuant to the proposed permit-by-registration do not have a high probability of leading to worsening of offsite flooding. Because of this, it is not necessary to continue to require an engineering certification. As such, the requirement for an applicant to obtain such a certification has been deleted from the proposed permit-by-registration.

As mentioned above, an exemption is proposed at new N.J.A.C. 7:13-2.5(a)5 that will include the activities currently authorized pursuant to general permit-by-certification 12 for surveying and geotechnical and archeological investigation activities at existing N.J.A.C. 7:13-8.12, as well as those activities authorized pursuant to permit-by-rule 44 for surveying activities (existing N.J.A.C. 7:13-7.44), permit-by-rule 45 for geotechnical and archeological investigation activities (existing N.J.A.C. 7:13-7.45), and permit-by-rule 46 for installation of one or more monitoring wells (existing N.J.A.C. 7:13-7.46). The proposed exemption combines the standards of all four existing authorizations into one comprehensive exemption with certain exceptions and limitations, as described in the exemption Summary above.

The Department is proposing to convert, with amendments, general permit-by-certification 13 for the placement of solar panels at N.J.A.C. 7:13-8.13 to a new general permit at proposed N.J.A.C. 7:13-9.11. Pursuant to the existing general permit-by-certification, no disturbance is allowed within 25 feet of any top of bank in a 50-foot riparian zone, within 75 feet of any top of bank in a 150-foot riparian zone and within 150 feet of any top of bank in a 300-foot riparian zone. The requirements pursuant to this general permit are proposed to be restructured to allow the placement of panels and equipment greater than 25 feet from

top of bank provided there is no disturbance to riparian zone vegetation within 75 feet of top of bank within a 150-foot riparian zone, or within 150 feet of top of bank within a 300-foot riparian zone. For example, an applicant may propose to place solar panels within an existing paved parking area that lies within the riparian zone in such a way that no vegetation is disturbed, and, therefore, no adverse impacts to water quality would occur.

The proposed general permit additionally clarifies that no panels or equipment are placed within a regulated water. Whereas, the existing general permit-by-certification does not authorize placement of panels and equipment within a floodway, only regulated waters that have a contributory drainage area of at least 50 acres possess a floodway. Pursuant to this general permit, the Department is clarifying that the placement of panels within regulated waters themselves, such as a lake, pond, or reservoir, would not be permitted irrespective of the presence of a floodway. In addition, in contrast to the existing requirement that the applicant obtain a verification prior to the application, the proposed new general permit allows an applicant to apply for a verification concurrently with the general permit. The existing requirement to obtain a verification prior to the application was only necessary as the general permit-by-certification was issued immediately while a verification was reviewed pursuant to the 90-day timeframe. Since the general permit will be reviewed pursuant to the 90-day timeframe, the verification can be reviewed concurrently. The Department has found that most applications for the placement of solar panels are part of a project that is submitted to the Department as an individual permit. The Department hopes to encourage solar energy projects by allowing appropriate projects to be authorized pursuant to this general permit rather than an individual permit but would like to ensure that the placement of the structures does not reduce the environmental value of any other resources in a regulated area. Authorization pursuant to a general permit allows both goals to be satisfied.

Finally, the Department is proposing to repeal general permit-by-certification 14 for the placement of water monitoring devices at existing N.J.A.C. 7:13-8.14, first established in 2016. The Department has

not received any applications for this general permit-by-certification since 2018, demonstrating the lack of usefulness of this general permit-by-certification. As part of this rulemaking, the placement of monitoring wells as part of exploratory site investigation is included as an exempt activity at proposed N.J.A.C. 7:13-2.5(a)4. Further, the other activities presently authorized pursuant to the existing permit-by-rule and general permit-by-certification, including the construction of a gauge, weir, or similar device, currently authorized pursuant to a permit-by-rule at N.J.A.C. 7:13-7.47, are proposed to be regulated pursuant to a new general permit-by-certification at proposed N.J.A.C. 7:13-8.14, as explained above. To reduce redundancies in the rules, selected standards from existing general permit-by-certification 14 will be included in that proposed general permit-by-certification at new N.J.A.C. 7:13-8.14.

Proposed Amendments to Existing General Permits-by-Certifications

The Department is proposing to recodify and amend the standards applicable to four existing general permits-by-certification. As described in the summary for proposed N.J.A.C. 7:13-18.3 below, an architect or engineer acting on behalf of the person intending to conduct the regulated activities is required to apply for a general permit-by-certification. As part of the application, the architect or engineer will be required to certify that the conditions specific to the general permit-by-certification are or will be met, and that information submitted is true, accurate, and complete. Since this applies to all general permits-by-certification, any standard within a general permit-by-certification to either obtain or submit an engineering certification has become duplicative. As such, the Department is proposing to no longer require that engineering certifications be obtained or provided as a specific standard in general permits-by-certification. As discussed in the summary for proposed N.J.A.C. 7:13-18.3 below, the protections and assurances provided by an engineering certification will instead be required as part of the general application submission applicable to all general permits-by certification.

The Department is proposing to recodify and amend general permit-by-certification 5 at N.J.A.C. 7:13-8.5 for the reconstruction, relocation, expansion, and/or elevation of a building outside a floodway at proposed N.J.A.C. 7:13-8.1 to require that the building is also outside of the inundation risk zone, among other changes. The proposed general permit-by-certification will require a verification of the climate-adjusted flood elevation, which is discussed above, rather than the flood hazard area elevation. Alternatively, an engineer can determine the climate-adjusted flood elevation for the site, using a map published by FEMA or the Department, pursuant to proposed N.J.A.C. 7:13-3.2. Additionally, the general permit-by-certification is amended to require that the lowest floor of any portion of the building being reconstructed, relocated, expanded, or elevated be constructed to at least one foot above the climate-adjusted flood elevation and no lower than the elevation required pursuant to the Uniform Construction Code, N.J.A.C. 5:23, instead of to at least one foot above the flood hazard area design flood elevation. An exception is made where the proposed improvements to the building consist solely of repair and maintenance activities that do not alter the building's height, footprint area, or habitable area. It has been the Department's experience that improvements necessary to ensure that a lawfully existing building remains habitable, such as replacing doors, windows, and roofs, or undertaking internal renovations, can sometimes constitute a substantial improvement, particularly where the market value of the building is low. It is not the Department's intention to discourage homeowners, for example, from undertaking necessary improvements to their home that do not alter the building's height, footprint area, or habitable area. Further, improvements that are designed to maintain a building in a state of good repair, and that do not increase the habitable area of the building, would not be associated with added risk. In fact, these types of repairs would likely increase the resilience of the building in question, having a positive effect. Therefore, in such a case, it is not necessary to construct or elevate the improved portion of the building at least one foot above the climate-adjusted flood elevation. Alternately, the lowest floor of the building is required to be elevated only as necessary to meet minimum NFIP standards as established by rule or floodplain ordinance for the

participating community in which the building is located. Equivalent language is proposed to be added to the individual permit requirements for a building at N.J.A.C. 7:13-12.5, as discussed below.

As discussed above, the proposed permit no longer specifically requires an engineering certification, as all newly proposed general permits-by-certification are required to be submitted by a licensed professional architect or engineer who certifies the accuracy of the application contents and the project's compliance with the permit standards. The existing building still may not be located within a floodway, nor may it be expanded or relocated into a floodway pursuant to proposed N.J.A.C. 7:13-8.1(a)2. This standard is further amended to indicate that the building may not be located within, expanded into, or relocated into the inundation risk zone, as discussed above. This standard is necessary to protect public safety and ensure that risks associated with any building reconstruction, expansion, or elevation within the inundation risk zone are fully considered, as required by the general permit or individual permit standards discussed below. The Flood Hazard Area Control Act allows for reconstruction of a lawfully existing building damaged in a natural disaster, which is an activity that can be authorized pursuant to this general permit-by-certification. The Department recognizes the financial burden that the reconstruction of a lawfully existing building that was damaged in natural disaster poses to property owners and is committed to facilitating the recovery process by not burdening applicants with additional costs, where appropriate. Therefore, no fee is required for this general permit-by-certification, even considering the broader range of projects which may fall within the scope of this general permit-by-certification.

The Department is proposing to recodify general permit-by-certification 8 at existing N.J.A.C. 7:13-8.8 for construction of an addition to a lawfully existing building as a general permit-by-certification at proposed N.J.A.C. 7:13-8.2 with amendments. While the existing general permit-by-certification is intended to authorize the construction of one or more additions that are located either above or adjoining a lawfully existing building, the proposed general permit-by-certification clarifies that intent. As discussed above, the requirement to provide an engineering certification to ensure that the addition being constructed

is not located in a floodway is proposed for deletion because pursuant to this rulemaking, the Department is also proposing to require that all applications for general permits-by-certification be submitted by a licensed professional architect or engineer who certifies the accuracy of the application contents and the project's compliance with the permit standards. However, the proposed authorization still prohibits the addition from being constructed in a floodway and adds a requirement prohibiting the existing building from being located in floodway. Further, the proposed authorization prohibits the existing building and addition from being located within the inundation risk zone to ensure the risks associated with any building expansion are fully considered, as required by the general permit or individual permit standards discussed below. The risk of damage to buildings constructed in a floodway or inundation risk zone is much greater than the risk to construction that is located in the flood fringe or area not anticipated to be inundated in the future. The Department believes it is necessary to discourage property owners from placing buildings and the people utilizing those buildings in a location that is inherently unsafe.

The proposed general permit-by-certification also amends the requirement for the lowest floor of the addition to be constructed at least one foot above the flood hazard area design flood elevation to at least one foot above the climate-adjusted flood elevation and eliminates the existing exception to the prohibition of disturbance within 25 feet of any top of bank, consistent with the change made throughout the chapter discussed above. No fee is proposed for this general permit-by-certification in order to encourage minor expansions of buildings that are not a substantial improvement.

Existing general permit-by-certification 15 at N.J.A.C. 7:13-8.15 for the in-kind replacement of public infrastructure is also proposed to be recodified as a new general permit-by-certification at N.J.A.C. 7:13-8.3 with amendments. The Department is proposing a new requirement to provide as-built drawings or other records to verify the dimensions and location of the infrastructure being replaced, so that the Department can ensure the replacements are in-kind and do not result in any unintended additional impacts that were not already present with the original infrastructure. As discussed above, an engineering

certification will no longer be required because the Department will be requiring that all proposed general permits-by-certification be submitted by a licensed professional architect or engineer who certifies the accuracy of the application contents and the project's compliance with the permit standards.

Finally, the Department is proposing to recodify and amend general permit-by-certification 16 at existing N.J.A.C. 7:13-8.16 for construction of a footbridge as a new general permit-by-certification as proposed N.J.A.C. 7:13-8.4. In order to facilitate the construction of these structures, the proposed general permit-by-certification increases the allowable width of the footbridge from four feet to 10 feet. It has been the Department's experience in regulating these structures that the flood damage potential is largely influenced by the thickness of the bridge deck and low chord (bottom of the stringer) elevation. The width of a footbridge does not generally affect its flood damage potential, specifically between four and 10 feet. This can be substantiated when considering standard hydraulic engineering principles. In general, a footbridge acts hydraulically as a broad-crested weir under circumstances where the bridge is overtopped by floodwaters. The broad-crested weir coefficient, a parameter influenced by the width of a bridge and elevation of the water over the bridge that is used to calculate flow passed over the bridge, generally does not vary significantly between a width of four feet and 10 feet at the same water elevation. For example, at a flood height of one foot over the bridge, the weir coefficient would be 2.67 and 2.68 for a four-foot wide and 10-foot-wide bridge, respectively (HydroCAD, 2011). This equates to a negligible difference in flow over the bridge of less than one percent.

In addition to the amended width limits, the existing referenced vertical datum for determining the elevation of the structure, the National Geodetic Vertical Datum of 1929 (NGVD 29), is proposed to be replaced with the more recent North American Vertical Datum of 1988 (NAVD 88). As indicated in the summary of the proposed definition for "NAVD 88," the Department's and FEMA's most recent mapping uses NAVD 88, and, thus, references to NGVD 29 are proposed to be changed for clarity and consistency.

Finally, the proposed general permit-by-certification requires handrails on the footbridge to have openings of more than six inches to allow for the safe passage of floodwaters and debris.

Proposed New General Permits-by-Certification

The Department is proposing, at N.J.A.C. 7:13-8.15, a new general permit-by-certification that authorizes lining a lawfully existing bridge or culvert with grout or similar material, in order to repair or restore the structure to a stable condition. Unlike bridge or culvert replacements, which may offer an opportunity to improve local flood conditions or address habitat fragmentation or impedances to low-flow aquatic passage through installation of a different type or size of structure, lining an existing structure is a common maintenance activity that affords no opportunity to address any such existing problem.

Lining is permissible pursuant to the proposed general permit-by-certification provided the work will not result in increased flooding outside the right-of-way associated with the structure during any flood event described at N.J.A.C. 7:13-12.1(i). In order to limit disturbance to riparian zone functionality, no riparian zone vegetation may be cleared, cut, or removed outside the structure or conveyance feature, and only where such disturbance is unavoidable, necessary to gain access to the structure or conveyance feature and minimized. Finally, the timing restrictions set forth at N.J.A.C. 7:13-11.6(d) must be observed to reduce potential impacts to fishery resources.

SUBCHAPTER 9. GENERAL PERMITS

The Department conducted a review of the 14 existing general permits to determine whether it is appropriate for the activities to be authorized pursuant to a general permit or pursuant to an individual permit and whether amendments are required. Based upon that evaluation, the Department is proposing to amend nine general permits and to repeal five general permits. The activities previously authorized pursuant to four of the repealed general permits will now require an individual permit while one, channel cleaning

pursuant to the Stream Cleaning Act, is incorporated into a new general permit. Finally, the Department is proposing a new general permit for the placement of solar panels based on the requirements of existing general permit-by-certification 13 (proposed to be repealed) and a new general permit for placement of an underground utility line using horizontal directional drilling or jacking, which is currently covered by existing permit-by-rule 36 (also proposed to be repealed).

The following table summarizes the relocation and resulting recodification of the existing general permits.

Table of citations, recodifications, and proposed changes

Current Citation N.J.A.C.	**Subject matter**	**Proposed Citation N.J.A.C.**	**Proposed change(s)**
7:13-9.1	Channel cleaning under the Stream Cleaning Act	No change	Repealed and replaced with a new general permit
7:13-9.2	Mosquito control water management activities	No change	Amendments described below
7:13-9.3	Scour protection activities at bridges and culverts	No change	Amendments described below
7:13-9.4	Creation, restoration, and enhancement of habitat and water quality values and functions	No change	Amendments described below

7:13-9.5	Reconstruction and/or elevation of a building in a floodway	No change	Amendments described below
7:13-9.6	Construction of one single-family home or duplex, and one associated driveway that does not cross a regulated water	No change	Amendments described below
7:13-9.7	Relocation of manmade roadside ditches to facilitate public roadway improvements	Repealed	Repealed
7:13-9.8	Placement of storage tanks	7:13-9.7	Recodified and amended; amendments described below
7:13-9.9	Construction or reconstruction of a bridge or culvert across a regulated water with a drainage area of less than 50 acres	Repealed	Repealed

7:13-9.10	Reconstruction of a bridge or culvert across a regulated water with a drainage area of 50 acres or more	Repealed	Repealed
7:13-9.11	Stormwater outfall along a regulated water with a drainage area of less than 50 acres	Repealed	Repealed
7:13-9.12	Construction of footbridges	7:13-9.8	Recodified and amended; amendments described below
7:13-9.13	Construction of trails and boardwalks	7:13-9.9	Recodified and amended; amendments described below
7:13-9.14	Application of herbicide within riparian zones to control invasive plant species	7:13-9.10	Recodified and amended

Proposed Repealed General Permit 1 Incorporated into New General Permit

N.J.A.C. 7:13-9.1 General Permit 1 – Removal of Accumulated Sediment and Debris from a Regulated Water

The Department is proposing to expand existing general permit 1 for channel cleaning pursuant to the Stream Cleaning Act at N.J.A.C. 7:13-9.1 to more generally address removal of accumulated sediment and debris from a regulated water and to permit State agencies and public transportation entities to utilize the same process. While the proposed general permit continues many of the provisions within existing general permit 1, due to the reorganization of the general permit to address expanded activities, for ease of understanding, the Department is proposing to repeal the existing general permit and replace it with a new general permit for the removal of accumulated sediment and debris from a regulated water. The proposed general permit maintains the standards of the existing general permit but also incorporates selected activities and standards from existing general permits-by-certification 1 and 7 at N.J.A.C. 7:13-8.1 and 8.7, respectively, which are both proposed to be repealed, as explained above. The activities included pursuant to the existing authorizations are similar and are being consolidated pursuant to the same permit to reduce redundancy and the complexity of the FHACA Rules.

Proposed N.J.A.C. 7:13-9.1(a) identifies all activities that are proposed to be authorized pursuant to the amended general permit, which include the desnagging of a channel and/or removal of accumulated sediment, debris, and garbage by a county, municipality, or a designated agency thereof pursuant to the Stream Cleaning Act at N.J.S.A. 58:16A-67 (currently authorized pursuant to general permit 1), the removal of accumulated sediment and debris from a regulated water on land that is actively farmed (currently authorized pursuant to general permit-by-certification 1), and removal of accumulated sediment and debris from an engineered channel (currently authorized pursuant to general permit-by-certification 7). It also affirms that a channel cannot be modified pursuant to this general permit, which is identified either explicitly or contextually in each of the three permits proposed to be consolidated. Proposed N.J.A.C. 7:13-9.1(a)3 clarifies what constitutes an engineered channel pursuant to this provision. Specifically, an engineered channel is a channel that is fully lined with concrete or other armoring and/or which has been constructed, altered, or otherwise manipulated as part of a flood control project.

Pursuant to proposed N.J.A.C. 7:13-9.1(a)1, this general permit additionally authorizes desnagging of a channel and/or removal of accumulated sediment, debris, and garbage by a State agency or public transportation entity, provided the requirements at N.J.A.C. 7:13-9.1(c) are met. Public transportation entities are tasked with keeping their transportation networks in safe, working order. This includes ensuring that bridges and culverts are not clogged with accumulated sediment and debris, which can obstruct flood flows and cause increased flood damage potential for nearby properties, as well as the bridge or culvert itself. State agencies in general can also have this obligation to maintain bridges and culverts, such as those situated in State parks. Given that the prior general permit authorizes other government entities to undertake these activities, often for the same reason (counties and municipalities have to maintain their bridges and culverts as well), and given the limitations and protections afforded by the requirements of this general permit, it is appropriate to expand the general permit authorization to include activities by a State agency or public transportation entity.

Proposed N.J.A.C. 7:13-9.1(b) provides the conditions that are applicable to all activities authorized pursuant to the proposed general permit. These include observing the timing restrictions set forth at proposed N.J.A.C. 7:13-11.6(d) for a regulated activity in or along a regulated water with fishery resources; prohibiting riparian zone vegetation to be cleared, cut, and/or removed unless such disturbance is unavoidable, necessary to gain access to the regulated water, and minimized; prohibiting clearing, cutting, or removing trees in a riparian zone; conducting the project from only one bank and preserving the existing tree canopy on the more southerly or westerly bank in order to shade the regulated water; removing only material that consists solely of accumulated sediment and/or debris; and disposing of all material that is removed outside of any regulated area and in accordance with all applicable Federal, State, and local requirements. Proposed N.J.A.C. 7:13-9.1(b) effectively combines all conditions that are ubiquitous across the three existing permits, with some exceptions intended to avoid potential adverse impacts to the environment. Specifically, activities proposed pursuant to the Stream Cleaning Act may not clear, cut, or

remove trees pursuant to the proposed general permit as was permissible pursuant to the existing general permit. This restriction is necessary to ensure riparian zone functionality is not jeopardized pursuant to this general permit. Additionally, activities in an engineered channel will be required to adhere to timing restrictions pursuant to all circumstances instead of just adhering to the restrictions only if the work was along a trout production or maintenance water and will be required to conduct the work from one bank while preserving the tree canopy on the more southerly or westerly bank where such was not required pursuant to the existing general permit-by-certification. The timing restrictions are necessary to protect fishery resources that may still be present in engineered channels. The requirement to conduct work from one bank while preserving the tree canopy of the more southerly or westerly bank is necessary to protect riparian zone functionality by minimizing disturbance, and to protect fishery resources and water quality by minimizing the amount of sun exposure, and, therefore, increases to temperature, to the water. Trees along the southerly and westerly banks provide more shade than those along easterly or northerly banks due to the position of the sun relative to New Jersey's latitude.

Proposed N.J.A.C. 7:13-9.1(c) provides additional standards that apply only to the desnagging of a channel and/or removal of accumulated sediment, debris, and garbage by a county, municipality, or a designated agency thereof pursuant to the Stream Cleaning Act at N.J.S.A. 58:16A-67. These standards include all requirements from existing N.J.A.C. 7:13-9.1(a) and (b) that are not listed above as being required at proposed N.J.A.C. 7:13-9.1(b).

Proposed N.J.A.C. 7:13-9.1(d) provides additional standards that apply only to the removal of accumulated sediment and debris from a regulated water on land that is actively farmed and includes all requirements from existing N.J.A.C. 7:13-8.1 that are not listed above as being required at proposed N.J.A.C. 7:13-9.1(b).

Proposed N.J.A.C. 7:13-9.1(e) provides standards that apply only to the removal of sediment and debris from an engineered channel, which reaffirms the requirement of projects within or along an

engineered channel to comply with proposed N.J.A.C. 7:13-9.1(b). No other requirements are provided because proposed N.J.A.C. 7:13-9.1(b) adequately includes and expands upon all of the requirements of the existing general permit-by-certification 7.

Existing N.J.A.C. 7:13-9.1(d), (e), and (f), which provide the application requirements and procedures for activities conducted pursuant to the Stream Cleaning Act, are proposed to be recodified at new N.J.A.C. 7:13-9.1(f)1, 2, and 3, with minimal changes to reference appropriate subsections and clarify the aspects of the general permit to which the requirements apply. Specifically, proposed N.J.A.C. 7:13-9.1(f) indicates that activities conducted pursuant to the Stream Cleaning Act are subject to the application requirements at (f)1, 2, 3, and 4, while activities within actively farmed areas and within or along engineered channels are subject to the application requirements at N.J.A.C. 7:13-18.

Proposed Amendments to Existing General Permits

N.J.A.C. 7:13-9.2 General Permit 2 – Mosquito Control Water Management Activities

The Department is proposing to amend general permit 2 for mosquito control water management activities at N.J.A.C. 7:13-9.2 to add a new requirement at proposed N.J.A.C. 7:13-9.2(b)2 for all activities to be in accordance with the document titled Best Management Practices for Mosquito Control and Freshwater Wetlands Management, dated July 1997, which is available from the Department. These best management practices similarly guide mosquito control activities pursuant to the existing FWPA rules at N.J.A.C. 7:7A-7.15(c)1 and are now included for consistency between rules and to help ensure mosquito control water management activities are conducted appropriately. Consequently, existing N.J.A.C. 7:13-9.2(b)2 and 3 are proposed to be recodified as N.J.A.C. 7:13-9.2(b)3 and 4, respectively. Existing N.J.A.C. 7:13-9.2(b)3 (proposed N.J.A.C. 7:13-9.2(b)4) is amended to delete all references to dredging and to replace them with broader language that encompasses any type of removal of accumulated silt and sediment. The

term “dredging” is unnecessarily narrow as the permit regulates additional activities that accomplish the same goal.

Existing N.J.A.C. 7:13-9.2(b)4i is proposed to be deleted, and existing N.J.A.C. 7:13-9.2(b)4ii is to be recodified as proposed N.J.A.C. 7:13-9.2(b)5, which is amended to require any material removed from a regulated area as a result of an activity authorized pursuant to this proposed general permit to be placed outside any regulated area. This amendment eliminates the current allowance pursuant to existing N.J.A.C. 7:13-9.2(b)4i for sediment placement in regulated areas in certain circumstances. The amended standard allows the Department to better protect the environs of any regulated area from being disturbed by the placement of silt, sediment, trash, and debris, while also avoiding the possibility that this material is exposed to and/or transported by floodwaters.

Existing N.J.A.C. 7:13-9.2(b)5 through 9 are proposed to be recodified as N.J.A.C. 7:13-9.2(b)6 through 10, without substantive changes. Finally, the Department is proposing new N.J.A.C. 7:13-9.2(d), which requires an applicant to receive approval from the State Office of Mosquito Control Coordination for the site-specific project proposal.

N.J.A.C. 7:13-9.3 General Permit 3 – Scour Protection Activities at Bridges and Culverts

The Department is proposing to amend general permit 3 for scour protection activities at bridges and culverts at N.J.A.C. 7:13-9.3 to clarify that multiple scour protection activities may be authorized pursuant to this general permit provided they all take place along the same roadway. This allows for a more efficient permit review by the Department. Proposed N.J.A.C. 7:13-9.3(a)2 additionally clarifies that this general permit authorizes scour protection activities to be undertaken both where scour has been observed, as well as in cases where public transportation entities determine that a potential for scour exists that must be addressed to maintain the safety of their transportation network. Further, at N.J.A.C. 7:13-9.3(a)3i, the Department is proposing language to clarify that all calculations of bank full flow, for the purposes of

determining the necessary amount of stabilizing material needed, are to be based on measurements upstream of the bridge or culvert where the work is to take place. Any other type of calculation as required by the U.S. Federal Highway Administration is still valid. Finally, N.J.A.C. 7:13-9.3(a)3ii is proposed to be amended to clarify that any stabilizing material will not cause an increase in flooding outside of the channel during any of the flood events listed at N.J.A.C. 7:13-12.1(i). The proposed amendments do not add any additional requirements, but instead clarify the requirements of the existing standards to help ensure there is no adverse impact on surrounding properties due to the work authorized pursuant to the general permit.

N.J.A.C. 7:13-9.4 General Permit 4 – Creation, Restoration, and Enhancement of Habitat and Water Quality Values and Functions

The Department is proposing to amend general permit 4 for creation, restoration, and enhancement of habitat and water quality values and functions at N.J.A.C. 7:13-9.4. Similar to the amendments proposed for CZM general permit at N.J.A.C. 7:7-6.24 and the FWW general permit at N.J.A.C. 7:7A-7.16 discussed above for similar activities, and in order to increase and support the establishment of environmentally beneficial projects, the sponsorship requirements at existing N.J.A.C. 7:13-9.4(b)1 are proposed for deletion as the sponsorship requirement has prevented environmentally beneficial projects from being authorized pursuant to this general permit. Originally, the sponsorship requirement was intended to ensure that habitat restoration, creation, and enhancement projects authorized pursuant to the general permit were suitable for their intended purpose with oversight by Federal and/or State experts. However, since the promulgation of this general permit, the Department and regulated community have gained experience and knowledge from implementing these projects. Accordingly, the Department has determined that the sponsorship requirements are no longer necessary.

N.J.A.C. 7:13-9.4(a)3ii is additionally amended to clarify that fencing intended to contain, or to prevent intrusion by, livestock or other animals must have openings of no less than six inches within a

fluvial floodway, which is necessary to allow for the safe passage of floodwater and debris without significant obstruction. The general permit is further expanded to authorize the placement of fencing, for habitat connectivity projects or barriers, necessary to prevent wildlife mortality, or vehicle damage. The fence can be placed either on its own or used in conjunction with a proposed or existing culvert or bridge. As with other permits for fencing pursuant to this chapter, fencing in a flood hazard area must be designed to minimize obstruction to floodwaters.

N.J.A.C. 7:13-9.5 General Permit 5 – Reconstruction and/or Elevation of a Building in a Floodway

The Department is proposing to amend general permit 5 for the reconstruction and/or elevation of a building in a floodway at N.J.A.C. 7:13-9.5 to replace the term "flood hazard area design flood elevation" with "climate-adjusted flood elevation" in order to protect against damage from increased future flooding resulting from climate change.

N.J.A.C. 7:13-9.5(a)5iii is proposed to be amended to require the building to withstand impact loads, in addition to hydrostatic and hydrodynamic loads, at least up to one foot above the climate-adjusted flood elevation. This amendment is necessary as this permit authorizes activities in the floodway, an area that has inherently high risk due to the velocity and depth of floodwaters compared to the flood fringe. Therefore, the Department believes it is necessary to ensure that the building being reconstructed or elevated pursuant to this general permit is designed to withstand the threat of impact from debris carried by floodwaters.

N.J.A.C. 7:13-9.6 General Permit 6 – Construction of One Single-Family Home or Duplex, and One Associated Driveway that does not Cross a Regulated Water

The Department is proposing to amend general permit 6 for construction of one single-family home or duplex, and one associated driveway that does not cross a regulated water at N.J.A.C. 7:13-9.6 to replace

the term “flood hazard area design flood elevation” with “climate-adjusted flood elevation” in order to protect against damage from increased future flooding resulting from climate change. Also, N.J.A.C. 7:13-9.6(a)1 is amended to prohibit any fill or structure associated with an authorization pursuant to this general permit from being placed in an inundation risk zone, as well as the floodway. The construction of a single-family home or duplex in the inundation risk zone will require an individual permit.

N.J.A.C. 7:13-9.8 General Permit 8 – Placement of Storage Tanks

The Department is proposing to amend existing general permit 8 at N.J.A.C. 7:13-9.8 for the placement of storage tanks and to recodify it as proposed N.J.A.C. 7:13-9.7. The Department is proposing a new requirement at N.J.A.C. 7:13-9.7(a)2 that any new tank be located outside the inundation risk zone. The Department believes any new tank construction in the inundation risk zone is more appropriately reviewed pursuant to an individual permit as inundation from increased sea levels may impact the tank’s stability and may prevent maintenance from occurring, which could lead to inadvertent releases from the storage tank. With added risk, additional scrutiny is necessary which is not provided pursuant to this general permit. Existing N.J.A.C. 7:13-9.8(a)2, 3, and 4 are proposed to be recodified as N.J.A.C. 7:13-9.7(a)3, 4, and 5.

At proposed N.J.A.C. 7:13-9.7(a)5 (existing N.J.A.C. 7:13-9.8(a)4), the term “flood hazard area design flood elevation” is proposed to be replaced with “climate-adjusted flood elevation.” Existing N.J.A.C. 7:13-9.8(a)5, which addresses requirements applicable to storage of hazardous substances in tanks capable of containing more than 2,000 gallons, including requirements designed to ensure that the tank is not transported offsite by floodwaters, is proposed to be deleted. Instead, these standards will now apply to all tanks not adequately elevated pursuant to proposed N.J.A.C. 7:13-9.7(a)5, which is also amended to require any tank of any size to be isolated from floodwaters by a berm or other structure if it is not feasible to elevate the tank above the climate-adjusted flood elevation. To be considered isolated, the berm or other

structure must be able to withstand the hydrostatic, hydrodynamic, and impact loads associated with flooding up to the climate-adjusted flood elevation. While the phrasing of proposed N.J.A.C. 7:13-9.7(a)5 differs slightly from existing N.J.A.C. 7:13-9.8(a)5, aside from the scope of tanks to which the standard applies, the intended implementation is the same. Specifically, if a tank containing hazardous material was elevated pursuant to existing N.J.A.C. 7:13-9.8(a)5, the Department would consider the tank isolated from floodwaters. Additionally, a berm, which is also considered a structure, would be required to resist the anticipated flood loads pursuant to existing N.J.A.C. 7:13-6.7(b)1 for standards that apply to all permits-by-rule, general permits-by-certification, and general permits. The proposed language clarifies and explicitly states this requirement. Finally, the phrase "specially designed containment area onsite" pursuant to the existing standard is clarified in broader terms as "other structure" which can resist the anticipated flood loads because of the lack of specificity as to what constitutes a "specially designed containment area."

N.J.A.C. 7:13-9.12 General Permit 12 – Construction of Footbridges

The Department is proposing to recodify general permit 12 at N.J.A.C. 7:13-9.12 for construction of footbridges as a general permit for the construction of a footbridge at proposed N.J.A.C. 7:13-9.8. The name of the permit is amended to allow only one footbridge to be authorized pursuant to this general permit. Proposed N.J.A.C. 7:13-9.8(a) is also amended to clarify that only one footbridge may be authorized and to replace the term "manmade" with "human created." Amending the number of footbridges that can be authorized pursuant to this general permit is necessary as the flood damage potential and adverse impacts to the environment increase with the number of structures. Thus, requiring a separate authorization for each footbridge crossing promotes minimization of the number of crossings and, thus, the anticipated impacts.

Proposed N.J.A.C. 7:13-9.8(a)3 is amended to increase the allowable width of the footbridge from a maximum of six feet to a maximum of 10 feet, including any applicable State or Federal barrier-free access requirements. As indicated in the summary for the proposed general permit-by-certification for the

construction of a footbridge at proposed N.J.A.C. 7:13-8.4, it has been the Department's experience in regulating these structures that the flood damage potential is largely influenced by thickness of the bridge deck and low chord (bottom of the stringer) elevation. The width of a footbridge does not generally affect its flood damage potential, specifically between six and 10 feet. As this amendment increases the maximum allowable width of the footbridge being constructed to 10 feet regardless of the intended use, existing N.J.A.C. 7:13-9.12(a)4 and (a)4i are redundant and proposed to be deleted. Consequently, existing N.J.A.C. 7:13-9.12(a)4ii will be recodified as new N.J.A.C. 7:13-9.8(a)4.

Proposed N.J.A.C. 7:13-9.8(a)5 is amended to require that the travel surface of any footbridge providing access to a critical facility be constructed to at least one foot above the climate-adjusted flood elevation, rather than the flood hazard area design flood elevation. Finally, at proposed N.J.A.C. 7:13-9.8(a)9ii, the general permit is amended to require all handrails to have openings of at least six inches in order to properly pass floodwaters and potential debris.

N.J.A.C. 7:13-9.13 General Permit 13 – Construction of Trails and Boardwalks

The Department is proposing to recodify general permit 13 for construction of trails and boardwalks at N.J.A.C. 7:13-9.13 as N.J.A.C. 7:13-9.9 with amendments. Proposed N.J.A.C. 7:13-9.9(a)2 increases the allowable width of trail or boardwalk intended solely for pedestrian use from a maximum of six feet (with allowance for up to a width of 10 feet, if necessary for barrier-free access purposes) to a maximum of 10 feet for any trail or boardwalk. This change is necessary to provide a consistent path width with the footbridges that can be authorized pursuant to the general permit-by-certification at proposed N.J.A.C. 7:13-8.4 and the proposed general permit at N.J.A.C. 7:13-9.8. The general permit is amended at proposed N.J.A.C. 7:13-9.9(a)3 to specify that any boardwalk not constructed at or below ground in a flood hazard area must be elevated at least six inches to allow floodwaters to freely pass underneath and to avoid catching, causing an obstruction. This six-inch gap is consistent with other amendments to permit standards

regarding fencing and handrails where the intent is to not restrict floodwaters and allow water to freely pass beneath or through the structure. Also, proposed pursuant to this general permit at N.J.A.C. 7:13-9.9(a)8, all public trails and boardwalks will be required to include features that educate users on the importance of inundation risk zones in addition to riparian zones, flood hazard areas, and stream corridors. The Department believes it is important to educate the public wherever possible of the value of natural and open spaces, and how those spaces may be affected by climate impacts.

Proposed Repeal of Certain General Permits

The Department is proposing to repeal general permit 7 for relocation of manmade roadside ditches to facilitate public roadway improvements at N.J.A.C. 7:13-9.7, which was first created in 2016. The Department has not received any applications for this general permit-by-certification since 2018, demonstrating the lack of usefulness of this general permit. The activity will now require an individual permit application to be authorized by the Department as the activities authorized pursuant to this application have significant potential to exacerbate nuisance flooding and adversely impact the environment such that a more stringent review is necessary.

General permit 9, for construction or reconstruction of a bridge or culvert across a regulated water with a drainage area of less than 50 acres, at N.J.A.C. 7:13-9.9, and general permit 10, for construction or reconstruction of a bridge or culvert across a regulated water with a drainage area of 50 acres or more, at N.J.A.C. 7:13-9.10, are proposed for repeal. Pursuant to the current rules, applicants who qualify for either of these general permits do not have to address terrestrial wildlife fragmentation as part of their application. Habitat fragmentation is a leading cause for loss of species diversity, especially in New Jersey's highly developed landscape. The Department believes that it is necessary to analyze whether culvert or bridge construction projects could potentially enhance environmental value by adding or improving an existing

wildlife crossing to preserve habitat and wildlife corridors. Such analysis is more appropriately conducted through an individual permit.

Finally, general permit 11 for a stormwater outfall along a regulated water with a drainage area of less than 50 acres at N.J.A.C. 7:13-9.11 is proposed for repeal. The Department has received only two applications for this general permit since 2018, which alludes to lack of usefulness of this general permit. Additionally, the construction of a stormwater outfall is typically associated with a major development as defined at N.J.A.C. 7:8, which would preclude the use of this general permit or any other permit other than an individual permit in accordance with existing N.J.A.C. 7:13-6.7(c). The Department will instead regulate this activity through an individual permit. By repealing this general permit and regulating the activity pursuant to an individual permit, the Department will be able to properly review the stormwater management issues related to the project.

SUBCHAPTER 10. INDIVIDUAL PERMITS

N.J.A.C. 7:13-10.1 Requirement to Obtain an Individual Permit; and N.J.A.C. 7:13-10.2 Duration of an Individual Permit

In order to accommodate the proposed changes discussed above, the Department is proposing to amend N.J.A.C. 7:13-10.1(a) to reference the exemptions proposed at N.J.A.C. 7:13-2.5(a) in the list of exceptions to the requirement to obtain an individual permit. The Department is also proposing to update cross-references at N.J.A.C. 7:13-10.2 that refer to the permit extension process.

N.J.A.C. 7:13-10.4 Obligations Pursuant to the National Flood Insurance Program

A new section is proposed at N.J.A.C. 7:13-10.4 to ensure that the State's commitment to uphold minimum NFIP standards is met, as articulated at existing N.J.A.C. 7:13-6.7(b)1ii(2). Identical requirements are proposed at new N.J.A.C. 7:13-6.8 for permits-by-registration, general permits-by-

certification, and general permits, as well as in the Department's CZM rules at new N.J.A.C. 7:7-3.9 for permits-by-registration, general permits-by-certification, and general permits, and new N.J.A.C. 7:7-8.4 for individual permits.

Proposed N.J.A.C. 7:13-10.4 focuses on development located within two specific areas mapped by FEMA. For a given community, FEMA-adopted flood insurance rate mapping generally depicts both the limits of FEMA's 100-year (or one-percent probability) "special flood hazard area," as well as regulatory floodway limits along the studied section of water. This section applies to development located within a FEMA-adopted regulatory floodway, as well as within a FEMA-adopted special flood hazard area that does not include a FEMA-mapped regulatory floodway, as required pursuant to 44 CFR 60.3. While the FHACA rules generally prohibit development within floodways, certain activities are permitted because it is understood they would not exacerbate flooding. Thus, satisfying the requirements of this section is necessary before an applicant undertakes activities within these FEMA-defined areas in order to meet minimum NFIP standards.

Proposed N.J.A.C. 7:13-10.4(b) explains that prior to the Department issuing an individual permit, the applicant must take certain actions. First, pursuant to N.J.A.C. 7:13-10.4(b)1, where activities are proposed within a FEMA-adopted regulatory floodway, and the activities would result in "no net increase" to the 100-year flood elevation, the registrant or applicant must provide an engineering certification to the local floodplain administrator having jurisdiction over the site confirming that the project will meet FEMA's no rise criteria. This is important to ensure that development within and adjacent to delineated floodways does not exacerbate flooding. Second, pursuant to N.J.A.C. 7:13-10.4(b)2, where activities are proposed within a FEMA-adopted regulatory floodway, which would result in a net increase to the 100-year flood elevation, the registrant or applicant must apply for and obtain a Conditional Letter of Map Revision from FEMA. In both scenarios, a "net increase" in the flood elevation is equated with any anticipated change in the water surface profile of greater than a 0.00 feet.

A third scenario is presented, in which activities are proposed within a FEMA-adopted special flood hazard area that does not include mapping of the regulatory floodway. In this case, if a project, when combined with all other existing and anticipated development within the flood hazard area, would result in a cumulative increase of greater than 0.20 feet in the 100-year flood elevation, the applicant shall apply for and obtain a CLOMR from FEMA, similar to N.J.A.C. 7:13-10.4(b)2. When mapping floodway limits in New Jersey, the Department and FEMA both utilize calculations that define the floodway as causing no more than a 0.20-foot rise in the 100-year flood elevation. Thus, should a project within a FEMA-mapped 100-year floodplain cause flood elevations to rise more than this amount, it would not meet the standards set forth in this chapter to protect people and property from increased flooding due to development. (See N.J.A.C. 7:13-12.1(g)5ii.)

Pursuant to proposed new N.J.A.C. 7:13-10.4(c), hydraulic calculations undertaken to demonstrate compliance with this section must be rounded to the nearest one-hundredth (0.01) of a foot. Two examples are provided to demonstrate how this standard should be applied. As with any type of modeling, there are limitations on the precision of the calculations. In other sections of the FHACA rules, calculations are to be rounded to the nearest one-tenth (0.1) of a foot. (See N.J.A.C. 7:13-12.1(g), 12.7(b)1, and 12.14(d)5.) However, since FEMA considers the accuracy of the calculations to the nearest one-hundredth (0.01) of a foot, this standard is necessary to demonstrate compliance with this section in order to ensure that the requirements of the NFIP are met.

Proposed N.J.A.C. 7:13-10.4(d) requires applicants for individual permits to upload a copy of the required no rise certification or approved CLOMR, as required at proposed N.J.A.C. 7:13-10.4(b), to the Department's online portal at https://www.nj.gov/dep/online prior to the issuance of the individual permit. This facilitates the Department's ability to track and report to FEMA actions pursuant to this section and subchapter.

Proposed N.J.A.C. 7:13-10.4(e) further underscores that the requirements of this proposed section shall not be construed to contradict or obviate the requirements of the National Flood Insurance Program. As the purpose of this section is to ensure that NFIP standards are met, and is furthermore proposed based on the Department's understanding of FEMA's requirements pursuan tto44 CFR 60.3 and related sections, it is appropriate to include this provision.

SUBCHAPTER 11. AREA-SPECIFIC REQUIREMENTS FOR INDIVIDUAL PERMITS

N.J.A.C. 7:13-11.2 Requirements for a Regulated Activity in a Riparian Zone

N.J.A.C. 7:13-11.2 sets forth the design and construction standards pursuant to which the Department will issue an individual permit for any regulated activity proposed in a riparian zone. N.J.A.C. 7:13-11.2(b) establishes basic standards that apply to any proposed regulated activity in a riparian zone that results in clearing, cutting, and/or removal of vegetation, including the need to avoid disturbance where possible, minimize disturbance to the maximum extent and, where feasible, remove existing development within 25 feet of the top of bank and replant the area with suitable vegetation. As existing N.J.A.C. 7:13-11.2(b) states that these requirements apply to a regulated activity or project that results in clearing, cutting, and/or removal of vegetation in a riparian zone, it has not been clear to applicants whether the Department intends to apply these standards in cases where development is proposed within a riparian zone, but disturbance is limited to previously developed areas that are devoid of vegetation. For example, an applicant may propose to construct a building on an existing parking lot within the riparian zone, which does not result in disturbance of riparian zone vegetation. While N.J.A.C. 7:13-11.2(f)1 exempts such activities from the limitations and requirements at Table 11.2, since no vegetation will be impacted, the requirement at N.J.A.C. 7:13-11.2(c)3 that existing development within 25 feet of the top of bank be removed and the area restored still applies, irrespective of whether riparian zone vegetation is impacted. In order to clarify the Department's intention to require restoration of the land proximate to the top of bank, where possible, and

irrespective of whether vegetation in the riparian zone is proposed to be cleared cut or removed, N.J.A.C. 7:13-11.2(b) is amended to apply to any regulated activity or project in a riparian zone.

N.J.A.C. 7:13-11.2(b)2 requires applicants to minimize impacts to riparian zone vegetation and N.J.A.C. 7:13-11.2(b)2ii specifically requires applicants to limit construction to "actively disturbed areas and/or areas wherein the benefits and functions of a riparian zone are considerably deteriorated and impaired as a result of previous development." While the Department expects applicants to meet this standard wherever practicable, it also recognizes that meeting this standard may not be possible in all cases. The intent of the provision is to require development activities to be located in disturbed areas rather than undisturbed areas on a site. For example, for a person proposing to construct a building within a facility that contains a large area of pavement within the riparian zone, N.J.A.C. 7:13-11.2(b)2ii is intended to require that, to the extent practicable, the building be placed within the area currently containing pavement rather than within a vegetated riparian zone. However, there are many factors to consider when siting a building or other project. In order to clarify the Department's intent pursuant to this provision, N.J.A.C. 7:13-11.2(b)2ii is amended to explain that the standard is to be met to the maximum extent practicable.

N.J.A.C. 7:13-11.2(b)3, which requires existing onsite impervious surface located within 25 feet of top of a bank to be removed except in certain circumstances, is proposed to be amended to remove the exemption for activities that lie adjacent to a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water. As noted above, this amendment is being made throughout the chapter to better protect near stream vegetation and thereby enhance the integrity of channels. An additional exception to the removal of existing impervious surface within 25 feet of top of a bank is proposed at new N.J.A.C. 7:13-11.2(b)3iii to address situations where a public transportation entity asserts that removing impervious surface associated with a lawfully existing railroad or public roadway is impracticable or would result in an unsafe condition. This exception is implied at recodified N.J.A.C. 7:13-11.2(b)3ii and the Department has previously excepted public roadways and railroads from this requirement using the existing

provision. However, the proposed new provision clarifies the Department's intent for public transportation entities.

The Department is also proposing to remove a reference to mitigation from N.J.A.C. 7:13-11.2(b)4 and add a standard at proposed new N.J.A.C. 7:13-11.2(b)6 to clarify and amend the mitigation requirements that apply to riparian zone impacts. Currently, mitigation requirements are embedded within N.J.A.C. 7:13-11.2(e), with additional requirements relating to the type of activity to be conducted and the established limits for those activities at Table 11.2, and additional mitigation requirements enumerated at N.J.A.C. 7:13-13, particularly N.J.A.C. 7:13-13.4. The Department proposes to amend the mitigation requirements as follows.

Proposed new N.J.A.C. 7:13-11.2(b)6i states that mitigation will be required for all impacts in a 300-foot riparian zone. Mitigation is already required for all impacts that occur in the 300-foot riparian zone in accordance with N.J.A.C. 7:13-11.2(e) and 13.4(b), with certain exceptions. With respect to proposed N.J.A.C. 7:13-11.2(b)6ii, the Department has determined that because the 150-foot riparian zone is associated with the presence of threatened or endangered species and/or trout, permitted impacts that occur in a 150-foot riparian zone, in excess of 2,000 square feet, also merit mitigation in their entirety, with appropriate exceptions specified at N.J.A.C. 7:13-11.2(f) and 13.4(c). The Department has chosen 2,000 square feet as the threshold for individual or cumulative impacts within a 150-foot riparian zone because it has been determined to be a reasonable disturbance threshold for activities with minimal footprints, such as headwall and outlet protection for a stormwater discharge, in accordance with Table 11.2. The values and benefits of riparian zone vegetation are well documented. Among other things, the continued presence of riparian zone vegetation helps prevent the degradation to water quality that can occur when near-stream impacts are not properly mitigated. It is essential that activities which have the potential to adversely impact water quality are avoided and minimized to the extent practicable and, where avoidance is impracticable, mitigation is provided to fully offset the proposed impacts. This comports with the requirement at N.J.A.C.

7:13-13.2(a) that mitigation "shall fully compensate for any ecological loss." Due to the criticality of waters supporting threatened or endangered species or which have been designated pursuant to the Department's Surface Water Quality Standards at N.J.A.C. 7:9B as trout production or trout maintenance, it is imperative, especially in light of a changing climate, that projects authorized pursuant to this chapter do not lead to further water quality degradation in these areas. For this reason, the Department is proposing to expand the riparian zone mitigation requirement to apply to all activities within a 150-foot riparian zone. Certain exceptions to the standard are present within the 300-foot riparian zone at proposed N.J.A.C. 7:13-13.4(c). As discussed in the summary below, these exceptions will be applied to activities within a 150-foot riparian zone as well.

Proposed N.J.A.C. 7:13-11.2(b)6iii addresses the remainder of riparian zone impacts. It states that impacts to the 50-foot riparian zone, which individually, or cumulatively, exceed 0.1 acres, will require mitigation for the entire impact. Currently, mitigation is required if an activity in the riparian zone is associated with a hazardous waste investigation or cleanup activity, solid waste investigation, or cleanup activity, or is an activity not otherwise listed at Table 11.2 (see N.J.A.C. 7:13-11.2(r), (s), and (y), respectively). The proposed amendments take a more comprehensive approach to the need for mitigation in the 50-foot riparian zone. Rather than separately evaluating each proposed activity with its individual impact, the proposed rule instead compiles all impacts relating to all activities proposed in the riparian zone. If those impacts, individually or cumulatively, are 0.1 acres or more, mitigation is required. This eliminates the need to separately evaluate each proposed activity and whether it needs mitigation, and instead focuses on the total impact to the riparian zone from the overall project. The Department has proposed 0.1 acres as the threshold for mitigation in a 50-foot riparian zone because it is minimal and consistent with the minimal impacts threshold for mitigation applied in the Freshwater Wetland Protection Act rules (N.J.A.C. 7:7A). Pursuant to this rulemaking, individual or cumulative impacts proposed in a 50-foot riparian zone that are below 0.1 acres do not require mitigation.

Existing N.J.A.C. 7:13-11.2(b)6 is being recodified as N.J.A.C. 7:13-11.2(b)7 without change.

N.J.A.C. 7:13-11.2(c) establishes the requirements that apply to a regulated activity resulting in riparian zone disturbance within 25 feet of any top of bank. Pursuant to existing N.J.A.C. 7:13-11.2(c)1, activities are permitted within 25 feet of the top of bank if the activity lies within an actively disturbed area adjacent to a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water. However, as noted above, the exception for work in close proximity to the top of bank where the structures exist is proposed for deletion throughout the chapter and is, thus, deleted here as well.

At N.J.A.C. 7:13-11.2(e), the Department is proposing clarifications to the existing language that do not change its meaning. Some applicants have been confused by the existing language, which is intended to explain that Table 11.2 establishes the maximum allowable area of riparian zone vegetation that can be temporarily or permanently cleared, cut, and/or removed. If the applicant seeks authorization to exceed the disturbance limits set forth at Table 11.2, the applicant must provide additional justification, as set forth at paragraphs (g)1, (h)1, (i)2, (j)1, (k)1, (q)1, (t), (u)1, (v), or (w)1, which allows the limits at Table 11.2 to be exceeded in certain cases without the need for a hardship exception request. Where such a provision does not exist, or where an applicant seeking to exceed the limits at Table 11.2 cannot comply with paragraphs (g)1, (h)1, (i)2, (j)1, (k)1, (q)1, (t), (u)1, (v), or (w)1, the applicant must seek a hardship exception from the Department for the proposed activities. N.J.A.C. 7:13-11.2(e) is amended to clarify the Department's intent pursuant to this subsection.

N.J.A.C. 7:13-11.2(e) is additionally proposed to be amended to clarify that riparian zone vegetation that is temporarily cleared, cut, and/or removed to conduct a regulated activity, access an area where regulated activities will be conducted, or otherwise accommodate a regulated activity shall be replanted in accordance with N.J.A.C. 7:13-11.2(z). The subsection is additionally amended to clarify that riparian zone mitigation for disturbance not covered by N.J.A.C. 7:13-11.2(z) is required in accordance with N.J.A.C. 7:13-13.4(b). Finally, the subsection is amended to explain that N.J.A.C. 7:13-11.2(f)

identifies activities not subject to the limits set forth at Table 11.2, and which do not require riparian zone mitigation. A similar explanation is added to N.J.A.C. 7:13-11.2(f) for clarity.

The Department is proposing to delete N.J.A.C. 7:13-11.2(f)7, which exempts any clearing, cutting, and/or removal of riparian zone vegetation within a truncated portion of a riparian zone from compliance with the limits set forth at Table 11.2. An area is considered to be a truncated portion of a riparian zone if the area is separated from a regulated water by a lawfully existing railroad or public roadway, the area does not slope toward the regulated water, and stormwater runoff from the area does not drain into the regulated water. The existing language at N.J.A.C. 7:13-11.2(f)7 suggests that the function and value of vegetation within a riparian zone can be condensed into one ecosystem benefit, management of runoff. The Department acknowledges that riparian zone vegetation provides many ecosystem services beyond management of runoff, including, but not limited to, stability of surrounding land area to prevent erosion, shading and temperature control, critical habitat for the survival of threatened and endangered flora and fauna, uptake of pollutants for the protection of groundwater quality, and overall watershed ecosystem function. The presence of an intervening public roadway or railroad or a topographic hindrance to overland flow of runoff does not necessarily preclude the aforementioned riparian zone services, which the Department acknowledges are valuable services to furthering the intent and goals of the Flood Hazard Area Control Act.

The Department is proposing to amend N.J.A.C. 7:13-11.2(z) to provide more detailed requirements for the restoration of riparian zone vegetation that is cleared, cut, and/or removed to conduct a regulated activity, access an area where regulated activities will be conducted, or otherwise accommodate a regulated activity. The scope of the subsection is clarified, as this applies to temporary disturbances to riparian zone vegetation, which is implied by the existing language. At N.J.A.C. 7:13-11.2(z)1i, the Department is proposing to specifically require a planting plan that identifies native vegetation that will replace the vegetation that was removed. The Department has not consistently obtained a planting plan and,

without having a planting plan to review, it is difficult to determine whether the applicant's proposal satisfies the requirements at N.J.A.C. 7:13-11.2(z). In addition, the Department consistently requires, with limited exceptions, that replanted vegetation be native and non-invasive, which is generally consistent with the existing requirement that replanted vegetation be of equal or greater ecological function. The proposed language reinforces this existing practice. Planting native species helps to ensure that those species that are part of New Jersey's natural environment continue to exist. Proposed N.J.A.C. 7:13-11.2(z)1i makes clear that the required planting plan may not propose that replacement vegetation include non-native species.

At N.J.A.C. 7:13-11.2(z)1ii, the Department is proposing to require the applicant to submit proposed planting specifications, including proposed seed mixes, as well as the size, type, and quantity of plants to be used to restore the riparian zone. Currently, the Department requests this information each time a project of this nature is proposed.

At proposed new N.J.A.C. 7:13-11.2(z)1iii, the Department is proposing to require the submittal of a brief narrative describing the restoration plan; and at new N.J.A.C. 7:13-11.2(z)1iv, an invasive species control plan is also being required. These are current, standard requirements for any project involving efforts to plant or restore sites and are consistent with, and repeated at, the mitigation section at N.J.A.C. 7:13-13.4.

Finally, at new proposed N.J.A.C. 7:13-11.2(z)3, the Department is requiring the applicant to provide notice upon completion of planting that the site is revegetated and stable. Such notice would be provided through the Department's online permitting system and will ensure that the intent of this subsection, which is to ensure that temporary impacts to the riparian zone are properly restored, has been carried out.

N.J.A.C. 7:13-11.3 Requirements for a Regulated Activity in a Floodway

Development within the floodway can obstruct the flow of floodwaters and, thus, exacerbate flood conditions. Additionally, development within the floodway is inherently dangerous as the higher depth and velocity of floodwaters characteristic of the floodway generate significantly higher forces on structures. To protect against this, existing N.J.A.C. 7:13-11.3 sets forth the requirements for regulated activities within the floodway. Specifically, N.J.A.C. 7:13-11.3(b) prohibits the placement of fill or aboveground structures that would raise ground elevation or obstruct the passage of floodwaters, with exceptions listed at existing N.J.A.C. 7:13-11.3(c).

Existing N.J.A.C. 7:13-11.3(c)1 allows for the construction or conversion of a building on a pier in the Hudson River within the floodway, provided the requirements of the Coastal Zone Management Rules at N.J.A.C. 7:7-9.46 are met and the project complies with N.J.A.C. 7:13-12.5(e) or (f), as applicable. This allowance for development within the floodway is proposed for deletion as the construction of a building within the floodway is inherently dangerous, as discussed above, and is antithetical to the purpose of this chapter. Additionally, buildings constructed in the floodway on piers over the Hudson River would be located waterward of the reach of mean high water. Current flood mapping issued by FEMA shows the Hudson River itself located within a V zone flood hazard area. The construction of new buildings waterward of mean high water within coastal A and V zones is not permissible pursuant to both the Uniform Construction Code and the Federal flood reduction standards. As such, this exception is being deleted to remain consistent with both the Uniform Construction Code and Federal flood reduction standards.

Existing N.J.A.C. 7:13-11.3(c)2 and 3, which address improvements to existing buildings location within a floodway, are combined as new N.J.A.C. 7:13-11.3(c)1 with clarifying amendments.

Existing N.J.A.C. 7:13-11.3(c)4 through 9 are proposed to be recodified as N.J.A.C. 7:13-11.3(c)2 through 7, with the only amendment being the change of the term “manmade” to “human created” at recodified N.J.A.C. 7:13-11.3(c)8 for reasons discussed above.

N.J.A.C. 7:13-11.4 Requirements for a Regulated Activity in a Flood Fringe

Development within the flood fringe that occupies existing flood storage by either the placement of fill or the construction of structures generally results in exacerbated flood conditions when considered in aggregate across a watershed. To protect against this, existing N.J.A.C. 7:13-11.4 sets forth the requirements for flood storage volume displacement within the flood fringe.

Further, as discussed below, existing N.J.A.C. 7:13-11.4(f) and (j)2, indicate that the flood storage volume displacement limits apply to both the volume between the existing ground surface elevation and the 10-year flood elevation and the volume between the 10-year flood elevation and the flood hazard area design flood elevation, independently. Effectively, the flood storage volume displacement limits are applied to two discreet volumes, or layers pursuant to the existing rule (hereafter referred to as the "existing volume sections"). This independence between the two volumes is necessary to ameliorate the impacts of fill over the range of flooding scenarios. For example, if fill is placed at lower flood elevations and is compensated for at higher flood elevations, the benefit of flood storage compensation would not be experienced during the more frequent storm events with lower flood elevations.

Proposed N.J.A.C. 7:13-11.4(f) and (j)2 indicate that the flood storage volume displacement limits apply to three volumes, or layers, hereafter referred to as the proposed volume sections: 1) the volume between existing ground surface elevation and the 10-year flood elevation; 2) the volume between the 10-year flood elevation and the 100-year flood elevation; and 3) the volume between the 100-year flood elevation and the climate-adjusted flood elevation. The lowest proposed volume section, between the ground surface elevation and the 10-year flood elevation, is maintained between existing and proposed rules. The higher existing volume section, which is proposed to become the middle proposed volume section, is proposed to be amended from between existing the 10-year flood elevation and the flood hazard area design flood elevation to the proposed between the 10-year flood elevation and 100-year flood elevation. This amendment is proposed as the 100-year flood elevation is widely available for most

watercourses. Establishing this as a separate volume section is intended to avoid confusion between the existing flood hazard area design flood elevation and the proposed climate-adjusted flood elevation. The new and highest proposed volume section, between the 100-year flood elevation and the climate-adjusted flood elevation, limits the amount of fill within future flood hazard areas to minimize the impacts to future flood hazard areas.

Existing N.J.A.C. 7:13-11.4(c) provides the instances in which the Department will issue an individual permit: pursuant to paragraph (c)1 if the regulated activity is exempt from the flood storage volume displacement limits of this section pursuant to N.J.A.C. 7:13-2.3(d); pursuant to paragraph (c)2 if the regulated activity displaces no flood storage volume onsite as calculated for the existing volume sections; or pursuant to paragraph (c)3 if the regulated activity displaces no more than 20 percent of the flood storage volume onsite as calculated for the existing volume sections and all flood storage displacement is compensated for offsite. Proposed N.J.A.C. 7:13-11.4(c)2 and 3 maintain their respective standards with the exception that the existing volume sections are replaced with the proposed volume section amendments.

Existing and proposed N.J.A.C. 7:13-11.4(d) set forth the regulated activities that are exempt from the flood storage volume displacement limits. Existing N.J.A.C. 7:13-11.4(d)1 provides that regulated activities within a tidal flood hazard area are exempt because it assumes that flooding associated with large tidal events is not significantly impacted by available flood storage. This broad exemption only considers whether the 100-year flood is tidally controlled and does not consider more frequent storm events for which the flood elevation may be fluvially controlled and, thus, may be impacted by the loss of available flood storage volume. With the inclusion of the climate-adjusted flood elevation to account for climate change and anticipated sea level rise, this standard may contradict its intended purpose. For example, if the climate-adjusted flood elevation is tidally governed, but current regulatory floods are fluvially governed, this exemption would allow unrestricted fill below the climate-adjusted flood elevation, which would likely

increase flood elevations, flood velocities, and flood damages during current regulatory flood events. Alternatively, if current regulatory floods are tidally governed but future flooding is anticipated to be fluvially governed, it could be argued that the site is in a tidal flood hazard area. This would permit an unrestricted loss of flood storage in areas of future fluvial flooding, thus exacerbating future flood conditions. To prevent the loss of flood storage in areas where such loss is anticipated to impact flooding, proposed N.J.A.C. 7:13-11.4(d)1 amends the tidal exemption such that only volume sections for which the higher bounding flood elevation is tidally controlled shall be exempt and the flood storage volume displacement limits apply to any flood event that is fluvially governed.

Existing N.J.A.C. 7:13-11.4(d)5 sets forth that construction, reconstruction, relocation, elevation, or enlargement of one single-family home is exempt from the flood storage volume displacement limits provided that certain conditions are met. Existing N.J.A.C. 7:13-11.4(d)5iii requires that, in order for this exemption to apply, any enclosure that is below the flood hazard area design flood elevation meets the requirements at existing N.J.A.C. 7:13-12.5(p), which effectuates the requirement that enclosures below the finished floor of a habitable building, such as a crawl space, garage, storage area, or access enclosure, are to be wet flood-proofed to allow the automatic entry and exit of floodwaters. This facilitates the elevation of single-family homes without penalizing such elevation with requirements to compensate for lost flood storage volume as floodwater may still occupy the space. Proposed N.J.A.C. 7:13-11.4(d)5 extends this requirement for any enclosure below the climate-adjusted flood elevation to effectuate its purpose during future flood events.

Existing N.J.A.C. 7:13-11.4(e) provides the methods to demonstrate that a regulated activity displaces no flood storage volume. Existing N.J.A.C. 7:13-11.4(e)3 requires that the calculated proposed flood storage volume onsite must be greater than or equal to the existing flood storage volume on site for both existing volume sections. Proposed N.J.A.C. 7:13-11.4(e)3 amends this requirement such that it applies to all of the proposed volume sections.

Existing N.J.A.C. 7:13-11.4(f) provides that onsite flood storage volume may be displaced up to 20 percent of what existed on various dates depending on the geographic location of the site and that a project may displace zero percent of flood storage volume that existed on various dates depending on the geographic location of the site when considering offsite compensation as detailed at existing Table 11.4. These dates for various geographic areas are a result of the 20 percent displacement and zero percent displacement limits being implemented slowly over time since 1977. Specifically, the Department first began regulating fill within the Central Passaic Basin on March 25, 1977, the date which applies to this geographic region. The current Flood Hazard Area Control Act was adopted on January 31, 1980, which ultimately instituted the 20 percent displacement limit for the remainder of the State. The Highlands Preservation Area was adopted on August 10, 2004, which is the date used to calculate the zero percent displacement limit for major Highlands development. Finally, November 5, 2007, was the date the Flood Hazard Area Control Act rules first mandated the zero percent flood storage displacement limit.

Existing N.J.A.C. 7:13-11.4(f) also indicates that existing and proposed flood storage volume shall be calculated for both existing volume sections. Proposed N.J.A.C. 7:13-11.4(f) replaces the two existing volume sections with the three proposed volume sections. Further, proposed Table 11.4 maintains the dates listed at existing Table 11.4 but distinguishes that these existing dates only apply to the volume sections up to the 100-year flood elevation and that the calculations for the volume section between the 100-year flood elevation and the climate-adjusted flood elevation shall be based on the date of adoption of these proposed rules. This will maintain the existing flood storage volume displacement standards while not penalizing projects where fill was lawfully placed in newly regulated, and previously unregulated, areas. It will also begin to limit the amount of fill within future flood hazard areas to minimize the impacts to future flood hazard areas.

Existing and proposed N.J.A.C. 7:13-11.4(g), (h), and (i) provide the process for calculating the percentage of flood storage volume a project displaces within the various geographic areas throughout the

State. The process is generally the same between the various geographic areas, except for the dates from which the base flood storage is calculated.

Existing and proposed N.J.A.C. 7:13-11.4(g) provide the process for calculating the percentage of flood storage volume a project displaces within the Central Passaic Basin. Pursuant to existing and proposed N.J.A.C. 7:13-11.4(g)1, three calculations are performed to determine the percentage of onsite storage volume that the proposed project would displace. The first calculation, pursuant to existing N.J.A.C. 7:13-11.4(g)1i, requires that existing flood storage volume is calculated from March 25, 1977, the date selected for the reasons discussed above, for the existing volume sections. Proposed N.J.A.C. 7:13-11.4(g)1i continues to require that the proposed volume sections below the 100-year flood elevation are to be calculated from March 25, 1977, but the volume section between the climate-adjusted flood elevation and the 100-year flood elevation, added through this rulemaking, is calculated from the effective date of this rulemaking. The second calculation, pursuant to both existing and proposed N.J.A.C. 7:13-11.4(g)1ii, involves determination of the flood storage that would remain onsite after the proposed project is conducted and cross-references to the two subsections specifying how this volume is to be calculated. This subparagraph is not proposed for amendment. The third calculation, at existing N.J.A.C. 7:13-11.4(g)1iii, provides the formula to calculate the percentage of flood storage volume displaced onsite using the numbers determined from N.J.A.C. 7:13-11.4(g)1i and ii. Proposed N.J.A.C. 7:13-11.4(g)1iii continues unchanged the formula for determining the percentage displacement for volume sections below the 100-year flood elevation and adds the formula for the volume section above the 100-year flood elevation.

Additional calculations are performed pursuant to existing and proposed N.J.A.C. 7:13-11.4(g)2 to determine the total percentage of flood storage volume a proposed project displaces, including any offsite compensation, within the Central Passaic Basin. Since the base flood storage as of March 25, 1977, has already been calculated and March 25, 1977, is the date from which the flood storage volume displacement limit including offsite compensation is calculated, it is not included again. Instead, existing N.J.A.C. 7:13-

11.4(g)2i, which is not proposed for amendment, involves determination of the volume of offsite compensation and cross-references N.J.A.C. 7:13-11.4(o), specifying how this volume is to be calculated. Existing N.J.A.C. 7:13-11.4(g)2ii provides the formula to calculate the total percentage of flood storage volume a project displaces, including any offsite compensation, using the numbers determined from N.J.A.C. 7:13-11.4(g)1i and ii and (g)2i. Proposed N.J.A.C. 7:13-11.4(g)2ii continues, unchanged, the formula for determining the percentage of displacement including offsite compensation for volume sections at or below the 100-year flood elevation and adds the formula for the volume section above the 100-year flood elevation.

Existing and proposed N.J.A.C. 7:13-11.4(h) provide the process for calculating the percentage of flood storage volume a major Highlands development displaces within the Highlands Preservation Area. Similar to existing N.J.A.C. 7:13-11.4(g)1, existing N.J.A.C. 7:13-11.4(h)1 sets forth three calculations that are performed to determine the percentage of onsite storage volume that the proposed project would displace. The main difference is that the first calculation, pursuant to existing N.J.A.C. 7:13-11.4(h)1i, determines the base flood storage volume that existed on the site on January 31, 1980, the date selected for the reasons discussed above, for the existing volume sections. Proposed N.J.A.C. 7:13-11.4(h)1i continues to require that the January 31, 1980, date be utilized to calculate base flood storage volume for proposed volume sections below the 100-year flood elevation. However, consistent with calculation performed pursuant to proposed N.J.A.C. 7:13-11.4(g)1i for the Central Passaic Basin, described above, the volume section above the 100-year flood elevation is calculated based upon the effective date of this rulemaking. Similar to existing N.J.A.C. 7:13-11.4(g)1iii, existing N.J.A.C. 7:13-11.4(h)1iii provides the formula, utilizing the numbers obtained pursuant to existing N.J.A.C. 7:13-11.4(h)1i and ii, to determine the percentage of flood storage volume that would be displaced onsite by the proposed project. Proposed N.J.A.C. 7:13-11.4(h)1iii continues, unchanged, the formula for determining the percentage displacement

onsite for the volume sections below the 100-year flood elevation and adds the formula for the volume section above the 100-year flood elevation.

Similar to N.J.A.C. 7:13-11.4(g)2, existing and proposed N.J.A.C. 7:13-11.4(h)2 provide additional calculations to determine the total percentage of flood storage volume a proposed project displaces, including any offsite compensation. However, an additional calculation is required as the date from which the existing onsite flood storage volume is calculated for the purpose of the flood storage volume displacement limits including offsite compensation differs from that of the onsite flood storage volume displacement limits. Existing N.J.A.C. 7:13-11.4(h)2i requires that, for the purposes of flood storage volume displacement including offsite compensation, existing flood storage volume is calculated from August 10, 2004, the date selected for the reasons discussed above, for the existing volume sections. Similar to proposed N.J.A.C. 7:13-11.4(h)1i discussed above, proposed N.J.A.C. 7:13-11.4(h)2i amends this to provide that the volume section above the 100-year flood elevation is calculated from the effective date of this rulemaking. Again, similar to proposed N.J.A.C. 7:13-11.4(h)1iii, existing N.J.A.C. 7:13-11.4(h)2iii, which provides the formula to calculate the total percentage of flood storage volume a project displaces, including any offsite compensation, is proposed for amendment to add the formula for the volume section above the 100-year flood elevation.

Existing and proposed N.J.A.C. 7:13-11.4(i) provide the process for calculating the percentage of flood storage volume displaced in areas other than those described at (g) and (h). Similar to N.J.A.C. 7:13-11.4(h)1, existing N.J.A.C. 7:13-11.4(i)1 sets forth three calculations that are performed to determine the percentage of onsite storage volume that the proposed project would displace. As at existing N.J.A.C. 7:13-11.4(h)1i, existing N.J.A.C. 7:13-11.4(i)1i requires that existing flood storage volume is calculated from January 31, 1980, for the reasons discussed above, for the existing volume sections. Proposed N.J.A.C. 7:13-11.4(i)1i continues to require that the January 31, 1980, date be utilized to calculate base flood storage volume for the proposed volume sections below the 100-year flood elevation. However, consistent with

calculation performed pursuant to proposed N.J.A.C. 7:13-11.4(h)1i, described above, the volume section above the 100-year flood elevation is calculated from the effective date of this rulemaking. Existing N.J.A.C. 7:13-11.4(i)1ii is not proposed to be amended. Similar to existing N.J.A.C. 7:13-11.4(h)1iii, existing N.J.A.C. 7:13-11.4(i)1iii provides the formula, utilizing the numbers obtained pursuant to existing N.J.A.C. 7:13-11.4(i)1i and ii, to calculate the percentage of flood storage volume displaced onsite by the proposed project. Proposed N.J.A.C. 7:13-11.4(i)1iii continues unchanged the formula for determining the percentage displacement onsite for the volume sections below the 100-year flood elevation and adds the formula for the volume section above the 100-year flood elevation.

Similar to N.J.A.C. 7:13-11.4(h)2, existing and proposed N.J.A.C. 7:13-11.4(i)2 provide additional calculations to determine the total percentage of flood storage volume a proposed project displaces, including any offsite compensation. Existing N.J.A.C. 7:13-11.4(i)2i requires that, for the purposes of flood storage volume displacement including offsite compensation, existing flood storage volume is calculated from November 5, 2007, for the reasons discussed above, for the existing volume sections. Similar to proposed N.J.A.C. 7:13-11.4(h)2i discussed above, proposed N.J.A.C. 7:13-11.4(i)2i amends this to provide that the volume section above the 100-year flood elevation is calculated from the effective date of this rulemaking. Again, similar to proposed to N.J.A.C. 7:13-11.4(h)2iii, existing N.J.A.C. 7:13-11.4(i)2iii, which provides the formula to calculate the total percentage of flood storage volume a project displaces including any offsite compensation is proposed for amendment to add the formula for the volume section above the 100-year flood elevation.

Existing and proposed N.J.A.C. 7:13-11.4(j) provide factors that shall be considered when calculating flood storage volumes. Existing N.J.A.C. 7:13-11.4(j)2 indicates that the flood storage displacement limits must be demonstrated for both existing volume sections, unless the site is entirely above the 10-year elevation, in which case the demonstration is only needed for the higher section. Proposed N.J.A.C. 7:13-11.4(j)2 expands the required demonstration to the three proposed volume sections and

specifies that demonstration is only necessary for volume sections for which the site is below. For example, if the site is entirely above the 100-year flood elevation but below the climate-adjusted flood elevation, then demonstration that the limits are met is only necessary for the volume section above the 100-year flood elevation. This distinction is made because, if the site is entirely above a lower flood elevation, such as the 10-year flood elevation, the existing flood storage is zero and, therefore, there would be no displacement.

Existing N.J.A.C. 7:13-11.4(j)3 provides that displacement shall be compensated for within its respective volume section except for circumstances described at paragraph (j)4. Proposed N.J.A.C. 7:13-11.4(j)3 reaffirms this standard but specifically details that it applies to all proposed volume sections. This standard ensures that flood storage is maintained for the different flood stages, so as not to exacerbate flooding during one event to compensate for lost storage in another.

Existing N.J.A.C. 7:13-11.4(j)4 details that when a site is predominantly below the 10-year elevation and it is not possible to compensate onsite for all flood storage displaced above the 10-year elevation, the applicant shall pursue compensation in the order of the hierarchy outlined at N.J.A.C. 7:13-11.4(j)4i, ii, and iii. This circumstance can occur when a site is predominantly below the 10-year flood elevation and a development proposes fill or a structure above the flood elevation because there is limited land to excavate above the 10-year flood elevation, and, thus, there is limited flood storage to create. Existing N.J.A.C. 7:13-11.4(j)4i provides that the applicant shall first create onsite flood storage above the 10-year flood elevation to the maximum extent practicable. Next, existing N.J.A.C. 7:13-11.4(j)4ii provides that, if the flood storage displacement cannot be fully compensated onsite and above the 10-year flood elevation, the applicant shall create flood storage volume above the 10-year flood elevation offsite to the maximum extent practicable. Finally, if displaced flood storage volume above the 10-year flood elevation still cannot be fully compensated for onsite or offsite, the applicant may create flood storage volume below the 10-year flood elevation for the volume unable to be compensated for pursuant to (j)4i and ii.

Proposed N.J.A.C. 7:13-11.4(j)4 maintains these provisions but expands them to include their applicability if a site is also predominantly below the 100-year flood elevation and/or the 10-year flood elevation. For example, if a site is predominantly below the 100-year elevation and fill is proposed between the 100-year flood elevation and the climate-adjusted flood elevation, compensation for the lost flood storage above the 100-year flood elevation would be required to be first provided onsite and above the 100-year flood elevation, then offsite and above the 100-year flood elevation, and finally below the 100-year flood elevation either onsite or offsite. This standard will ensure that flood storage is maintained for the different flood stages, so as not to exacerbate flooding during one event to compensate for lost storage in another, to the maximum extent practicable.

Existing N.J.A.C. 7:13-11.4(j)5 provides that, where the 10-year flood elevation is not provided on State or Federal flood maps, it may be estimated by using a flood depth halfway between the lowest existing ground elevation onsite and the flood hazard area design flood elevation. Since the proposed volume sections include the volume between the 10-year flood elevation and the 100-year flood elevation, proposed N.J.A.C. 7:13-11.4(j)5 amends this methodology to estimate the 10-year flood elevation as the depth halfway between the lowest existing ground surface elevation and the 100-year flood elevation. This simplifies the process and maintains its consistency with the proposed volume sections. Proposed N.J.A.C. 7:13-11.4(j)5 also amends the example; provided that the elevations reference the North American Vertical Datum (NAVD 88), rather than the National Geodetic Vertical Datum (NGVD). This change is proposed as NGVD has largely been replaced by NAVD 88 in both flood mapping and standard practice.

Existing N.J.A.C. 7:13-11.4(k) indicates that the base flood storage onsite is the volume of floodwater that was able to occupy the flood fringe onsite on the appropriate date shown at Table 11.4. Proposed N.J.A.C. 7:13-11.4(k) adds the volume calculated from the year of the effective date of rulemaking for the volume between the 100-year and the climate-adjusted flood elevation to the list of base flood storage volumes.

Existing N.J.A.C. 7:13-11.4(q) provides that flood storage volume can be created by removing material previously placed within a flood fringe, such as fill, or structures, as long as certain requirements are satisfied. Existing N.J.A.C. 7:13-11.4(q)2 indicates that the material to be removed is not associated with an activity authorized pursuant to a permit-by-rule. Without this provision, an applicant could place fill within the flood fringe pursuant to a permit-by-rule for the sole purpose of removing it for flood storage displacement compensation. This requirement ensures that certain activities that qualify for authorization pursuant to a permit-by-rule and are not required to meet the flood storage displacement limits are not used to circumvent the flood storage displacement limits. Proposed N.J.A.C. 7:13-11.4(q)2 amends this requirement consistent with the amendments discussed above to specify that the material was not placed pursuant to a proposed permit-by-registration because permits-by-rule will no longer be part of the Flood Hazard Area Control Act Rules and will be largely replaced by permits-by-registration.

N.J.A.C. 7:13-11.5 Requirements for a Regulated Activity in an Inundation Risk Zone

The Department is proposing new N.J.A.C. 7:13-11.5 to address the unique challenges and impacts related to development within the newly proposed "inundation risk zone." Due to the significant flooding risk associated with developing within this area that will be subject to inundation and flooding in the future, this rulemaking proposes standards at N.J.A.C. 7:13-11.5 that afford protection to applicants proposing new structures and other improvements. While a large portion of the inundation risk zone is currently developed, portions of the inundation risk zone remain developable today. By nature, some development carries more significant flood-associated risk than does other development. Proposed N.J.A.C. 7:13-11.5 acknowledges this balance by requiring additional analyses for development with greater flood-associated risks, as discussed below.

Proposed N.J.A.C. 7:13-11.5(a) sets forth the scope of the section, which applies to buildings and infrastructure, that are described at proposed N.J.A.C. 7:13-11.5(a)1 and 2, respectively. Pursuant to

proposed N.J.A.C. 7:13-11.5(a)1, the section would apply to any residential or critical building. An exception is made for repair and maintenance activities in cases where the building's height and footprint area are unchanged, and the habitable area of the building is not increased. In some cases, these improvements could constitute a "substantial improvement" to the building, as defined at N.J.A.C. 7:13-1.2. However, improvements that are designed to maintain a building in a state of good repair, and which do not increase the habitable area of the building, would not be associated with added risk. These types of repairs would likely increase the resilience of the building in question, having a positive effect.

Certain infrastructure would be subject to the requirements of this section as set forth at proposed N.J.A.C. 7:13-11.5(a)2. This provision includes infrastructure that is critical for emergency response and recovery, or which poses a risk to public health safety and welfare, should the infrastructure be damaged or unable to perform its intended function. It is essential that such infrastructure meet the elevated standards set forth in this section, given the adverse public safety impacts that could result if proper construction techniques are not utilized, and the applicant does not understand or recognize the associated risk of flooding and inundation. These standards apply only to the work that is being proposed. If only a segment of the infrastructure within an inundation risk zone is being constructed/improved then the standards apply only to that portion of the project. Exceptions are provided in three cases. Pursuant to N.J.A.C. 7:13-11.5(a)2i, the construction of drainage improvements and associated stormwater management structures necessary to ameliorate periodic inundation along a lawfully existing roadway, are not subject to the requirements of this section. Proposed N.J.A.C. 7:13-11.5(a)2i exempts from the requirements of this section, certain improvements to a lawfully existing railroad or public roadway. Specifically, safety or "state of good repair" improvements are exempt provided that there is no reasonable opportunity to meet the requirements of proposed N.J.A.C. 7:13-11.5(b) as part of the project's overall scope and purpose. Pursuant to N.J.A.C. 7:13-11.5(a)2i and ii, these activities do not contribute to additional flood-related risk and, in

general, are likely to increase the level of flood resilience of a particular community located within the inundation risk zone.

Proposed N.J.A.C. 7:13-11.5(a)2iii addresses projects by public transportation entities that have reached a milestone in their development and design, prior to the effective date of this rulemaking, such that meeting the requirements at proposed N.J.A.C. 7:13-11.5(b) would necessitate reevaluation of the selected preferred alternative or equivalent milestone, a significant redesign, or significant modifications or additions to private land acquisition plans, whether in fee or easement. In such a case, it would not be feasible or in the public interest for the public transportation entity to significantly modify its design. This is similar to the provision at existing N.J.A.C. 7:13-12.6(b), which provides flexibility for the elevation of roadways that meet the same milestone described here.

Proposed N.J.A.C. 7:13-11.5(b) establishes the standards to conduct the activities listed at N.J.A.C. 7:13-11.5(a) within an inundation risk zone. Proposed N.J.A.C. 7:13-11.5(b)1 requires the applicant to provide data specific to the likelihood this site will be inundated, and the frequency at which inundation could occur by 2100. The applicant must provide the elevation of the mean higher highwater line nearest to the site, and must disclose the minimum amount of inundation that would cause the lowest portion of the site to be inundated on a regular basis. An applicant proposing construction or improvements to a building subject to this section must additionally disclose the minimum amount of inundation that would cause the lowest portion of the primary roadways providing regular or emergent access to the site to be inundated daily, as well as the corresponding maximum depth of inundation on the roadway itself. By providing this data to the Department, staff can evaluate the relative risk associated with the proposed activity, as well as the risk to end users of the proposed development.

Proposed N.J.A.C. 7:13-11.5(b)2 requires applicants to provide an "inundation risk assessment" to consider the potential adverse impacts of inundation on the site of the regulated activity in the future. This analysis of risk would focus on potential injury or loss of life of people inhabiting or relying upon the

building or subscript infrastructure, damage, or loss of use of the building or infrastructure due to inundation, including the potential for disruption of public transportation, government services, or commerce, as well as an evaluation of the potential increases in short- and long-term costs due to inundation. Examples of these costs could include, but are not limited to, evacuation, storm response and recovery, as well as operations, maintenance, repair, replacement, reconstruction, demolition, and removal of structures located within the inundation risk zone.

Finally, proposed N.J.A.C. 7:13-11.5(b)3 requires applicants to demonstrate that all reasonable measures have been taken to avoid or ameliorate potential adverse impacts on public health, safety, and welfare and the environment. Since development within the inundation risk zone is inherently associated with a certain level of risk, it is important that applicants proposing the activities listed at proposed N.J.A.C. 7:13-11.5(a) have evaluated all reasonable measures for accomplishing the basic purpose of the project, while maximizing the reduction of risk associated with the development. Examples of measures may include: changes to onsite topography that would reduce or eliminate inundation of the project, such as raising up portions of the property, and alternative onsite configurations that may reduce or eliminate inundation of the project, such as locating as much of the project as practicable outside the inundation risk zone, or upon portions of site where less inundation is anticipated.

Applicants proposing buildings designated as Flood Design Class 4, or any non-linear infrastructure as described at paragraph (a)2, must demonstrate that there are no practicable alternative offsite locations to accomplish the purpose of the proposed regulated activity, where that location would meet the requirements of this section. As noted in the proposed definition for “critical building” at N.J.A.C. 7:13-1.2, buildings belonging to Flood Design Class 4 possess the highest level of criticality to the surrounding community. Examples include, but are not limited to: power plants, hospitals, and other buildings that a community depends upon for its recovery after a flood event. Due to the criticality of these buildings for a

community's resilience, it is appropriate that offsite locations be explored for citing these types of buildings and infrastructure listed at paragraph (a)2.

Finally, proposed N.J.A.C. 7:13-11.5(c) requires that permanent signage be incorporated on any new or substantially improved habitable building within an inundation risk zone, where the project is funded in whole, or in part, by public funds. This requirement will educate and raise awareness to people entering a building of the risk within an inundation risk zone. The sign will reflect that in the years 2050, 2070, and/or 2100, a portion of that particular building could be permanently or partially inundated. N.J.A.C. 7:13-11.5(c)1 requires that at least one sign is placed prominently close to the entrance of the building. Where there are multiple entrances, N.J.A.C. 7:13-11.5(c)2 directs the applicant to place the sign at the primary entrance. Pursuant to N.J.A.C. 7:13-11.5(c)3, the signage must incorporate the sea level rise data published by the Department, and depicted at Table 11.5, as appropriate for the specific site. As directed at N.J.A.C. 7:13-11.5(c)4, the sign must be readily legible, and have characters no less than two inches in height. N.J.A.C. 7:13-11.5(c)5 requires that only the projected sea level elevations described at N.J.A.C. 7:13-11.5(c)3, and corresponding Table 11.5, must be depicted on the signage. Signage pursuant to this subsection would not be required where the entire building is situated entirely above all the Department's projected sea level elevations.

N.J.A.C. 7:13-11.6 Requirements for a Regulated Activity in or Along a Regulated Water with Fishery Resources; and N.J.A.C. 7:13-11.7 Requirements for a Regulated Activity in or Affecting a Present or Documented Habitat for Threatened or Endangered Species

Existing N.J.A.C. 7:13-11.5 and 11.6 are proposed to be recodified as N.J.A.C. 7:13-11.6 and 11.7, respectively, with amendments to the application of timing restrictions discussed below.

Existing N.J.A.C. 7:13-11.5(d) specifies time periods during which authorized activities shall not be conducted in order to protect fishery resources. Existing N.J.A.C. 7:13-11.5(e) indicates circumstances

that will lead the Department to reduce, extend, or otherwise modify a timing restriction specified at existing N.J.A.C. 7:13-11.5(d). Similar provisions for specifying and potentially amending time periods during which authorized activities are not to be conducted are found at existing N.J.A.C. 7:13-11.6(g), with regards to protecting threatened or endangered species. At both existing N.J.A.C. 7:13-11.5(e)2 and existing N.J.A.C. 7:13-11.6(g), the Department is not permitted to limit the regulated activity to fewer than 183 calendar days per year. The Department is proposing to remove the language that limits timing restrictions and replace it with an indication that the Department will evaluate the type, location, and timing of each proposed activity and provide guidance to the applicant to develop a timeframe for which the project can be undertaken without adverse impacts to protected species. Pursuant to the existing rules, the presence of multiple timing restrictions that would result in less than 183 days for construction, especially when combining the limits for fisheries at recodified N.J.A.C. 7:13-11.6 and for threatened and endangered species at recodified N.J.A.C. 7:13-11.7(g), automatically results in the need to reduce or eliminate one or more restrictions. The Department administers timing restrictions to protect the critical habitat of the State's fishery resources and threatened and endangered species. Limiting the cumulative application of timing restrictions to no more than 183 days is not, in all cases, fully protective of the species in question and leads the Department to determine which species it prioritizes over another, which is unwise and can lead to adverse impacts to fishery resources or threatened or endangered species, both of which are prohibited pursuant to this and other chapters.

Further, cumulatively applying multiple timing restrictions that reduce the period within which work can occur to less than 183 days does not necessarily mean the conduct of the project is unduly impeded. For example, it may be that one timing restriction may relate to work in the channel for four months, while another timing restriction may relate to tree removal for a different four-month period. Combined, they result in greater than 183 days of restrictions. However, tree clearing can occur throughout eight months of the year and work in the channel can also occur throughout eight months of the year, just

not concurrently. The Department recognizes that in some cases this may lead to a hardship for the applicant, in which case, the applicant can request a hardship exception pursuant to N.J.A.C. 7:13-15.1.

It should also be noted that endangered species timing restrictions and fisheries timing restrictions often apply to different regulated activities associated with a development. For example, the Department frequently provides guidance on the timing restriction for the State and Federally listed endangered Indiana Bat (*Myotis sodalis*). The timing restriction for Indiana Bat is only applicable to tree clearing; therefore, once all trees have been cleared on a site, the timing restriction is effectively removed and provides no additional limitations on construction. Fisheries restrictions are focused on earth moving activities that may introduce sediment to the adjacent waterway. By staging, sequencing, and planning development activities, construction can move forward without conflicting with restricted periods. The Department currently assists applicants in understanding which activities apply to each restriction to ensure that timing restrictions can be observed without unnecessarily impeding approved development of a site. The proposed amendments memorialize and codify this process.

SUBCHAPTER 12. ACTIVITY-SPECIFIC REQUIREMENTS FOR INDIVIDUAL PERMITS

N.J.A.C. 7:13-12.1 Requirements that Apply to All Regulated Activities; N.J.A.C. 7:13-12.2 Requirements for Stormwater Management

The Department is proposing to replace references to the flood hazard area design flood in these sections with the new climate-adjusted flood elevation. Furthermore, N.J.A.C. 7:13-12.2(c)2, which addresses calculations that should be made in order to account for tailwater conditions on a proposed stormwater management basin discharge, is amended to clarify that analyses pursuant to this section should be based on current flood conditions, with the exception of the proposed new climate-adjusted flood elevation. This is appropriate since calculations pursuant to this section should

demonstrate that the stormwater management structure will function as intended for both today's extreme weather, as well as for future climate conditions.

N.J.A.C. 7:13-12.4 Requirements for a Structure

In addition to replacing reference to the flood hazard area design flood with the climate-adjusted flood elevation, proposed N.J.A.C. 7:13-12.4(b)2, which requires that structures within the flood hazard area be designed to resist uplift, flotation, collapse, and displacement due to hydrostatic and hydrodynamic forces, is proposed to be updated to instead refer to buoyancy, collapse, and displacement. The proposed term buoyancy more accurately captures the Department's intent than the usage of the terms "uplift" and "flotation."

Additionally, new N.J.A.C. 7:13-12.4(c), which requires that any electrical equipment cabinets, transformers, generators, or any other structures or equipment that generate or provide power be elevated one foot above the climate-adjusted flood elevation, where practicable, is proposed. This adds a measure of flood resilience to a building or to a community in general that may otherwise be lacking.

N.J.A.C. 7:13-12.5 Requirements for a Building

N.J.A.C. 7:13-12.5 sets forth design and construction standards that apply to any building proposed to be constructed, reconstructed, enlarged, elevated, or otherwise modified within the flood hazard area. It also sets forth standards for the conversion of a lawfully existing building to either a residential or critical building in this area. Proposed changes to this section of the FHACA rules are meant to account for climate change and sea level rise. In addition, existing rule standards in this section are regrouped in order to provide additional clarity.

While this section of the FHACA rules applies to all buildings, N.J.A.C. 7:13-12.5(a)2 describes circumstances pursuant to which these rules would not apply. In the existing rules, if a site was filled,

raised, or otherwise removed from a flood hazard area and either the Department or FEMA subsequently altered their respective flood studies to show the site as located outside of the flood hazard area, the standards of this section would not apply to any building proposed thereon. The substance of N.J.A.C. 7:13-12.5(a)1 and 2 is proposed to be combined into proposed N.J.A.C. 7:13-12.5(a) with amendments and new regulations at proposed N.J.A.C. 7:13-12.5(a)1 and 2 that more accurately reflect the interaction between FEMA and the Department, related to flood mapping and also to address situations where a site has been removed from the flood hazard area in violation of this chapter.

Proposed N.J.A.C. 7:13-12.5(a) explains that the section applies to any building within any regulated area, which includes the flood hazard area and riparian zone. This distinction is necessary since some activities pursuant to this section may lie within a repairing zone but outside a flood hazard area. Proposed N.J.A.C. 7:13-12.5(a) further details the type of work that could remove an activity from the flood hazard area, such as through the construction of a flood control project. Thus, a site that is currently in a flood hazard area or which was at one time in a flood hazard area continues to be subject to the standards of this chapter, unless the requirements of both N.J.A.C. 7:13-12.5(a)1 and 2 are met.

Proposed N.J.A.C. 7:13-12.5(a)1 requires that the area in question was removed from the flood hazard area either prior to the adoption of the Flood Hazard Area Control Act in 1980 or in accordance with this chapter at the time the activity occurred, which removed the area in question from the flood hazard area. This mirrors the existing definition of “lawfully existing” at N.J.A.C. 7:13-1.2, and, furthermore, addresses circumstances in which those who illegally filled their sites would benefit from relaxation of the applicability of this section.

Proposed N.J.A.C. 7:13-12.5(a)2 additionally requires that the Department and/or FEMA, as appropriate, amend their flood mapping to indicate the area in question no longer lies within the Department's jurisdiction. Whereas, pursuant to the existing rules, this requirement was satisfied if either the Department or FEMA modified their mapping, in order to further our cooperation with FEMA, this

rulemaking clarifies that FEMA mapping needs to be amended with the appropriate letter of map amendment instrument, irrespective of whether a Department delineation is available. Should a Department delineation also be available for the area in question, the Department would amend its delineation to account for the area in question, separately from FEMA's process of map revision. Additionally, N.J.A.C. 7:13-12.5(a)2ii is amended to clarify that acceptable revisions to FEMA mapping include either a Letter of Map Amendment or a Letter of Map Revision Based on Fill. The former is a revision based on more accurate site topography than was available to FEMA when it published an effective map. The latter is a revision based on fill that has been placed on site after the date the effective FEMA map was published.

Proposed new N.J.A.C. 7:13-12.5(b)1 requires that an architect or engineer certify that the building design meets required stability standards during flooding events. In addition to the new professional certification requirement, by requiring that the certification confirm compliance with N.J.A.C. 7:13-12.4, the current requirement at N.J.A.C. 7:13-12.5(b)1, that a proposed building is able to resist hydrostatic and hydrodynamic loads and the effect of buoyancy is expanded to require that the building also be certified to be able to resist impact loads. Additionally, as a result of proposed amendments at N.J.A.C. 7:13-12.4 discussed above, the building must be resistant to these forces to an elevation of one foot above the climate-adjusted flood elevation, as opposed to one foot above the flood hazard design flood elevation.

Proposed N.J.A.C. 7:13-12.5(b)2 additionally requires that, with limited exception, all mechanical and electrical equipment for the building is elevated to one foot above the climate-adjusted flood elevation. This is necessary to decrease the flood-related damage a building situated in the flood hazard area may incur during times of flooding. Nevertheless, the Department recognizes that it may not always be feasible for electric or mechanical equipment to be elevated. To accommodate this reality, proposed N.J.A.C. 7:13-12.5(b)2i and ii make an allowance for mechanical and electrical equipment to be located at lower elevations, provided the applicant demonstrates it is not feasible to properly elevate the equipment. To minimize the risk of flood-related damage, the applicant will also need to place the equipment as close to

one foot above the climate-adjusted flood elevation as feasible. Lastly, the applicant will need to isolate the equipment from coming into contact with floodwaters, unless he or she certifies that the equipment is designed to operate in submerged conditions.

As part of the effort to maximize flood resilience, logic dictates that building on higher ground is preferable to building on lower ground. Both the frequency and depth of flooding would be less on higher ground. Accordingly, proposed N.J.A.C. 7:13-12.5(b)3 requires a proposed building to be elevated on higher ground, where practicable, unless doing so would result in more environmental disturbance than citing it on lower ground. For example, this situation could occur if the higher ground contained woody vegetation within a riparian zone, which the lower ground lacks. In this case, building on lower ground would save the woody vegetation from being destroyed, which in turn would spare an important carbon sink. Similarly, higher ground could contain documented habitat for threatened or endangered species, which should be avoided under the tenets of the FHACA rules.

Finally, the Department notes that the construction, reconstruction, or expansion of buildings may be proposed in the inundation risk zone. This is a portion of the flood hazard area directly at risk due to sea level rise. Because of this risk, additional regulatory requirements will apply as compared to the portion of the flood hazard area located outside of the inundation risk zone. In these cases, proposed N.J.A.C. 7:13-12.5(b)4 requires the applicant to comply with those additional requirements, which are found at N.J.A.C. 7:13-11.5.

N.J.A.C. 7:13-12.5(b) focuses on the construction, reconstruction, elevation, and enlargement of a building. So, too, does existing N.J.A.C. 7:13-12.5(m), which deals with buildings constructed in violation of this chapter, and which is being recodified as N.J.A.C. 7:13-12.5(c). This recodification is proposed to better group overarching issues together by theme. Addition of this amendment requires recodification of several subsequent standards in this subchapter. Recodification is proposed according to the following chart.

Table of citations, recodifications, and proposed changes

Current citation N.J.A.C.	Subject matter	Proposed citation N.J.A.C.	Proposed change(s)
7:13-12.5(c)	Required setback from top of bank	7:13-12.5(d)	Deletion of relaxation of setback requirement
7:13-12.5(d)	Exceptions to 12.5(c)	7:13-12.5(e)	Addition of standard to ensure stability does not rely on hard armoring of the banks of a watercourse
7:13-12.5(e)	Construction of a new building in the floodway	7:13-12.5(f)	Deletion of exemption allowing constructing over water on the Hudson River
7:13-12.5(f)	Conversion of a building within a floodway	7:13-12.5(f)3	No substantive change
7:13-12.5(g)	Elevating, reconstructing a building within a floodway	No citation change	Amended for clarity and with added requirements

7:13-12.5(h)	Construction of an addition to a building within a floodway	7:13-12.5(g)	Combined with 7:13-12.5(g)
7:13-12.5(i)	Low floor standards for a habitable building	7:13-12.5(h) through (k)	Update lowest floor requirement for climate-adjusted flood elevation
7:13-12.5(j)	Lowest floor requirement for substantial improvement of building subject to substantial damage	7:13-12.5(o)	Update lowest floor requirement for climate-adjusted flood elevation; require compliance with NFIP
7:13-12.5(k)	Lowest floor requirement for substantial improvement of building not subject to substantial damage	7:13-12.5(p)	See previous column.
7:13-12.5(l)	Lowest floor requirements for building improvements not constituting a	7:13-12.5(q)	Update lowest floor elevation requirement for climate-adjusted flood elevation

	substantial improvement		
7:13-12.5(m)	Buildings constructed in violation of chapter	7:13-12.5(c)	No changes
7:13-12.5(n)	Building conversion to residential or critical building	7:13-12.5(h)-(j)	Update required lowest floor elevation
7:13-12.5(o)	Dry access requirement	7:13-12.5(m)	Update travel surface elevation for climate-adjusted flood elevation
7:13-12.5(p)	Standards for enclosures below the flood hazard area	7:13-12.5(r)	Clarified and amended with additional standards
7:13-12.5(q)	Subdivisions	7:13-12.5(l)	No substantive changes
7:13-12.5(r)	General flood-proofing standards	7:13-12.5(s)	Refers to NFIP and UCC
7:13-12.5(s)	Dry flood-proofing standards	7:13-12.5(t)	Expanded requirements
7:13-12.5(t)	Wet flood-proofing standards	7:13-12.5(u)	Expanded requirements

7:13-12.5(u)	Restriction on flood-proofing certain types of buildings	7:13-12.5(v)	No substantive changes

Proposed N.J.A.C. 7:13-12.5(d) establishes standards for a building setback from the top of bank of a regulated water. Consistent with other amendments proposed through the FHACA rules, the Department proposes deleting the relaxation of the standard allowing construction within 25 feet of the top of bank. Proposed N.J.A.C. 7:13-12.5(d)1, 2, and 3 are additionally amended to clarify that the required 25-foot setback from the top of bank also applies to any pipe, culvert, or bridge that may enclose a regulated water. Applicants sometimes propose to construct buildings on top of or immediately adjacent to sections of regulated waters that are enclosed in a human-made structure, such as a pipe, culvert, or bridge. Constructing a building on top of or in close proximity to such enclosure can lead to foundation failure and damage to the enclosure. Constructing above or near enclosed regulated waters can additionally lead to increased flood damage potential. Pipes, culverts, and bridges, especially those designed and constructed years ago, often cannot convey the entire design flood. Excess floodwaters that cannot be carried by the structure, therefore, tend to flow overland and create a flow path near the original location of the regulated water before it was enclosed. Finally, it has been the Department's intention in this and prior rulemakings to facilitate the "daylighting" of enclosed regulated waters, that is, to restore to a natural condition a regulated water that is significantly ecologically degraded, such as a channel enclosed by a pipe or culvert, a channel that has been previously straightened, channelized, or lined with revetments, retaining walls, or other armoring, or a channel that has relocated or become significantly eroded or incised through natural processes. (See N.J.A.C. 7:13-12.14(d).) Constructing a building on, above, or in close proximity to an enclosed regulated water effectively prevents the regulated water from ever being restored. Therefore, it is

appropriate to apply the same building setbacks from enclosed regulated waters as is required from the top of bank of open channels.

Recodified N.J.A.C. 7:13-12.5(e), which provides the ability to relax the setbacks established at proposed N.J.A.C. 7:13-12.5(d) in certain circumstances is proposed for amendment. In the existing rules, in order to be granted relaxation by the Department, an applicant needs to submit an engineering certification confirming that the location of the proposed building is stable to support the building and not subject to erosion or undermining due to its close proximity to the top of bank. Proposed language clarifies that the banks of the regulated water need to be stable without the need to construct bulkheads, retaining walls, or other types of hard armoring. This preserves the ecology of the regulated water. By keeping the building at least 25 feet away from the top of bank, it also serves as an additional measure of protection, should a hard armoring measure fail and guards against undermining of the building than what would occur if the building were located closer to the top of bank.

Existing N.J.A.C. 7:13-12.5(e), which sets forth standards for the construction of a new building in a floodway, is proposed for deletion. The floodway is the inner part of the flood hazard area and is subject to deeper and faster flood flows then other portions of the flood hazard area. As a result, new construction with a floodway is generally prohibited pursuant to N.J.A.C. 7:13-11.3. However, pursuant to the existing rules, the construction of a new building in a floodway is permitted if it is located on a pier in the Hudson River, the CZM rules are met, and the applicant provides an engineering certification confirming that the proposed building is properly designed. Given that the floodway along the Hudson River has been converted on FEMA flood mapping to indicate tidal flooding and associated V zones, and in light of the fact that the construction of a building over the water within a V zone would violate minimum NFIP standards, this exemption from the prohibition for new buildings in floodways is proposed for deletion.

The substance of existing N.J.A.C. 7:13-12.5(f), which addresses the conversion of an existing building located in a floodway into a single-family home, duplex, multi-residence building, or critical building, is at proposed N.J.A.C. 7:13-12.5(f)3 as discussed below.

Proposed new N.J.A.C. 7:13-12.5(f) explains that the Department shall not issue an individual permit for certain regulated activities located either within or above a floodway or situated waterward of the mean high water line in a Coastal A zone, V zone, or VE zone. Not only is the floodway dangerous, as noted above, so too is building directly over a regulated water when the flood is driven by wave action. This is an important distinction because waters whose floods are dominated by wave action do not possess floodways, as described at Subchapter 3. The danger stems from higher velocities of flooding experienced in the floodway and the additional forces imparted on floodwaters due to wave action. To account for these dangers, proposed N.J.A.C. 7:13-12.5(f)1 disallows the construction of a new building in the floodway or waterward of the mean high water line in a V zone, VE zone, or Coastal A zone. The standards are slightly different for lawfully existing buildings located in a floodway or over a water. While proposed N.J.A.C. 7:13-12.5(f)2 also disallows the substantial improvement of a building that has not suffered substantial damage, an exception is made for cases where the improvement results in the elevation or flood-proofing of the building to one foot above the climate-adjusted flood elevation. Such an allowance helps reduce the flood-related risk that a lawfully existing building currently faces. An additional exception is made where the proposed improvements to the building consist solely of repair and maintenance activities that do not alter the building's height, footprint area, or habitable area. It has been the Department's experience that improvements necessary to ensure that a lawfully existing building remains habitable, such as replacing doors, windows, and roofs, or undertaking internal renovations, can sometimes constitute a substantial improvement, particularly where the market value of the building is low. It is not the Department's intention to discourage homeowners, for example, from undertaking necessary improvements to their home that do not alter the building's height, footprint area, or habitable area. Further, improvements that are designed to

maintain a building in a state of good repair, and which do not increase the habitable area of the building, would not be associated with added risk. In fact, these types of repairs would likely increase the resilience of the building in question, having a positive effect. Therefore, in such a case, it is not necessary to construct or elevate the improved portion of the building at least one foot above the climate-adjusted flood elevation. Alternately, the lowest floor of the building is required to be elevated only as necessary to meet minimum NFIP standards as established by rule or floodplain ordinance for the participating community in which the building is located. Equivalent language is proposed to be added pursuant to the general permit-by-certification at proposed N.J.A.C. 7:13-8.1 and 12.5(p), as discussed below. Proposed N.J.A.C. 7:13-12.5(f)3 incorporates existing N.J.A.C. 7:13-12.5(f), and imposes additional permitting limits, as the flood risk in a floodway or directly over a regulated water is so great that no lawfully existing building should be converted into a residential use or a critical building.

Despite the danger inherent in constructing a building in a floodway, not all types of building modifications carry the same degree of additional risk. One example is an addition that is located upstream or downstream of the building in a manner that does not further obstruct flow. Not every point in a floodway necessarily or effectively conveys the flow of floodwaters. An existing building in a floodway can create a "shadow" area, which does not effectively convey the flow of floodwaters. This results from the obstruction to flow created by the existing building. The amount and location of these shadows is highly dependent upon the footprint and orientation of the existing building and the direction of flood flows. Expanding a building within this area often does not exacerbate flooding and is, therefore, allowable pursuant to proposed N.J.A.C. 7:13-12.5(g), which combines and incorporates with amendments existing N.J.A.C. 7:13-12.5(g) and (h). However, because it is still safer not to build in this area, proposed N.J.A.C. 7:13-12.5(g)2 requires the existing building to have been occupied within the five years prior to the date of application to the Department to modify the building and N.J.A.C. 7:13-12.5(g)3 requires a demonstration that the expansion will not cause further dangers. A new provision is included at proposed N.J.A.C. 7:13-

12.5(g)3 pursuant to which the applicant must demonstrate that the revised building footprint will not result in any further obstruction to the flow of floodwaters, as noted above, and also that the revised building footprint will not exacerbate offsite flooding in any flood event described at N.J.A.C. 7:13-12.1(i). This is necessary to ensure that the expansion, reduction, or revision of the building will not exacerbate flooding or adversely impact the environment.

Existing N.J.A.C. 7:13-12.5(i) establishes standards for the lowest floor elevations of a habitable building, including a single-family home or duplex, a critical building, a multi-residence building, and any other type of habitable building. Proposed rule amendments break this section into a number of smaller sections at proposed N.J.A.C. 7:13-12.5(h) through (k), as follows.

Proposed N.J.A.C. 7:13-12.5(h) addresses single-family dwellings and duplexes. Here, the lowest floor elevation requirement is amended to one foot above the climate-adjusted flood elevation to reflect the worsening flooding expected due to climate change and sea level rise. In addition, the portion of existing N.J.A.C. 7:13-12.5(n), which deals with converting a building to a residential use, is incorporated into proposed N.J.A.C. 7:13-12.5(h) without a substantive change. The relocation of portions of existing N.J.A.C. 7:13-12.5(n) helps to centralize standards relevant to a single-family dwelling or duplex.

Proposed new N.J.A.C. 7:13-12.5(i) addresses the construction of a critical building and the conversion of an existing building to a critical building. It incorporates the standards from existing N.J.A.C. 7:13-12.5(i)2, expanded to include the portion of existing N.J.A.C. 7:13-12.5(n) that addresses conversions to a critical building, with a revision in the required lowest floor elevation to incorporate a reference to the proposed new climate-adjusted flood elevation.

Similar to subsections (h) and (i), recodified N.J.A.C. 7:13-12.5(j) amends the lowest floor elevation requirement for a multi-residence building. It maintains the flexibility from existing N.J.A.C. 7:13-12.5(i)3, which allows for lowest floors of non-residential portions of the building to be situated at lower elevations. The Department is also proposing to clarify, at recodified N.J.A.C. 7:13-12.5(j)2, that

the lowest floor of any residential portion of the building must be constructed at least one foot above the climate-adjusted flood elevation and no lower than the elevation required pursuant to the Uniform Construction Code. The language at existing N.J.A.C. 7:13-12.5(i)3iv, v, vi, and vii, relating to standards for non-residential portions of a mixed-use building, are incorporated with amendments at proposed N.J.A.C. 7:13-12.5(n), as discussed below. The same is true for proposed N.J.A.C. 7:13-12.5(k), which deals with all other buildings not discussed at proposed subsections (h) through (j).

While the standards at proposed N.J.A.C. 7:13-12.5(h) and (j) are applicable to single-family homes, duplexes, and multi-residence buildings in both fluvial and tidal flood hazard areas, proposed N.J.A.C. 7:13-12.5(l) provides additional limitations applicable to these structures in fluvial flood hazard areas. Particularly, in a fluvial flood hazard area, if construction or conversion is proposed to occur on a lot created through subdivision after November 5, 2007, then none of the lots created in that subdivision can have either an existing habitable building or a valid authorization from the Department to construct a habitable building in the flood hazard area. This incorporates with amendments, the substance of existing N.J.A.C. 7:13-12.5(q), which applies to single-family homes and duplexes, and applies it to multi-residence building as well. The rulemaking further clarifies that this provision is intended to ensure that no more than one single-family home, duplex, or multi-residence building is constructed within a fluvial flood hazard area on a given lot as that lot existed on November 5, 2007. Subdivision of a lot into two or more segments after this date does not entitle the present or future owner of the lot to construct or create (through conversion) more than one single-family home, duplex, or multi-residence building on the original lot. In this way, the Department is providing for more consistent protection for residential buildings in fluvial flood hazard areas. Flooding in fluvial areas is generally harder to anticipate than in tidal areas, where flood events are caused by tidal surges that can often be predicted in advance, thus affording occupants the ability to evacuate before the building is impacted. Conversely, flash floods can occur in fluvial areas that can quickly trap occupants before they are able to evacuate. By limiting the construction or creation of one

single-family home, duplex, or multi-residence building per lot within a fluvial flood hazard area, as that lot existed on November 5, 2007, the Department is limiting the number of new people moving into dangerous areas, thereby balancing the amelioration of flood risk in fluvial areas along with the expectation for reasonable use of a site.

While a multi-residence building is similar to a single-family home or duplex because it is meant for residential use, a multi-residential building is also somewhat similar to a critical building because damage to either type of building creates the potential for socioeconomic disruption and displacement of a greater number of people. In the case of a multi-residence building, the disruption is specific to the large number of people who would typically occupy the building, which can be considerably higher when compared to either a single-family home or duplex. In the case of a critical building, the number can include the entire community or communities served. While both types of buildings are similar in this regard, it is important to note that a multi-residence building does not equate to a critical building. Additionally, developments of two or more single-family homes or duplexes would, if constructed within flood hazard areas, subject multiple families to flood risks that should be considered by the Department when reviewing applications for such work.

Because of the similarity in the number of people that would be impacted by flooding for each of these uses, proposed N.J.A.C. 7:13-12.5(m) outlines the requirements specific to the construction of any critical building or multi-residence building, any project involving two or more single-family homes or duplexes, and the conversion of a lawfully existing building into any of these uses. These standards reflect the more significant flood-related risks associated these types of developments. The proposed standards include a prohibition on any building being located in a V zone or VE zone at proposed N.J.A.C. 7:13-12.5(m)1, the need to have at least one road accessing the building elevated to at least one foot above the flood elevation, with a constrained exception at paragraph (m)2, and a requirement to elevate the grade surrounding the building at paragraph (m)3, also with a constrained exception.

Proposed new N.J.A.C. 7:13-12.5(m)2 incorporates with amendments the substance of existing N.J.A.C. 7:13-12.5(o) and the deed notice language at existing N.J.A.C. 7:13-12.5(p). The flexibility for redevelopment projects that existing N.J.A.C. 7:13-12.5(o)1 allows is not proposed to be continued. Applicants proposing multi-residence buildings that are part of a redevelopment project can currently seek to demonstrate pursuant to existing N.J.A.C. 7:13-12.6(e) that it is not feasible to construct an elevated access into the site. The Department acknowledges that there will be situations where either roads or surrounding grades cannot feasibly be elevated. Rather than requiring a hardship exception, proposed N.J.A.C. 7:13-12.5(m)2i, ii, and iii and (m)3i outline standards that must be met in order to allow a road or surrounding grades to be set at lower elevations. Proposed N.J.A.C. 7:13-12.5(m)2i continues the exemption for projects located in tidal flood hazard areas, with the added clarification that the regulated activity must not additionally be subject to fluvial flooding. As noted in the summary at N.J.A.C. 7:13-2.3 above, specifically with regard to proposed Figure 2.3D, an area can be subject to both fluvial and tidal flooding. The dynamics of flooding differ greatly in fluvial and tidal areas. Whereas, flooding in tidal areas is more easily predicted, and affected residents generally have sufficient time to evacuate, fluvial areas can be subject to flash flooding that provides little or no time to evacuate. Further, the velocity of floodwaters in fluvial areas is generally higher than tidal areas, leading to increased potential for erosion and structural damage. In some cases, flooding along regulated waters that lie in close proximity to tidal waters can be subject to both types of flooding. It is, therefore, important to clarify that flexibility pursuant to this subsection is provided only in areas subject to tidal flooding alone. As proposed, areas subject to both fluvial and tidal flooding would not qualify for the flexibility provided at N.J.A.C. 7:13-12.5(m)2. With respect to surrounding grades, proposed N.J.A.C. 7:13-12.5(m)3ii mandates that grading may not result in additional flooding caused by stormwater runoff, unless the Stormwater Management Rules have been followed.

Proposed N.J.A.C. 7:13-12.5(n) sets forth additional standards for other habitable buildings pursuant to N.J.A.C. 7:13-12.5(k) and for a multi-residence building when an applicant seeks to construct the lowest floors of the building's nonresidential portions at an elevation less than one foot above the climate-adjusted flood elevation pursuant to N.J.A.C. 7:13-12.5(j)3. These requirements are similar to those found at existing N.J.A.C. 7:13-12.5(i)3, with the exception that the lowest floor elevation is amended to require that the elevation be determined with reference to the climate-adjusted flood elevation for the reasons discussed above and proposed N.J.A.C. 7:13-12.5(n)1 and 2 and (n)2ii are amended to add the requirement that the lowest floor elevation of the building be no lower than that required pursuant to the Uniform Construction Code (UCC), N.J.A.C. 5:23, or the NFIP 44 CFR Part 60. Reference at proposed N.J.A.C. 7:13-12.5(n)4 is made to both the V zone and the VE zone, terms which FEMA has designated to indicate specific flood risks. V zones are areas along the coast that may experience storm induced waves higher than three feet along with flooding. VE zones are based on a more detailed engineering analysis, wherein a specific level of potential flooding has been determined and a base flood elevation is established. Since both zones represent a high coastal flood risk, it is appropriate to reference both of these designations in the proposed rules.

Existing N.J.A.C. 7:13-12.5(j) and 12.5(k) deal with substantial improvements of lawfully existing buildings. These subsections, respectively, address substantial improvement of a lawfully existing habitable building that has been substantially damaged and substantial improvement of a lawfully existing building not proposed as a result of substantial damage. The existing subsections are proposed to be recodified as N.J.A.C. 7:13-12.5(o) and (p), respectively, with amendments. Both subsections are amended to specify that the substantially improved building have a lowest floor elevation set no lower than the applicable minimum NFIP standard. Further, pursuant to N.J.A.C. 7:13-125(p), an exception is made where the proposed improvements to the building consist solely of repair and maintenance activities that do not alter the building's height, footprint area, or habitable area. It has been the Department's experience that

improvements necessary to ensure that a lawfully existing building remains habitable, such as replacing doors, windows, and roofs, or undertaking internal renovations, can sometimes constitute a substantial improvement, particularly where the market value of the building is low. It is not the Department's intention to discourage homeowners, for example, from undertaking necessary improvements to their home that do not alter the building's height, footprint area, or habitable area. Further, improvements that are designed to maintain a building in a state of good repair, and which do not increase the habitable area of the building, would not be associated with added risk. In fact, these types of repairs would likely increase the resilience of the building in question, having a positive effect. Therefore, in such a case, it is not necessary to construct or elevate the improved portion of the building at least one foot above the climate-adjusted flood elevation. Alternately, the lowest floor of the building is required to be elevated only as necessary to meet minimum NFIP standards as established by rule or floodplain ordinance for the participating community in which the building is located. Equivalent language is proposed to be added to the individual permit requirements for a building at N.J.A.C. 7:13-12.5, as discussed below.

N.J.A.C. 7:13-12.5(q) is recodified from N.J.A.C. 7:13-12.5(l). It addresses modifications of a lawfully existing building that do not result in a substantial improvement of a building. No substantive changes are proposed.

Existing N.J.A.C. 7:13-12.5(p) establishes requirements for enclosures that lie below the lowest floor of habitable buildings. In addition to recodification as N.J.A.C. 7:13-12.5(r), proposed new N.J.A.C. 7:13-12.5(r)4i requires that, should an applicant propose an enclosure beneath the lowest floor of a building located in a Coastal A, V zone, or VE zone, the enclosure can only be constructed using a breakaway wall or other non-load bearing elements. This is different from existing rule language, which provides that the Department shall not issue an individual permit to construct an enclosure below the lowest floor of any building located in a V zone. The Department is proposing to remove this restriction because the UCC and NFIP allow the use of breakaway walls in a V or VE zone. Finally, the requirement to place a notice on the

deed of the building at N.J.A.C. 7:13-12.5(p)6 is proposed to be relocated to proposed N.J.A.C. 7:13-22.3 is discussed below.

Existing N.J.A.C. 7:13-12.5(r), recodified as proposed N.J.A.C. 7:13-12.5(s), sets forth the hierarchy by which the Department will authorize a building to be flood-proofed. Proposed new N.J.A.C. 7:13-12.5(s)1 requires that any building to be flood-proofed pursuant to this chapter must be designed in accordance with the requirements of the National Flood Insurance Program, 44 CFR 60.3 and 60.6, and the Uniform Construction Code, N.J.A.C. 5:23. Whereas, the reference to N.J.A.C. 5:23 is covered at existing N.J.A.C. 7:13-12.5(s) for dry flood-proofing and at subsection (t) for wet flood-proofing, and is reiterated in this paragraph, the reference to the NFIP is proposed to be included in order to ensure that buildings designed and ultimately permitted pursuant to this chapter meet minimum NFIP standards for the community in which the building is located.

Proposed N.J.A.C. 7:13-12.5(s)2 relocates with amendments existing N.J.A.C. 7:13-12.5(u), which explains that the Department shall not issue an individual permit to flood-proof a single-family home, duplex, or critical building, or any residential portions of a multi-residence building. A distinction is made regarding flood-proofing of enclosures beneath the lowest floor of a building pursuant to recodified N.J.A.C. 7:13-12.5(r). This limited type of flood-proofing, which is generally wet flood-proofing given that the area in question must have flood vents pursuant to N.J.A.C. 7:13-12.5(p)3, is distinct from the requirements at N.J.A.C. 7:13-12.5(s), which apply to flood-proofing of other portions of buildings. A qualifier is additionally proposed at N.J.A.C. 7:13-12.5(s)3ii that wet flood proofing can be used only if the type of building is permitted to be wet flood-proofed pursuant to the UCC and NFIP. In general, habitable areas cannot be wet flood-proofed pursuant to these requirements. Rather, wet flood-proofing is typically permitted for agricultural buildings and certain buildings with a water-dependent use, which cannot be practicably elevated or dry flood-proofed.

Amendments are proposed at existing N.J.A.C. 7:13-12.5(s), which is recodified with amendments as proposed N.J.A.C. 7:13-12.5(t). Existing rule language requires dry flood-proofing be designed in accordance with the Uniform Construction Code to an elevation of at least one foot higher than the flood hazard area design flood elevation. Proposed N.J.A.C. 7:13-12.5(t)1 updates the requirement to reflect the proposed new climate-adjusted flood elevation.

Dry flood-proofing standards as proposed N.J.A.C. 7:13-12.5(t)2 through 10 are adapted from FEMA's 2013 document "Floodproofing Non-Residential Buildings" and the Uniform Construction Code, which incorporates by reference Chapter 6 of The American Society of Civil Engineer's publication "ASCE 24-14," which provides flood-resistant design standards for buildings. While the proposed dry flood-proofing standards are new to the FHACA rules (except for proposed N.J.A.C. 7:13-12.5(t)4), they do not represent new concepts. Instead, they are familiar regulatory constructs from ASCE 24-14 and FEMA. Any structure regulated pursuant to the UCC located in a flood plain already needs to comply with these standards. The FHACA proposal builds on these standards by ensuring they are applied to the flood hazard area regulated pursuant to N.J.A.C. 7:13; that is, the flood producing the climate-adjusted flood elevation. This flood hazard area is larger than the one produced by FEMA's base flood.

N.J.A.C. 7:13-12.5(t)2 notably disallows dry flood-proofing in flood hazard areas in which the flood velocity is greater than five feet per second or unknown, an inundation risk zone, Coastal A zone, and the V zone or VE zone. Other than the prohibition in the inundation risk zone, the disallowance of dry flood-proofing in these areas matches the requirements of Chapter 6 of ASCE 24-14. With respect to the inundation risk zone, according to FEMA, stillwater flood depth at least two feet in height can produce waves 1.5 feet in height. Given that the climate-adjusted flood elevation in tidal flood hazard areas is equivalent to FEMA's 100-year flood elevation plus five feet, and that the inundation risk zone is an area impacted by five feet of sea level rise, it is reasonable to conclude that floods within the inundation risk zone would be deep enough to support waves of at least 1.5 feet in height. The area constituting the

inundation risk zone, while not necessarily depicted as a Coastal A zone on FEMA mapping, may behave similar to a Coastal A zone. Therefore, proposed rule amendments disallow the use of dry flood-proofing in the inundation risk zone.

The proposed requirement to post a flood emergency operations plan at N.J.A.C. 7:13-12.5(t)9 directly follows recommendations established in FEMA's publication P-936, "Floodproofing Non-Residential Buildings." This publication dates back to 2013, and as such, the concepts behind such a plan are not new. Chapter 6 of ASCE 24-14 already requires a flood emergency plan.

The FHACA rules acknowledge that it may not always be possible to elevate a building. In addition, based on the preceding discussion, it may not be possible to dry flood-proof a building. As a result, recodified N.J.A.C. 7:13-12.5(u) focuses on wet flood-proofing standards. It consists of standards recodified from existing N.J.A.C. 7:13-12.5(t) with several amendments. Similar to the dry flood-proofing standards discussed above, proposed rule amendments at N.J.A.C. 7:13-12.5(u)1 and 3 are taken from ASCE 24-14. Also similar to the proposed dry flood-proofing standards, wet flood-proofing must be provided to a depth of one foot above the climate-adjusted flood elevation. However, options for wet flood-proofing are more limited than they are for dry flood-proofing.

As was the case for dry flood-proofing, the rulemaking incorporates long-standing requirements particular to ASCE 24-14. This will help eliminate any confusion that may currently exist between the requirements of ASCE 24-14 and the FHACA rules. Only buildings designated as Flood Design Class 1, agricultural structures, or buildings functionally dependent on close proximity to water may be wet flood-proofed, pursuant to proposed new N.J.A.C. 7:13-12.5(u)1. In addition, the FHACA rules propose to incorporate usage of flood damage-resistant materials at proposed new N.J.A.C. 7:13-12.5(u)3.

Proposed N.J.A.C. 7:13-12.5(v) is a new standard that is proposed to be added in order to clarify that below ground enclosures of any kind are not permitted in a flood hazard area. The provision codifies the Department's longstanding interpretation and implementation of this section and is being added to

ensure that prospective applicants fully understand the Department's policy in this regard. It is not uncommon for applicants to propose basements and below ground parking areas beneath a building, particularly in urban areas. The NFIP description of a below ground enclosure is included to clarify the scope of the provision. Below ground enclosures in flood hazard areas are unwise for a number of reasons. First, since, by definition, such an enclosure is below ground along all sides, there is no positive drainage. As such, floodwaters will quickly collect in the enclosure and remain trapped until the area is pumped out, which requires operational machinery and a power supply, both of which easily may fail during a flood event. Pumping may, therefore, not occur for days after the flood and can result in damage to the building and total loss of automobiles and other property stored in such an area. Second, floodwaters, once they reach the below ground enclosure, pour in extremely rapidly, which led to fatalities during Superstorm Sandy. Applicants sometimes propose to ramp up earth or structures around the enclosure in hopes of preventing floodwaters from entering. However, such designs have failed during flood events, leading to catastrophic results. The Department is, therefore, adding this requirement to underscore the importance of this policy.

N.J.A.C. 7:13-12.6 Requirements for a Railroad, Roadway, Parking Area, or Airport Runway or Taxiway

Existing N.J.A.C. 7:13-12.6 sets standards for the construction, reconstruction, or modification of a railroad, roadway, and parking area, including the placement of drainage improvements. Existing N.J.A.C. 7:13-12.6 is proposed to be repealed and replaced by the following proposed new rule. The concept of the proposed rule text is in many respects similar to existing concepts, with one major exception being that the travel surface elevation standard is being revised to reference the climate-adjusted flood elevation as opposed to the flood hazard area design flood elevation. This reflects the increase in flooding expected to result from climate change, as discussed at length previously in this summary. Additionally, the rule is

proposed to be changed to clarify the longstanding interpretation that the design and construction standards of the section apply to airport runways and taxiways.

Proposed N.J.A.C. 7:13-12.6(a) incorporates existing N.J.A.C. 7:13-12.6(a) and clarifies the scope of the section.

Pursuant to existing N.J.A.C. 7:13-12.6(b)1, (e)1, and (f)1, the travel surface of proposed railroads, roadways, and parking areas are required to be elevated one foot above the flood hazard area design flood elevation, with allowances for railroads, roadways, and parking areas below this elevation pursuant to existing N.J.A.C. 7:13-12.6(b)2, (e)2, and (f)2. Existing N.J.A.C. 7:13-12.6(b), (c), and (d) apply to railroads and public roadways, existing N.J.A.C. 7:13-12.6(e) applies to private roadways and parking areas in fluvial flood hazard areas serving critical buildings or multi-residence buildings that are not part of a redevelopment project, and existing N.J.A.C. 7:13-12.6(f) applies to all other private roadways and parking areas. Proposed N.J.A.C. 7:13-12.6(b) imposes elevation requirements for the construction, reconstruction, or modification of any railroad, roadway, parking area, or airport runway or taxiway. The travel surface of these structures must be elevated to one foot above the climate-adjusted flood elevation, unless certain conditions at N.J.A.C. 7:13-12.6(c) are met.

Proposed N.J.A.C. 7:13-12.6(c) sets forth provisions for exceptions to elevating a railroad, roadway, parking area, or airport runway or taxiway to one foot above the climate-adjusted flood elevation. Proposed N.J.A.C. 7:13-12.6(c)1 states that the applicant must be a public transportation entity that has either demonstrated that the project consists solely of safety improvements that have a limited project scope, or the project has reached a development milestone prior to the effective date of this rulemaking, such that elevating the structure to one foot above the climate-adjusted flood elevation would necessitate a significant redesign or additional acquisition of private land. The Department recognizes the funding and budgetary constraints, as well as long-term design process associated with public railroad, roadway, and airport improvements, can in some cases preclude the elevation of certain structures above the climate-adjusted

flood elevation into the project proposal. As such, these circumstances can be used to justify not elevating a railroad, roadway, parking area, or airport runway or taxiway when elevation would be otherwise practicable. Alternatively, proposed N.J.A.C. 7:13-12.6(c)2 allows the applicant to demonstrate that one or more of the following exists: prohibitively high construction costs, a design that necessitates an excessive volume of fill, a design that causes adverse environmental impacts with little to no ability to mitigate, or a design that exacerbates flooding or causes adverse impacts to existing drainage patterns or offsite properties. The exceptions pursuant to proposed N.J.A.C. 7:13-12.6(c)2 are effectively the circumstances outlined at existing N.J.A.C. 7:13-12.6(b)2iii. Not only does the applicant have to meet one of the requirements at proposed N.J.A.C. 7:13-12.6(c)1 or (c)2 to qualify, they also must meet the requirements at N.J.A.C. 7:13-12.6(d) and (e).

In addition to meeting the requirements at N.J.A.C. 7:13-12.6(c)1 or (c)2, proposed N.J.A.C. 7:13-12.6(d) requires that the applicant demonstrate compliance with three standards that largely mirror existing N.J.A.C. 7:13-12.6(c), for the Department to issue an individual permit for a railroad, roadway, parking area, or airport runway or taxiway less than one foot above the climate-adjusted flood elevation. Specifically, proposed N.J.A.C. 7:13-12.6(d)1 contains similar language to existing N.J.A.C. 7:13-12.6(c)1 and requires the applicant demonstrate that every reasonable effort has been taken to elevate the structure one foot above the climate-adjusted flood elevation. Proposed N.J.A.C. 7:13-12.6(d)1ii and iii contain similar language to existing N.J.A.C. 7:13-12.6(c)1ii and iii and require the applicant demonstrate that the structure is designed to the maximum extent practicable to resist damage, displacement, and loss of service due to anticipated flooding, and further that no extraordinary risk is posed to any person using each proposed structure not elevated one foot above the climate-adjusted flood elevation. This demonstration must include an analysis of the depth and frequency of flood waters inundating the structure pursuant to proposed N.J.A.C. 7:13-12.6(d)1iii(1), which mirrors existing N.J.A.C. 7:13-12.6(g)3i. However, the language at existing N.J.A.C. 7:13-12.6(g)3i, which indicates that in no case shall the travel surface of a private roadway

or parking area be serving a multi-residence building in a fluvial flood hazard be situated greater than 12 inches below the flood hazard area design flood elevation is being amended at proposed N.J.A.C. 7:13-12.6(e), as discussed below. Additionally, the analysis must include a quantification of the number of people that will be adversely impacted, pursuant to proposed N.J.A.C. 7:13-12.6(d)1iii(2), and a discussion of measures proposed to ameliorate the adverse impacts, such as evacuation plans, provisions for emergency electrical service, and flood proofing measures, pursuant to proposed N.J.A.C. 7:13-12.6(d)1iii(3), which mirror existing N.J.A.C. 7:13-12.6(g)3ii and iii, respectively.

Proposed N.J.A.C. 7:13-12.6(d)2 requires signage to be placed along any new, reconstructed, or expanded section of roadway or parking area, alerting to the likelihood of inundation, whereas existing N.J.A.C. 7:13-12.6(g)4 requires such signage to be placed only for roadways serving critical buildings, multi-residence buildings, and residential subdivisions of two or more single-family homes or duplexes, and within parking areas of 10 spaces or more. This additional signage requirement will provide more notice to the public of potential roadway flooding to inform safer choices when driving during storm and flooding conditions, and, thus, is more protective of public health, safety, and welfare.

Proposed N.J.A.C. 7:13-12.6(d)2i, ii, and iii prescribe the context of the signage to be placed in the flood-prone roadways and parking areas to adequately convey the level of risk associated to the motoring public relative to the likelihood and severity of inundation. Specifically, proposed N.J.A.C. 7:13-12.6(d)2i requires that the signage along roadways and parking areas overtopped or inundated during the two-year flood event indicates there is a significant flood risk, and the roadway or parking area may not be passable. Proposed N.J.A.C. 7:13-12.6(d)2ii requires that, for roadways and parking areas overtopped or inundated by during the 10-year flood event, the signage must indicate the roadway is subject to frequent flooding that may prevent passage. Finally, proposed N.J.A.C. 7:13-12.6(d)2iii requires that, for roadways and parking areas overtopped or inundated by during the 100-year flood event, the signage must indicate the roadway is subject to periodic flooding.

Proposed N.J.A.C. 7:13-12.6(e) stipulates that in no case shall the travel surface of a private roadway or parking area in a fluvial flood hazard that serves a critical building, multi-residence building, or residential subdivision of two or more single-family homes or duplexes be constructed below the 100-year flood elevation, unless the applicant demonstrates that each building is served by at least one roadway constructed at least one foot above the climate-adjusted flood elevation of adequate size and capacity to accommodate motor vehicle access to each building. This standard is largely an amalgam of existing N.J.A.C. 7:13-12.6(e)2 and (f)2. However, this standard now applies to all private roadways and parking areas serving critical buildings, multi-residence buildings, and residential subdivisions of two or more single-family homes or duplexes within fluvial flood hazard areas, instead of only private roadways and parking areas in fluvial flood hazard areas serving critical buildings and multi-residence buildings not part of a redevelopment project pursuant to existing N.J.A.C. 7:13-12.6(e)2. Additionally, the standard now stipulates that the lowest elevation permissible is the 100-year flood elevation, instead of 12 inches below the flood hazard area design flood elevation pursuant to existing N.J.A.C. 7:13-12.6(g)3i and allows for lower elevations; provided the building or subdivision is served by a roadway of adequate size and capacity which is constructed one foot above the climate-adjusted flood elevation. The intent is to require safe access to and from sites within fluvial flood hazard areas that house large numbers of people or buildings that are essential for community operations, where flood warning times are typically less than those within tidal flood hazard areas. The requirements at existing N.J.A.C. 7:13-12.6(h) are relocated as proposed N.J.A.C. 7:13-22.3(a)7, with modification, discussed below.

N.J.A.C. 7:13-12.7 Requirements for a Bridge or Culvert

N.J.A.C. 7:13-12.7 sets forth provisions for the construction or reconstruction of a bridge or culvert in a regulated area. Existing N.J.A.C. 7:13-12.7(a) mandates that a footbridge that does not meet the requirements of permit-by-rule 23 at N.J.A.C. 7:13-7.23 or general permit 12 at N.J.A.C. 7:13-9.12 is

subject to the requirements of this section. N.J.A.C. 7:13-12.7(a) is revised to reflect the proposed amendments at Subchapters 7 and 9 and updates the cross-references corresponding to both the permit-by-registration and the general permits.

Existing N.J.A.C. 7:13-12.7(c), which requires that a new or reconstructed bridge or culvert, as well as associated construction, including embankments, abutments, footings, and travel surfaces, is proposed to be amended to refer to the climate-adjusted flood elevation as opposed to existing language, which requires stability and resistance to displacement and/or damage during the flood hazard area design flood. As discussed in more detail above, the Department proposes this change to reflect the fact that the rules are being amended to better take into account the expected increase in flooding due to climate change and sea level rise to ensure activities authorized will be appropriately protective of public health and safety, property, and the environment.

N.J.A.C. 7:13-12.7(e)2 sets forth the types of hydrologic and hydraulic analyses that are conditionally acceptable for analyzing existing and proposed conditions for the reconstruction of a bridge or culvert, including limitations on the use and/or applicability of each type of analysis for given situations. For example, a standard step backwater analysis is conditionally acceptable, provided the area upstream of the structure is not a permanent impoundment of water such as a lake or pond, or would temporarily impound floodwaters during the flood being analyzed, and provided the analysis takes into account any potential downstream impacts. For reconstructed bridges and culverts, any decrease in upstream water surface elevations indicates that more water is flowing through the replacement structure than the original structure, which can lead to increased flooding downstream. A hydrologic routing of downstream conditions in such a case can be used to model potential downstream impacts. As an alternate to a standard step backwater analysis, a hydrologic routing is conditionally acceptable provided the analysis considers any potential downstream effect of a decrease in water surface elevations upstream of the bridge or culvert under proposed conditions, as noted above. An inlet/outlet control analysis is similarly conditionally

acceptable provided the analysis does not reveal a decrease in water surface elevations upstream of the bridge or culvert. In such a case, unacceptable downstream impacts could occur for the same reasons described above.

It has, however, been the Department's experience that applicants sometimes misinterpret existing N.J.A.C. 7:13-12.7(e)2iii to mean that an inlet/outlet analysis that indicates a rise in water surface elevations upstream of the structure is acceptable. The existing prohibition on a decrease in the water surface elevation is a condition for using this method of analysis, since a drop in upstream water surface elevations generally indicates a loss of flood storage and associated increases in flow rates (and flooding) downstream. In order to explain the reasons for the existing limitation on the use of the method, and to clarify that the inlet/outlet analysis must ultimately demonstrate that there are no upstream or downstream impacts to flooding beyond the tolerances listed at existing N.J.A.C. 7:13-12.7(e)1, the Department has added clarifying language at N.J.A.C. 7:13-12.7(e)2iii without altering the use or applicability of the method.

Proposed new N.J.A.C. 7:13-12.7(e)3i clarifies that wildlife passage through a bridge or culvert as required in this subsection does not apply in cases where an applicant demonstrates that changes in the size or geometry of the existing bridge or culvert necessary to accommodate providing wildlife passage would result in unavoidable and unacceptable increases in offsite flood depths. This standard is implied in the existing rules, which limit offsite impacts resulting from bridge and culvert replacement.

Proposed N.J.A.C. 7:13-12.7(f) limits culverts that may be authorized by individual permit to arch culverts or three-sided culverts and requires that a new or reconstructed bridge or culvert needs to satisfy four requirements specified at N.J.A.C. 7:13-12.7(f)1, 2, 3, and 4, unless the applicant can demonstrate that a circular, elliptical, or box culvert is acceptable pursuant to N.J.A.C. 7:13-12.7(g) and (h). Proposed N.J.A.C. 7:13-12.7(f) is identical to existing N.J.A.C. 7:13-12.7(f), with the exception of one change at proposed N.J.A.C. 7:13-12.7(f)2. The existing rule requires that the bridge or culvert be sized to convey the flood hazard area design flood without a significant increase in the velocity of water in the channel. In

addition to changing the reference to the flood hazard area design flood to flooding up to and including the climate-adjusted flood for the reasons previously discussed, the Department is proposing to amend N.J.A.C. 7:13-12.7(f)2 to delete the current reference to a significant increase in the velocity of water in the channel and instead require that a bridge or culvert to be sized to convey flooding up to and including the climate-adjusted flood elevation without causing a change in velocity that would cause the channel to erode. This change is proposed in order to more clearly express the intent behind this requirement: to ensure that a change in velocity does not cause an erosion problem in the channel.

Existing N.J.A.C. 7:13-12.7(g) sets forth criteria pursuant to which the construction or reconstruction of a circular, elliptical, or box culvert is conditionally acceptable through compliance with N.J.A.C. 7:13-12.7(g)1 through 6. The Department proposes no changes to these standards except at N.J.A.C. 7:13-12.7(g)3 and 4 wherein the term "manmade" is proposed to be replaced by the term "human created." This modification of language is proposed to be consistent with proposed changes elsewhere in this rulemaking.

N.J.A.C. 7:13-12.8 Requirements for a Utility Line

Pursuant to existing N.J.A.C. 7:13-12.8(c), applicants for an individual permit must demonstrate that the construction or placement of a utility line cannot feasibly be accomplished through jacking (pursuant to permit-by-rule 36), constructing the utility line within a roadway that already crosses the channel or water (pursuant to permit-by-rule 37), or attaching the utility line to a bridge that already crosses the channel or water (pursuant to permit-by-rule 38). As noted in the Summary above, portions of permits-by-rule 36 and 37 are proposed to be converted to exemptions at proposed N.J.A.C. 7:13-2.5(a)13 and general permit at proposed N.J.A.C. 7:13-9.12, and permit-by-rule 38 is proposed to be converted to a general permit-by-certification at proposed N.J.A.C. 7:13-8.12. References to these promulgated permits are proposed to be updated accordingly at N.J.A.C. 7:13-12.8(c)1, 2, and 3 and (d) and (d)1.

The Department is also proposing to clarify, throughout the section, that a water being crossed is more appropriately referenced as a "regulated water," and also to include a requirement at N.J.A.C. 7:13-12.8(c)6 that the applicant demonstrates that a utility line directionally drilled beneath a regulated water will not adversely impact or result in a discharge into regulated areas. The Department has determined that horizontally drilled utility lines beneath a regulated water have the potential to disturb regulated waters, riparian zones, and/or flood hazard areas if there is an "inadvertent return" during installation. An "inadvertent return" occurs when the bentonite-based drilling fluid seeps up through fractures in the soil. (Tammi, CE et al., 2008) Therefore, the proposed rule amendment requires the applicant to demonstrate that horizontally directional drilling to install utility lines will not adversely impact or result in a discharge into these regulated areas.

N.J.A.C. 7:13-12.10 Requirements for a Low Dam

The Department is proposing to update this section to reflect changes in citations of other sections of the FHACA rules. No substantive changes are proposed.

N.J.A.C. 7:13-12.11 Requirements for a Dam

Existing N.J.A.C. 7:13-12.11 sets forth standards related to certain dams within a flood hazard area or riparian zone. Existing N.J.A.C. 7:13-12.11(b) provides that activities related to the construction, replacement, repair, or removal of certain dams, as well as certain regulated activities performed in association with the removal of certain dams, do not require a permit pursuant to this chapter, provided all applicable requirements of the Dam Safety Standards at N.J.A.C. 7:20 are met. This existing exemption is relocated to proposed N.J.A.C. 7:13-2.5(a)12 with the added requirement that the conditions at N.J.A.C. 7:13-2.5(b), which apply to all exempt activities, are met, as described in the Summary above.

N.J.A.C. 7:13-12.12 Requirements for a Flood Control Project

N.J.A.C. 7:13-12.12(c) requires that an applicant for a flood control project that results in disturbance to a channel or a riparian zone demonstrate that there is no feasible alternative project outside the channel and riparian zone that will adequately control flooding. For example, rather than disturbing a channel, a flood control project could instead involve construction of a regional stormwater management basin outside the channel to handle excess stormwater, thus controlling flooding without placing the project in the channel. This requirement will minimize environmental impact and protect the integrity of channels and riparian zones. The Department is proposing to expand the subsection to specify that the required demonstration includes the proposed inundation risk zone, described at proposed N.J.A.C. 7:13-3.4 and regulated pursuant to proposed N.J.A.C. 7:13-11.5. Since land within the inundation risk zone is likely to be permanently inundated by 2100 due to sea level rise, flood control projects proposed in the inundation risk zone would be subject to unavoidable future flood risks and potential failure. N.J.A.C. 7:13-12.12(c) is, therefore, proposed to be amended to specify that the Department will only issue an individual permit for a flood control project that results in disturbance to a channel, inundation risk zone, and/or riparian zone if the applicant demonstrates that there is no feasible alternative project located outside the channel, inundation risk zone, and riparian zone that would satisfactorily reduce flooding.

N.J.A.C. 7:13-12.13 Requirements for a Retaining Wall or Bulkhead

The Department proposes to amend the standards for retaining walls and bulkheads at N.J.A.C. 7:13-12.13. The existing rules set forth design and construction standards that apply to any retaining wall or bulkhead located within a regulated water, a floodway, or within 25 feet of any top of bank. The proposed amendments expand the requirements of this section to apply to any retaining wall or bulkhead located within any regulated area, including anywhere in the flood hazard area and the riparian zone. Retaining walls and bulkheads located within these areas are subject to periodic inundation, high velocity flood flows,

and other forces that can undermine, damage, and ultimately collapse these structures, leading to adverse impacts on public health, safety, and welfare, and the environment. It is, therefore, appropriate to apply basic design and construction standards intended to increase the resilience and stability of retaining walls and bulkheads. This includes retaining walls and bulkheads that are subject to the Coastal Zone Management Rules at N.J.A.C. 7:7, which are currently exempted from the requirements of this section. In order to ensure that all retaining walls and bulkheads within flood hazard areas and riparian zones are properly designed, the existing exemption from this section is proposed for deletion. However, retaining walls and bulkheads that are exempt from requiring a CZM permit pursuant to N.J.A.C. 7:7-2.4(d)6 continue to be exempt from the requirements at N.J.A.C. 7:13-12.13.

N.J.A.C. 7:13-12.13(c) sets forth standards for retaining walls and bulkheads subject to this section. Existing N.J.A.C. 7:13-12.13(c)1 requires that the retaining wall or bulkhead is designed with stable footings and notes that footings generally need to extend at least three feet below grade. The Department is proposing to amend this by requiring a minimum footing depth of three feet, unless the applicant demonstrates that such footings are not possible to construct or necessary for stability. This is a common engineering practice in New Jersey where footings are expected to be placed at this depth so that they are below the frost line.

A new requirement is proposed at N.J.A.C. 7:13-12.13(c)4, which requires any retaining wall or bulkhead located within a tidal flood hazard area to be designed in accordance with N.J.A.C. 7:7-15.11(b). This section of the Coastal Zone Management Rules applies to shore protection and/or storm damage reduction measures and requires the applicant to design these measures according to a hierarchy wherein non-structural measures are preferred. If the applicant can demonstrate that non-structural measures are not feasible or practicable, hybrid shore protection and/or storm protection measures may be considered. If the applicant can demonstrate that hybrid measures are not feasible or practicable, then structural measures such as retaining walls and bulkheads may be used. Proposed N.J.A.C. 7:13-12.13(b)4 adopts this hierarchy

by reference to reflect the Department's preference for non-structural stabilization measures, such as living shorelines, which are better suited to adapt to a changing climate than many types of hard armoring, and which have the benefit of providing both stability and environmental uplift.

N.J.A.C. 7:13-12.16 Requirements for the Storage of Unsecured Material; 12.17 Requirements for the Investigation, Cleanup, or Removal of Hazardous Substances; 12.18 Requirements for the Placement, Storage, or Processing of Hazardous Substances; 12.19 Requirements for Solid Waste Landfill Closure; 12.20 Requirements for the Placement, Storage, or Processing of Solid Waste or Recyclable Materials; and 12.21 Requirements for the Removal of Existing Fill or an Existing Structure

The Department is proposing to replace references to the flood hazard area design flood in these sections with the new climate-adjusted flood elevation. Beyond that change, these sections have been updated to reflect changes in cross-references of other sections of the FHACA rules. Additionally, N.J.A.C. 7:13-12.17(b)2i, 12.18(c)1, 12.19(b)2i, and 12.20(c)1 are amended to prohibit the storage, stockpiling, or processing of hazardous substances, solid waste, or recyclable materials with the proposed new inundation risk zone. As discussed in the summary above, the inundation risk zone is land currently adjacent to tidal waters, which is subject to frequent flooding and potential future inundation. These activities are, therefore, not appropriately located within an inundation risk zone.

SUBCHAPTER 13. RIPARIAN ZONE MITIGATION

N.J.A.C. 7:13-13.1 Definitions; and 13.2 General Mitigation Requirements

The definitions of "enhancement" and "restoration" at N.J.A.C. 7:13-13.1 are being amended to update the cross-reference. In addition, the Department is proposing to add a definition of "temporary restoration" to the definitions. Temporary restoration is a type of mitigation. It refers to replacing vegetation

that is temporarily removed when an applicant needs temporary access to facilitate an approved regulated activity. For example, an applicant conducting an approved road widening may need a temporary staging location to access the construction site. Once construction is completed, the staging area is no longer needed and can therefore be restored. Temporary restoration refers to replacing the vegetation that was temporarily removed with vegetation of the same type or of a type that has greater ecological value. For example, an applicant may remove herbaceous vegetation, but for purposes of erosion control or to provide a visual buffer, may determine that the planting of trees or shrubs is appropriate to replace the herbaceous vegetation. The proposed rules would allow this change. The rules do not allow an applicant to remove forested vegetation and to restore the area with herbaceous vegetation since herbaceous vegetation is less ecologically beneficial than forested vegetation. Similarly, the Department is proposing to amend N.J.A.C. 7:13-13.2(k)1, to reference the addition of temporary restoration standards proposed at N.J.A.C. 7:13-13.9. N.J.A.C. 7:13-13.2(k)2, 3, 4, and 5 are proposed for amendment to reflect a change in codification occurring in later sections of the rules.

N.J.A.C. 7:13-13.4 Amount of Mitigation Required

N.J.A.C. 7:13-13.4 specifies the amount of mitigation required to compensate for conduct of a regulated activity in the riparian zone. The Department is proposing to restructure the section, establish new thresholds for requiring riparian zone mitigation, and amend the exemptions from mitigation that are currently listed at N.J.A.C. 7:13-13.4(b).

Proposed new N.J.A.C. 7:13-13.4(a)1 provides a reference to N.J.A.C. 7:13-11.2(z), which establishes the protocol for restoring an area temporarily disturbed to access or accommodate a regulated activity. This reference is added to proposed N.J.A.C. 7:13-13.4(b) to provide clarity as to when a project is subject to the requirements at N.J.A.C. 7:13-13.4 versus 11.2(z).

Existing N.J.A.C. 7:13-13.4(b) provides that, where a regulated activity is located within a 300-foot riparian zone, mitigation is required for the total area of vegetation that is cleared, cut, and/or removed,

with certain exceptions listed at existing N.J.A.C. 7:13-13.4(b)1, 2, 3, and 4. The requirement to mitigate all riparian zone impacts within a 300-foot riparian zone is continued at proposed N.J.A.C. 7:13-13.4(b)1 and the existing exemptions are amended and recodified at proposed N.J.A.C. 7:13-13.4(c), as discussed below.

Proposed N.J.A.C. 7:13-13.4(b)2 mirrors proposed N.J.A.C. 7:13-11.2(b)6ii and introduces a new mitigation standard that applies to disturbances within a 150-foot riparian zone. As noted in the Summary of N.J.A.C. 7:13-11.2(b), the Department has determined that because the 150-foot riparian zone is associated with the presence of threatened or endangered species and/or trout, permitted impacts that occur in a 150-foot riparian zone, in excess of 2,000 square feet, also merit mitigation in their entirety, with appropriate exceptions specified at N.J.A.C. 7:13-11.2(f) and 13.4(c), as discussed below. The proposed 2,000 square foot threshold for individual or cumulative impacts within a 150-foot riparian zone is based on the Department's determination that this is a reasonable disturbance limit for activities with minimal footprints, such as headwall and outlet protection for a stormwater discharge, in accordance with Table 11.2, which will have a *de minimis* impact to the resources intended for protection within a 150-foot riparian zone. Pursuant to this proposed rule, individual or cumulative impacts proposed in a 150-foot riparian zone that are below 2,000 square feet do not require mitigation.

Proposed N.J.A.C. 7:13-13.4(b)3 similarly mirrors proposed N.J.A.C. 7:13-11.2(b)6iii and introduces a new mitigation standard that applies to disturbances within a 50-foot riparian zone. Specifically, the proposed amendments take a more comprehensive approach to the need for mitigation in the 50-foot riparian zone. Rather than separately evaluating each proposed activity with its individual impact, the proposed rule instead compiles all impacts relating to all activities proposed in the riparian zone. If those impacts, individually or cumulatively, are 0.1 acres or more, mitigation is required. This eliminates the need to separately evaluate each proposed activity and whether it needs mitigation, and instead focuses on the total impact to the riparian zone from the overall project. The Department has proposed 0.1 acres as

the threshold for mitigation in a 50-foot riparian zone because it will have a *de minimis* impact on the resources intended for protection and is furthermore consistent with the minimal impacts threshold for mitigation applied in the Freshwater Wetland Protection Act rules (N.J.A.C. 7:7A). Pursuant to this proposed rule, individual or cumulative impacts proposed in a 50-foot riparian zone that are below 0.1 acres do not require mitigation.

Proposed N.J.A.C. 7:13-13.4(c) incorporates, amends, and updates the exemptions from the requirement to provide riparian zone mitigation at existing N.J.A.C. 7:13-13.4(b). As noted above, existing N.J.A.C. 7:13-13.4(b) relates to riparian zone mitigation within a 300-ft riparian zone while existing N.J.A.C. 7:13-13.4(c) relates to riparian zone mitigation within a 150-foot or 50-foot riparian zone. As described below, proposed N.J.A.C. 7:13-13.4(c) applies these exemptions from riparian zone mitigation, irrespective of the width of the riparian zone.

Existing N.J.A.C. 7:13-13.4(b)1, which provides that mitigation is not required for the construction of a new aboveground or underground utility line that meets the requirements at N.J.A.C. 7:13-11.2(k), is proposed for deletion. Pursuant to Table 11.2, a utility line is permitted 30 square feet of disturbance per linear foot of the utility line through a riparian zone, as well as additional disturbance to facilitate access to the project. For example, within a 300-foot riparian zone, which is a total of 600 feet wide (not including the channel), Table 11.2 would allow for at least 18,000 square feet of disturbance for one crossing of a riparian zone. Utility lines, being linear in nature, typically cross multiple regulated waters, often leading to acres of riparian zone impacts. While the placement of a utility line within a riparian zone can be justified pursuant to N.J.A.C. 7:13-11.2(k), the impacts related to these crossings can be significant and should be appropriately mitigated. Therefore, the Department is proposing to delete the exemption at existing N.J.A.C. 7:13-13.4(c)1 and instead require riparian zone mitigation in accordance with proposed N.J.A.C. 7:13-13.4(b) for new aboveground or underground utility lines.

Recodified N.J.A.C. 7:13-13.4(c)1 continues, without amendment, existing N.J.A.C. 7:13-13.4(b)2, which exempts from riparian zone mitigation the reconstruction, replacement, repair, or maintenance of an existing aboveground or underground utility line that meets the requirements at N.J.A.C. 7:13-11.2(l). Unlike a new utility line pursuant to N.J.A.C. 7:13-11.2(k), riparian zone disturbances related to the reconstruction, replacement, repair, or maintenance of an existing utility line are generally limited to actively disturbed areas and, as required by the Board of Public Utilities, are generally necessary to maintain existing levels of service upon which the public relies. By continuing the existing provision, the Department intends to facilitate the continued efforts of public utilities to make their systems more resilient in light of a changing climate.

Proposed N.J.A.C. 7:13-13.4(c)2 continues with amendments at existing N.J.A.C. 7:13-13.4(b)3, which exempts from mitigation, construction associated with a single-family home or duplex that meets the requirements of all applicable requirements at N.J.A.C. 7:13-11.2(m) or (n). However, these subsections cover only the construction or reconstruction of a single-family home or duplex itself and do not address other attendant disturbances such as the construction of a driveway to access the building or the placement of an individual subsurface sewage disposal system to serve the building. Thus, while the building itself is exempted from mitigation, the associated development is not, which has led to complicated and expensive scenarios for homeowners and inequitable compensation for impacts to riparian zone vegetation. For example, one person could be constructing a large home within a riparian zone that does not require a driveway or sewage disposal system within a riparian zone and be permitted 7,000 square feet of riparian zone impacts pursuant to Table 11.2 without the need to provide riparian zone mitigation. Another person, however, could be constructing a smaller home within a riparian zone that disturbs only 3,000 square feet of riparian zone vegetation, but also requires the construction of a driveway and sewage disposal system within a riparian zone, which would require riparian zone mitigation. In order to simplify and standardize the Department's approach to mitigation for a single-family home or duplex, and in recognition that

disturbances associated with these buildings can vary widely depending on a number of factors, the Department is proposing to exempt from mitigation any proposed impacts associated with a single-family home or duplex provided the cumulative impacts do not exceed the 3,500 or 7,000 square foot threshold, which are established at Table 11.2 according to the width of the riparian zone.

Proposed N.J.A.C. 7:13-13.4(c)3 continues without amendment existing N.J.A.C. 7:13-13.4(b)4, which exempts from riparian zone mitigation the construction of a trail or boardwalk that meets the requirements of N.J.A.C. 7:13-11.2(t).

N.J.A.C. 7:13-13.5 Property Suitable for Mitigation

N.J.A.C. 7:13-13.5 provides both administrative and technical criteria for selecting a mitigation site. The Department is proposing new N.J.A.C. 7:13-13.5(i) to require applicants to consider and assess the effects of climate change on a potential mitigation site.

When evaluating a site for mitigation potential, it is important to consider both the short-term success and the long-term viability of the mitigation site, including consideration of how changing climate conditions will impact the proposed site. To try to make an informed determination, an assessment of the vigor of the surrounding (reference) riparian zone should be considered. For example, if the target riparian zone is forested, are forests in the vicinity of the mitigation site healthy or showing signs of decline? Is there greater inundation than would support a forested condition, or are neighboring sites too dry? Is that due to precipitation, subsidence, or other causes? Applicants must provide their best professional assessment of the local conditions and any factors that could affect a mitigation project. This is important, regardless of whether the cause is a changing climate or something else, because without such an assessment, the short and long-term success of the proposed mitigation project may be jeopardized. Finally, N.J.A.C. 7:13-13.5(h) will be amended to redefine what “ecological risk” means in the context of

mitigation. This is to provide the applicant with more context as to where proposed mitigation may cause an ecological risk.

N.J.A.C. 7:13-13.6 Conceptual Review of a Mitigation Area

At N.J.A.C. 7:13-13.6(a), the Department is proposing to update the cross-reference to the requirements for conceptual review of a mitigation bank site to reflect a change in codification occurring in later sections of the rules.

N.J.A.C. 7:13-13.7 Basic Requirements for Mitigation Proposals

The Department is proposing new N.J.A.C. 7:13-13.7(f)12, as an addition to a list of basic information requirements for mitigation proposals. The Department is proposing to add the requirement that applicants provide a discussion regarding the future of the site and any special considerations that may be necessary to address the effects of climate change on the site. The Department is proposing that applicants include a discussion and assessment of the site anticipating the effects of climate change and sea level rise by 2100. Climate change models for New Jersey indicate that by 2100, there will be five feet of sea level rise above the mean higher high water elevation as it currently exists. Therefore, to evaluate the future of a mitigation site, it is necessary to consider where the site will be in the landscape with these anticipated changes in water elevation. While this provision may have the most applicability to mitigating for tidal systems, riparian systems exist in various reaches of tidal systems. Therefore, the applicability of this provision will depend on the location of the site an applicant is contemplating using for mitigation.

In addition, while specific information is not known about how precipitation may change as a result of climate change, experts agree that patterns of precipitation will change (since such patterns are already occurring). These changes include an increase in the timing, intensity, and amount of precipitation, and a potential increase in summertime drought (NJDEP, 2020). A riparian systems often depend on surface

water flow and precipitation, and less on ground water than wetland systems, it is important to consider the effects of potential changes in precipitation patterns when planning a mitigation project. Forested systems can be especially sensitive to hydrology, especially when newly planted. Young trees cannot survive with too much or too little water. Therefore, when trying to provide forested mitigation, it is critically important to assess the vigor of reference forested systems to try to identify any local factors that may affect the success of the project.

N.J.A.C. 7:13-13.9 Mitigation for a Temporary Disturbance

At N.J.A.C. 7:13-13.9, the Department is proposing a new section that details the requirements to mitigate temporary impacts to the riparian zone. While the existing rules define "temporary," they do not provide further direction on how to apply that term when addressing mitigation.

The Department distinguishes between temporary impacts to non-forested riparian zones and temporary impacts to forested riparian zones due to the difference in values and functions provided by each. The benefits of forests on streams include enhancing recharge by lowering ground temperatures, which helps to keep water in the soil instead of allowing it to evaporate. For the same soils, ground-water recharge is highest in forests and shrub areas. Higher recharge results in more abundant and steady ground-water discharge to streams (known as base flow), which is water of high quality. From a water-quality perspective, a United States Geological Survey (USGS) study of the quality of streams in the Upper Delaware River Basin in New Jersey concluded that the "concentrations of most chemical constituents studied and levels of fecal coliform bacteria were lowest, and concentrations of dissolved oxygen were highest, in streams whose watersheds contain the most forested or undeveloped land." (USGS Fact Sheet FS-090-02). Temporary restoration is considered a form of mitigation. Proposed new N.J.A.C. 7:13-13.9(a)1 requires that temporarily disturbed portions of non-forested riparian zones be restored.

Proposed new N.J.A.C. 7:13-13.9(a)2 addresses restoration for temporary impacts to forested riparian zones. Pursuant to the proposed paragraph, mitigation for an area of forested riparian zone temporarily disturbed may be performed in one of two ways. Particularly, the area may be restored to a forested condition or in cases where the forest component cannot be restored, to a non-forested condition. This restoration of the area to a non-forested condition most often applies when a subsurface pipe has been installed, or the site is being remediated to remove hazardous materials. In the case of an underground pipe, trees planted atop the pipe can damage the pipe and are, therefore, not acceptable. In the case of remediation, all vegetation is removed, the hazardous materials are removed, and the site is restored by reestablishing original elevations and replanting with previously existing vegetation including trees. In some instances, the remedial method includes leaving contaminated materials in place and covering them with a cap. In such cases, it may not be desirable to replant trees atop the cap because the tree roots could penetrate the cap material and result in the future exposure of the underlying contaminated materials. As a result, although the site began as forested, it may be restored to herbaceous riparian zone vegetation without the forested component.

To address the permanent loss of the benefits provided by the forest component when it is replaced by non-forest vegetation, the Department has determined that it is necessary to require additional mitigation. To satisfy the requirement, applicants must find another riparian zone location in the same watershed, devoid of trees and plant trees in that location. The Department requires that this be done at a 1:1 ratio, which means that for each acre of trees that were removed, an equal area of riparian zone must be planted with trees. Proposed new N.J.A.C. 7:13-13.9(b) provides the requirements for the restoration plan that the Department requires to ensure sufficient restoration of the site. These are the same criteria outlined at N.J.A.C. 7:13-11.2(z). The plan must include the number, type, and quantity of each species to be planted; the components of any seed mixes proposed to be used; a brief narrative description of the restoration plan;

and an invasive species control plan. The Department currently requests such information if it is not provided with an application.

N.J.A.C. 7:13-13.9 Riparian Zone Mitigation Hierarchy

Existing N.J.A.C. 7:13-13.9, Riparian zone mitigation hierarchy, is to be recodified as N.J.A.C. 7:13-13.10, without change.

N.J.A.C. 7:13-13.11 Riparian Zone Creation

Existing N.J.A.C. 7:13-13.10, which provides standards applicable to riparian zone creation, is proposed to be recodified as N.J.A.C. 7:13-13.11 with amendments. Particularly, at recodified N.J.A.C. 7:13-13.11(b), the Department is proposing to delete the portion of the existing provision that allows applicants to create riparian zones at a ratio of less than 1:1 if they demonstrate through the use of productivity models or other similar studies that creating a smaller area of riparian zone will result in replacement riparian zones of equal ecological value to those lost or disturbed, with the minimum allowed ratio of creation to loss specified to be 0.5:1. Existing N.J.A.C. 7:13-13.10(b)1 specifies the demonstrations that must be made and the information that must be provided to support a request to provide mitigation at a ratio of less than 1:1.

In the Department's experience, while individual site evaluation may be desirable, the time and effort it would take for applicants to thoroughly evaluate each site to devise a ratio, and for the Department to evaluate the work undertaken by the applicant, makes such a scenario impractical in a regulatory framework. The inclusion of the reduced ratio provision has had the effect of inviting applicants to spend time and money attempting to make this demonstration, instead of evaluating available mitigation options, and rarely, if ever, results in the reduction of the riparian zone requirements. In addition, requiring an area of mitigation that is at least equal to the impact area better ensures that the water quality benefits lost due to permitting, will be replaced. Therefore, the Department is proposing to eliminate this provision.

N.J.A.C. 7:13-13.12 Riparian Zone Restoration and Enhancement

Existing N.J.A.C. 7:13-13.11, which is proposed to be recodified as N.J.A.C. 7:13-13.12 with amendment, provides requirements applicable to riparian zone restoration and enhancement plans. For the same reasons discussed above, the Department is proposing to delete the existing provision allowing applicants to restore riparian zones at a ratio of less than 2:1 if the mitigator makes certain demonstrations. A similar deletion is proposed at recodified N.J.A.C. 7:13-13.12(c), except that the existing provision proposed for deletion allows applicants to enhance riparian zones at a ratio of less than 3:1 if the mitigator makes certain demonstrations.

As previously described, the Department has developed the current mitigation ratios using a relative sense of values and functions, and a relative sense of what types of mitigation result in more value to the waterway environment than others. In the case of restoration and enhancement, the ratios established through that process are 2:1 and 3:1, respectively. For the reasons discussed above, the Department has determined that continued provision of the potential to reduce the established mitigation ratios is not appropriate and is accordingly proposing to delete both allowances in this section.

N.J.A.C. 7:13-13.13 Monitoring and Reporting for Riparian Zone Creation, Restoration, and Enhancement

Existing N.J.A.C. 7:13-13.12, Monitoring and reporting for riparian zone creation, restoration, and enhancement, is to be recodified as N.J.A.C. 7:13-13.13 without change.

N.J.A.C. 7:13-13.14 Riparian Zone Preservation

As indicated above, existing N.J.A.C. 7:13-13.13 (proposed for recodification with amendments as N.J.A.C. 7:13-13.14) sets forth requirements applicable to riparian zone preservation plans. At recodified N.J.A.C. 7:13-13.14(c)3, the Department is proposing to require that preservation shall, dependent upon

the functions and values of the preservation area, generally be provided at a ratio of eight acres preserved for every acre of riparian zone impact (an 8:1 ratio). The current rule requires that preservation be "significantly larger than the area that would be required for any other mitigation alternative" but does not provide a ratio, which has led to riparian zone preservation proposals submitted to the Department that are inconsistent in size and that do not fully compensate for the ecological loss associated with the permitted activities, as required at N.J.A.C. 7:13-13.2(a).

While the Department has determined that an 8:1 ratio provides an appropriate level of compensation for riparian zone impacts, it additionally recognizes that a preservation area of significant ecological value may be able to fully compensate for the proposed ecological loss at a ratio of less than 8:1. Pursuant to N.J.A.C. 7:13-13.10, 13.11, and 13.12, riparian zone creation, restoration, and enhancement areas are required to be planted at a certain density with native, non-invasive vegetation and must be monitored by the permittee to ensure that the intended functions and values of the area are suitably maintained. This provides more uniformity in the functions and values of the created, restored, or enhanced area than is typically found in preserved areas, which can vary significantly in the density and type of existing vegetation, proximity to regulated waters, and other important characteristics that make the area valuable for preservation.

N.J.A.C. 7:13-13.15 Financial Assurance for Mitigation Projects; General Provisions; 13.16 Financial Assurance; Fully Funded Trust Fund Requirements; 13.17 Financial Assurance Line of Credit Requirements; 13.18 Financial Assurance Letter of Credit Requirements; 13.19 Financial Assurance Surety Bond Requirements; 13.20 Mitigation Banks; and 13.21 Application for a Mitigation Ban

Amendments at N.J.A.C. 7:13-13.15 through 13.21 (recodified at N.J.A.C. 7:13-13.16 through 13.22) reflect necessary updates of cross-references necessitated by proposed new N.J.A.C. 7:13-13.9.

SUBCHAPTER 15. HARDSHIP EXCEPTION FOR AN INDIVIDUAL PERMIT

It is not always possible for an applicant to comply with all applicable requirements at N.J.A.C. 7:13-11 and 12, which apply to individual permits. In these cases, the applicant may ask for relief from strict compliance with one or more requirements at N.J.A.C. 7:13-11 and 12 pursuant to the hardship exception. The Department considers these requests pursuant to the provisions at Subchapter 15. Amendments are proposed to this subchapter to ensure that the hardship exception process is protective of public health, safety, and welfare while simultaneously addressing the foreseeable impacts of climate change on regulated activities.

N.J.A.C. 7:13-15.1 Hardship Exception for an Individual Permit

Existing N.J.A.C. 7:13-15.1(b) sets forth three conditions pursuant to which the Department can consider a hardship exception request. The Department is proposing to amend the condition at N.J.A.C. 7:13-15.1(b)2 and to add a fourth category pursuant to which a hardship exception can be considered.

Existing N.J.A.C. 7:13-15.1(b)2 describes a case in which the Department determines that a hardship exists because the cost of compliance with the requirements at N.J.A.C. 7:13 is unreasonably high in relation to the environmental benefits that would be achieved through strict compliance. The Department proposes to amend this paragraph to expand the benefits considered that would be achieved if the rules' standards were strictly complied with to include not only the environmental benefits, but also the additional protection to public health, safety, and welfare. While protection of the environment is often inexorably tied to protection of public health with environmental protection, such as measures designed to protect water quality, yielding direct public health benefits, the proposed amendment explicitly recognizes that the protection of public health, safety, and welfare is just as important of a goal as achieving environmental benefit pursuant to FHACA, and the value of that protection, regardless of whether there is a corresponding environmental benefit resulting in the public health benefit, must, therefore, and necessarily be included when a determination is made weighing the relative cost of compliance against the protection that would

be achieved by strict compliance. By including protection as a metric considered when it determines if the cost of strict compliance is so unreasonably high as to be considered a hardship justifying some limited reduction in the rules' requirements, the Department is broadening the scope of the analysis it will undertake in this context in order to ensure that all relevant factors are considered when contemplating the issuance of a hardship exception. The proposed inclusion will put N.J.A.C. 7:13-15.1(b)2 on equal footing with N.J.A.C. 7:13-15.1(b)3, which similarly focuses on both public health, safety, and welfare, as well as the environment.

A fourth circumstance pursuant to which a hardship exception may be considered is proposed at new N.J.A.C. 7:13-15.1(b)4. The proposed new paragraph provides for the situation where there is a compelling public need for the project or regulated activity. As described in the summary of the proposed definition of "compelling public need" at N.J.A.C. 7:13-1.2, this captures situations where adverse impacts to public health, safety, welfare, or the environment are likely to occur if the project or regulated activity is not undertaken as proposed. An example of a project that could fall under this category is a public roadway that is being undermined by erosion and at risk of serious impairment or failure, which requires a hardship exception for relief from strict compliance with one or more sections of the FHACA rules. The applicant, likely a government entity in this example, would demonstrate that there is compelling public need for the project, not only because it is a public infrastructure project, but because there is a serious threat to public safety if the proposed project is not undertaken as proposed. This is being added to capture a class of projects, such as the example above, not considered at existing N.J.A.C. 7:13-15.1(b). Particularly, existing N.J.A.C. 7:13-15.1(b)1, 2, and 3 consider feasible and prudent alternatives to a proposed project or activity, cost of compliance, and alternative requirements. While these are important considerations in determining whether an exception from strict compliance with the rules is appropriate based upon hardship, the existing bases for a hardship exception do not capture projects that need to be undertaken to address a compelling public need for the project or activity in order to avoid adverse impacts to public health, safety, and welfare,

or the environment and where there is no viable alternative to address the compelling public need. In such a circumstance, cost is often not a primary issue that could otherwise qualify the project for consideration for an exception from strict compliance with the rules. Inclusion of proposed N.J.A.C. 7:13-15.1(b)4 expands the types of projects or regulated activities that can be considered for a hardship exception, but only for projects that satisfy a public need important to the protection of public health, safety, or welfare, or protection of the environment.

Should a project or regulated activity satisfy at least one of the potential bases for consideration of a hardship exception listed at N.J.A.C. 7:13-15.1(b), then the applicant must successfully demonstrate compliance with each of three separate requirements at N.J.A.C. 7:13-15.1(c)1, 2, and 3. Existing N.J.A.C. 7:13-15.1(c)1 requires the applicant to demonstrate that, due to an extraordinary situation of the applicant or site condition, compliance with N.J.A.C. 7:13 would result in an exceptional and/or undue hardship for the applicant and/or would adversely impact public health, safety, and welfare. Proposed N.J.A.C. 7:13-15.1(c)1 deletes the reference to "site condition" and replaces it with "the presence of extraordinary physical or engineering constraints on the site." This is proposed to clarify what is meant by "site condition." Particularly, for a condition on the site to potentially support the grant of a hardship exception, it must be something extraordinary of a physical or engineering nature that is so significant that strict compliance with the rules' requirements would result in an exceptional or undue hardship to the applicant or would adversely impact public health, safety, and welfare. The proposed greater specificity will enable an applicant to make a more cogent argument in favor of granting a hardship exception. It will also enable the Department to more cogently question the bases of any condition asserted to satisfy the standard set forth at N.J.A.C. 7:13-15.1(c)1 when determining whether or not to grant a hardship exception.

Finally, the Department is proposing to amend N.J.A.C. 7:13-15.1(c)1 to refer not only to potential adverse impacts on public health, safety, and welfare as a basis for grant of a hardship exception, but also to include potential adverse impacts on the environment that would result from strict compliance with

N.J.A.C. 7:13-11 or 12 in light of an extraordinary situation of the applicant or the presence of extraordinary physical or engineering constraints on the site. Using the above example of a public roadway that is being undermined by erosion and at risk of serious impairment or failure, such a condition could lead to adverse environmental impacts, including increased sedimentation of regulated waters and loss of riparian zone vegetation and associated habitat, in addition to adverse impacts to public health, safety, and welfare. The inclusion of a reference to adverse environmental impacts at N.J.A.C. 7:13-15.1(c)1 is, therefore, appropriate and reflects this concept that is stated at existing N.J.A.C. 7:13-15.1(b)1, (b)3, and (c)3, as well as proposed N.J.A.C. 7:13-15.1(e)3.

Comprehensive amendments are proposed to existing N.J.A.C. 7:13-15.1(e). The existing standard requires an applicant requesting a hardship exception to submit an application for an individual permit pursuant to N.J.A.C. 7:13-18. That submission needs to include information, as applicable, specified at N.J.A.C. 7:13-15.1(e)1 through 8 in the existing version of the rules (proposed N.J.A.C. 7:13-15.1(e)1 through 11).

Existing N.J.A.C. 7:13-15.1(e)1 requires submission of a narrative that explains how the project or regulated activity meets one of the requirements at N.J.A.C. 7:13-15.1(b) and all requirements at N.J.A.C. 7:13-15.1(c), discussed above. The submitted narrative must also demonstrate that the applicant has pursued alternate designs and/or locations for the project or regulated activity, as applicable, which have proven to not be feasible. The proposed amendment will bifurcate the existing paragraph into new N.J.A.C. 7:13-15.1(e)1 and 2 for clarity.

Existing N.J.A.C. 7:13-15.1(e)2 requires the applicant to describe any potential impacts of the proposed project or regulated activity upon the environment. In light of the proposed change at N.J.A.C. 7:13-15.1(e)1, existing N.J.A.C. 7:13-15.1(e)2 is being recodified as N.J.A.C. 7:13-15.1(e)3. Additionally, like proposed N.J.A.C. 7:13-15.1(b)2, proposed N.J.A.C. 7:13-15.1(e)3 will include consideration of public

health, safety, and welfare, in addition to the environment. The reason for the proposed inclusion here is the same as that at N.J.A.C. 7:13-15.1(b)2.

Given the proposed bifurcation of N.J.A.C. 7:13-15.1(e)1, existing N.J.A.C. 7:13-15.1(e)3 is proposed to be recodified as N.J.A.C. 7:13-15.1(e)4. The existing paragraph requires submission of all necessary structural, socio-economic, flood-proofing, and/or other information relevant to supporting the request for a hardship exception if the request relates to the requirements of a building at N.J.A.C. 7:13-12.5. The paragraph is proposed to be amended to require submission of this information for all projects, not just those seeking an exception from the requirements for buildings. This represents an expansion in the scope of the standard. This will lead to a more judicious decision-making process on both the part of the applicant in making a request for a hardship exception and the Department in reviewing the request.

The Department is similarly proposing changes to existing N.J.A.C. 7:13-15.1(e)4 (recodified N.J.A.C. 7:13-15.1(e)5) that will expand a requirement currently only applicable to a hardship request related to the requirements of one rule section to be applicable to all requests. Existing language requires identification of proposed access routes to and from a property during a flood, but only if the hardship exception request relates to the access requirements at existing N.J.A.C. 7:13-12.6. Proposed amendments expand this requirement to be applicable to all requests for hardship exception and additionally requires that the applicant consider the impact of the project or regulated activity on the post-flood resilience of the community. The expanded applicability of this provision is based upon the same reason for the similar change at recodified N.J.A.C. 7:13-15.1(e)4, discussed above. The added requirement that the applicant considers recovery after a flood has occurred helps ensure that a hardship exception will only be granted in appropriate circumstances. As a hardship exception will grant relief from strict compliance with N.J.A.C. 7:13, requiring focus on recovery after a flood is important. As the standards established in the rules are designed to ensure public health, safety, and the environment are protected and the threats associated with flooding have been minimized, any reduction of those standards through a waiver from strict compliance

must only be granted taking into account all potential impacts of any reduction of a particular standard, including any impacts that the project or activity may have on the ability of the community within which the project or activity is proposed to recover after a flood event.

Minor changes are proposed to existing N.J.A.C. 7:13-15.1(e)5 (recodified N.J.A.C. 7:13-15.1(e)6). This standard requires that the applicant identifies the projected height, velocity, and duration of the floodwaters expected at a site due to flooding to the climate-adjusted flood elevation, as well as demonstrating that the proposed project or regulated activity will not adversely affect the hydraulic capacity of any water so as to cause or increase flooding upstream and/or downstream of the proposed project. Otherwise, proposed changes improve explanation of the requirement and are not substantive.

Existing N.J.A.C. 7:13-15.1(e)6 (recodified N.J.A.C. 7:13-15.1(e)7) requires the submission of detailed financial documentation to support a hardship exception request based on economic grounds. Other than recodification, and an added example of the type of documentation that can be provided pursuant to this paragraph, the only proposed changes are those necessary to reflect changed format of the introductory language at proposed N.J.A.C. 7:13-15.1(e) and are not intended to be substantive.

Existing N.J.A.C. 7:13-15.1(e)7 will be recodified as N.J.A.C. 7:13-15.1(e)8. The existing standard requires a description of the existing development in the area and any potential impacts of the proposed project or regulated activity on that development. Proposed amendments clarify that the impacts required to be addressed are any adverse impacts, and that examination of those impacts must include impacts or influences on the community at large in addition to the existing development. This change is proposed because development, once built, becomes part of a community and it can often impact that community. The proposed rule strives to be more mindful of that community rather than focusing solely on the development to avoid ignoring issues that may arise as a result of that development, which may not be as protective of the community as it otherwise should be.

Proposed new N.J.A.C. 7:13-15.1(e)9 would require the applicant demonstrate that the proposed project or regulated activity meets the minimum NFIP standards at 44 CFR 60.3, the floodplain management criteria for flood-prone areas, as amended and supplemented, or provides proof that the applicant has obtained a variance for the proposed project from the local floodplain administrator or, where the applicant is a State agency, to the State floodplain administrator. 44 CFR 60.3 requires the applicant to disclose information so that NFIP regulated communities can obtain, review, and reasonably utilize data available from Federal, State, or other sources regarding flood risks to issue permits for proposed developments in flood prone areas. This represents a significant addition to the hardship exception requirements. By adding this requirement, the Department will move closer to ensuring that any hardship exception that it grants will not conflict with the NFIP. This will add a measure of consistency that is currently lacking between N.J.A.C. 7:13 and the NFIP and ensure the State remains NFIP-compliant. Such consistency will benefit the regulated community because it will decrease the likelihood that a State and local permit will conflict with one another.

Existing N.J.A.C. 7:13-15.1(e)8 stipulates that the Department may require additional information that it determines is reasonable and necessary to evaluate whether the hardship exception request meets the requirements of this section. This standard is somewhat unrelated to the remainder of N.J.A.C. 7:13-15.1(e). As such, the Department proposes to recodify it as proposed N.J.A.C. 7:13-15.1(f). In addition, the Department proposes to clarify that such requests for information may be made prior to or during its review of a hardship exception request. A request for additional information being made prior to a review means that the Department can make the request as part of the administrative and technical pre-review. This clarification is being made for the benefit of the applicant in order to more efficiently process a request for a hardship exception.

SUBCHAPTER 18. APPLICATION REQUIREMENTS

N.J.A.C. 7:13-18.1 Purpose and Scope

This section currently sets forth the application requirements for verifications, general permits-by-certification, general permits, and individual permits. The existing language at N.J.A.C. 7:13-18.1 will largely be retained with minor amendments. Specifically, existing N.J.A.C. 7:13-18.1(a)3 indicates that an authorization pursuant to a general permit is subject to the application requirements of this subchapter, except for authorization pursuant to the existing general permit 1 for channel cleaning pursuant to the Stream Cleaning Act. As this general permit is being repealed and combined with two similar existing general permits-by-certifications, proposed N.J.A.C. 7:13-18.1(a)3 is amended to indicate that the application requirements of this subchapter apply only to the portions of the proposed general permit, other than the portion authorizing channel cleaning pursuant to the Stream Cleaning Act pursuant to proposed N.J.A.C. 7:13-9.1(a), (c), and (f). Similarly, existing N.J.A.C. 7:13-18.1(b)3, which indicates that the application requirements for the existing general permit 1 for channel cleaning pursuant to the Stream Cleaning Act are set forth at existing N.J.A.C. 7:13-9.1, is proposed to be amended pursuant to N.J.A.C. 7:13-18.1(b)4 to indicate the application requirements for channel cleaning pursuant to the Stream Cleaning Act are set forth at proposed N.J.A.C. 7:13-9.1(f). Proposed N.J.A.C. 7:13-18.1(b)3 indicates that the application requirements for proposed permits-by-registration are set forth at N.J.A.C. 7:13-6.5. Existing N.J.A.C. 7:13-18.1(b)4, 5, and 6 are recodified as proposed N.J.A.C. 7:13-18.1(b)5, 6, and 7 without change, except for updated cross-references.

N.J.A.C. 7:13-18.2 General Application Requirements

This section currently sets forth general requirements for permit applications pursuant to N.J.A.C. 7:13. Existing N.J.A.C. 7:13-18.2(g) provides requirements for obtaining written consent for applications that include activities within a right-of-way or easement. Proposed new paragraph (g)2 expands upon the existing requirements at (g)1 to include applications which involve activities within a right-of-way or easement other than the existing requirements for gas pipelines located within a municipally owned right-

of-way. The proposed requirements at N.J.A.C. 7:13-18.2(g)2 includes all other activities within a right-of-way or easement, other than described at paragraph (g)1 and set requirements for how written consent shall be provided. For the holder of any right-of-way or easement other than described at paragraph (g)1, proposed N.J.A.C. 7:13-18.2(g)2i, written consent shall consist of one of the following: (i) documentation that the holder of the right-of-way or easement does not object to the submittal of an application to the Department for the proposed activities with the right-of-way or easement, with the understanding that said activities may commence upon the receipt of all necessary approvals; or (ii) a copy of the instrument establishing the right-of-way or easement, which indicates that the proposed activities are permitted as a condition of the right-of-way or easement.

The Department proposes to recodify existing N.J.A.C. 7:13-18.2(h) as (i) and propose new subsection (h) to address permitting timelines for State agencies exercising eminent domain. For this proposed subsection, private and quasi-private entities would not be included as a "State agency." Proposed N.J.A.C. 7:13-18.2(h) allows a State agency that does not yet own, possess title to, or have a right of access to private land to apply for a permit to conduct governmental or public safety activities without first obtaining the written permission of the current holder of the property. However, to submit such an application, the applicant must provide notice sufficient to comply with N.J.A.C. 7:13-19.3(b)6, regardless of any notice exceptions at N.J.A.C. 7:13-19.3(c) and if site access is necessary for the Department to complete its technical review of the application, the applicant would be required to obtain such right sufficient to constitute consent pursuant to proposed N.J.A.C. 7:13-18.2(n) prior to the Department declaring the application is complete for review.

N.J.A.C. 7:13-18.3 Additional Application Requirements for an Authorization pursuant to a General Permit-By-Certification

Authorizations for general permits-by-certification have separate instructions that require applicants to register with the Department's online portal. This rulemaking proposes to require that, in order to receive an authorization pursuant to a general permit-by-certification, a New Jersey licensed professional architect or engineer must apply for the general permit-by-certification and must certify that each requirement of a general permit-by-certification is met, and that information submitted is true, accurate, and complete. These particular activities warrant a certification from an architect or engineer, as appropriate, to ensure that public health, safety, and welfare are protected. For example, in many cases an applicant for authorization pursuant to an existing general permit-by-certification must certify that the applicant possesses an engineering certification attesting to one or more conditions or determinations related to the project or the site. In all cases, pursuant to an existing general permit-by-certification, the applicant is required to certify that a project meets certain criteria, such as that the lowest floor is elevated to the correct flood elevation or that the activities are not proposed within a floodway. In some instances, an applicant may not have sufficient knowledge to attest to the accuracy of some of these items for which certification is required, such as a single-family homeowner unfamiliar with how an enclosure below the lowest floor would be constructed in accordance with existing N.J.A.C. 7:13-12.5(p) as required by existing general permit-by-certification 5. Requiring a New Jersey licensed professional architect or engineer to apply for authorization pursuant to a general permit-by-certification ensures that the design and conduct of the project has appropriate oversight and that the activities will not exacerbate flooding or adversely impact the environment.

The examples provided at N.J.A.C. 7:13-18.3(b)4 and 6iv are outdated and reference incorrect cross-references due to proposed amendments, which are part of this rulemaking. Therefore, two new corrected examples are proposed for inclusion.

Also, at N.J.A.C. 7:13-18.3(b)5, the Department is proposing a requirement for applicants for general permits-by-certification to provide contact information for both the municipal clerk and the county

clerk for each municipality and county in which the proposed project is located. As general permits-by-certification are applied for and approved electronically, in addition to greater transparency, the Department will use the information to provide notification to the municipality and county upon issuance. Receiving direct notification from the Department when a general permit-by-certification has been issued will assure the municipality and county that the permit-by-certification is valid. As permits-by-certification are issued through the online service and, therefore, do not have a raised seal, verifying authenticity has been cause for concern for some municipalities.

N.J.A.C. 7:13-18.4 Additional Application Requirements for an Authorization pursuant to a General Permit or for an Individual Permit

N.J.A.C. 7:13-18.4 specifies information in addition to that required of all permit applications pursuant at N.J.A.C. 7:13-18.2 that must be included as part of an application for an authorization pursuant to a general permit or an application for an individual permit. Information specified includes the type of geographic and topographic information required for each application.

On April 5, 2021, amendments were adopted that require electronic submission of applications for all general permit authorizations and individual permits, effective October 5, 2021. These amendments also included a requirement for applicants to provide contact information for the municipal clerk for each municipality in which the proposed project is located but did not require contact information for the county clerk. Therefore, the Department is proposing a requirement at N.J.A.C. 7:13-18.4(b)5 for applicants for general permits and individual permits to provide contact information for the county clerk for each county in which the proposed project is located. Similar to the amendment described for general permits-by-certification, requiring this contact information provides for greater transparency, and the Department will use the information to send notification to the county upon issuance. Approved general permit authorizations and individual permits will be issued in a digital format as part of the Department's initiative

to transition to an entirely paperless process. As these digital approvals will not have a raised seal, receiving direct notification from the Department when they are issued will assure the county that the authorization or permit is valid.

At N.J.A.C. 7:13-18.4(c)4iii, the Department proposes to update the existing references to NGVD to NAVD 88, as discussed above, to reflect the most current geodetic vertical datum, consistent with the same change being made throughout the chapter.

N.J.A.C. 7:13-18.4(c)7 requires submittal of information necessary to ensure compliance with State and/or Federal law, and/or to determine whether an application meets State and/or Federal standards. An important component of the State's participation in the NFIP is ensuring that buildings that have been subject to substantial damage or to which a substantial improvement is proposed meet minimum NFIP standards. The terms "substantial damage" and "substantial improvement" are defined at N.J.A.C. 7:13-1.2. The determination as to whether a building is substantially damaged or improved is made by the floodplain administrator having jurisdiction over the building. Thus, pursuant to proposed new N.J.A.C. 7:13-18.4(c)7i, where improvements to a building are being proposed, documentation regarding the status of the building from the floodplain administrator is necessary to ensure that the Department is upholding minimum NFIP standards.

N.J.A.C. 7:13-18.5 Additional Application Requirements for a Verification

This section provides the application requirements for a verification. Verifications that are submitted in conjunction with an application for a general permit authorization or individual permit must be submitted electronically through the Department's online system in accordance with the requirements at N.J.A.C. 7:13-18.4, Additional application requirements for an authorization pursuant to a general permit or for an individual permit. However, stand-alone verifications must be submitted in hard copy. For these

stand-alone verifications, the Department is amending the existing references to NGVD at N.J.A.C. 7:13-18.5(b)4ii to NAVD 88 to reflect the most current geodetic vertical datum, as discussed above.

N.J.A.C. 7:13-18.7 Engineering Report Requirement for an Application for a Verification or for an Individual Permit

Pursuant to existing and proposed amendments to the FHACA rules, an engineering report must be submitted with an application for a verification or permit requiring a review of engineering calculations. The engineering report provides detailed engineering data and calculations that the Department evaluates to determine compliance with the hydrologic, hydraulic, structural, buoyancy, flood storage displacement, and stormwater calculations pursuant to this chapter. Pursuant to the existing rules, an engineering report is required for flood hazard area verifications using Methods 4, 5, or 6, pursuant to existing N.J.A.C. 7:13-3.4(f), 3.5, and 3.6, and for individual permits, since these approvals typically require engineering calculations. The Department is proposing to amend this section to require the report only for verifications and individual permits which necessitate the preparation of engineering calculations.

The Department is proposing new N.J.A.C. 7:13-18.7(a) to generally describe the scope of the section. As a result, existing N.J.A.C. 7:13-18.7(a) is proposed to be recodified to N.J.A.C. 7:13-18.7(b).

As described above, the methods for determining the limits of the flood hazard area are changing. Therefore, flood hazard area verification Methods 4, 5, and 6 must be changed in the heading at N.J.A.C. 7:13-18.7 to address the changes to proposed at N.J.A.C. 7:13-3. Reflecting this change, recodified N.J.A.C. 7:13-18.7(b) is proposed to be amended to eliminate reference to Methods 4, 5 and 6, as well as the cross-references to these methods and to provide examples of some of the types of engineering calculations required pursuant to rules that will trigger the need to provide an engineering report as part of an individual permit application.

Amendments are additionally proposed to the portion of recodified N.J.A.C. 7:13-18.7(b) that describes the content required in a signed and sealed engineering report. The proposed amendments provide examples of engineer calculations, including hydrologic, hydraulic, structural, buoyancy, flood storage displacement, and stormwater calculations, as well as computations associated with determining the flood hazard area by approximation.

The Department is proposing minor changes at recodified N.J.A.C. 7:13-18.7(b)2 to address that, in a virtual setting, an email address is essential to have as contact information for an applicant or party designated to answer questions about an engineering report. This will ensure that Department reviewers have direct contact to an individual knowledgeable in the engineering calculations performed and will also eliminate strain on persons designated by an applicant trying to communicate the Department's requests for revisions through multiple authorized parties.

N.J.A.C. 7:13-18.7(b)6 is proposed to be subcodified into subparagraphs, with a portion of the existing paragraph becoming N.J.A.C. 7:13-18.7(b)6i, with amendment, and new N.J.A.C. 7:13-18.7(b)6ii proposed. Proposed N.J.A.C. 7:13-18.7(b)6i is amended to specifically refer to flood profiles as a required component of an engineering report submitted as part of an application for a verification. The essence of the remaining existing language at existing N.J.A.C. 7:13-18.7(b)6 is retained.

Metes and bounds are already an application requirement for all flood hazard area verifications in accordance with N.J.A.C. 7:13-18.4(a)4vi. As explained above, the applicable limits of the flood hazard area are expanding to include the climate-adjusted flood elevation, floodway, inundation risk zone, and/or the riparian zone. Proposed new N.J.A.C. 7:13-18.7(b)6ii requires that, where it is available, GIS information delineating the metes and bounds of the flood hazard area, floodway, and inundation risk zone be submitted with instructions as to how that information must be submitted if the verification application is submitted electronically. Electronically submitted electronic metes and bounds will be added to the Department's database. This will help the Department to assess other nearby flood hazard areas to

determine compliance with future applications, leading to a speedier review time, can relieve the applicant of creating another plan solely to display metes and bounds, and will be added to the Department's open-source database for the general public to understand flood risks surrounding their area.

Geographic Information Science (GIS) applications and software are actively being developed by the Department's Bureau of GIS. This bureau serves as the lead for developing the Department's electronic database and online GIS applications. N.J.A.C. 7:13-18.7(b)6 also retains the applicant's right to submit metes and bounds in plan form or directly to the Department's reviewer in a secure manner, due to the Department's online database's current file size limitations which will be addressed in the future. By allowing the applicant to submit GIS information for jurisdictional boundaries, such as a shapefile or file geodatabase containing a feature class in zipped folders, a layer or file geodatabase can be created by the Department that shows all delineations performed from the effective date of this rulemaking. This serves not only as an essential tool for the public, but also makes available the Department's most current determinations on flood hazard area jurisdictional boundaries, which is already available on a Federal level by FEMA. Furthermore, other Department programs already accept and implement GIS information for recording and review purposes. The current Division of Water Quality uses this process to obtain information in reference to proposed sewer service areas; New Jersey State Planning staff use shapefiles to designate town centers; and the Division of Watershed Protection and Restoration's Endangered and Threatened Species Unit requires shapefiles from utility companies and other organizations dealing with linear projects that staff receive in a zipped folder to use, when applicable.

N.J.A.C. 7:13-18.7(b)8 is proposed for amendment to address the new green infrastructure, quantity reduction requirements, and maintenance plan requirements of the Stormwater Management Rules at N.J.A.C. 7:8 that became operative in March 2021. N.J.A.C. 7:13-18.7(b)8i has been updated to reflect those changes to the Stormwater Management Rules. Additionally, changes to the cross-references that correspond to the groundwater recharge (N.J.A.C. 7:8-5.4), quantity (N.J.A.C. 7:8-5.5), and quality

standards (N.J.A.C. 7:8-5.6) within the Stormwater Management Rules are reflected in the proposed amendments. The new language at N.J.A.C. 7:13-18.7(b)8iii better follows the flow of both the Flood Hazard Area Control Act and Stormwater Management rules. Proposed new N.J.A.C. 7:13-18.7(b)8v adds the proposed mandatory requirement for a maintenance plan at N.J.A.C. 7:8-5.8, which is already a requirement for stormwater reviews pursuant to this chapter.

N.J.A.C. 7:13-18.7(b)9 addresses the additional requirement applicable to applications for an individual permit for a project in the Central Passaic Basin that includes utilization of fill credits to satisfy the rule requirements for this area. Particularly, the existing rule requires that the application include proof that the fill credits have been purchased before the application was filed. Fill credits for projects located in the Central Passaic Basin are continuously purchased and utilized. Historically, the Department has issued authorizations relying on flood storage fill credits pursuant to existing N.J.A.C. 7:13-11.4(e)3, however oftentimes a purchase contract will need to be amended after the Department's review. Adding new language at N.J.A.C. 7:13-18.7(b)9 clarifies that an application can only be submitted with a demonstration that the applicant has contracted to purchase the required fill credits and that activities authorized pursuant to an individual permit that rely on fill credits in the Central Passaic Basin shall not commence until the contracted fill credits are purchased and proof of such is provided to the Department. The proposed amendment clarifies the existing requirements, as described above. While fill credits in this area remain a part of the rules, the Department is proposing at N.J.A.C. 7:13-18.7(b)9ii to require that the applicant demonstrate that the flood storage displacement requirements at N.J.A.C. 7:13-11.4(e)3 have been met onsite to the maximum extent practicable.

N.J.A.C. 7:13-18.8 Environmental Report Requirement for an Application for an Individual Permit

Existing N.J.A.C. 7:13-18.8 provides the requirements for an environmental report associated with an individual permit authorization pursuant to this chapter, and all existing language is proposed to be

amended to be consistent with other changes made throughout the chapter as discussed. N.J.A.C. 7:13-18.8(a)3, which requires analysis of adverse environmental impacts on various resources and regulated areas, is proposed to be amended to expand the analysis to include inundation risk zones. As part of the Department's intent to make the rules more protective by addressing changes occurring as a result of climate change and sea level rise, N.J.A.C. 7:13-18.8(a)3i is proposed for amendment to expand the required justification regarding minimization of adverse environmental impacts to include consideration of sea level rise and increased rainfall amounts. Finally, N.J.A.C. 7:13-18.8(b) is amended to correct a cross-reference regarding threatened or endangered species habitat.

N.J.A.C. 7:13-18.9 Acknowledgement of Potential Flood and Inundation Risk

Proposed new N.J.A.C. 7:13-18.9 introduces a new requirement for owners of any site on which activities are proposed in the flood hazard area pursuant to a general permit or individual permit. Particularly, such owners must provide a written "Acknowledgement of Potential Flood and Inundation Risk" that identifies potential economic and other costs to the current or future property owners, including government entities for activities on public land, associated with the projected present or future flooding and inundation risk. Construction within flood hazard areas carries inherent and specific long-term risks that are likely to be severely exacerbated due to a changing climate. It is important that the owner of the site, not the applicant or agent, provide a written record attesting to the realities of said risk.

Proposed N.J.A.C. 7:13-18.9(a) sets forth the scope of the section and establishes that an acknowledgement is required for any regulated activity in a flood hazard area pursuant to a general permit or individual permit.

Proposed N.J.A.C. 7:13-18.9(b) sets forth who is required to sign the acknowledgement required pursuant to this section. For projects not proposed by a government entity, the owner or owners of the site on which the regulated activity is proposed must sign the acknowledgement. The Department believes it is

critically important for the owners of a site to acknowledge that undertaking a proposed activity in a flood hazard area carries certain inherent risks, in some cases substantial risks, for current occupants and, furthermore, that these risks will very likely increase significantly due to climate change, thereby affecting all future owners and occupants. Where work is proposed by a government entity, an individual with the executive level signatory authority for said entity shall sign the acknowledgement. It is similarly important for government entities who are proposing capital improvement projects and other expenditures of public funds to acknowledge the vulnerability of their assets.

Proposed N.J.A.C. 7:13-18.9(c) explains that the person signing the acknowledgement will be required to complete a checklist provided by the Department that specifically acknowledges the significant risks associated with undertaking the project within the flood hazard area. The checklist will require the signatory to recognize, though not calculate, several categories of potential impacts, including: (1) potential economic and other costs to owners or government entities associated with the projected present and future flooding and inundation risk; (2) any potential increased cost of flood insurance within the lifespan of any structures being constructed, reconstructed, or modified; and (3) the cost of restoration and cleanup following flooding to the climate-adjusted flood elevation. It is the Department's intention that by acknowledging these risks associated with undertaking the project, owners and government entities will be encouraged to thoughtfully consider the short- and long-term costs and ultimately make wiser, better-informed decisions.

Proposed N.J.A.C. 7:13-18.9(d) explains that the requirements of this section do not apply to improvements undertaken by a public transportation entity along a public roadway, railroad, or parking area. Whereas as other types of development involve work on privately owned land, and the choices made by private developers, as well as the potential flood risk taken by said developers, should be communicated to future owners of the development through the proposed acknowledgment required pursuant to this section, there are no future property owners to consider for work along a public roadway or railroad.

Therefore, rather than require public transportation entities to provide an acknowledgement pursuant to this section to communicate flood risk, it is appropriate to instead require signage along public roadways that discloses the potential for limited or impeded access during flood conditions, pursuant to N.J.A.C. 7:13-12.7(d)2.

SUBCHAPTER 19. REQUIREMENTS FOR AN APPLICANT TO PROVIDE PUBLIC NOTICE OF AN APPLICATION

N.J.A.C. 7:13-19.1 Purpose and Scope

Existing N.J.A.C. 7:13-19.1 establishes the requirement for persons filing certain applications pursuant to this chapter to provide written public notice directly to individuals within 200 feet of the site on which the application is proposed, as well as various government agencies. A robust public process ensures that the Department is basing its decisions on the most accurate data available, as it is often the Department's experience that nearby property owners and government entities may have information about the site in question which is helpful to the Department.

Pursuant to existing N.J.A.C. 7:13-19.1(a), an applicant is required to provide public notice for an application for certain types of verifications, an authorization pursuant to a general permit-by-certification or general permit, an individual permit, a mitigation proposal, and a major technical modification. Existing N.J.A.C. 7:13-19.1(b) provides that the remaining types of applications and approvals pursuant to this chapter do not require public notice.

In order to foster public participation and gather a more complete data set regarding prospective activities that may be useful for its determinations, the Department is proposing to require applicants for all types of verifications pursuant to the chapter to provide public notice as well pursuant to N.J.A.C. 7:13-19.1(a)1. Currently, public notice is required only for verifications that are based on existing Methods 4, 5, or 6, which rely on calculations or approximation. Verifications based on existing Methods 1, 2, and 3,

which rely on State and Federal flood mapping, do not currently require public notice. However, it is imperative that the public be made aware of potential actions pursuant to all verifications throughout the State, given the establishment of the proposed new climate-adjusted flood elevation and inundation risk zone, as these regulatory areas can affect the type, location, and density of development and are not depicted on State and Federal flood maps. By requiring public notice, the Department will be able to make more well-informed decisions regarding its jurisdiction and the public may be made aware of nearby regulated areas that are not shown on State and Federal flood maps.

Existing N.J.A.C. 7:13-19.1(a)3 indicates that an authorization pursuant to a general permit is required to provide public notice except for authorization pursuant to the existing general permit 1 for channel cleaning pursuant to the Stream Cleaning Act. As this general permit is being repealed and combined into a new general permit with two similar existing general permits-by-certifications, this Department amends this requirement to indicate that the public notice requirement does not apply to the portion of the proposed general permit authorizing channel cleaning pursuant to the Stream Cleaning Act. Similarly, existing N.J.A.C. 7:13-19.1(b)5, which indicates that public notice is not required for the existing general permit 1 for channel cleaning pursuant to the Stream Cleaning Act, is proposed to be amended pursuant to N.J.A.C. 7:13-18.1(b)3 to indicate public notice is not required for the portion of the proposed general permit authorizing channel cleaning pursuant to the Stream Cleaning Act as set forth at proposed N.J.A.C. 7:13-9.1(f).

N.J.A.C. 7:13-19.3 Contents and Recipients of Public Notice of an Application

Existing N.J.A.C. 7:13-19.3 describes the contents and recipients of public notice for an application. Existing N.J.A.C. 7:13-19.3(b) lists the persons or entities to which notice of an application is required to be provided at paragraphs (b)1 through 6. In keeping with the Department's goal of being transparent about public safety and welfare, proposed new N.J.A.C. 7:13-19.3(b)7 requires public notice to

be delivered to emergency first responders servicing the project area, including the police department, fire department, emergency medical services, and office of emergency management if the application is for an individual permit and project proposes activities within an inundation risk zone which are not listed at N.J.A.C. 7:13-11.5(c). This additional notice allows the entities who will be responding to floods or other emergencies that may arise during a flood to be made aware of additional risk they will be managing, either for planning purposes or to provide comment for Department consideration. The additional notice is only required if a project proposes an activity pursuant to an individual permit that is not listed at proposed N.J.A.C. 7:13-11.5(c). The activities permissible within an inundation risk zone pursuant to a general permit-by-certification, general permit, or proposed N.J.A.C. 7:13-11.5(c) are activities that generally have low potential to add additional burden to the community at large and, therefore, do not require the additional notice.

Proposed new N.J.A.C. 7:13-19.3(f) requires that, for activities authorized pursuant to an individual permit, the notice must include details of any activities occurring in the inundation risk zone. As previously discussed, since activities within an inundation risk zone have potential to add additional burden to the community in which they are situated, it is appropriate for public notice pursuant to this section to include a description of activities proposed to be located within an inundation risk zone.

N.J.A.C. 7:13-19.4 Content and Format of Newspaper Notice

Existing N.J.A.C. 7:13-19.4 describes the content of the newspaper notices required pursuant to N.J.A.C. 7:13-19.3(c). Proposed new N.J.A.C. 7:13-19.4(b)8 adds the requirement for applications pursuant to an individual permit to describe activities located in an inundation risk zone, for the same reasons discussed at N.J.A.C. 7:13-19.3(f).

SUBCHAPTER 20. APPLICATION FEES

N.J.A.C. 7:13-20.1 Application Fees

The Department is proposing amendments throughout N.J.A.C. 7:13-20.1 to reflect proposed recodification and amendments to Subchapters 5, 6, 7, 8, and 9. The FHACA rules at N.J.A.C. 7:13-20.1 establish application fees for the review of verifications, general permits-by-certification, general permits, individual permits, extensions, modifications, and revisions to a Department delineation. Existing Table 20.1 is proposed for deletion, to be replaced with a new table that will contain the proposed changes discussed more fully below.

At N.J.A.C. 7:13-20.1, the Department is proposing amendments to reflect the proposed changes to N.J.A.C. 7:13-5, Verifications, including the renaming of Methods 1, 2, 5, and 6, the deletion of Methods 3 and 4, and the inclusion of a new verification, "Delineation of an inundation risk zone," which has been assigned a review fee that is consistent with the other verifications.

The Department is additionally proposing amendments to reflect the proposed changes at N.J.A.C. 7:13-8, General Permits-by-Certification. Amendments include the proposed addition of several new general permits-by-certification that were formerly another permit type, or not formerly addressed in Subchapter 8, as well as the deletion of existing general permits-by-certification that were converted to another permit type or deleted through this rulemaking. The Department is further proposing that the following proposed general permits-by-certification be exempt from application fees for the reasons previously explained for each proposed general permit-by-certification: N.J.A.C. 7:13-8.1, General permit-by-certification for reconstruction, relocation, expansion, and/or elevation of a building outside a floodway and/or inundation risk zone; 8.2, General permit-by-certification for construction of an addition to a lawfully existing building; 8.6, General permit-by-certification for construction of an aboveground swimming pool associated with residential use; 8.9, General permit-by-certification for construction of an aquatic habitat enhancement device; 8.11, General permit-by-certification for construction of barrier-free

access to a building in a floodway; and 8.15, General permit-by-certification for construction of a gauge, weir, or similar device.

The Department is further proposing amendments to reflect the proposed changes at N.J.A.C. 7:13-9, General Permits, including the addition of new general permits that were formerly another permit type, or not formerly addressed at Subchapter 9, as well as the deletion of existing general permits that were converted to another permit type or removed through this rulemaking. The Department is proposing to maintain the application fee for general permits of $1,000. The Department is proposing that the following proposed general permits, or portions thereof, be exempt from application fees: N.J.A.C. 7:13-9.1, 9.4, 9.5, and 9.9.

Additionally, the Department is proposing to add to Table 20.1 to include the extension of a verification for the inundation risk zone only with a fee consistent with other verification extensions.

SUBCHAPTER 21. APPLICATION REVIEW

N.J.A.C. 7:13-21.1 General Application Review Provisions

The Department is proposing to amend the provisions at N.J.A.C. 7:13-21.2(b)5, for a request to extend, transfer, or modify an approval, to reflect the recodification of cross-references to conditions at N.J.A.C. 7:13-22. Also, at N.J.A.C. 7:13-21(c)2, language has been added to clarify that only the portion of the general permit 1 is subject to the review requirements at N.J.A.C. 7:13-21.4.

SUBCHAPTER 22 PERMIT CONDITIONS; EXTENSIONS; MODIFICATION, TRANSFER, SUSPENSION, AND TERMINATION OF VERIFICATIONS, AUTHORIZATIONS, AND PERMITS

N.J.A.C. 7:13-22.2 Conditions that Apply to All Permits

Existing N.J.A.C. 7:13-22.2 enumerates the conditions that apply to authorizations and permits pursuant to the chapter, which are necessary to ensure that the standards and requirements at N.J.A.C. 7:13 are met during the conduct, and upon completion, of authorized activities. Specifically, the Department is proposing amendments to the conditions listed at N.J.A.C. 7:13-22.2(d), which apply to all general permit-by-certifications, general permits, and individual permits, to require the permittee to register online both prior to commencing and upon completion of authorized activities, and to establish additional reporting requirements related to certain construction activities associated with a habitable building, roadway, or railroad within a flood hazard area. The proposed requirements mirror the reporting requirements for activities authorized pursuant to a permit-by-registration pursuant to proposed N.J.A.C. 7:13-6.5.

Existing N.J.A.C. 7:13-22.2(d)13 requires the permittee to submit written notification to the Bureau of Coastal and Land Use Compliance and Enforcement at least three working days prior to the commencement of regulated activities. This notice is intended to assist compliance and enforcement staff in scheduling site inspections while construction is occurring. The Department is proposing to amend the timing of the notice and to require the notice to be provided through the Department's online system, rather than in writing. Specifically, the Department is proposing to require that notice be provided online no more than 14 calendar days prior to undertaking an authorized or permitted activity. It has been the Department's experience that the existing requirement makes it difficult for staff to schedule inspections, since the existing condition does not limit how much time before construction commences that notice can be provided. In some cases, permittees file the construction notice immediately after issuance of the permit, sometimes years before actual construction begins, in order to ensure that notice has been filed at least three days prior to construction. Further, as noted in the summary at proposed N.J.A.C. 7:13-6.5, the proposed online registration process will enable tracking of cumulative impacts within a community or watershed, which aligns with FEMA's requirement to record and track approvals pursuant to the National Flood Insurance Program. Pursuant to the proposed condition, notice of construction must be completed by either

the permittee or a person designated, in writing, by the permittee to register on their behalf, such as an engineer, attorney, or consultant. The registration additionally requires the owner or designee to indicate the Department file number, the anticipated date authorized activities will begin, and contact information for the registrant. The registrant must additionally certify that they are the permittee or that the permittee has provided written consent to register.

The Department is proposing a new standard condition at N.J.A.C. 7:13-22.2(d)14 that addresses the situation where an approval authorizes the construction, repair, reconstruction, rehabilitation, addition placement, or other improvement of any habitable building, roadway, or railroad within a flood hazard area. In such a case, permitted activities must commence within 180 days of approval issuance, which is necessary to ensure that approved activities are based on the most recent flood data available and to align the chapter's requirements with minimum NFIP standards. After an authorization or permit is issued, a new or revised Department delineation or FEMA flood mapping, which indicates a higher level of risk associated with a specific development than was understood at the time of the Department's approval of the authorization or permit, may become available. In this circumstance, the design of the development as initially contemplated and approved may not be adequately protective of public health, safety, and welfare in consideration of this new information. For this reason, communities participating in the National Flood Insurance Program are required to issue permits and authorizations for activities within FEMA's special flood hazard area that are valid for no more than 180 days unless construction commences.

Proposed new N.J.A.C. 7:13-22.2(d)14i additionally clarifies where the approved activities have not commenced within 180 days of issuance, said activities may not commence unless and until the permittee takes one of three actions set forth at N.J.A.C. 7:13-22.2(d)14i(1), (2), and (3). These requirements are necessary to remain consistent with the NFIP, ensure that current and future flood hazard risks are considered and based on the best available information, and to be suitably protective of public health, safety, and welfare. The proposed options are intended to ensure compliance with FEMA

requirements at 44 CFR 60.3 which, as noted above, is necessary in order to ensure that approved activities comply with minimum NFIP standards.

N.J.A.C. 7:13-22.2(d)14i(1) provides that, where the approved activities have not commenced within 180 days of issuance, said activities may not commence unless and until the permittee registers online and certifies that the climate-adjusted flood elevation, floodway limits, and flood zone designation for the site have not been amended by the Department or FEMA since the date of the initial authorization.

In cases where the climate-adjusted flood elevation, floodway limits, and/or flood zone designation for the site has changed since issuance of the permit or authorization, the permittee can take one of two actions. Pursuant to proposed N.J.A.C. 7:13-22.2(d)14i(2), the permittee must demonstrate that the amended climate-adjusted flood elevation, floodway limits, and/or flood zone designation for the site does not alter compliance with this chapter as applied in the issued authorization or permit. Through this provision, the Department recognizes that there can be situations where amended flood mapping does not affect compliance with the requirements of this chapter. For example, an amended floodway line could be adopted, which is located on a project site but does not encroach on the proposed development. In such a case, the amended floodway line would not alter the project's compliance with this chapter since all development remains outside the revised floodway limits.

In cases where the amended climate-adjusted flood elevation, floodway limits, and/or flood zone designation for the site does impact the authorized activities, the permittee must, pursuant to proposed N.J.A.C. 7:13-22.2(d)14i(3), demonstrate that the project has been revised where necessary to comply with the amended climate-adjusted flood elevation, floodway limits, and/or flood zone designation for the site. Pursuant to either N.J.A.C. 7:13-22.2(d)14i(2) or (3), the Department must determine, in writing, that the permittee is correct before authorized activities may commence.

Proposed N.J.A.C. 7:13-22.2(d)14ii and iii establish what constitutes commencement of authorized activities FHACA rules the purposes of this paragraph. The proposed description mirrors language required

by FEMA at 44 CFR 60.3 which, as noted above, is necessary in order to ensure that approved activities comply with minimum NFIP standards. Proposed N.J.A.C. 7:13-22.3(d)14iv explains that where a permittees intends to demonstrate that either subparagraph (a)14ii or iii apply to an authorization or permit, the permittee must provide the Department with all necessary information supporting the permittee's assertion. The proposed provision further clarifies that commencement of activities authorized by the Department pursuant to the permit or authorization cannot occur unless and until the Department concurs with the permittee's assertion in writing.

Proposed N.J.A.C. 7:13-22.2(d)14v describes the process by which a registrant may contest the re-registration requirement, in accordance with the procedures at N.J.A.C. 7:13-23, Requests for Adjudicatory Hearings.

Proposed N.J.A.C. 7:13-22.2(d)15 sets forth a new requirement upon completion of authorized activities, which mirrors similar language at proposed N.J.A.C. 7:13-6.5(e) for permits-by-registration. Pursuant to the proposed condition, the permittee or a person designated, in writing, by the permittee to provide such notice on their behalf, such as an engineer, attorney, or consultant, shall indicate said completion through the Department's online system.

N.J.A.C. 7:13-22.3 Deed Notice Requirement for a Verification, an Authorization pursuant to a General Permit-By-Certification or General Permit, or an Individual Permit

Pursuant to the existing rules, various types of deed notice are required depending on the type of activity. The purpose of these deed notices is to inform future owners of the site, as well as occupants who are renting or leasing the property, that there are certain inherent flood risks associated with the building or facility in question. In some cases, the deed notice includes certain information related to anticipated flooding on the site or adverse impacts to access to the site. Pursuant to this rulemaking, the Department proposes to expand the requirements for deed notice and to consolidate them at proposed new N.J.A.C.

7:13-22.3. By requiring more robust and comprehensive deed noticing, the Department seeks to vastly increase the public's awareness of the serious risks associated with flooding, particularly where roads and buildings will be subject to flooding or for projects proposed in the inundation risk zone.

Proposed N.J.A.C. 7:13-22.3(a) requires that the applicant, upon being granted a verification, an authorization pursuant to a general permit-by-certification, general permit, or an individual permit, shall submit specific information to the office of the county clerk or the registrar of deeds and mortgages in which the site is located, and have said information recorded on the deed of each lot referenced in the approval. Proof of recordation must additionally be provided to the Department in accordance with proposed N.J.A.C. 7:13-22.3(c) and (d), as discussed below. Exceptions to the requirement to execute a deed notice are listed at proposed N.J.A.C. 7:13-22.3(b).

The information required pursuant to the deed notice is set forth at N.J.A.C. 7:13-22.3(a)1 through 7, and includes information related to the verification, authorization, or permit. For projects in the flood hazard area, a statement that the activity is likely to be subject to periodic inundation and associated flood damage must be included in the deed notice. This statement must include the expected depth of inundation that results from flooding to the climate-adjusted flood elevation. Similarly, for any authorized or permitted activity located in an inundation risk zone, the deed notice must contain a statement that the activity is likely to be subject to permanent inundation during any structure’s anticipated lifetime. Key to this statement is a disclosure of the depth of inundation expected due to sea level rise through the year 2100.

Proposed N.J.A.C. 7:13-22.3(a)6 sets forth additional information requirements for projects involving a habitable or critical building, including the climate-adjusted flood elevation and associated depth of flooding at the building and the approximate frequency at which the building is anticipated to be impacted by floodwaters. The deed notice must also contain a prohibition on habitation of any enclosure below the lowest floor of any building in the flood hazard area, as well as a statement that converting the enclosure into a habitable area may subject the property owner to enforcement pursuant to this chapter.

Finally, proposed N.J.A.C. 7:13-22.3(a)7 requires that, for any private roadway or parking area that is proposed to be constructed or raised to less than one foot above the climate-adjusted flood elevation, the deed for each lot on which the private roadway or parking area is constructed, as well as any lot served by the private roadway or parking area, and each lease or rental agreement for a unit within a multi-residence building served by a private roadway or parking area that lies below the climate-adjusted flood elevation, shall be modified to explain that the private roadway or parking area is likely to be inundated by floodwaters, which may result in damage and/or inconvenience. The deed must further be modified to disclose the climate-adjusted flood elevation and associated depth of flooding, as well as the approximate frequency at which the private roadway or parking area is anticipated to be impacted by floodwaters.

Proposed N.J.A.C. 7:13-22.3(b) sets forth three classes of activities that are not subject to the deed notice requirements for this section due to the nature of the activity or the type of land to which the notice would be applied. Where the Department approves a verification within a State right-of-way or easement, there is not likely a lot and block that has a deed. Similarly, where the Department approves a permit or authorization to undertake regulated activities on public land by a State agency, the deed notice, if possible to record, would simply be altering the State to what it has already approved, which is not necessary. Finally, where a permit or authorization to undertake sediment and debris removal activities, there is no construction or permanent improvement that would warrant a deed notice.

Proposed N.J.A.C. 7:13-22.3(c) requires that the permittee provide proof to the Department that the deed notice requirements at proposed N.J.A.C. 7:13-22.3(a) have been satisfied. Such proof shall be provided to the Department in accordance with proposed N.J.A.C. 7:13-22.3(d) prior to the start of any site disturbance and no more than 90 calendar days after the issuance of the approval.

Finally, proposed N.J.A.C. 7:13-22.3(d) requires proof that the information required at proposed N.J.A.C. 7:13-22.3(a) has been recorded on the deed of each lot referenced in the approval. This proof shall be in the form of either a copy of the complete recorded document or a receipt from the clerk or other proof

of recordation provided by the recording office. However, if the initial proof provided to the Department is not a copy of the complete recorded document, a copy of the complete recorded document must be provided to the Department within 180 calendar days of the issuance of the verification, authorization, or permit.

Existing N.J.A.C. 7:13-22.3, Extension of a verification, an authorization under a general permit, and an individual permit, is to be recodified as N.J.A.C. 7:13-22.4 without change.

Minor amendments regarding recodification pursuant to this chapter and updating the Division's name to "Division of Land Resource Protection," which is a change being made throughout the rulemaking, are proposed at existing N.J.A.C. 7:13-22.5, Modification of a verification, an authorization under a general permit, or an individual permit, and 22.6, Application for a modification, which are to be recodified as N.J.A.C. 7:13-22.6 and 22.7, respectively.

N.J.A.C. 7:13-22.7 Suspension of a Verification, an Authorization Pursuant to a General Permit, an Individual Permit, or an Emergency Authorization

This section is to be recodified as N.J.A.C. 7:13-22.8 with no substantive changes.

N.J.A.C. 7:13-22.8 Termination of a Verification, an Authorization Pursuant to a General Permit, an Individual Permit, or an Emergency Authorization

This section is to be recodified as N.J.A.C. 7:13-22.9 with no substantive changes.

SUBCHAPTER 24. ENFORCEMENT

N.J.A.C. 7:13-24.1 General Provisions

The Department proposes to amend the general provisions at N.J.A.C. 7:13-24.1(d) to include in the explanation of the types of approvals that are considered to be a "permit" pursuant to Subchapter 24,

including certifications pursuant to permits-by-registration, in addition to authorizations pursuant to general permits-by-certification, general permits, individual permits, emergency authorizations, letter of authorization, memorandum of agreement, or other written authorization or approval issues pursuant to N.J.S.A. 58:16A-50.

N.J.A.C. 7:13-24.5 Civil Administrative Penalties for Failure to Obtain a Permit Prior to Conducting Regulated Activities

The procedure for assessing a civil administrative penalty for violations where a permit has not been obtained prior to the regulated activities being conducted is similar to that in the coastal and freshwater wetlands program rules and takes into account the conduct of the violator and the seriousness of the violation. Each violation of N.J.A.C. 7:13-2.1, which establishes when a permit is required pursuant to FHACA, constitutes an additional, separate, and distinct violation, and each day a violation continues or remains in place without the required permit constitutes an additional, separate, and distinct offense.

Conduct and seriousness are assigned points, as described below, which are then totaled to determine the base penalty amount per day. The base penalty amount per day can be adjusted, as described below. The total penalty is the daily penalty multiplied by the number of calendar days during which each violation continued or remained in place without the required permit. Notwithstanding the $25,000 maximum penalty otherwise applicable, as provided by the EEEA, the Department may add to the assessed civil administrative penalty, the amount of economic benefit that the violator realized as the result of its noncompliance or delayed compliance.

Inundation Risk Zone Penalties

At N.J.A.C. 7:13-24.5(e), the Department proposes to add a provision to the existing seriousness point evaluation to specify the points assessed for violations comprised of unauthorized activities in the inundation risk zone. The Department proposes that those activities that may be approvable pursuant to an

individual permit pursuant to proposed N.J.A.C. 7:13-11.5(b) be assessed three points. Other unauthorized activities would be assessed five points. The Department proposes to add the inundation risk zone to the list of resources of concern at recodified N.J.A.C. 7:13- 24.5(e)vii (formerly N.J.A.C. 7:13-24.5(e)vi).

Base Penalty Points Table at N.J.A.C. 7:13-24.5

The Base Penalty Points Table is codified at N.J.A.C. 7:13-24.5(f). This table enumerates the serious factor of the violation, in assigned points. Points will continue to be assigned based on the type, size, and location of the violation, whether the activity also constitutes a Tidelands violation, and whether the activity impacted a resource of concern. The Department is proposing to restructure the Base Penalty Points Table to increase the deterrence effect of assessed Civil Administrative Penalties, and to make the assessed penalty amounts as they relate to the severity of the impact more consistent with penalties for similar violations pursuant to the Freshwater Wetlands Protection Act Rules and the Coastal Zone Management Rules. The current Base Penalty Points Table was part of the rule adopted on April 28, 2016, and became effective on June 20, 2016. Since that effective date, the average daily base penalty assessed pursuant to the Flood Hazard Area Control Act Rules was approximately $4,562.50. Over that time, the Department has identified over 450 violations of the Flood Hazard Area Control Act Rules.

The following are six examples illustrating how the proposed changes would increase the level of deterrence as compared with the existing rules (note: to ensure this comparison focused on scaling the impact based on Seriousness, each of these examples was assumed to have moderate Conduct):

Unauthorized Activity	Points	Existing daily base penalty	Proposed daily base penalty
Expansion of a single-family home in a floodway, 276 cubic yards of fill in a floodway, 160 square feet of riparian zone disturbance.	16	$10,000	$20,000

Construction of a single-family home in a flood fringe with first habitable floor above base flood elevation and placement of fill for a 21 feet x 50 feet septic mound.	7	$2,000	$5,000
Clearcutting, filling, and grading within 40,000 square feet of riparian zone, piping and backfilling 245 linear feet of stream channel	15	$10,000	$20,000
Construction of a 3rd and 4th story addition of a habitable building in a flood fringe (first floor below BFE), impacting 6,000 square feet of riparian zone within 25 feet top of bank	9	$3,000	$8,000
14,000 cubic feet of fill in a floodway, between 51-250 cubic yards of fill in a flood fringe, and between 1,001 and 5,000 square feet of riparian zone clear cut and stumped	15	$10,000	$20,000
24,000-33,000 cubic yards of fill in a flood fringe, 5,000-6,500 square feet of riparian zone clear cut and filled	11	$6,000	$10,000

The protections and benefits identified in the statutes that these rules are promulgated pursuant to are only realized to the extent that the provisions of those statutes and the rules implementing them are complied with. Violations of those statutes or these rules contravene and undermine their intent and purpose and cause negative environmental, ecological, social, or health impacts. The Department is charged with

and responsible for the implementation, oversight, and enforcement of those statutes through these rules and with protecting the environmental benefits they provide to the citizens of New Jersey.

N.J.A.C. 7:13-24.6 Civil Administrative Penalties for Violations other than Failure to Obtain a Permit Prior to Conducting Regulated Activities

Existing N.J.A.C. 7:13-24.6 addresses assessment of civil administrative penalties for violations other than failure to obtain a permit prior to undertaking regulated activities. In determining penalties pursuant to this section, the Department takes into account the seriousness of the violation and the conduct of the violator, with each of the two factors classified as major, moderate, or minor.

The Department proposes to establish that violations comprised of unauthorized activity occurring within or impacting an inundation risk zone would be considered violations of "major" seriousness. As stated at N.J.A.C. 7:13-24.6(e)1, violations of major seriousness are comprised of "any violation which has caused or has the potential to cause serious harm to human health or safety, property, the environment, or the flood hazard regulatory program, or seriously deviates from the applicable law and/or condition."

The Inundation Risk Zone is a proposed new regulatory area that would encompass currently dry land that is expected to be inundated by tidal waters daily or permanently by 2100. Development within areas prone to flooding can obstruct and displace floodwaters, contributing to an increase the frequency, intensity, duration, and extent of flooding. This increased risk subjects the residents of the State to severe and repetitive flood damage, and results in the displacement of residents, loss or damage of critical infrastructure, interruption of essential public and private services, and prolonged economic disruption or loss. The proposed standards for regulated activities in an Inundation Risk Zone are designed to ameliorate these risks to the maximum extent practical. Therefore, it is imperative to the regulatory program and protections to health and human safety contained therein that any permit approvals for activities in an Inundation Risk Zone be complied with, making violations of said permits or permit conditions "major"

seriousness. Accordingly, N.J.A.C. 7:13-24.6(e)1 is amended to add any violation occurring within the inundation risk zone to the list of examples of violations of "major seriousness" at proposed N.J.A.C. 7:13-24.6(e)1iii.

The Department also proposes to update the citation at proposed N.J.A.C. 7:13-24.6(e)vi, formerly (e)v, for the table detailing Restricted Time Periods for Regulated Waters with Fishery Resources.

N.J.A.C. 7:13 APPENDIX 1

Approximating the Climate-Adjusted Flood Elevation

Existing N.J.A.C. 7:13 Appendix 1 provides a means by which the flood hazard area design flood elevation can be approximated along regulated waters that do not possess a Department delineation or FEMA flood mapping. The method was adopted in the Department's November 5, 2007, rulemaking for N.J.A.C. 7:13 (see 38 N.J.R. 3950(a); 39 N.J.R. 4573(a)) and is based on a survey of hundreds of data points gathered from FEMA flood mapping and other sources within each of the State's 20 watershed management areas. The appendix is proposed to be amended to reference the climate-adjusted flood elevation and also to reflect updated citations and the renaming of the methods by which flood hazard area and floodway limits are determined, as described in the above.

N.J.A.C. 7:13 APPENDIX 2

LIST OF DEPARTMENT DELINEATED WATERS

N.J.A.C. 7:13 Appendix 2 provides a list of the waters for which the Department has promulgated a delineation of the flood hazard area. This list is organized by county and municipality and is referenced at existing N.J.A.C. 7:13-3.3, which sets forth the procedure for determining a flood hazard area design flood elevation and floodway limit from a Department delineation, as well as existing N.J.A.C. 7:13-3.7, which sets forth the process by which a Department delineation can be revised. The introductory paragraph of the appendix explains that an asterisk shown next to a delineated water indicates that the associated

Department delineation was promulgated on or after January 24, 2013. On this date, the Department underwent emergency rulemaking to amend the FHACA rules to facilitate recovery after the devastation of Superstorm Sandy in October 2012. Pursuant to N.J.A.C. 7:13-3.2(b), Department delineations adopted after that date must be used to determine the flood hazard area design flood elevation. However, N.J.A.C. 7:13-3.2 is proposed for deletion. Further, this rulemaking proposes to allow applicants to calculate the flood hazard area limits in all cases, irrespective of the availability of Department delineations, pursuant to proposed N.J.A.C. 7:13-3.8. Since there is no longer a need to identify which delineations were promulgated after January 24, 2013, the asterisks are proposed for deletion.

N.J.A.C. 7:14A NEW JERSEY POLLUTANT DISCHARGE ELIMINATION SYSTEM

SUBCHAPTER 20. STANDARDS FOR THE USE OR DISPOSAL OF RESIDUAL

N.J.A.C. 7:14A-20.8 Surface Disposal of Residual

The New Jersey Pollutant Discharge Elimination System rules regulate the discharge of pollutants to the surface and ground waters of the State. Existing N.J.A.C. 7:14A-20.8(e)1 requires that the closure of a surface disposal site will not restrict the flow of a base flood, unless otherwise approved by the Department pursuant to the FHACA rules, as the FHACA rules address flow and fill requirements. For consistency with the amendments to Subchapter 3 of the FHACA rules and to ensure consideration of climate change impacts on flooding, the Department is proposing to replace "base flood" with "floodwaters within a flood hazard area."

SUBCHAPTER 23. TECHNICAL REQUIREMENTS FOR TREATMENT WORKS APPROVAL APPLICATIONS

N.J.A.C. 7:14A-23.13 Wastewater Treatment Plants

At existing N.J.A.C. 7:14A-23.13(c)3, the NJPDES rules currently require wastewater treatment

plants to be raised above the flood elevation, with the flood elevation level considered to be one foot above the 100-year flood elevation for non-delineated waterways and up to the flood hazard area design flood elevation for delineated waterways. Consistent with amendments to Subchapter 3 in the FHACA rules that redefines the extent of flood hazard areas, the Department is proposing to amend the standard in the NJPDES rules, so that the lowest floor elevation of any habitable building constructed as part of any treatment plants must be raised one foot above the climate-adjusted flood elevation, as defined by the FHACA rules in this rulemaking, and so that all structures must be built in accordance with N.J.A.C. 7:13-12.4. While only habitable buildings are required to be elevated pursuant to the FHACA rules, pursuant to N.J.A.C. 7:13-12.4, Requirements for a structure, non-habitable buildings are required to be built to withstand flood forces. N.J.A.C. 7:13-12.5 further sets forth standards for the construction of habitable buildings. Therefore, the proposed amendments at N.J.A.C. 7:14A-23.13(c)3 provide consistency between the requirements in the NJPDES rules and the FHACA rules, including the proposed amendments to Subchapter 3, while also ensuring that both habitable and non-habitable buildings associated with wastewater treatment plants are constructed in a manner to provide adequate protection during both current and future flood conditions.

N.J.A.C. 7:26 SOLID WASTE

SUBCHAPTER 2. DISPOSAL

N.J.A.C. 7:26-2.9 Environmental and Health Impact Statement Requirements

This chapter governs the registration, operation, maintenance, and closure of sanitary landfills and other solid waste facilities in the State of New Jersey as may be approved by the Department; and the registration, operation, and maintenance of solid waste transporting operations and facilities in the State of New Jersey. Pursuant to existing N.J.A.C. 7:26-2.9(c)3i(8), the Environmental and Health Impact Statement that is required for approval for solid waste disposal facilities, requires a description of the

topography of the site including the 100-year floodway and flood hazard area delineations pursuant to the Flood Hazard Area Control Act, N.J.S.A. 58:16A50 et seq. The Department is proposing to delete the phrase “100 year” as it could be misconstrued as referring to both the floodway and the flood hazard area. The FHACA rules do not define a 100-year flood hazard area. Further, by definition, the floodway is based on the 100-year flood pursuant to the FHACA rules, so the inclusion of “100 year” in reference to the floodway at N.J.A.C. 7:26-2.9(c)3i(8) is redundant.

N.J.A.C. 7:26-2.10 General Engineering Design Submission Requirements

N.J.A.C. 7:26-2.10(b) sets forth the general requirements for the preparation and submittal of engineering designs for all proposed solid waste facilities. Specifically, at N.J.A.C. 7:26-2.10(b)4i, a key map of the engineering drawings and design for the facility is must be prepared and submitted as part of the engineering design and must including all 100-year floodways and flood hazard areas as defined at N.J.A.C. 7:13. The Department is proposing to delete “100 year” for the same reasons as described above in the explanation for the proposed amendment at N.J.A.C. 7:26-2.9(c)3i(8). A reference to these flood areas being “delineated in N.J.A.C. 7:13” is proposed to be amended to clarify that N.J.A.C. 7:13 defines these areas.

SUBCHAPTER 2A. ADDITIONAL SPECIFIC DISPOSAL RULES FOR SANITARY LANDFILLS

N.J.A.C. 7:26-2A.6 Sanitary Landfill Environmental Performance Standards

N.J.A.C. 7:26-2A.6(g)1 requires sanitary landfills to be designed and constructed to protect environmentally sensitive areas, including "flood fringe areas of the flood hazard area as identified by the Department pursuant to the State Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq." As the entire flood hazard area, not just the flood fringe, is considered an environmentally sensitive area, the Department is proposing to replace “flood fringe areas of the flood hazard area” with “flood hazard area” to ensure that

sanitary landfills will be designed and constructed to protect all portions of the flood hazard area, as defined in the FHACA rules. The Department is proposing the same amendment at N.J.A.C. 7:26-2A.6(h)1, which requires, at minimum, upgrading of the surface drainage system and an increase in the design storm size in order to protect the flood fringe areas of flood hazard areas, as identified at N.J.A.C. 7:26-2A.6(g)1. "Flood fringe areas of flood hazard areas" is proposed to be replaced with "flood hazard areas" in order to ensure these measures will be utilized when sanitary landfills are designed and constructed within any part of the flood hazard area.

SUBCHAPTER 3. TRANSPORTATION

N.J.A.C. 7:26-3.6 Intermodal Container Facility

N.J.A.C. 7:26-3.6(a) sets forth the Department's regulations for intermodal container facilities within the solid waste rules. N.J.A.C. 7:26-3.6(b) requires that a person registered and licensed to transport solid waste in the State of New Jersey that seeks to operate an intermodal container facility, submit an application to the Department with a copy to the host municipality and district solid waste plan implementation agency. The application must include a site plan that, among other requirements, delineates "floodplains" as defined at N.J.A.C. 7:13-1.2. However, "floodplain" is not a defined term in the FHACA rules. Therefore, the Department is amending this provision to replace "floodplain" with "flood hazard area" as defined at N.J.A.C. 7:13.

SUBCHAPTER 3A. REGULATED MEDICAL WASTES

N.J.A.C. 7:26-3A.39 Collection Facilities for Medical Wastes

N.J.A.C. 7:26-3A.39 establishes rules for the authorization and operation of noncommercial and commercial collection facilities for regulated medical waste. A person that seeks to operate a commercial collection facility for medical waste must submit an application that includes a site plan, prepared, signed,

and sealed by a licensed New Jersey professional engineer, surveyor, or architect. As currently written, the site plan requires the applicant to "delineate floodplains as defined at N.J.A.C. 7:13." However, as previously mentioned above, "floodplain" is not a defined term in the FHACA rules. Therefore, the Department is amending this standard to replace "floodplain" with "flood hazard area" as defined at N.J.A.C. 7:13.

CHAPTER 26A. RECYCLING RULES

SUBCHAPTER 3. APPROVAL OF RECYCLING CENTERS FOR CLASS B, CLASS C, OR CLASS D RECYCLABLE MATERIALS

N.J.A.C. 7:26A-3.2 Application Procedure for General Approval to Operate a Recycling Center for the Receipt, Storage, Processing, or Transfer of Class B, Class C, or Class D Recyclable Material

The recycling rules govern the operation of recycling centers and the conduct of recyclable materials generators and transporters, and of governing municipalities and counties that have jurisdiction over recyclable materials pursuant to the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., particularly the New Jersey Statewide Mandatory Source Separation and Recycling Act, N.J.S.A. 13:1E-99.11 et seq. At N.J.A.C. 7:26A-3.2(a)9, the recycling rules require a site plan be provided in order to receive approval to operate a recycling center for the receipt, storage, processing, or transfer of Class B, Class C, or Class D recyclable material. More specifically, at N.J.A.C. 7:26A-3.2(a)9iii, those site plans must "delineate the floodplain as defined at N.J.A.C. 7:13-1.2." However, as mentioned above, "floodplain" is not a defined term pursuant to the FHACA rules. Therefore, the Department is amending this standard to replace "floodplain" with "flood hazard area as defined at N.J.A.C. 7:13."

CHAPTER 26G. HAZARDOUS WASTE

SUBCHAPTER 12. HAZARDOUS WASTE PERMIT PROGRAM

N.J.A.C. 7:26G-12.1 Incorporation By Reference

This chapter governs the registration, operation, closure, and post-closure maintenance of hazardous waste facilities in the State of New Jersey as may be approved by the Department; and the registration, operation, and maintenance of hazardous waste transporting operations and facilities in the State of New Jersey. At N.J.A.C. 7:26G-12.1(c), the rules incorporate by reference parts of 40 CFR Part 270, which contain the regulations for the USEPA's hazardous waste permit program. At new N.J.A.C. 7:26G-12.1(c)6, the Department is proposing to incorporate changes to the reference to 40 CFR 270.14, which contain the general requirements for a USEPA hazardous waste permit, to replace "100-year flood plain," which is not a defined term pursuant to the FHACA rules, with "flood hazard area, as defined at N.J.A.C. 7:13" and to replace "100-year flood" with "flooding to the climate-adjusted flood elevation, as defined at N.J.A.C. 7:13" for consistency with the amendments to Subchapter 3 of the FHACA rules, as described above. Existing N.J.A.C. 7:26G-12.1(c)6 through 18 are proposed to be recodified as N.J.A.C. 7:26G-12.1(c)7 through 19 without change.

N.J.A.C. 7:26G-12.2 Environmental and Health Impact Statement

N.J.A.C. 7:26G-12.2(g)3i(1) requires a key map to be included in the Environmental and Health Impact Statement that must be submitted as part of an application for a hazardous waste permit, and N.J.A.C. 7:26G-12.2(g)3i(1)(A) specifically requires the key map to depict all 100-year floodways and flood hazard areas as delineated at N.J.A.C. 7:13. Similar to N.J.A.C. 7:26-2.9(c)3i(8), the Department is proposing to delete "100 year" as this phrase is redundant with the definition of "floodway" and does not apply to flood hazard areas.

CHAPTER 28. RADIATION PROTECTION PROGRAMS

SUBCHAPTER 59. LICENSING REQUIREMENTS FOR LAND DISPOSAL OF RADIOACTIVE

WASTE

N.J.A.C. 7:28-59.1 Incorporation By Reference

The Radiation Protection Programs rules prohibit and prevent the use or presence of unnecessary radiation. At N.J.A.C. 7:28-59.1, the rules incorporate by reference parts of 10 CFR Part 61, which are United States Nuclear Regulatory Commission (USNRC) regulations establishing licensing requirements for land disposal of radioactive waste that are derived from a Federal Executive Order from 1977. The existing rule language was incorporated by reference from USNRC regulations as part of the New Jersey Agreement State Program. At new N.J.A.C. 7:28-59.1(c)15, the Department is proposing to incorporate changes to the reference to 10 CFR 61.50, which establishes the disposal site suitability requirements for land disposal, by adding “or flood hazard area, as defined at N.J.A.C. 7:13” after "100-year flood plain" to ensure that there are no gaps between the FHACA rules and the Radiation Protection Program Rules. This is necessary because the term “100-year flood plain is not a defined term in the FHACA rules. As New Jersey does not currently have any low-level radioactive waste disposal facilities and it is highly unlikely that such facilities will be sited within the State in the future, the proposed changes will have little to no impact on the radiation protection program or its licensees.

CHAPTER 36. GREEN ACRES PROGRAM

SUBCHAPTERS 6, LOCAL GOVERNMENT UNIT ACQUISITION PROJECTS: APPLICATION PROCESS, 17, NONPROFIT ACQUISITION PROJECTS: APPLICATION PROCESS, AND 26, STANDARDS AND PROCEDURES FOR COMMISSIONER AND STATE HOUSE COMMISSION APPROVAL OF THE DISPOSAL OR DIVERSION OF FUNDED OR UNFUNDED PARKLAND

N.J.A.C. 7:36-17.4, Application Requirements, 6.4, Application Requirements, 26.4, Minor Disposals or Diversions; Preapplication Requirements and 26.9, Major Disposals or Diversions of Parkland; Preapplication Requirements

The rules at N.J.A.C. 7:36-6.4 sets forth the application requirements for local government units applying for a project in the Standard Acquisition, Site Specific Incentive Acquisition, or Urban Aid Acquisition funding award categories. Included on the list of requirements is the location and area of the floodplain. The Department is proposed to amend this language for consistency with the FHACA rules to replace the reference to "floodplain" with "flood hazard area," and to delete references to "stream encroachment" since that term is no longer used. Additionally, the rules require a local government unit to submit location information and include in that the location of any floodplains. That language is also being amended to reference the flood hazard area. At N.J.A.C. 7:36-17.4, the same amendments are proposed. Additionally, the provision indicates that the flood hazard area can be located on State or Federal map sources or from a site delineation. The Department is proposing to amend the provision to add the requirement that the site delineation be Department-verified in accordance with the FHACA rules. The same amendments are also proposed at N.J.A.C. 7:36-26.4 and 26.9.

CHAPTER 38. HIGHLANDS WATER PROTECTION AND PLANNING ACT RULES

The Highlands Water Protection and Planning Act Rules are proposed to be amended throughout to update all references to program names and contact information. Additionally, at N.J.A.C. 7:38-3.7 (Flood hazard areas), historic and archeologic areas (N.J.A.C. 7:38-3.10), and emergency permits (N.J.A.C. 7:38-7.1), the rules are being amended to replace references to "flood plain elevation" with "climate-adjusted flood elevation," and references to "flood plain" with "flood hazard area" for the reasons previously described.

Social Impact

Sea level rise, an increased extent of floodplains, and more frequent extreme storm events, will have a detrimental impact on the social well-being of anyone who lives, works, and/or recreates in New Jersey. The damaging effects of flooding and extreme storm events, which are expected to increase because of climate change, put the very foundation of livelihood in New Jersey – public health, safety, and welfare – at risk. The damaging effects of flooding and extreme storm events can impair critical aspects of cultural identity and way of life that are unique to New Jersey, particularly our coastal communities, including, cultural assets, like the iconic boardwalks throughout the "Jersey Shore" communities, economic vitality, such as the vibrant New Jersey commercial fishing industry which ranks fifth largest in the United States and provides more than 50,000 jobs (2016; NOAA NMFS), and recreational opportunities, such as angling, associated with the State's striped bass and summer flounder fisheries assets. The proposed amendments will have a positive social impact by requiring stormwater management climate resilience planning for communities, reducing flood and coastal storm-related damages to buildings and infrastructure, increasing public safety, improving water quality, and maintaining and improving natural resources Statewide, especially in coastal communities. There are several proposed amendments, such as the creation of the inundation risk zone (IRZ) and more stringent construction standards within modified tidal flood hazard areas, that address projected sea level rise and flooding and will promote development that is more resilient to the damage of flooding and extreme storm events and will encourage increased protection of natural resources. By mitigating the deleterious impacts of climate change that disrupt the social well-being of the people who live, work, and recreate in New Jersey, these proposed amendments will have an overall positive impact on the social well-being of the State.

Protecting Communities from the Damage of Flooding

Climate change has increased, and is expected to continue to increase, the frequency and intensity of precipitation events in New Jersey. These more frequent and intense precipitation events will likely increase the burden on existing stormwater management facilities, particularly aging infrastructure that was not designed to handle the current and expected volume and intensity of stormwater that has resulted from increases in impervious surface and more frequent and intense precipitation events. The proposed onsite retention standard in the Stormwater Management rules will mitigate the current and expected burdens on stormwater management facilities by reducing stormwater runoff volume. This will help mitigate the damaging impacts of flooding discussed above, including protecting the serviceability of critical infrastructure like roadways and utilities from flooding driven or exacerbated by stormwater runoff.

The proposed creation of the IRZ, expanded tidal flood hazard area, and more protective construction standards for development within these regulated areas pursuant to the FHACA rules, will also mitigate the damaging effects of flooding and sea level rise. Buildings and infrastructure that are more resilient to flood and coastal-storm damage can facilitate protection of human life and property and minimize the amount of time that people are displaced from their homes and businesses due to a flooding or coastal storm event. The proposed amendments also afford protections from damage related to flooding and coastal storm events by encouraging new development and redevelopment on previously disturbed land outside of regulated areas, rather than undisturbed, vegetated land within regulated areas. Undeveloped land, particularly permeable land cover, provides critical flood storage that helps to protect existing structures during a flood or coastal storm event.

Coastal communities are also afforded protection from the damage of coastal storm events by natural features, such as coastal marshes. Coastal marshes play an important role in shoreline protection from coastal storms by attenuating wave action and stabilizing sediment. In New Jersey, there are more than 200,000 acres of tidal marsh that form a band along the coastline (NJDEP, 2020) and provide these

valuable ecological and storm protection benefits to the people who live, work, and recreate in the State's coastal communities and beyond. Coastal marshes are disappearing at an alarming rate around the world, due in part to sea level rise and surrounding development pressures. Sea level rise is a contributor to the global loss of thousands of hectares of tidal wetlands each year (Hartig et al., 2002, Langley et al., 2009). The stress of rising seas requires coastal marshes to adapt and retreat inland, however, development such as roads and flood berms are often an impediment to natural coastal marsh retreat. The proposed amendments, such as the more stringent mitigation standards for wetlands disturbance, will further deter disturbance to coastal marshes and their surrounding land areas and promote the creation and restoration of coastal marshes that will serve to further protect the State's coastal communities from the negative social impacts of flooding and coastal storms.

Flooding and Extreme Storm Events Threaten Public Safety, Health, and Welfare.

Flooding and coastal storms cause major social disruption to the public. There is often a need to relocate flood victims and provide emergency services to affected residents, which diverts emergency personnel from other essential tasks. Additionally, there may be lasting long-term social, economic, and emotional impact on residents as a result of damaged or destroyed homes, schools, businesses, and infrastructure upon which residents rely.

A clear example of the devasting and wide-reaching effects that coastal storms and flooding can have on New Jersey residents was Hurricane Sandy in 2012. According to a 2013 report prepared by the National Hurricane Center, there were at least 117 direct deaths recorded across the Atlantic basin due to Hurricane Sandy, with 34 of these fatalities (29.1 percent of all fatalities) occurring in New Jersey (Centers for Disease Control and Prevention, 2013). A recent study found that anthropogenic sea level rise caused 24,500 people and 16,700 homes (50th percentile of estimated range) in New Jersey to be affected by Hurricane Sandy (Strauss et al., 2021). The proposed amendments will have a positive social impact by

requiring new and redeveloped structures and infrastructure within tidal flood hazard areas or inundation risk zones to meet construction standards that promote increased resilience to flooding and coastal storms considering the impacts of climate change. These proposed construction standards for buildings and infrastructure should reduce the amount of times that a building, such as a home or business, or infrastructure, such as a roadway, is out of operation and help facilitate emergency response access to those in need.

The proposed amendments also promote the protection of critical facilities and critical infrastructure located within tidal flood hazard areas or inundation risk zones. As discussed above, the continuity of operation of essential social services before, during, and after a flood or coastal storm event is a paramount concern for the entities responsible for resilience and emergency planning for a community. Critical facilities and infrastructure are recognized in the proposed amendments for the essential services they provide in achieving public safety before, during, and after a flood or coastal storm event and are afforded additional standards and consideration beyond the definition and standards for critical buildings in the existing FHACA rules. Proposed amendments to the Stormwater Management rules provide public entities with the flexibility to manage stormwater runoff using Best Management Practices but also provide a comprehensive, hierarchical approach to ensure the implementation of green infrastructure BMPs to the maximum extent, considering the hydrologic and hydraulic conditions of lands within and immediately adjacent to the project limits, and in the upstream drainage area. The proposed amendments will allow public transportation projects, essential to the maintenance of the health, safety, welfare, and economic vitality of the public, to proceed while ensuring that the stormwater runoff from those transportation projects is managed in a way that prevents increases in flooding, minimizes the discharge of pollutants from the roadway or railway, and maintains groundwater recharge.

Natural Resources Play a Critical Role in New Jersey Communities and Culture

The proposed amendments will result in a positive social impact Statewide by maintaining protections and promoting improvements of natural resources such as beaches, dunes, coastal marshes, wetlands, waters, wildlife habitat, and upland forests. These natural resources provide the general public with abundant recreational opportunities and are of cultural and historic significance to the communities that utilize them, particularly in the coastal areas of the State.

The diversity of physiographic regions in New Jersey provides the general public with a wide array of natural resources to utilize for recreation. Across the State, the public enjoys hundreds of miles of beaches, oceanfront, bayfront, streams, lakes, and upland forests to utilize for passive and active recreation, including hiking, swimming, angling, boating, and sports. The proposed amendments, such as the 80 percent Total Suspended Solids removal requirement for redeveloped motor vehicle surface and more stringent mitigation requirements for riparian zone and wetland mitigation, support increased protections of natural resources, as discussed in the summary above, that will maintain and improve the quality of many of these natural resources, particularly water quality, and allow the public to continue to enjoy outdoor recreational activities in these areas for years to come. The proposed amendments to require 80 percent TSS removal from redeveloped motor vehicle surface and to require compliance with applicable TMDLs will result in improved water quality, particularly in urbanized areas, and will proactively prevent degradation of water quality in less developed areas. The higher TSS removal requirement will help improve water quality in overburdened communities and will provide residents of those communities with their right to live, work, and recreate in a clean and healthy environment.

The update of living shoreline permitting processes and standards pursuant to the CZM rules, and the addition of standards for bulkheads and retaining walls within tidal flood hazard areas, is consistent with the Department's past efforts to preserve natural shorelines and utilize soft engineering techniques, such as living shorelines, over hard engineering techniques, such as bulkheads and retaining walls, for

shoreline and bank stabilization. Development along the shoreline is contributing to the degradation and elimination of the State's coastal marshes. By promoting nature-based solutions along the State's shorelines, the proposed amendments will help to protect coastal marshes, which provide habitat for many marine fish that are essential to the prosperity of the commercial fishing industry in New Jersey. The commercial fishing industry is a culturally and economically significant industry for many coastal communities, as discussed in greater detail in the Economic Impact below.

Planning for Climate Change Impacts on Communities

The proposed amendments to require climate resilience planning in municipal or regional stormwater management plans pursuant to the Stormwater Management rules, and to require an inundation risk assessment for certain permit applications pursuant to the Flood Hazard Area Control Act and Coastal Zone Management rules, will result in positive social impacts for communities. Both amendments will prompt municipalities and certain permit applicants, respectively, to consider future sea level rise and precipitation conditions when siting new or reconstructed development, infrastructure, and/or stormwater management facilities. This will encourage the construction and reconstruction of buildings and infrastructure today to be built to withstand the flooding, inundation and/or extreme storm events that are expected through the end of the century. Additionally, the inundation risk assessment will require certain permit applicants to consider the human health, safety, and welfare implications of a constructing a project in an area that has been identified as being in area of increased risk of flooding and/or daily or permanent inundation due to sea level rise.

The proposed amendment to the Stormwater Management rules, which requires municipalities to prepare a resilience plan that evaluates the potential risk applicable to its citizens and assesses the resources and actions needed to respond to these risks, is expected to have a positive social impact to communities throughout the State. This type of planning is expected to reduce the impacts of more frequent flooding and

extreme storm events that can be caused or exacerbated by insufficient stormwater management facilities. As was observed in recent extreme storm events in New Jersey, such as the remnants of Tropical Storm Ida, extensive and life-threatening flooding that impedes the use of critical assets such as roads and utilities can be driven by stormwater runoff alone, occurring in locations far removed from the influence of flooding that results from a watercourse overtopping its banks. The proposed requirements for climate resilience planning will encourage municipalities throughout the State to plan for future extreme precipitation events so that adequate stormwater management facilities can be strategically designed and implemented to better manage the stormwater runoff from expected increases in extreme precipitation events.

Additionally, the proposed amendment to remove the Department-delineated non-mainland coastal centers is also expected to have a positive social impact by encouraging responsible management of impervious cover on the barrier island complex and strategic planning of land cover at the municipal level. The Department-delineated non-mainland coastal centers are located on barrier islands, spits, and peninsulas; with limited acreage for competing land uses, strategic planning is a helpful tool to ensure that natural resources in these areas are being protected from the impacts of development. These centers were delineated by the Department and did not go through the comprehensive planning afforded by the State Planning Commission (SPC) plan endorsement process. The removal of the Department-delineated non-mainland coastal centers may encourage affected municipalities to go through the plan endorsement process.

New Jersey's Coastal Communities Face Additional Climate Change Challenges

The rulemaking proposes new standards for certain development within tidal flood hazard areas and inundation risk zones, which are predominantly found within coastal communities, but also in tidally influenced rivers. Certain types of development that have social value and significance may be more difficult to construct within flood hazard areas and inundation risk zones due to the protective construction

standards and mitigation requirements included in this rulemaking. The proposed amendments, such as the new standards for development in the inundation risk zone, seek to achieve a reasonable balance between ensuring safe and responsible development in lands that are at risk of flooding or permanent inundation and allowing improvement of existing facilities that are necessary for the continued operation and enjoyment of the State's coastal resources and communities.

On balance, the proposed amendments will result in significant social benefits related to resilience of buildings and infrastructure to flood and coastal storm-related damage, increased public safety, and maintenance and improvement of natural resources, such as marine fisheries resources and coastal marshes, which provide an overall social benefit. Several of the proposed amendments, such as the creation of the inundation risk zone and removal of Department-delineated non-mainland coastal centers, are unique to tidal waterbodies and coastal areas, particularly those located on the barrier island complex, which directly affect coastal communities, who may experience short-term disruptive social effects as a result of these proposed amendments. However, the Department finds that the proposed amendments will likely result in the greatest long-term positive impacts to public health, safety, and cultural vitality of the State's coastal communities, due to the extensive and disruptive climate change effects that are anticipated. After extensive stakeholder input on these issues, the Department has developed this proposal to maximize the overall social benefits in regulated areas.

Economic Impact

The proposed amendments, as discussed in greater detail in the summary, will result in a positive economic impact by reducing long-term costs related to disaster assistance, infrastructure repair, and insurance claims from flooding. The avoided costs of flooding to homeowners, businesses, and local/state government entities are significant and extensively documented. In response to Governor Murphy's Executive Order 100 for NJPACT, Moody's Investors Service determined that New Jersey's adoption of stronger building codes, especially along the State's 130-mile coastline, is "credit positive" and indicated

that “New Jersey's economic vulnerability to increased flooding is substantive” and that “total storm damage in New Jersey since 1980 is equivalent to 5.7% of the state's gross domestic product, compared with 3.1% for the United States for the same time period.” Given this significant financial exposure, the reality that investment in resilience leads to savings in recovery and an increasing awareness of and desire to avoid unmitigated climate risks among investors, actions to empower smarter development, protect residents from the looming threat of sea level rise, improve air quality Statewide and incentivize cleaner technologies are necessary for the economic, as well as environmental resilience (Moody’s Investors Services, 2020).

According to the Fifth National Climate Assessment (2023), climate change is expected to have direct impacts on the national economy. It is reasonable to assume that these impacts will be felt across all states, and especially concentrated in coastal states like New Jersey. One study cited in the assessment predicted a 14.7 percent loss in property values impacted by a foot of sea-level rise (Bernstein, Gustafson, and Lewis, 2019). Another cited study estimated a 1.3 percent loss in property tax revenue from a three-foot rise (Shi and Varuzzo, 2020). These are just a handful of examples. As the report notes, “climate change is projected to impose a variety of new or higher costs on most households and to impact their employment, income, and quality of life.” These impacts can be mitigated through the “design, evaluation, and deployment of adaptation technologies and policies” such as this proposed rule change.

There are several proposed amendments, such as the creation of the inundation risk zone, climate change resilience planning requirements, and more stringent construction standards within tidal flood hazard areas, that will help the general public, including homeowners, business investors, municipalities, and government agencies, avoid the significant cost of flood damage to buildings and infrastructure in areas that are most at risk of sea level rise and tidal flooding. These proposed amendments promote development that is more resilient to flooding and sea level rise and encourage communities to integrate the anticipated impacts of sea level rise and flooding into their strategic plans. Additionally, proposed amendments such

as the onsite retention requirement for stormwater management and more stringent mitigation requirements for riparian zone, open water, freshwater wetland, and transition area disturbance, will reduce stormwater runoff volume and flow rates, which will aid communities throughout the State in avoiding, minimizing, and mitigating some of the economic impacts of extreme precipitation and flooding caused by climate change.

Flooding is a Financial Risk to New Jersey

Climate change has already increased New Jersey's exposure to flood risk, and this increased occurrence of flooding has resulted in significant economic damages to individual property owners, communities, and government entities. According to the 2019 State Hazard Mitigation plan, "NOAA's National Climatic Data Center (NCDC) storm events database reported that New Jersey experienced 1,582 flood events between 1950 and 2012. Between January 1, 2013, and December 31, 2017, an additional 643 flood events occurred in New Jersey. Total property damage was estimated at over $24.6 million between January 1, 2013, and December 31, 2017. Total crop damage is estimated to be over $800,000 … These events included flash floods, coastal flooding, and floods." (New Jersey Office of Emergency Management, Section 5.6, 2019). It is also estimated that, "… approximately one-third (36%) of the cost of flood damages over 1988 to 2017 is a result of historical precipitation changes …" (Davenport et al., 2021). A 2021 report by First Street Foundation found that there are 94,146 residential properties in New Jersey that currently have substantial flood risk, calculated as inundation of one centimeter or more to the building in the 100-year return period (one percent annual risk) in this report, and were expected to incur a collective loss of $415.4 million in 2021 (First Street Foundation, 2021). The proposed amendments that would require buildings and infrastructure to elevate above a climate-adjusted flood elevation are expected to provide ample protection from flooding in the near-term and reduce the financial risk of flooding throughout the lifespan of the structure, which is only expected to increase over time.

The extent of structures and infrastructure exposed to economic damages from flooding is expected to expand because of climate change, particularly in communities that will be most at risk of temporary or permanent inundation from sea level rise and/or coastal flooding. One global study estimates that Newark and New York City have a combined population of 1,540,000 people exposed to coastal flooding in 2020 and projects that this number will increase to 2,931,000 people in 2070 due to climate change. This same study estimates that the value of assets exposed to coastal flooding in 2020 totaled $320.20 billion, with that total increasing to $2.15 trillion in 2070 (Doig et al., 2016). According to a Rutgers University report, "with 3.5 feet of sea-level rise, the area subject to annual flooding in New Jersey encompasses about 180,000 people and $80 billion of property. With 7.5 feet of [sea level] rise, it encompasses nearly 580,000 people and $180 billion of property." (Kopp et al., 2019). In 2019, the Rhodium Group estimated an "additional 73,000 to 113,000 buildings in New Jersey worth a combined $60 to $96 billion" will be at high risk for flooding in 2050 due to sea-level rise (Hess et al., 2019). Over this same time period, an additional 10,870 New Jersey properties are expected to incur financial loss due to flooding and average annual loss per property is expected to increase by 53 percent over the course of the next 30 years (First Street Foundation, 2021). These reports of increasing financial risk to New Jersey's economic assets within the next 50 years due to climate change-related flooding and/or inundation come from various sources and compel the Department to put standards in place now that will allow new and redeveloped structures constructed today to better withstand the flooding and economic losses that will likely occur within the next 50 years.

Flooding is a prevalent occurrence across the country, therefore, many individuals that own property within areas that have been identified as being at risk of flooding choose to invest in flood insurance to offset any potential flood-related losses. This provides ample data to assess the average cost of flood damage to individual property owners. The National Flood Services prepared estimates of flood loss potential based on national FEMA flood loss tables of cash value loss. These estimates show that for

an average home (one-story, 2,500 sq. ft., with possessions worth $50,000), interior water depth of as little as one inch presents a combined loss potential of $26,807 (FEMA). FEMA establishes that homes at the 100-year flood elevation have at least a one percent chance of flooding in any given year. Pursuant to this assumption, there is at least a 26 percent chance of the 100-year flood event occurring at least once over the course of a 30-year mortgage.

However, individual property owners are not the only entities that stand to suffer economic damages from flooding that occurs on privately owned property. Increasing severity and frequency of flooding also presents additional challenges to public entities that fund disaster relief, such as FEMA. The average flood claim payout from FEMA's NFIP between 1996 and 2019 in New Jersey was $37,600 (FEMA, 2020), with approximately 12 percent of claims for properties outside the SFHA (direct communication). Recent events show that in any given year, extreme weather events, such as the remnants of Tropical Storm Ida, can place substantially more properties outside of FEMA's 100-year floodplain at risk. In these situations, property owners who were not aware of their property's flood-risk and therefore may not have acquired flood insurance are incurring significant financial loss that may prompt them to seek out public assistance programs and publicly funded relief from entities such as FEMA.

In April 2022, the Federal Office of Management and Budget published a joint report with the President's Council of Economic Advisors that estimates significant increases in climate-related costs to the Federal Government and the United State economy. Pursuant to current policy, it is estimated that the U.S. GDP could be reduced by three to 10 percent by 2100 and the Federal Government could see up to a 7.1 percent loss in annual revenue. This loss of economic productivity and funds available to the Federal Government would limit spending on necessary programs and the basic production of goods and services on which we all depend. Coastal disasters and inundation from sea-level rise were identified as two key drivers of lost economic activity. The Department sees no reason to assume that New Jersey would be spared similar negative economic consequences of inaction.

The most easily identifiable costs of flooding include loss of life, injury, and property damage and destruction. However, additional flood-related expenses include clean up, evacuation, emergency services, providing temporary housing to displaced residents and businesses, lost revenue from business interruption, increased cost of capital in at-risk areas, and the opportunity costs of any relief funds provided. These additional costs have a clear economic impact to public entities. According to the 2019 Congressional Budget Office report, between 2005 and 2016 the Federal Government spent $28 billion—or 14 percent of total outlays--on emergency services such as debris removal and temporary shelter in response to hurricane winds and storm-related flooding (note that State and local spending on emergency services are not included in this figure). Even more concretely, a study by researchers from Climate Central, Rutgers University, and Stevens Institute of Technology showed that approximately 13 percent ($8.1 billion) of the $62.7 billion in losses incurred by New York, New Jersey, and Connecticut following Hurricane Sandy can be attributed to climate change.

New Jersey's experience during Hurricane Sandy in 2012 provides a clear example of the economic damages associated with coastal storm-related flooding. With storm tides that measured at more than 8.9 feet and inundation from the storm that measured up to nine feet deep, Sandy's surge resulted in historic storm-related flooding. Sea level rise exposed about 40,000 New Jerseyans to Hurricane Sandy's floodwaters who would not have otherwise been affected (Kopp et al., 2019). According to a 2013 report from the National Hurricane Center, "preliminary U.S. damage estimates are near $50 billion, making Sandy the second-costliest cyclone to hit the United States since 1900" (Blake et al., 2013). A more recent study estimates the total national damages of Hurricane Sandy at over $60 billion (Strauss et al., 2021). This study also reported that $3.7 billion (13 percent) of New Jersey-specific Hurricane Sandy damages, which represents the midpoint (50th percentile) of estimated damages, are attributable to anthropogenic sea level rise (Strauss, 2021).

Impacts on Communities and Systemic Risk

The ongoing and increasing risk of flooding caused by climate change presents an immediate economic challenge for homeowners and the housing market, which further has potential to expose the global economy to systemic, interconnected risks. Without efforts to reduce exposure to climate risk, the financial viability of New Jersey's communities is threatened. Bernstein et al. (2019), shows that in coastal communities, properties with greater flooding risk show a decline in price appreciation over time, even if the property itself does not experience a flood. Following a flooding event, a decline in property value for the flooded home is well documented (Bin and Polasky, 2004; Carbone et al., 2006; Hallstrom and Smith, 2005; and Bin and Landry, 2013). Climate related flooding risk can have a negative impact on the housing market beyond falling property values. In examining coastal Florida, Keys and Mulder (2020) found the home sales volume between 2013 and 2018 declined 16-20 percent in the communities most exposed to sea-level rise.

Declining property values and slow housing sales are directly linked with an increased risk of mortgage default and foreclosure, as observed throughout the 2008-2009 financial crisis (Mian and Sufi, 2009). Nuisance flooding increases the risk of default by placing downward pressure on home values. Kopp et al. (2019), report that sea-level rise has increased the frequency of minor tidal flooding in shore communities about 20-fold since the 1950s. Bin and Landry (2013) found that home prices typically recover 10 years after a flooding event. However, if a community is experiencing repeated flooding events during that time, the homeowner will not have a chance to recover their equity. The Union of Concerned Scientists (UCS) predicts that homeowners who experience this chronic inundation will choose to abandon their homes (Union of Concerned Scientists, 2018). The UCS also identifies New Jersey among one of the states most at risk for climate related flooding—alongside Florida and New York. After examining the 2017 hurricane season, Fannie Mae found a significant increase in defaults in Texas, Florida, Puerto Rico, and the U.S. Virgin Islands.

There is growing evidence that mortgage lenders are improperly pricing climate disaster risk in their portfolios (Ouazad and Kahn, 2019; Ceres, 2020; Hino and Burke, 2020). As a result, communities in high-risk areas may continue to see their property values increase and robust home sales in the near-term. However, economists warn that these conditions will likely not last long. A recent McKinsey report notes "As lenders and insurers start to recognize these risks, they could shift their willingness to hold these risks on their balance sheets—or might reprice that risk accordingly" (2020). Simultaneously, the increase in mortgage defaults in climate impacted areas has caused the Federal Reserve to increase their oversight, expecting banks to "have systems in place that appropriately identify, measure, control, and monitor" their material risks, including risks from climate threats (Brainard, 2019). Improved disclosure is expected to increase investor pressure on lenders to exit risky markets (CERES, 2020). A recent paper published by the Federal Reserve Bank of San Francisco warned that communities with potential flooding may be subject to "blue-lining" where "absent substantial new approaches to reducing and managing flood risk, there may be a threat to the availability of the 30-year mortgage in various vulnerable and highly exposed areas" (Berman, 2019). Lenders will likely shift to a combination of shorter-term loans, increased rates, and greater requirements for flood insurance. Any decrease in available credit will further depress property values and home sales in impacted communities. Impacted communities will likely see reduced opportunities to borrow at favorable terms on the municipal bond market. One study of the housing market in New York State found that "long-term municipal bonds are significantly affected by their exposure to climate change risk" noting that "counties should be proactive in reducing the amount of damage that sea level rise is likely to cause to their municipalities" (Painter, 2020).

In response to the expected economic risks and damages in flood-prone areas, large enterprises are likely to move to communities with less risk (Andersson, Bolton, and Samama, 2016; Surminski, 2013), an option not available to many small and medium sized firms. Business flight will have an impact on local employment (Sarmiento, 2007), likely further depressing property values (Dvorkin and Shell, 2016). Small,

local businesses that remain will be forced to cope with increasing expenses from flooding repairs, insurance premiums, and higher rent or mortgage payments (Ayyub, et al., 2016). Local firms will be forced to contend with supply chain disruptions from chronic inundation (Moftakhari and AghaKouchak, 2015; Schedel and Schedel, 2018). They will also face a shrinking customer base, both because people will leave impacted communities and those that stay will have less disposable income available (Hudson, 2016). In areas dependent on tourism, environmental damage will also decrease demand for goods and services (Becken, 2010; Falk, 2013). Outside support will be limited by increasing strain on relief programs, such as Small Business Administration's Office of Disaster Assistance (Lamond and Penning-Rowsell, 2014).

Insurance is Insufficient

The potential economic impacts of flooding can be abated if flood insurance is obtained by a homeowner, business owner, or tenant. According to NOAA, Hurricane Sandy in 2012 caused $18.75 billion in insured property losses, excluding flood insurance claims (NOAA, 2019, 2021). Total estimated Federal government disaster relief related to Hurricane Sandy in New Jersey was estimated to be $5.58 billion (Henry et al., 2013). A majority of residential home insurance is provided through the National Flood Insurance Program. FEMA reports that the average flood claim payout from the NFIP between 1996 and 2019 in New Jersey was $37,600 (FEMA, 2020). According to a July 2020 report by the Rutgers NJ Climate Change Resource Center, "As of August 2019, New Jersey policyholders had cumulatively received roughly $5.268 billion (2018 USD) in total payments on 160,169 claims" (Bradt et al., 2020). However, a 2019 report analyzing New Jersey's coastal risk cited estimates from the Congressional Budget Office (CBO) that the NFIP only covers 16 percent of potential losses (Hess et al., 2019).

The millions of dollars of flood damage that New Jersey sustains each year is borne not only by those directly affected by flooding but also by taxpayers through relief measures and increased insurance premiums. According to a July 2020 report by the Rutgers New Jersey Climate Change Resource Center,

following Hurricane Sandy in 2012, FEMA Individual Assistance grants averaged just above $8,000 (Bradt et al., 2020). Significant repetitive loss properties may contribute to increased premiums for privately held insurance (Hudson, 2016). As reported in the 2019 State Hazard Mitigation Plan, there are a total of 1,238 significant repetitive loss properties in New Jersey (New Jersey Office of Emergency Management, Section 5.6, 2019).

Adaptation is Expected to Reduce Exposure to Climate Risk

The costs associated with flooding can be defrayed or avoided entirely by elevating buildings and infrastructure to levels that are above the expected flood elevations for a particular locality. The avoided costs of flooding by elevating homes have been well documented for recent storm events, such as Hurricane Harvey in 2017. As per the Houston Public Works Flood Plain Management Data Analysis, 81% of homes that were flooded by Hurricane Harvey could have been spared from flooding by elevating to the 500-year flood elevation plus a one-foot factor of safety (City of Houston, 2018). In a study of 31,822 homes within the 100-year and 500-year floodplain, the average cost of flooding per home was found to be $56,297 (City of Houston, 2018).

The cost of flooding can also be avoided and mitigated through better stormwater management; the proposed onsite retention standard will help to decrease the amount of stormwater runoff that leaves a site. Incorporation of green infrastructure best management practices is an economical approach to provide flood storage and mitigate some of the impacts of climate change. An economic analysis study sponsored by NOAA shows the economic benefits of green infrastructure, including those measures that retain stormwater onsite, which can help to mitigate the increased flooding expected because of climate change. The study shows that green infrastructure which provides a 10 percent reduction in peak flow of the 100-year 24-hour storm (the New Jersey Stormwater Management rules require a 20 percent reduction) across a watershed will cost $1.7 million (capital and maintenance); however, the associated benefits from avoided

flood damage to buildings would greatly exceed the cost and were calculated to be $1.77 million in the 20-year life span of green infrastructure (NOAA, 2014). The savings in the benefits related to reduced or avoided flood damages alone greatly exceed the costs of installation and maintenance. The true value of the economic benefits would be higher, since, using green infrastructure will also have many other benefits that were not monetized here, including, but not limited to, improved water quality, reduced urban heat island effect, improved air quality, beautification of public spaces, and increased property values. See 50 N.J.R. 2375(a) and 52 N.J.R. 402(a) for more discussion on the benefits of utilizing green infrastructure.

It is difficult to fully ascertain the monetary value of additional proposed amendments, such as more stringent mitigation standards for disturbance to wetlands and expanded requirements for conservation restrictions on transition areas, that will also help to avoid the costs of flooding. Wetlands and marshes act as sponges in the environment, absorbing and retaining floodwaters and nutrient and sediment-laden runoff, as well as recharging groundwater. Coastal marshes provide ecosystem services such as storm protection, flood control, nutrient cycling, habitat, and recreational opportunities that have positive economic impacts to communities. As reported in the NJ Climate Science Report, tidal wetlands are among the most valuable habitats in New Jersey, providing more than 1.24 billion per year in ecosystem services (Liu et al., 2010). Given the multitude of potential ecosystem services provided by coastal marshes, estimations of the economic value of coastal marshes can be highly dependent upon the ecosystem service being considered as well as site-specific circumstances. However, knowing the documented flood storage and wave and sediment attenuation ecosystem services provided by coastal marshes, it is reasonable to assume that the protection of coastal marshes will yield economic benefits by reducing the damaging effects of coastal storms to private and public property.

Planning for the Expected Impacts of Climate Change Insulates Investments Made Today

Incorporating climate resilience planning into a municipality's stormwater management plan will help promote that municipality's resilience to climate change impacts. This planning and the corresponding steps taken as a result of the planning, will indirectly benefit land developments in the municipality by ensuring that impacts that result from sea level rise, an increase in the size of flood plains, excessive rainfall and extreme weather are minimized. Assuming a development will last at least fifty years, if not longer, a land developer will invest in a development that is not only affected by the current markets and environment, but also the future risk. As indicated above, ULI's study shows that some land developers will assess the location of a development to be built today based on the resilience planning of a municipality, such as a municipality's accountability, transparency, quality, and implementation of climate change resilience planning. (ULI, 2020). Land developers and home buyers will choose areas that are less prone to flooding issues due to increasing storms and sea level rise. (ULI, 2020). A municipality incorporating a climate change resilience plan will reduce or mitigate the flooding risks and attract developers to invest in the real estate market of the municipality.

The Inundation Risk Assessment, which is proposed for inclusion in the Flood Hazard Area Control Act and Coastal Zone Management rules, will require applicants to consider climate change in their proposed project if it is located within an inundation risk zone. The requirements of the Assessment are designed to prompt the applicant to consider the long-term economic, social, and environmental consequences of constructing certain types of development within the inundation risk zone, or below the standards of the Flood Hazard Area rule that would necessitate a Hardship Exception permit application. By considering these long-term implications, it is possible that the applicant may make modifications to the proposed project that are more compatible with the expected future financial, environmental, and social risks due to climate change. These considerations could result in significant long-term savings for the property owner and the community in which the project is situated.

Investment in renewable energy to meet greenhouse gas emission reduction targets is one mechanism to begin to address sea level rise and increases in extreme precipitation events. The State of New Jersey has committed to reducing greenhouse gas emissions to 80 percent below 2006 levels by 2050, which is discussed in the New Jersey's Global Warming Response 80x50 report (available at www.nj.gov/dep/climatechange/mitigation/index.html). To help achieve these emissions reduction goals, New Jersey has committed to the pursuit of increased expansion of its renewable energy resources. The State's 2019 Energy Master Plan includes strategies to reach a target of 100 percent clean energy by 2050. Strategy 2 of the Energy Master Plan is accelerating deployment of renewable energy and distributed energy resources, including development of offshore wind, community solar, solar thermal, and energy storage infrastructure. Given these commitments, development of electric generating facilities in the Atlantic Ocean is fast becoming a reality for achieving the State's objectives on producing clean energy. The proposed standards for offshore wind development will allow for reasonable use of the State's coastline for this renewable energy industry while still maintaining protections for high ecological value shallow marine habitat from any type of development, including the necessary infrastructure associated with offshore electric generating facilities. The proposed amendments, such as the new definition of "nature-based solution" and amended definition of "living shoreline," will also encourage nature-based solutions and minimization of vegetation disturbance along tidal waterbodies and the coastline when avoidance is not possible, which will further encourage protection of the high ecological value shallow marine habitat. The proposed amendments, such as the expansion of permissible activities within shellfish habitat to allow for the installation of submerged cables and the addition of burial depth requirements for submerged cables, balance the protection of marine resources with the development of offshore electric generating facilities by putting forth reasonable measures for offshore electric generating facilities and associated infrastructure that seek to protect marine fisheries resources and avoid impacts to the commercial fishing industry.

Potential Costs

Several of the proposed amendments, such as expanded tidal regulated areas and more stringent construction standards for development in tidal flood hazard areas, may result in negative economic impacts to the general public, particularly the residential and commercial development industry, commercial fishing industry, offshore wind industry, and the State's coastal communities. The proposed amendments to expand existing regulated areas and create a new regulated area, the inundation risk zone, may incur costs related to application fees, site evaluation, engineering, design, raw materials, construction labor, and reduced opportunity for investment and return on investment. The proposed standards for offshore electric generating facilities may have impacts on the commercial fishing industry and the economy of coastal communities. Additionally, several of the proposed amendments to the Stormwater Management rules such as resilience planning requirements, the volumetric reduction standards for stormwater runoff, the flexible design of outlet flow control devices, expanding the 95 percent TSS removal requirement to include runoff discharged into an existing or proposed stormwater conveyance system that ultimately discharges within a 300-foot riparian zone, the application of TSS removal on redeveloped motor vehicle surfaces, and the incorporation of additional stormwater quality measures may result in short-term costs to land developers, property owners, applicants, and review agencies.

Potential Costs Associated with Expanded Regulatory Areas

The Department has proposed several regulatory area amendments that increase the amount of land in the State subject to the FHACA rules which may have an economic impact on the general public, particularly developers and/or builders. The Department has proposed a new regulatory area called the inundation risk zone, which represents currently dry land that is projected to experience permanent or daily inundation by 2100. This proposed regulated area is situated within the existing regulated flood hazard area

and will have additional requirements to protect people and property from the economic, environmental, and social damages of flooding and coastal storms. The Department has also proposed amendments which expand existing tidal flood hazard areas and the amount of land subject to riparian zone standards. The proposed expansion of tidal flood hazard areas and riparian zones will subject more property owners to the Department's rules if they are undertaking a regulated activity. This could result in additional costs related to application fees, site evaluation, engineering, design, and construction.

Inundation Risk Zone and Tidal Flood Hazard Area Jurisdiction

The proposed inundation risk zone will subject new construction and reconstruction within the most at risk portions of tidal flood hazard areas to additional standards that are designed to increase resilience and protect human life, health, and property. Although the IRZ is set forth within the existing tidal flood hazard area protected pursuant to the FHACA rules, the more protective standards proposed for development within the IRZ may increase cost of development in this area due to costs related to application fees, site evaluation, engineering, design, and construction.

Additionally, the proposed amendment to expand tidal flood hazard areas will increase the Department's oversight of land adjacent to tidal waterbodies throughout the State. Based on a review of available FEMA mapping of the Special Flood Hazard Area, the Department estimates that 384 square miles of land in New Jersey currently lies within tidal flood hazard areas. The regulatory flood hazard area would increase in tidal areas by approximately 115 square miles pursuant to this rulemaking, which represents a 30 percent increase in tidal flood hazard areas and 1.5 percent of New Jersey's total land area. However, the Department also estimates that 94.6 percent of the expanded tidal flood hazard area is already encumbered by various land features that would restrict development such as beaches, wetlands, urban space, and open space areas. The predominance of construction within these expanded jurisdictional areas is therefore anticipated to be redevelopment activities. The Department anticipates that this amendment

may increase cost of development and redevelopment in these areas due to costs related to additional application fees, site evaluation, engineering, design, and construction.

Regulated Waters and Riparian Zone

The proposed amendments to remove the riparian zone exemptions for the barrier island complex and isolated waters draining less than 50 acres, as well as the amendment to define the "critically dependent on the water for survival" criteria for threatened and endangered species in the FHACA rules will expand riparian zones across the State, especially along the barrier island complex. The existing FHACA rule exempts riparian zones on the ocean and bayside of the barrier island; however, the existing rule imposes a riparian zone from the bay for the mainland. The proposed amendment will remove this existing discrepancy to more consistently apply riparian zone jurisdiction to the bayside of the barrier island complex. This proposed amendment will subject land within 50-, 150-, or 300-feet, depending on the location, along the bayside of the barrier island complex to riparian zone standards. The Department anticipates this amendment may increase development costs in these areas due to costs related to additional application fees, site evaluation, engineering, design, and construction.

The existing FHACA rule includes a riparian zone exemption for isolated waters that have a drainage area of less than 50 acres. In the Department's experience, this exemption often results in environmental protection that is lacking for headwaters and tributaries with small drainage areas, particularly those in karst geology where the watercourse will display a defined surface channel, redirect flow underground and reappear on the surface further downstream. Headwater streams are often groundwater fed and discharge cold water into streams which benefits certain species, such as trout. As discussed above, the steady increase of average temperatures related to climate change is a concerning prospect for these species that are intolerant of warmer water temperatures. Protecting these headwater sources and the vegetation, particularly trees that provide shade to the watercourse adjacent to them will

help moderate the temperature of these surface waters. The proposed amendment will remove this exemption and subject all land within 50-, 150-, or 300-feet, depending on the location, along isolated waters draining less than 50-acres to riparian zone standards. The Department anticipates this amendment may increase cost of development in this area due to costs related to application fees, site evaluation, engineering, design, and construction.

Finally, the proposal to define the "critically dependent on the water for survival" criteria for threatened and endangered species in the FHACA rule will likely increase the assignment of 150-foot riparian zones to watercourses across the State. The proposed amendment will subject additional lands within 150-feet of a watercourse, that are determined to be documented or suitable habitat for a threatened or endangered species and that meet the proposed definition of critically dependent on the regulated water for survival, to the 150-foot riparian zone standards. This proposed amendment is consistent with the literature for terrestrial species buffers ranging from 100 feet to more than 300 feet (and in some cases over 1000 feet) to be protective, depending upon the species in question (Wenger, 1999). The Department anticipates that this amendment may increase the cost of development in these areas due to costs related to additional application fees, site evaluation, engineering, design, and construction.

Overall, the Department anticipates the proposed amendments discussed above will increase the amount of land subject to the proposed inundation risk zone requirements, as well as the tidal flood hazard area and riparian zone standards across the State. The Department acknowledges that the proposed amendments, such as the creation of a new regulatory area adjacent to tidal waterbodies and the removal of the barrier island complex exemption for riparian zones, will expose coastal communities, particularly those within the barrier island complex, to increases in short-term costs associated with new development and reconstruction. However, as the risks associated with climate change increase, the adaptation measures required in this rulemaking will result in the greatest cost savings for coastal communities in the long term, due to their increased risk of flooding and coastal storm damage, as documented above. Development in

these new and expanded regulatory areas may incur costs associated with Department permitting including application fees, site evaluation, engineering, design, and construction. Expected cost savings, as discussed above, include reduced flood insurance premiums, and avoided costs of flooding and coastal storm damage.

Potential Costs Associated with Design Standards

The proposed amendments, such as the more stringent design standards within flood hazard areas, may result in a negative, short-term economic impact by increasing costs associated with the design and construction of flood-resilient development, such as elevated structures. Compliance with the more stringent requirements of the proposed amendments may require an individual or entity seeking to construct within a flood hazard area to incur increased costs related to site evaluation, engineering, design, and construction, as compared with the existing rules. While these costs are site-specific and difficult to generalize, it is generally understood that climate adaptation measures similar to the ones required in this rulemaking have a positive benefit-cost ratio. For example, in 2019, the National Institute of Building Sciences' Multi-Hazard Mitigation Council found that it was consistently "cost effective to design new coastal buildings higher above BFE" than required by the 2015 I-Codes. Similarly, academic studies modeling climate resilience projects in Los Angeles (de Ruig et al., 2019) and New York City (Aerts et al., 2014) find favorable benefit-cost ratios when considering policies similar to those proposed here.

The proposed amendments to make the Total Suspended Solid removal requirement applicable to redeveloped motor vehicle surfaces, require 80 percent TSS removal on existing impervious surfaces, and apply 95 percent TSS removal to the runoff discharged into existing or proposed stormwater conveyance systems that ultimately discharge within a 300-foot riparian zone may result in short-term upfront costs for proposed developments that meet the criteria of a major development pursuant to the proposed rules. The proposed amendment to the definition of major development to include the reconstruction of one-quarter

acre or more of regulated motor vehicle surface or regulated impervious surface will qualify more development projects for being major developments and may result in additional costs for stormwater treatment. Since the stormwater runoff quality standard of 80 percent TSS removal already applied to major developments that include one quarter acre or more of new impervious coverage, the additional costs will be limited to those development projects that proposed significant amounts of motor vehicle surface reconstruction. Although the cost of treating stormwater to the developer may increase due to the new requirements discussed above, current practice has required at least a 50 percent TSS removal requirement on existing impervious surfaces when a major development creates one quarter acre or more of impervious surface (motor vehicle surface after March 2, 2022). Therefore, the TSS removal rate increasing from 50 to 80 percent or 80 percent to 95 percent may not have a significant increase in the cost of stormwater treatment, considering treatment was already required and that the green infrastructure requirements have been in place since March 2, 2022, and many of the green infrastructure BMPs provide an 80 percent TSS removal rate.

The proposed amendments to provide flexibility regarding the use of green infrastructure BMPs for public roadways or railroads will have a positive economic impact. The right-of-way along public roadways or railroads usually has constrained space for the incorporation of stormwater management measures. The acquisition of additional land becomes necessary when the right-of-way is not available or sufficiently large enough for stormwater management measures. When acquiring lands from private entities, the cost of acquisition includes not only the land cost, but also the legal fees, professional service fees, administrative expenses, relocation costs of existing structures, as well as compensation for the diminished value of the remaining land after acquisition by the public transportation entity has occurred.

The NJDOT and the New Jersey Turnpike Authority estimated that the cost associated with the acquisition of a property, including the engineering, real estate, and legal process costs averages $725,000 to $900,000 per acre, but may reach or exceed one million dollars per acre in the highly developed regions

of the State where transportation facilities are near residential, commercial, and industrial developments. In accordance with the New Jersey Department of Treasury's report of the average residential sales price in 2020, Bergen County has the highest average sale price of residential properties in the State, with an average sale price of $576,109. Among those sales in Bergen County, 183 sales in 2020 were above one million dollars (https://www.state.nj.us/treasury/taxation/lpt/class2avgsales.shtml). Although the properties acquired by NJDOT might not necessarily be as costly as those properties in the report, statistics indicate that the cost of acquisition of a property for roadway projects can be significant.

The use of small-scale green infrastructure increases the complexity of the drainage system along roadways and railroads. For example, existing piping systems often collect runoff from more area than the drainage area limitations associated with small-scale green infrastructure would allow. To meet the drainage area limitation for a BMP in an area where the existing piping system already collects more than the drainage area limitation, a parallel piping system would need to be constructed to divert the excess flow around the small-scale BMP. The increased number of pipes and pipe sizes increase the likelihood of utility conflicts and results in more features within the roadway that will require maintenance.

The additional BMPs that would result from a strict requirement to use small-scale green infrastructure in all cases would also require an increased number of safety measures (for example, guiderail, barriers, fencing, and access drives) to protect the traveling public and the individuals required to perform maintenance on the features. A Rutgers University study of the cost of roadway construction and maintenance in New Jersey for capital projects completed by NJDOT from 2013 through 2016 shows that projects involving more ancillary components, such as drainage components, extensive landscaping, and guiderails, were more likely to cost more (Carnegie, 2019).

The maintenance of stormwater BMPs along public roadways involves additional challenges that are not present on standard lot developments. For example, to maintain many BMPs, the public transportation entity must temporarily close lanes or shoulders along roadways, sometimes requiring the

use of law enforcement to ensure the appropriate diversion of traffic flow. The costs of such closures, both in dollars to the public transportation entity and ultimately taxpayers, as well as in traffic delays for the traveling public will be reduced by giving additional flexibility to public transportation entities to employ a broader selection of green infrastructure BMPs to achieve the design and performance standards. Flexibility will reduce the expenditure of public funds for land acquisitions, installation of safety measures, and maintenance of the installed stormwater measures and their appurtenant safety features. Finally, the proposed amendment to allow the use of BMPs after conducting the required investigations, without the need to request a waiver from strict compliance will save the public transportation entity the application costs associated with applying for the waiver, while still obtaining the public benefits from compliance with stormwater runoff quality, quantity, groundwater recharge design, and performance standards.

The proposed amendments to freshwater wetland mitigation standards and conservation easements requirements, which are expected to afford greater protections to freshwater wetlands, open waters, and transition areas, may result in negative economic impacts by increasing the cost of mitigation and the amount of land that is encumbered by a conservation easement. The proposed amendments to expand mitigation requirements in the FWPA and FHACA rules may also result in negative short-term economic impacts by increasing the cost of permitting. The Department anticipates that the expanded mitigation requirements will result in an increase in the number of applications that are required to complete mitigation as part of the permit approval. Mitigation can incur costs to the applicant in the form of consulting fees for design, restoration, and monitoring of mitigation projects and mitigation bank credits.

Additionally, the proposed amendments are expected to increase the amount of land that will be encumbered by conservation restrictions; land that is encumbered by a conservation restriction is protected in perpetuity and requires additional steps in the permitting process to file the appropriate legal documents to protect this land in perpetuity. Therefore, the Department expects similar economic impacts as discussed above, including an increase in the number of permit applications that are required to file a conservation

easement, which may result in increased cost of permitting in the form of consulting fees. These amendments may also require developers to adjust the location, configuration, and scope of projects that do occur on parcels with regulated areas to avoid and minimize degradation of natural resources, such as freshwater wetlands, open waters, and transition areas.

Furthermore, the more stringent requirements of these proposed amendments may result in some types of development being sited outside of regulated areas, such as flood hazard areas and the freshwater wetlands, altogether. The proposed amendments may encourage development outside of regulated areas, and therefore, may influence the siting of projects within a community to avoid development on parcels that are encumbered by regulated areas. For example, the more stringent development standards and mitigation requirements proposed in regulatory areas may reduce the scope of development in regulated areas to deter and minimize environmental degradation. This does not necessarily incur costs to the regulated community so much as it may reduce the profit margin on potential development in these areas. Consequently, it is probable that the proposed new restrictions on development in flood hazard areas, the inundation risk zone, riparian zones, freshwater wetlands, and transitions areas will bring greater awareness to potential investors and help them to conduct informed cost-benefit risk analyses when siting proposed projects.

The proposed flexibility for the Department to grant a variance from the design and performance standards, the exemption for a public roadway or railroad project that has achieved a preferred alternative, the exemption for dam maintenance, the exemption for public safety improvements, and the exemption for construction of data transmission and electricity cables will have the effect of reducing stormwater management costs for the parties conducting such activities.

Potential Costs Associated with Planning Changes

The proposed amendments, such as the climate resilience planning requirements for municipalities at N.J.A.C. 7:8 and inundation risk assessment requirements at N.J.A.C. 7:13, may incur some short-term costs to municipalities and permit applicants related to consulting fees for plan and permit application preparation, however, the long-term savings related to the avoided impacts of flooding and extreme storm events, as discussed above, are expected to far outweigh any associated costs of planning. The proposed amendments at N.J.A.C. 7:8 requires municipalities to evaluate climate change impacts on municipal or regional stormwater management, including, but not limited to, sea level rise, increased flooding frequency and extent, and increased rainfall depth and intensity. The proposed amendments at N.J.A.C. 7:13 require applicants to evaluate the impacts of climate change at the site-specific level and include an analysis of future flood depths for a site, as well as human health and safety impacts related to the expected increased risk of flooding and extreme storm events. As indicated in a study prepared by the Urban Land Institute (ULI), some land developers will assess the location of a development to be built today based on the resilience planning of a municipality, such as a municipality's accountability, transparency, quality, and implementation of climate change resilience planning (ULI, 2020). This study suggests that a municipality that makes investments in climate change resilience planning may attract developers to invest in their community.

Potential Costs Associated with Department-Delineated Non-Mainland Coastal Center Removal

The proposed amendments to remove the Department-delineated non-mainland coastal centers may result in a negative economic impact to non-mainland coastal communities that have not gone through the comprehensive planning process for coastal center designation with the State Planning Commission. The Department estimates that this proposed amendment will potentially impact 18 municipalities, listed at Appendix H of the CZM rule, that are Department-delineated non-mainland coastal centers, which the Department estimates cumulatively represent 12,170 acres of total land area in the State. The proposed

amendments will subject development in these municipalities to the impervious cover limits at N.J.A.C. 7:7-13, which is more stringent than the impervious cover limits for designated coastal centers. The Department estimates existing urban land cover in these 18 affected municipalities ranges from 55 percent through 95 percent, with a median percent urban land cover of 83 percent. The Department estimates that this proposed amendment will result in minor negative economic impacts by reducing the allowable impervious cover limit for proposed development in certain areas of these municipalities, however, being that these standards are regularly applied to waterfront development permits that do not have designation that exempts the project from the impervious cover limits at Subchapter 13, the Department does not anticipate significant hardships in complying with these impervious cover standards. Additionally, those municipalities that will be losing coastal center designation may seek to go through the comprehensive planning process with the State Plan Commission to obtain coastal center designation. The process would require an investment of time and resources by the municipality, should they choose to do so.

Potential Costs Associated with Process Improvements

The proposed amendments, such as converting permits-by-rule to permits-by-registration, general permits-by-certification, general permits, or exemptions, remodifying sections, consolidating similar provisions, simplifying language, expanding electronic and automated permitting services, and aligning standards and procedural requirements across these rules, will generally result in positive economic impacts to applicants by improving the permitting process. The proposed amendments, such as improving consistency across the flood hazard area, freshwater wetlands, and coastal zone management programs and the consolidation of similar provisions, will incur cost savings to the applicant by reducing time spent by engineers and consultants determining the necessary permits required for regulated activities. In addition, the creation of several new exempted activities pursuant to the FHACA rules should avoid the associated costs of permitting, as discussed above, for certain activities that were formerly permits-by-rule or general

permits-by-certification, such as certain agricultural activities, and have been deemed to have *de minimis* impacts on the environment.

The proposed permits-by-registration will require additional electronic registration that is not currently required pursuant to the promulgated permits-by-rule. This amendment may incur costs to applicants related to time spent completing the registration, which is anticipated to generally take less than 10 minutes. However, the Department does not anticipate this registration to require the expertise of a professional to complete and will not be charging an application fee for this service. The proposed general permits-by-certification will require certification by a professional engineer or architect, as appropriate. In the Department's experience, the technical nature of the standards included in general permits-by-certification, particularly those relating to the flood hazard area, require the expertise of a professional engineer or architect to be certified with accuracy and a high-level of confidence. The Department anticipates that this amendment may incur engineering fees to applicants seeking to obtain a general permit-by-certification.

The proposed amendments provide the Department with the ability to grant a variance from the stormwater design and performance standards at N.J.A.C. 7:8-5.3, 5.4, 5.5, and 5.6, provided each municipality where the project is located has adopted a mitigation plan and the conditions set forth at proposed N.J.A.C. 7:8-5.10(a)1, 2, 3, and 4 are met. The ability to grant a variance at the Department level will generally result in positive economic impacts to applicants by reducing potentially cost prohibitive site redesign for projects requiring both municipal and departmental approvals.

Potential Costs Associated with Offshore Electric Generating Facilities

The Department acknowledges the social and economic value of the State's fishing industry and coastal economy, and the inextricable connection to the abundance and biodiversity of the marine ecosystem off the coast of New Jersey. With the fifth largest commercial fishing industry in the United

States which provides more than 50,000 jobs (2016, NOAA NMFS) and a combined contribution of $1 billion annually from fishing and aquaculture industries to the State's economy, protection of fisheries' resources is an important consideration when developing policy for offshore wind development off the coast of New Jersey.

The impacts of offshore electric generating facilities, also known as wind farms, to marine fisheries and other marine resources has not been as widely studied in the United States as it has been in other parts of the world. According to the 2020 Global Offshore Wind Report, Europe remains the leader in the offshore wind market, making up 75 percent of the total global offshore wind installation, which was recorded at 29.1 gigawatts (GW) by this report (GWEC, 2020). By comparison, the United States has just 30 megawatts (MW) of offshore wind in operation (GWEC, 2020). The top five offshore wind markets in total installation are the United Kingdom, Germany, China, Denmark, and Belgium, according to the 2020 Global Offshore Wind Report (GWEC, 2020). Wind farms in Europe, except for the UK, prohibit commercial fishing, so it is not known how wind turbines, substations, and cables might effectively limit access to fishing and transit. Studies on the environmental impacts of offshore wind are more prevalent in European countries where the industry is more mature. One such study investigated the potential risks to marine fish biodiversity due to a variety of potential factors including habitat alteration and disturbance from noise and electromagnetic fields; the study did not reveal any long-term effects on fish diversity or abundance after installation of the wind farm, however, smaller spatial scale changes, such as increased density of piscivorous fish, fish that feed on other fish, such as eels, cod, and sculpin, were observed around the base of the foundations in the first years of installation (Bergström et al., 2013). An increase in fish abundance in the vicinity of wind turbines has also been observed in other studies. The foundation of an offshore wind turbine has the potential to function as an artificial reef or fish aggregation device. The placement of human-made structures, such as shipwrecks, on the seabed is a common practice for enhancing fisheries resources globally and locally off the coast of New Jersey; the New Jersey Artificial Reef

Program has been involved in an intensive program of artificial reef construction and biological monitoring since 1984. A study of two offshore wind farms off the coast of Sweden found that fish abundance was greater in the vicinity of wind turbines, while species diversity and richness were similar across the study area (Wilhelmsson, 2006).

The aforementioned literature suggests that the installation of offshore wind turbines has the potential to alter fish communities in the general vicinity of the turbine foundation, but a larger concern is loss of access by fishing vessels. In a study of wind farms and their impacts on fisheries in Europe, Berkenhagen et al. (2010), concluded that when the spatial coverage is small, potential impacts may be negligible, however cumulative impacts on commercial fisheries will be significant when windfarms and fisheries are co-located, and opportunities to catch valuable species are effectively reduced.

Certain fisheries are more at risk of impact from offshore wind than others. For example, the sea scallop, surf clam, ocean quahog, and trawl fisheries actively fish within the wind energy areas, have a high commercial value to the State, and use mobile bottom gear, which requires a larger spatial footprint and bottom contact. In addition, there may be biological risk factors that also apply, including spatially fixed habitats and larval distribution that can be affected by changes in hydrodynamics and sediment transport induced by turbine foundations. Studies suggest that other types of fisheries may benefit from windfarms, including recreational fishing opportunities and pot fishing (Steltzenmuller et al., 2021).

The Department concludes that implementing the proposed amendments, such as expanded tidal flood hazard areas, more stringent construction standards for development within a tidal flood hazard area, and more stringent mitigation requirements for disturbance to wetlands and riparian zones will result in substantial avoided costs related to flood damage and relief, which will greatly outweigh the short-term negative economic impacts that may result from the proposed amendments. The Department acknowledges that the proposed amendments, such as the creation of the inundation risk zone standards and the removal of the barrier island complex exemption for riparian zones, will expose coastal communities, particularly

those within the barrier island complex, to the greatest positive and negative economic impacts of these proposed amendments, due to their increased risk of flooding and coastal storm damage. The Department asserts that the overall economic benefits of the proposed rules and amendments outweigh the potential negative impacts.

Environmental Impact

The proposed amendments will result in a positive environmental impact by providing enhanced and consistent stormwater management, increasing protection of vegetation and environmentally sensitive areas, such as wetlands, dunes, and threatened and endangered species habitat, promoting nature-based solutions, such as living shorelines and marsh restoration, and encouraging responsible land use planning, particularly in coastal communities.

Enhanced and More Consistent Stormwater Management

The existing Stormwater Management rules do not require treatment of pollutant loads from existing motor vehicle surfaces of a major development. In addition, there are different thresholds for being a major development between State rules and local ordinances. Proposed amendments will provide consistency in the definition of "major development" and in the requirement of TSS removal on existing and new motor vehicle surfaces of a major development. This fills the gaps of the stormwater quantity, stormwater quality, and groundwater recharge requirements apparent in the existing rules. Pursuant to the proposed rules, local and State review will be consistent in their protection of water bodies from increased stormwater runoff due to climate change. The proposed onsite retention standard is also expected to decrease the amount of stormwater leaving a site, by requiring the use of BMPs that can manage stormwater onsite. Overall, these proposed changes to the Stormwater Management rules are expected to reduce the amount of runoff leaving a site and reduce pollutant load, such as sediment and nutrients, in stormwater

runoff, which will have a positive impact on the quality of surface waters and the flora and fauna that depend on those waters for habitat.

Additionally, the proposed amendments provide the needed flexibility in using BMPs to achieve the design and performance standards for stormwater runoff quality, groundwater recharge, and stormwater runoff quantity, before a waiver from strict compliance from those standards can be sought. Proposed amendments that would require the investigation of lands immediately adjacent to the project limits and in the upstream drainage area, provides a greater opportunity to incorporate green infrastructure BMPs before using non-green infrastructure BMPs.

Existing rules include a waiver of strict compliance for existing roadway or railroad projects undertaken by public transportation entities and provide a mechanism by which relief can be sought if the use of green infrastructure is not feasible. The proposed amendments provide additional direction to allow for a transparent and objective determination on the feasibility of using stormwater BMPs. Further, they provide the public transportation entities with an alternative route from the waiver requirements but still encourage the use of green infrastructure except where infeasible in the context of linear development. The Department believes that projects on existing public roadways or railroads that will use the proposed alternative provisions in the amendments would have otherwise used the waiver of strict compliance in the absence of these amendments. Pursuant to the current Stormwater Management rules, if a new roadway or railroad project is unable to use any green infrastructure BMPs from Table 5-1 to meet the groundwater recharge and stormwater runoff quality requirements, or any green infrastructure BMPs from Tables 5-1 or 5-2 to meet the stormwater runoff quantity requirement, the new roadway or railroad project would not meet the rule requirements because the waiver of strict compliance is not available for new roadway or railroad projects. The proposed amendment establishes a hierarchy of BMP options and provides an opportunity to use stormwater management BMPs from Table 5-3 after investigating the use of green infrastructure BMPs from Tables 5-1 and 5-2. Ultimately, the new roadway or railroad project can be

constructed and the runoff from the new roadway and railroad project will still be treated to meet the water quality, water quantity, and groundwater recharge requirements. As this is an alternative approach to an existing rule process, this change will have a neutral impact on the environment.

The proposed exemptions from the groundwater recharge, stormwater runoff quality, and stormwater runoff quantity standards for certain development projects including dam maintenance, public safety improvements undertaken by a public transportation entity, and construction, reconstruction, or repair of data transmission and electricity cables will ultimately have a *de minimis* environmental impact due to the conditional limitations on applicability and scope of these activities set forth in this rulemaking.

Protection of Vegetation and Environmentally Sensitive Areas

The Department is proposing a suite of amendments related to increased oversight, more stringent design standards and mitigation requirements, and increased preservation of environmentally sensitive areas, as discussed in the summary, that increase protection of regulated areas including freshwater and coastal wetlands, marshes, regulated waters, riparian zones, threatened and endangered species habitat, waterfront development areas, and flood hazard areas. These regulated areas provide ecosystem services such as flood storage, nutrient/sediment uptake and cycling, groundwater recharge, shoreline stability, bank stability, shading, wildlife habitat, and carbon sequestration. These ecosystem services are necessary for maintaining and improving overall environmental health Statewide, particularly the quality of the State's waters. The disturbance or elimination of environmentally sensitive areas for the purposes of development exacerbate existing environmental degradation from flooding, coastal storms, nutrient and sediment-laden stormwater runoff, depleted groundwater reserves, habitat destruction, erosion, and sea level rise, all of which are also being exacerbated by climate change.

The proposed amendments, such as more stringent mitigation requirements for wetland and riparian zone disturbance, will result in a positive environmental benefit by increasing protection and mitigation of

vegetation within regulated areas. Vegetation plays a critical role in the stability of lands susceptible to erosion, the reduction and uptake of nutrient and sediment-laden runoff, the recharging of groundwater, the sequestration of carbon, the availability of habitat for wildlife, and the shading of land and surface water. The protection of vegetation around waterbodies and wetlands is directly tied to protection of water quality in the existing FHACA, FWPA, and CZM rules. According to the New Jersey Climate Science Report, temperature increases are felt more strongly in New Jersey because of the high urbanization of the State that results in large expanses of asphalt and concrete instead of forests, fields, and other open spaces that can provide cooling effects. Vegetated areas, such as forested stands, serve as "carbon sinks," or natural environments that absorb carbon dioxide, that play an important role in the equation of meeting the State's greenhouse gas emissions reduction targets by 2050. Accordingly, increased protection of vegetation throughout the State, particularly in regulated areas, is expected to have a positive environmental impact on water quality and abating the environmental impacts of climate change.

Additionally, the proposed amendments, such as the proposal to more broadly define "critically dependent on the water for survival" as discussed in the N.J.A.C. 7:13 Flood Hazard Area Control Act rule summary below, will result in a positive environmental benefit by increasing riparian zone protections of flora and fauna habitat Statewide, particularly for State-listed and Federally listed threatened and endangered species. Development in New Jersey, the most densely populated state in the country, has steadily fragmented and eliminated habitat for the over 400 species of vertebrate wildlife found in the State (New Jersey Division of Fish and Wildlife). The New Jersey Division of Fish and Wildlife estimates that New Jersey loses roughly 45-square miles of wildlife habitat to development every year (New Jersey Division of Fish and Wildlife). The increased protection to the habitat of threatened and endangered flora and fauna will also benefit the other wildlife that utilize this habitat and promote the protection of riparian zone vegetation. The proposed amendments to increase protections of vegetation, such as the more stringent mitigation standards for riparian zone and wetlands disturbance, is expected to have a positive

environmental impact on the State's flora and fauna that is most at risk of decline due to the pressures of development and the anticipated impacts from climate change disrupting their habitat. Examples of negative impacts to flora and fauna habitat in New Jersey from climate change include, but are not limited to, loss of coastal marsh habitat for shorebirds and a plethora of aquatic species, due to sea level rise and loss of riverine habitat for cold water fish species, such as trout, and a plethora of macroinvertebrates, due to warming water temperatures.

Nature-Based Solutions and Renewable Energy

The proposed amendments will have a positive environmental impact by promoting nature-based solutions through several amendments to the CZM rules. First, the Department is proposing changes to two definitions in the CZM rules, including a new definition for "nature-based solution" and an amended definition of "living shoreline," which is a type of nature-based solution. The proposed definition of "nature-based solution" includes language that clarifies that these projects have a "substantial biological design component" and includes examples of projects that would be considered a "nature-based solution" such as certain living shorelines, marsh restoration and enhancement, and shallow submerged habitat creation projects. The proposed definition of living shorelines redefines two categories of living shorelines, "non-structural" and "hybrid" and removes references to structural strategies to clarify that a living shoreline project must include a "living" component and cannot be purely structural in nature. These proposed amendments are expected to clarify the types of projects that qualify as "nature-based solutions" and provide the foundation for the permitting and installation of these projects.

Additionally, the proposed amendments expand the existing general permit for habitat creation and living shoreline projects to more broadly include nonstructural and hybrid nature-based solution projects as well as the addition of dredged material, loose shell, or shell bags as acceptable substrate for the construction of living shorelines, are expected to facilitate the use of living shorelines as a preferred

alternative to purely structural strategies for shoreline stabilization. The proposed amendments will also encourage the responsible development of renewable energy infrastructure through the creation of reasonable development standards for offshore electric generating facilities that balance the State's emissions targets with marine resource protection.

The proposed amendments related to living shorelines mentioned above will have a positive environmental impact by promoting shoreline stability projects that imitate natural systems and provide maximum environmental benefits. New Jersey's coastal wetlands and marshes are being threatened by sea level rise. As discussed in the New Jersey Climate Science Report, increased flooding and salinity are projected to lead to a loss of 92 percent of brackish marshes, 32 percent of tidal swamps, and six percent of tidal fresh marshes in the Delaware Estuary by 2100 with 2.3 feet (0.7 meters) of sea level rise (Glick et al., 2008). These proposed amendments provide clarity as to what constitutes a living shoreline project pursuant to the CZM rules, which is intended to address existing confusion around which types of projects the Department would consider to be living shorelines. The proposed amendments also provide more accessible permitting avenues for a broader array of nature-based solutions and the conditional inclusion of dredged material, loose shell, and shell bags as a substrate for living shorelines. These amendments are expected to remove existing barriers that make the use of these more environmentally beneficial nature-based solutions for shoreline stabilization more accessible and likely to be used as an alternative to purely structural strategies.

The environmental value of New Jersey's wetlands and marshes cannot be overstated. Wetlands and marshes are often compared to sponges, absorbing and retaining floodwaters and nutrient and sediment-laden runoff, as well as recharging groundwater. Coastal marshes provide a vast array of ecosystem services including storm protection, flood control, nutrient cycling, carbon sequestration, and habitat for a broad array of flora and fauna, all of which provide positive environmental impacts. Nature-based solutions for marsh restoration and shoreline stability, such as the beneficial use of dredged material and living

shorelines, can abate the degradation and elimination of coastal marshes while maintaining and improving marine resources and habitat. The alternatives to nature-based solutions, such as bulkheading and elevation of land, do not offer the level of environmental benefits provided by nature-based solutions and could exacerbate the degradation of coastal wetlands and marshes by impeding marsh retreat and intensifying impacts related to sea level rise on adjacent properties.

The proposed amendments related to offshore wind may have both positive and negative environmental impacts to marine fisheries resources by creating standards that allow for the development of offshore electric generating facilities. Literature on the impacts of wind farms on marine ecosystems is most abundant in areas where the industry is more mature, such as off the European and Scandinavian coasts. One such study investigated the potential risks to marine fish biodiversity due to a variety of potential factors including habitat alteration and disturbance from noise and electromagnetic fields; the study did not reveal any long-term effects on fish diversity or abundance after installation of the wind farm, however, smaller spatial scale changes, such as increased density of piscivorous fish, fish that feed on other fish, such as eels, cod, and sculpin, were observed around the base of the foundations in the first years of installation (Bergström et al., 2013). An increase in fish abundance in the vicinity of wind turbines has also been observed in other studies. The foundation of an offshore wind turbine has the potential to function as an artificial reef or fish aggregation device. The placement of human-made structures, such as shipwrecks, on the seabed is a common practice for enhancing fisheries resources globally and locally off the coast of New Jersey; the New Jersey Artificial Reef Program has been involved in an intensive program of artificial reef construction and biological monitoring since 1984. A study of two offshore wind farms off the coast of Sweden found that fish abundance was greater in the vicinity of wind turbines, while species diversity and richness were similar across the study area (Wilhelmsson, 2006). The aforementioned literature suggests that offshore wind development has the potential to alter fish communities in the direct vicinity of the wind turbine foundation. For example, spatially fixed habitats and larval distribution can be affected by

changes in hydrodynamics and sediment transport induced by turbine foundations. Studies suggest that species with spatially fixed habitat, such as surf clams, ocean quahogs, and sea scallops, should be given additional consideration when determining the impacts of offshore wind farms, since these species cannot as easily relocate their habitat, like many finfish species can, in response to the installation of an offshore wind generating facility (Berkenhagen, 2009).

The proposed standards for offshore wind development will allow for reasonable use of the State's coastline for this renewable energy industry while still maintaining protections for high ecological value shallow marine habitat from any type of development, including the necessary infrastructure associated with offshore electric generating facilities. The proposed amendments will also encourage nature-based solutions and minimization along tidal waterbodies and the coastline when avoidance is not possible, which will further encourage protection of high ecological value shallow marine habitat. With New Jersey's commitment to the pursuit of increased expansion of its renewable energy resources, the development of electric generating facilities in the Atlantic Ocean is fast becoming a reality for achieving the State's objectives on producing clean energy. The proposed amendments, such as the expansion of permissible activities within shellfish habitat to allow for the installation of submerged cables and the addition of burial depth requirements for submerged cables, balance the protection of marine resources and development of offshore electric generating facilities by putting forth reasonable measures for offshore electric generating facilities and associated infrastructure that seek to protect marine fisheries resources and avoid impacts to the commercial fishing industry.

Strategic Planning

The proposed amendments, such as the removal of the Department-delineated non-mainland coastal centers and modification of the traffic rule at the CZM rule, will result in a positive environmental impact by expanding planning considerations for environmentally responsible development, particularly in

coastal communities. The Department anticipates that the Department-delineated non-mainland coastal centers will have a positive environmental impact in non-mainland coastal communities that have not gone through the comprehensive planning process for coastal center designation required by the State Planning Commission. The Department estimates that this proposed amendment will potentially impact 18 municipalities that are Department-delineated non-mainland coastal centers, which cumulatively represent 12,171.06 acres of total land area in the State. The proposed amendments will subject development in these municipalities to the impervious cover limits at N.J.A.C. 7:7-13, which will presumably be more stringent than the impervious cover limits for designated coastal centers in most cases. The Department estimates existing urban land cover in these municipalities ranges from 57.12 percent through 91.58 percent, with a median percent urban cover of 82.93 percent. The Department estimates that this proposed amendment will result in positive environmental impacts by reducing impervious cover allowances for proposed development subject to the CZM rules. A reduction in impervious cover creates the opportunity for more green spaces, which should result in benefits to stormwater management, discussed above.

Federal Standards Analysis

Executive Order No. 27 (1994) and N.J.S.A. 52:14B-1 et seq. (P.L. 1995, c. 65), requires State agencies that adopt, readopt, or amend State rules that exceed any Federal standards or requirements to include in the rulemaking document a comparison with Federal law.

The Department's authority for regulating development within freshwater wetlands and State open waters is derived from Federal and State law. The Freshwater Wetlands Protection Act, N.J.S.A. 13:9B-1 et seq., requires rules to be promulgated to govern the removal, excavation, disturbance, or dredging, drainage, or disturbance of water level or water table, dumping, discharging, or filling with any materials, driving of pilings, and placing obstructions in a freshwater wetland, and the destruction of vegetation, which would alter the character of a freshwater wetland. The FWPA rules, N.J.A.C. 7:7A, fulfill this purpose and

regulate the discharge of dredged and fill material in State open waters, as well as govern activities in transition areas. New Jersey's freshwater wetlands program operates in place of the Federal 404 program (Section 404 of the Federal Water Pollution Control Act, 33 U.S.C. §§ 1251 et seq.). The Department, pursuant to Section 404(g), has assumed the Federal permitting authority. The United States Environmental Protection Agency (EPA) oversees the Department's wetlands program in accordance with the Federal Clean Water Act and a Memorandum of Agreement between the Department and the EPA. The requirement imposed by the Federal Clean Water Act on a state assuming the Federal permitting authority is that the state implements regulatory standards at least equally stringent as those currently in place for the Federal 404 program for the protection of waters of the United States, including wetlands. The proposed amendments add flexibility where appropriate; address implementation issues; provide consistency with other Federal, local, and State requirements; align procedures with flood hazard and coastal permitting procedures where possible; and simplify language to improve the permitting process and reduce the cost of compliance. The proposed changes retain the appropriate level of stringency to ensure compliance with Federal law.

The Department's authority for regulating development within flood hazard areas and riparian zones comes solely from State statute, specifically N.J.S.A. 58:16A-50 et seq., 58:10A-1 et seq., 58:11A-1 et seq., and 13:1D-1 et seq. The Flood Hazard Area Control rules are not promulgated pursuant to the authority of, or in order to implement, comply with, or participate in any program established pursuant to Federal law or a State statute that incorporates or refers to Federal laws, Federal standards, or Federal requirements. The Federal Emergency Management Agency delineates flood hazard areas in the State for the purposes of the National Flood Insurance Program. However, there is no Federal agency or program that directly regulates activities in flood prone areas based on their potential flooding impacts. The Code of Federal Regulations, at 44 CFR Part 60, enables FEMA to require municipalities who participate in the NFIP to adopt certain flood hazard reduction standards for construction and development in 100-year flood

plains. However, a community's participation in the NFIP is voluntary, and FEMA does not otherwise regulate land uses in flood hazard areas. Furthermore, the Federal flood reduction standards at 44 CFR Part 60 are administered by local governments. The proposed amendments do not derive authority from any Federal law or pursuant to any State statute that incorporates or refers to Federal laws, standards, or requirements. The proposed amendments will require an applicant, that is using a flood hazard area method based on FEMA mapping but believes the mapping is in error, to first go to FEMA to apply for and obtain the appropriate letter or map change document. If FEMA does not have a process to review the applicant's information (as is the case with some preliminary maps), then NJDEP will review the new data provided that the resulting flood hazard area and floodway is not less stringent than minimum NFIP standards as described in the municipal floodplain ordinance.

The Federal Coastal Zone Management Act (P.L. 92-583) was signed into law on October 27, 1972. The Act does not set specific regulatory standards for development in the coastal zone; rather it provides broad guidelines for states developing coastal management programs. These guidelines are found at 15 CFR Part 923 and do not specifically address the review standards that should be applied to new coastal development to preserve and protect coastal resources and to concentrate the pattern of coastal development. The guidelines simply provide a planning and management process, without establishing development standards for development in the coastal area. Pursuant to Section 6217(g) of the Coastal Zone Act Reauthorization and Amendments of 1990 (CZARA), P.L. 101-508, the USEPA has published "Guidance Specifying Management Measures for Sources of Nonpoint Pollution In Coastal Waters" (CZARA 6217(g) Guidance). No mandatory Federal standards or requirements for nonpoint source pollution control are imposed. The CZARA 6217(g) Guidance includes management measures for stormwater runoff and nonpoint source pollution control from land development as well as many other source types. The Department's Coastal Zone Management program includes a component addressing coastal nonpoint source pollution control. Therefore, the Department has concluded that the proposed

amendments do not exceed any Federal standards or requirements of the Federal Coastal Zone Management Act.

Many shore protection and beach nourishment projects subject to amendments will be conducted through a joint funding agreement between the State of New Jersey and the United States Army Corps of Engineers (Corps), which agreements often include local governments. Such projects are authorized by Congress through Federal Water Resources Development Acts, generally passed annually. In a document entitled ACOE Planning Guidance Notebook Section IV – Hurricane and Storm Damage Prevention (CECW-P Engineer Regulation 1105-2-100, April 22, 2000) the Corps establishes standards for Federal participation in shore protection, paramount among them the requirement for public use of the shore protection projects. These Federal standards require that the shores be available for public use on equal terms to all, and for a reasonable fee. The standards cite sufficient parking facilities for the general public located reasonably nearby and with reasonable public access to the project, as requirements. The Federal standards say that parking should be provided every one-half mile or less. The proposed amendments do not alter the Federally established maximum distance of one-half mile between access points for projects to be conducted pursuant to the guidance of, and with participation by, the ACOE. Therefore, the proposed amendments are as stringent as, but do not exceed, Federal standards for public access.

Another Federal program implemented by the Department is the Clean Water Act. The Clean Water Act's Municipal Separate Storm Sewer System Program (MS4) identifies five minimum control measures to address stormwater management at the minimum standards as described at 40 CFR 122.34(b). Specifically, the post-construction stormwater management requirements at 40 CFR 122.34(b)(5) require the MS4 permittee to identify the minimum elements to address the runoff from a major development, which is defined as new development and redevelopment projects that disturb greater than or equal to one acre.

In addition to the one-acre disturbance threshold pursuant to the Federal standards, the existing rules also include an increase of one-quarter acre or more of regulated impervious surface or regulated motor vehicle surface as an additional threshold to qualify a development or redevelopment project as a major development. As discussed above, this amendment further proposes to add a new threshold; that is, a development or redevelopment project that reconstructs one-quarter acre or more of regulated impervious surface or regulated motor vehicle surface will also be a major development. The proposed amendment includes more development and redevelopment projects that will be subject to the post-construction stormwater management requirements. However, the proposed amendment is necessary to implement the Federal regulations and standards and satisfy the requirement of the Clean Water Act.

Additionally, the Federal Clean Water Act (33 U.S.C. §§ 1251 et seq.) requires permits pursuant to Section 402 of that Act (33 U.S.C. § 1342) for certain stormwater discharges. The Department's requirements to obtain such permits are set forth in the New Jersey Pollutant Discharge Elimination System Rules, N.J.A.C. 7:14A, rather than in the Stormwater Management rules being amended.

Section 319 of the Clean Water Act (33 U.S.C. § 1329) authorizes a Federal grant-in-aid program to encourage states to control nonpoint sources. The Department developed a management program for nonpoint source control pursuant to which the Department issues grants to local, regional, State, and interstate agencies, as well as to nonprofit organizations to, for example, develop or monitor BMPs to control stormwater.

The proposed onsite retention of stormwater runoff is within the limits of Federal programs. The EPA recommends the use of a permit condition that is based on maintaining or restoring the predevelopment hydrology. Volume retention practices through infiltration, evapotranspiration, and rainwater harvesting are recommended by the EPA as the primary stormwater management mechanisms to achieve the permit condition (EPA, 2010). Therefore, the onsite retention requirement is consistent with Federal programs.

The Department has determined that the proposed amendments do not include any standards or requirements that exceed the standards or requirements imposed by Federal law. Accordingly, Executive Order No. 27(1994) and N.J.S.A. 52:14B-1 et seq. (P.L. 1995, c. 65), do not require any further analysis.

Jobs Impact

The FHACA rules play a significant role in the planning and construction of residential, commercial, industrial, and public development in the State. The Department anticipates that the proposed regulatory area, the inundation risk zone, and the proposed expansion of tidal flood hazard areas may increase the number and complexity of certain permit applications received by the Department. These amendments will likely cause a slight increase in the amount of time required by consultants, engineers, surveyors, and other professionals to help applicants demonstrate compliance with the rules. Demonstrating compliance with the expanded regulatory areas and standards established through the proposed amendments will likely require a person seeking to construct within tidal flood hazard areas and riparian zones to employ consultants to a greater extent as compared with the existing rules. Thus, the proposed amendments may increase job opportunities for consultants, engineers, surveyors, and other professionals for projects in tidal flood hazard areas or the proposed inundation risk zone.

As the proposed amendments will require most development and redevelopment to be constructed to more resilient standards, it is also anticipated that investors will be more attracted to invest in projects that are designed and built to reduce flood damage potential and the subsequent loss of life and property. As noted above, while short-term impacts may be experienced at a local level due to the proposed new design and construction standards in areas expected to be affected by inundation and flooding from sea level rise, it is expected that these impacts will be outweighed in the long-term by the continued demand to construct in attractive areas along New Jersey's coastline. Further, the added detail in design standards will increase the number of more involved projects, which will likely result in more construction jobs in general.

Amendments to the FHACA and FWPA mitigation requirements may have a positive impact on jobs related to mitigation. The proposed amendments are expected to increase the number of applications that require mitigation to freshwater wetlands, regulated waters, and riparian zones, which will likely increase the number of mitigation projects. This may increase the demand for employees involved in the mitigation industry. In general, however, the Department does not anticipate that the proposed amendments will have a large impact on jobs.

Similar to the job impacts previously described for the FHACA amendments, the proposed climate resilience planning requirement pursuant to the Stormwater Management rules may increase the demand for professionals experienced in planning for climate change. However, the proposed amendments relating to the design of green infrastructure BMPs to manage stormwater runoff from public roadway or railroad projects is within the current job scope of design engineers and can be performed by the same engineers designing the project's stormwater management system.

Finally, the improved clarity and consistency created by the proposed unified definition of major development and a unified application of TSS removal rate from existing and new regulated motor vehicle surface within the Stormwater Management rules, may cause a reduction in the amount of time required by consultants, engineers, and other professionals to demonstrate compliance with the rules. Therefore, overall, the Department does not believe that the proposed amendments to the Stormwater Management rules will result in a significant impact on jobs.

Agriculture Industry Impact

Pursuant to N.J.S.A. 52:14B-4(a)2, the Department has evaluated this rulemaking to determine the nature and extent of the impact on the agricultural industry. The Department believes that the proposed amendments, new rules, and repeals will have an overall positive impact on agriculture for a number of reasons as discussed below.

The proposed amendments include the creation of an exemption for the ongoing continuation of lawfully existing and a limited number of new agricultural activities such as grazing, harvesting, horticulture, irrigation, planting, tilling, viticulture, and watering, on land that is actively farmed within a tidal flood hazard area or riparian zone to facilitate certain environmentally responsible agricultural practices. These activities were previously regulated pursuant to a permit-by-rule and general permit-by-certification; therefore, these activities will be subject to less regulatory oversight than they are currently. However, the proposed amendments expand requirements for non-habitable buildings used for agricultural purposes buildings to afford greater protection to the environment, human life, and property.

The proposed new rules will expand the benefits of the existing rules with regards to minimizing erosion and flood damage. The benefits of reduced flood damage potential afforded by the implementation of these new standards will be realized by all landowners in tidal flood hazard areas, including farmers, since the inappropriate development of tidal flood hazard areas causes the frequency and extent of flooding to be exacerbated. Furthermore, the implementation of stringent new standards for mitigation in riparian zones will reduce erosion and increase the quality of the State's surface waters by deterring and more fully compensating for development in these areas, which will create a positive impact on the agriculture industry.

In cases where agricultural activities are proposed for expansion into regulated areas, however, the proposed amendments limit the placement of fill material in flood hazard areas and the destruction of riparian zone vegetation. Since agricultural activities can often be undertaken in flood hazard areas without requiring the placement of fill, the proposed new rules are not anticipated to prohibit the expansion of new agricultural activities into flood hazard areas. However, given the expanded mitigation requirements designed to protect riparian zone vegetation, the proposed amendments may limit the expansion of new agricultural activities into undisturbed riparian zones as compared with the existing rules. The Department believes this is appropriate, however, since increased agricultural development adjacent to streams can lead

to increased sedimentation and pollution of surface waters. Nevertheless, the Department does not anticipate a significant number of farmers requesting to expand agricultural activities into riparian zones, since many riparian zones on existing agricultural lands are either currently farmed, and therefore not subject to the proposed riparian zone restrictions, or else cannot be farmed due to the presence of steep slopes, freshwater wetlands, or other factors that make farming difficult or impractical.

Furthermore, the proposed amendments to the Stormwater Management rules including the onsite retention requirement, TSS removal on all regulated motor vehicle surfaces, and the unified definition of major development will not have a significant impact on the agricultural industry. Agricultural activities that meet the definition of major development are already regulated pursuant to the existing stormwater rules to meet erosion control, stormwater quality, stormwater quantity, and groundwater recharge standards. The Department is not proposing to change the erosion control, stormwater quality, stormwater quantity, and groundwater recharge standards.

The stormwater amendments provide clarity and consistency on the applicability of major development and the TSS removal requirements for the motor vehicle surfaces. The proposed amendments will not have a significant adverse impact on the agricultural industry in this regard since farming vehicles for agricultural activities in a farm field are excluded from the definition of motor vehicle. The proposed amendments provide flexibility to incorporate green infrastructure BMPs within the public roadway or railroad project limits and allow a hierarchical analysis to investigate the opportunity to use green infrastructure BMPs in disturbed areas immediately adjacent to the public roadway or railroad project limits, the land controlled or owned by the public transportation entity within the upper stream drainage area, and the disturbed areas immediately adjacent thereto. The proposed amendment excludes preserved farmland from the disturbed areas to be investigated if compliance cannot be achieved on the project site. Other proposed amendments to clarify the rules will not have a significant adverse impact on the agricultural industry because the clarification of the rules does not impose new requirements on the agricultural

industry. To the extent that these rules provide multiple benefits such as reduced flooding, improved water quality, increased groundwater recharge, and increased protection of stream channel integrity, the agricultural industry will be positively impacted.

Given the above, the Department anticipates that the proposed new rules, repeals, and amendments will result in an overall positive impact on the agriculture industry.

Regulatory Flexibility Analysis

In accordance with the New Jersey Regulatory Flexibility Act, N.J.S.A. 52:14B-16 et seq., the Department has determined that a number of contractors, builders, and property owners that will be affected by the proposed new rules, repeals, and amendments are "small businesses" as defined by the Regulatory Flexibility Act. It is not possible for the Department to accurately estimate the number of small businesses situated within the jurisdiction of, or otherwise affected by, the FHACA, FWPA, CZM, and stormwater management rulemaking. To the extent that the proposed amendments add parts of the State to a regulated area and increases the stringency of standards in existing regulated areas, small businesses may be impacted by the rulemaking. However, because the rulemaking applies to new construction and reconstruction, the Department has determined that the proposed amendments, taken as a whole, will not impose additional reporting or recordkeeping requirements on small businesses nor increase the need for professional services for existing businesses. The costs to small businesses are the same as to any person or entity seeking to construct within regulated areas pursuant to the FHACA, FWPA, and CZM rules, including engineering and environmental consultant fees, as well as permit application fees. The actual costs will vary depending upon the size of the development and the particular site conditions. While some provisions in the proposed amendments (such as stricter construction requirements in the tidal flood hazard area, more stringent mitigation requirements for wetlands disturbance, and more encompassing water quality requirements) may impose additional compliance requirements on small businesses along with the rest of the regulated

community, these are offset by other provisions (such as new exempt activities, more efficient electronic process improvements, and consolidation of similar provisions) that will simplify compliance requirements in many cases. As the minimization of flood damage and adverse environmental impacts caused by development in tidal flood hazard areas and riparian zones is important to all persons, and the proposed permit criteria are necessary to maintain appropriate protection from such adverse impacts, no lesser requirements for small businesses are provided.

Similarly, as is the case for the proposed amendments pursuant to the FHACA, FWPA, and CZM rules, the impact of the onsite retention requirement pursuant to the Stormwater Management rules is not unique to small businesses; the costs that may be incurred by small businesses are the same as to any person undertaking a major development. Proposed amendments to the green infrastructure requirements apply to public roadways and railroad projects and not to small businesses.

Housing Affordability Impact Analysis

In accordance with N.J.S.A. 52:14B-4, as amended effective July 17, 2008, by P.L. 2008, c. 46, the Department has evaluated the proposed amendments, new rules, and repeals to determine the impact, if any, on the affordability of housing.

The proposed amendments, repeals, and new rules to create a new jurisdictional area, the inundation risk zone, will inform the public of the expected extent of permanent or daily inundation expected from sea level rise by the end of the century. The Department anticipates the creation of the inundation risk zone will bring greater awareness to the general public of the risks associated with investment in properties, including housing, located within this area. To the extent that the proposed amendments require increased design standards for properties in high-risk areas, the cost of new housing may increase locally, particularly for single-family residential units and for multi-family units that may be unable to easily put residential dwellings on the first floor. However, it is unclear whether these increased cost stem directly from the

rulemaking or are reflective of a larger awareness from the public, insurers, and the Federal government (among others) of the increase risks of building in these areas.

Proposed amendments pursuant to the Stormwater Management rules will help reduce flooding, improve water quality, increase groundwater recharge, increase protection of stream channel integrity, reduce erosion, and maintain the integrity of dams. This will result in more resilient communities. In addition, the proposed amendments also provide clarity and improve consistency in rule implementation and, as such, will improve regulatory predictability. While compliance with the proposed amendments may require the use of stormwater management BMPs to achieve reduction of stormwater runoff, usage of BMPs is already a requirement in the current version of the rules. Finally, proposed amendments relating to the use of green infrastructure for public roadway or railroad projects would not result in a change to, or influence, the affordability of housing.

Smart Growth Impact Analysis

In accordance with N.J.S.A. 52:14B-4, as amended effective July 17, 2008, by P.L. 2008, c. 46, the Department has evaluated the rulemaking to determine the impact, if any, on housing production in Planning Areas 1 or 2, or within designated centers, pursuant to the State Development and Redevelopment Plan (State Plan). The Department is proposing amendments to remove the non-mainland coastal centers from the CZM rules at N.J.A.C. 7:13-13. The Department-delineated non-mainland coastal centers are located on barrier islands, spits, and peninsulas. These centers were delineated by the Department and did not go through the comprehensive planning afforded by the SPC plan endorsement process. The non-mainland centers are expected to experience more intense storms and may be permanently inundated because of climate change. Accordingly, it is appropriate for municipalities that want these areas to be designated as CAFRA centers to proceed through the plan endorsement process to receive a high impervious cover limit.

The proposed new rules, repeals, and amendments are consistent with the law and policy of New Jersey to promote smart growth and to reduce the negative effects of sprawl and disinvestment in older communities, as described in Executive Order No. 4 (2002). Executive Order No. 4 (2002) states that New Jersey requires sound and integrated planning, as well as coordination with local planning, in order to conserve natural resources, revitalize urban centers, protect the environment, and provide needed housing and adequate public services, all at a reasonable cost, and all while promoting beneficial economic growth, development, and renewal. The executive order also encourages redevelopment, repair, rehabilitation, and replacement of existing facilities. These goals are reflected in several existing provisions that will be continued in the amended rules.

The proposed amendments, repeals, and new rules promote State Plan General Policy 4, Prevention of Water Pollution, and General Policy 5, Water Quality/Individual and Community Onsite Wastewater Treatment Systems. Without the regulatory framework to establish design and construction standards within tidal flood hazard areas and riparian zones, there would be no method to ensure that developments are constructed to any minimum criteria that is protective of public safety and the environment.

The State Plan policy also identifies the protection and enhancement of water resources through coordinated planning efforts aimed at reducing sources of pollution and other adverse effects of development, encouraging designs in hazard-free areas that will protect the natural function of stream and wetland systems, and optimizing sustainable resource use. The rules establish provisions to achieve this State Plan policy, including stringent design and construction standards for development, which protect natural waterways, often reducing the size and impacts of development. Furthermore, by limiting flood storage displacement in tidal flood hazard areas and preventing obstructions in floodways, the rules encourage development to relocate outside tidal flood hazard areas. The inclusion of more stringent mitigation requirements for development in regulated areas, such as wetlands and riparian zones, discourages incompatible development of these environmentally sensitive features, and therefore

encourages development outside these areas as well. The unification of the concept of a major development at the State and local levels, the consistent application of the water quality standards for both new development and redevelopment, and the proposed onsite retention requirement will help guard against increased flooding and further protect water quality where major development will occur. This is consistent with the order's goals of protecting the quality of the environment, encouraging growth in areas suitable for growth, and promoting reinvestment in older communities where such features are not present.

The proposed rule amendments further advance the State's Smart Growth policies by providing clear technical standards and guidance to the regulated public. This promotes more predictable and expeditious review and approval processes. Furthermore, several exemptions and design standards are geared to facilitate the rehabilitation and reconstruction of existing structures in tidal flood hazard areas, and to provide flexibility for the use of green infrastructure BMPs for public transportation entities seeking to undertake changes to existing public roadway or railroad projects.

As was stated above, to the extent that the proposed amendments require increased design standards for properties in high-risk areas, the cost of new housing may increase locally, particularly for single-family residential units and for multi-family units that may be unable to easily put residential dwellings on the first floor. This analysis applies equally to affordable housing units. As with the above, it is unclear whether these increased costs stem directly from the rulemaking, or are reflective of a larger awareness of the increase risks of building in these areas.

Therefore, the proposed new rules, repeals, and amendments comport with the goals of smart growth and implementation of the State Plan as required in Executive Order No. 4 (2002).

Racial and Ethnic Community Criminal Justice and Public Safety Impact

The Department has evaluated this rulemaking and determined that it will not have an impact on pretrial detention, sentencing, probation or parole policies concerning adults and juveniles in the State. Accordingly, no further analysis is required.

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Full text of the rules proposed for repeal may be found in the New Jersey Administrative Code at N.J.A.C. 7:7-3.6, 4.1, 4.2, 4.6, 4.7, 4.12, 4.14, 6.17, 12.23, and 13.19 and 7:7 Appendices H and J; and 7:13-3.1, 3.2, 3.4, 6.5, 7.1, 7.2, 7.4, 7.5, 7.6, 7.7, 7.11, 7.12, 7.17, 7.27, 7.28, 7.29, 7.32, 7.33, 7.35 through 7.40, 7.42 through 7.55, 8.1, 8.2, 8.3, 8.4, 8.6, 8.7, 8.9 through 8.14, 9.1, 9.7, 9.9, 9.10, 9.11, and 12.6.

Full text of the proposed amendments and new rules follows (additions indicated in boldface **thus**; deletions indicated in brackets [thus]):

CHAPTER 1E

DISCHARGES OF PETROLEUM AND OTHER HAZARDOUS SUBSTANCES

SUBCHAPTER 2. PREVENTION AND CONTROL OF DISCHARGES AT MAJOR FACILITIES

7:1E-2.9 Flood hazard areas

(a) Hazardous substances stored within the [tidal floodplain as delineated by the Federal Emergency Management Agency or the floodway of any watercourse as delineated by the Department in

N.J.A.C. 7:13-7.1] **flood hazard area as defined at N.J.A.C. 7:13** shall be adequately protected so as to prevent such hazardous substances from being carried off by or being discharged into flood waters.

(b) (No change.)

CHAPTER 1F

UNDERGROUND STORAGE CAVERNS

SUBCHAPTER 2. CONSTRUCTION OF AN UNDERGROUND STORAGE CAVERN

7:1F-2.4 Assessments of environmental, health, and climate change impacts

(a) (No change.)

(b) The environmental inventory must contain a description of the information listed below. If any category described below presents no impact relative to the proposed facility, a notation of non-applicability shall be entered in the environmental inventory for that category.

1.-6. (No change.)

7. How the system or facility will conform or conflict with the objectives of any applicable Federal, State, or local land use and environmental requirements including, but not limited to, those affecting the following:

i. The [floodway and flood fringe areas of the flood hazard areas as] **regulated areas** identified by the Department pursuant to the State Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq.**, and the implementing rules, N.J.A.C. 7:13,** or areas identified under the flood insurance studies prepared by the Federal Emergency Management Agency (FEMA);

ii.-xviii. (No change.)

(c)-(e) (No change.)

(f) The owner and operator of a system shall include a climate change impact assessment with any application for a permit or permit renewal pursuant to N.J.A.C. 7:1F-4. Assessing the impacts of

climate change on a system shall be conducted, in accordance with (f)1 through 4 below. The Department may accept a climate change impact assessment, or similar evaluation conducted to satisfy other Department regulatory or permitting programs**;** provided it includes the items described in this subsection.

1. (No change.)

2. At a minimum, the assessment shall use data and tools from the Department's Climate Change website (https://www.nj.gov/dep/climatechange) or other current scientific resources, which must be referenced in the prepared document, to provide a written report considering the following scenarios:

i. Whether the system, including any above-ground ancillary equipment, is located within a flood hazard area, as defined by the Flood Hazard Area Control Act Rules, N.J.A.C. 7:13. A system not located in a flood hazard area shall identify the distance from the cavern system to the closest flood hazard area and minimum value or depth flood waters would have to rise to potentially reach the cavern system, using data available at the time the assessment is being prepared for the Department;

[ii. The 100-year storm events and facility flooding expected;]

ii. The anticipated impacts to the site from flooding to the climate-adjusted flood elevation;

iii.-iv. (No change.)

3.-4. (No change.)

(g) (No change.)

CHAPTER 3

FORESTRY

SUBCHAPTER 5. FOREST STEWARDSHIP PROGRAM

7:3-5.4 Background and goals

(a) (No change.)

(b) With regard to background, the section shall:

1. – 4. (No change.)

5. State whether:

i. (No change.)

ii. Some or all of the property's forest land lies in a flood hazard area and, if so, whether any of the prescriptions and practices in the plan is subject to the Flood Hazard Area Control Act rules**,** [at] N.J.A.C. 7:13[-7];

6. – 7. (No change.)

(c) – (e) (No change.)

CHAPTER 7

COASTAL ZONE MANAGEMENT RULES

SUBCHAPTER 1. GENERAL PROVISIONS

7:7-1.1 Purpose

(a) This chapter establishes the rules of the Department regarding the use and development of coastal resources**.** [The rules are] **This chapter constitutes the rules governing the implementation of and is** used in reviewing applications for [coastal] permits [under] **pursuant to** the Coastal Area Facility Review Act, N.J.S.A. 13:19-1 et seq. [(CAFRA permits)], the Wetlands Act of 1970, N.J.S.A. 13:9A-1 et seq. [(coastal wetlands permits)], [and] the Waterfront Development Law, N.J.S.A. 12:5-3 [(waterfront development permits)]**, the Freshwater Wetlands Protection Act, N.J.S.A. 13:9B-1 et seq., Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq., and the Public Access Act, N.J.S.A. 13:1D-150 et seq., in addition to relevant aspects of the Environmental Justice Act, N.J.S.A. 13:1D-157 et seq., New Jersey Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq., Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq., Dam Safety Act, N.J.S.A. 58:4-1 et seq., the Endangered and Nongame Species Conservation Act, N.J.S.A. 23:2A-1 et seq., the Municipal Land Use Law, N.J.S.A. 40:55D-1 et seq., the Ninety-Day Construction Permits Law, N.J.S.A. 13:1D-29 et seq.; and**

N.J.S.A. 13:1D-1 et seq. The rules are also used in the review of water quality certificates subject to Section 401 of the Federal Clean Water Act, 33 U.S.C. § 1341, and Federal consistency determinations [under] **pursuant to** Section 307 of the Federal Coastal Zone Management Act, 16 U.S.C. § 1456. The rules also provide a basis for recommendations by the Program to the Tidelands Resource Council on applications for riparian grants, leases, and licenses.

(b) (No change.)

(c) Both the New Jersey Coastal Management Program and the Coastal Zone Management Rules are founded on the [eight] **10** broad coastal goals described at (c)1 through [8] **10** below. The coastal goals express results that the New Jersey Coastal Management Program strives to attain. Each goal is supplemented by related policies that set forth the means to realize that goal. The Coastal Zone Management Rules, including the coastal goals and policies set forth below, are enforceable policies of the New Jersey Coastal Management Program**,** as approved [under] **pursuant to** the Federal Coastal Zone Management Act (16 U.S.C. §§ 1451 et seq.). The New Jersey Coastal Management Program goals and supplemental policies are:

1. -5. (No change.)

6. Safe, healthy**,** and well-planned coastal communities and regions.

i. – iv. (No change.)

v. Promote and implement strategies for the development of **resilience and** hazard mitigation plans; and

vi. (No change.)

7. Climate change-informed management.

i. Identify vulnerabilities to, and proactively plan for and address current and future climate conditions;

ii. Ensure that management of coastal activities reflects the best available and most recent science; and

iii. Minimize the generation of greenhouse gas emissions.

8. Equity, justice, and social vulnerability.

i. Identify existing and potential vulnerabilities and needs of overburdened communities and socially vulnerable populations;

ii. Proactively engage and minimize barriers for socially vulnerable populations, neighborhoods, and communities to participate in coastal management, and seek to provide increased opportunities for these populations to provide input on decisions affecting their communities; and

iii. Routinely evaluate the effectiveness of engaging and responding to all populations in coastal management, and coastal activities.

Recodify existing 7. – 8. as **9.-10.** (No change in text.)

(d)-(e) (No change.)

7:7-1.5 Definitions

The following words and terms, when used in this chapter, shall have the following meanings, unless the context clearly indicates otherwise. Additional definitions specifically applicable to N.J.A.C. 7:7-13, Requirements for Impervious Cover and Vegetative Cover for General Land Areas and Certain Special Areas, are set forth at N.J.A.C. 7:7-13.2. Additional definitions specifically applicable to N.J.A.C. 7:7-17, Mitigation, are set forth at N.J.A.C. 7:7-17.1.

…

"Cabana" means a structure with vertical walls that accommodates beach- or pool-use-related conveniences, such as the storage of personal items, socializing, showering, changing,

sleeping, and/or sun protection. Cabanas are included in the definition of dwelling unit at N.J.S.A. 13:19-3.

…

"Climate-adjusted flood elevation" means the regulatory flood hazard elevation that is anticipated to occur as a result of climate change and sea level rise. The methods for determining the climate-adjusted flood elevation are provided in the Department's Flood Hazard Area Control Act Rules at N.J.A.C. 7:13-3.2.

…

"Division" means the Division of Land [Use Regulation] **Resource Protection** in the Department.

…

"Environmental non-governmental organization" or "NGO"" means either a non-profit organization, which has received a tax exemption pursuant to section 501(c)(3) of the Internal Revenue Code, which is organized on a local, national, or international level that contributes to, or participates in, cooperative projects, education, or training relating to the environment.

…

"FEMA flood mapping" means information published or publicly released by FEMA regarding the frequency, location, and/or extent of flooding in a community, such as flood elevations, flood profiles, flow rates, and floodway limits, and FEMA 100-year flood elevation as defined in the Flood Hazard Area Control Act Rules at N.J.A.C. 7:13-1.2. For the purposes of this chapter, such information shall include only that information adopted as part of the most recent effective FEMA Flood Insurance Study, dated on or after January 31, 1980, or **the most recent of** any [more recent] advisory [or proposed (preliminary)]**, preliminary, or pending** flood mapping, **that may have been issued by FEMA after the date of the effective flood mapping,** if the [more] **most** recent advisory [or proposed (preliminary)]**, preliminary, or**

pending flood mapping results in higher flood elevations, wider floodway limits, and greater flow rates, than depicted in the most recent effective FEMA Flood Insurance Study, or indicates a change from an [A] **AE** zone to a [V] **VE** zone or coastal A zone. **If a regulated water is depicted on FEMA flood mapping, but lacks a flood profile or other identifying flood information in the Flood Insurance Study, the FEMA flood mapping cannot be used pursuant to this chapter to determine flood elevations or floodway limits for that regulated water.** Effective [and proposed (preliminary)]**, preliminary, and pending** FEMA flood mapping can be viewed at https://msc.fema.gov and advisory flood mapping for coastal areas, where available, can be viewed at [http://www.region2coastal.com] **https://r2-coastal-fema.hub.arcgis.com/**. Questions regarding the availability, use, derivation, or modification of FEMA flood mapping should be directed to FEMA at (800) 358-9616.

…

"Habitable" with reference to structures or development means a [structure or development] **building** that [has been or could have been legally occupied in the most recent five-year period] **is intended for human occupation and/or residence**. **Examples of a habitable building include a single-family home, duplex, multi-residence building, or critical building; a commercial building, such as a retail store, restaurant, office building, or gymnasium; an accessory structure that is regularly occupied, such as a garage, barn, or workshop; mobile and manufactured homes, and trailers intended for human residence, which are set on a foundation and/or connected to utilities, such as in a mobile home park (including campers and recreational vehicles) that remain on site for more than 180 days; and any other building that is regularly occupied, such as a house of worship, community center, or meeting hall, or animal shelter that includes regular human access and occupation. Examples of a non-habitable building include a bus stop shelter, utility building, storage shed, self-storage unit, construction trailer, or an individual shelter for animals, such as a doghouse or outdoor kennel.**

…

"Inundation risk zone" means the portion of a tidal flood hazard area that has been determined to be at significant risk for future permanent or daily inundation by 2100, based on Rutger University's findings of the New Jersey Science and Technical Advisory Panel (STAP) report and that, therefore, represents a high level of hazard for existing and proposed development and habitation. The limits of the inundation risk zone on a particular site are determined using the methods set forth in the Department's Flood Hazard Area Control Act Rules at N.J.A.C. 7:13-3.4(c).

…

"Living shoreline" means a [shoreline management practice] **nature-based solution that is a near-shore protection measure** that addresses the [loss of vegetated shorelines, beaches, and habitat in the littoral zone by providing for the protection, restoration**,** or enhancement of these habitats. This is accomplished through the strategic placement of plants, stone, sand, or other structural and organic materials.] **erosion of shorelines, beaches and wetlands, and/or restores and enhances habitat of these areas.** There are [three] **two** types of living shorelines: [natural,] **non-structural and** hybrid[, and structural]. [Natural] **Non-structural** living shorelines include [natural] **native** vegetation, submerged aquatic vegetation, fill, **dredged material** and biodegradable organic materials. Hybrid living shorelines incorporate [natural] **native** vegetation, submerged aquatic vegetation, fill, biodegradable organic materials, **dredged material, loose shell or shell bags, and include a hybrid structural component, such as oyster castles** and low-profile rock structures**,** such as segmented sills, stone containment, and living breakwaters seeded with native shellfish. [Structural living shorelines include, but are not limited to, revetments, breakwaters, and groins.]

. . .

"Mean higher high water" means the arithmetic average of the elevations of the higher high waters of a mixed tide over a specific 19-year period (National Tidal Datum Epoch). For shorter

periods of observation, corrections are applied to eliminate known variations and reduce the result to the equivalent of a mean 19-year interval. For the purposes of this definition, "higher high water" refers to the higher of the two high waters of a tidal day where the tide is of the semidiurnal or mixed type. The single high water occurring daily during periods when the tide is diurnal as is considered to be higher high water.

. . .

"Nature-based solution" means a project that is designed to protect, restore, or enhance shorelines, wetlands, and in-water areas utilizing natural features and processes to address erosion and flooding issues, and to restore or create ecological habitats. Nature-based solution projects may be non-structural or hybrid but have a substantial biological design component and include, but are not limited to: living shorelines; marsh restoration/enhancement through the strategic placement of material (sediment or the beneficial use of dredged material) on the marsh; elevation of the wetland platform using methods, such as the beneficial use of dredged material, or through the strategic placement of material in the shallow water areas adjacent to the marsh to allow coastal processes to naturally move the material onto the marsh; or using material to create a shallow submerged habitat in open water for habitat creation/enhancement or wave energy dissipation.

…

"NAVD 88" means the North American Vertical Datum of 1988, which is the vertical datum for orthometric heights established for vertical control surveying in the United States, based upon the General Adjustment of the North American Datum of 1988. NAVD 88 is the reference datum for all surveying, topography, and elevations described in this chapter. Flood mapping and other topographic information that is based on the National Geodetic Survey of 1929 (NGVD) or other reference data shall be converted to or reference NAVD 88 for the purposes of establishing

jurisdictional boundaries and determining compliance with the requirements of this chapter. Information related to this datum and others are provided by the National Oceanic and Atmospheric Administration's National Geodetic Survey at https://geodesy.noaa.gov/datums/vertical/north-american-vertical-datum-1988.shtml.

…

"NRCS" means the United States Department of Agriculture's Natural Resource Conservation Service.

…

"Seasonal or temporary structures related to the tourism industry" means **structures associated with any government agency's operation of the beach, including** lifeguard stands and associated temporary **lifeguard** equipment storage containers **used only for lifesaving equipment, with a footprint not to exceed 120 square feet and with no utility connections**, picnic tables, benches and [canopies] **sun shelters for daily use**, [beach badge sheds,] wooden walkways, stage platforms, **beach badge sheds with a footprint not to exceed 120 square feet,** and portable restrooms **without sewer connections or underground utilities**, which remain in place only during the period from May 1 through October 31, and provided that **these structures can be removed from the beach within 24 hours and without the use of heavy machinery in the event the National Weather Service issues a severe weather alert for the municipality in which the development is located for significant weather events, such as coastal flood warning, extreme wind warning, hurricane warning, tornado warning, or tropical storm warning**, the placement of such structures does not involve the excavation, grading**,** or filling of a beach or dune**, and the placement of such structures does not interfere with existing public access points or the public's ability to utilize lands subject to the public trust doctrine**.

. . .

"Substantial damage" means damage of any origin sustained by a structure whereby the cost of restoring the structure to its condition before damage, including the cumulative cost of all improvements made to the structure after (the effective date of this rulemaking), would equal or exceed 50 percent of the market value of the structure before the damage occurred. Restoration of a substantially damaged structure shall constitute a substantial improvement.

"Substantial improvement" means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which, including the cumulative cost of all improvements made to the structure after (the effective date of this rulemaking), equals or exceeds 50 percent of the market value of the structure as determined before the start of construction of the improvement. This term includes structures that have sustained substantial damage regardless of the actual repair work performed. Substantial improvement does not include:

1. Any project for improvement of a structure to correct existing violations of State or local health, sanitary, or safety code specifications that have been identified by the local code enforcement officer and that are the minimum necessary to ensure safe living conditions; or

2. Any alteration of a building designated by the State as an historic structure; provided that the alteration will not preclude the structure's continued designation as an historic structure.

. . .

"Sun shelter" means a tent-like structure without walls or a roof, and dimensions not exceeding 12 feet x 12 feet x 12 feet, which is placed on the beach and made available to the public for daily, not season long, use and which is removed from the beach daily.

. . .

7:7-1.6 Forms, checklists, information; Department address and website

(a) Forms, checklists, and other information related to this chapter can be obtained from the Division of Land [Use Regulation] **Resource Protection** at the address [in] **at** (b) below, by telephone at

(609) 984-0162, or through the Division's website at https://www.nj.gov/dep/landuse. Further information about the Department can be accessed at https://www.nj.gov/dep.

(b) Applications and other correspondence shall be submitted to the following addresses:

1. For **registration of activities pursuant to a permit-by-registration and/or the** submittal of an application for authorization [under] **pursuant to** a general permit**,** or general permit-by-certification, for an individual permit, or a water quality certificate, the Department's website at https://www.nj.gov/dep/online; and

2. For correspondence or the submittal of an application for an exemption, applicability determination, request for the reconsideration of the application of a rule(s) in this chapter, or an extension, transfer, or modification of a permit:

i. For regular mail:

New Jersey Department of Environmental Protection

Division of Land [Use Regulation] **Resource Protection**

Mail code 501-02A[, P.O.]

PO Box 420

Trenton, NJ 08625.

ii. For hand delivery, courier service, and overnight mail:

New Jersey Department of Environmental Protection

Division of Land [Use Regulation] **Resource Protection**

501 East State Street

5 Station Plaza, Second Floor

Trenton, NJ 08609; and

(c) Questions regarding the requirements of this chapter or about the status of a particular application can be directed to the Division of Land [Use Regulation] **Resource Protection** Technical

Support Center at (609) 777-0454, [via] **through** email at LURTechSupport@dep.nj.gov**,** or by using an online contact form at https://www.nj.gov/dep/landuse/contact.html.

(d) – (e) (No change.)

SUBCHAPTER 2. APPLICABILITY AND ACTIVITIES FOR WHICH A PERMIT IS REQUIRED

7:7-2.1 When a permit is required

(a) (No change.)

(b) A person undertaking any regulated activity [under] **pursuant to** this chapter shall do so only in accordance with:

1. A [permit-by-rule] **permit-by-registration**, pursuant to N.J.A.C. 7:7-3 [and]**,** 4**, and 5**;

2. – 5. (No change.)

(c) (No change.)

7:7-2.4 Waterfront development

(a) – (c) (No change.)

(d) A permit shall be required for the construction, reconstruction, alteration, expansion, or enlargement of any structure, or for the excavation or filling of any area, any portion of which is in the waterfront area as defined [in] **at** (a) above, with the exceptions listed below:

1. – 5. (No change.)

6. The repair, replacement, renovation, or reconstruction, in the same location and size, as determined in accordance with (d)6i and ii below of the preexisting structure, of any dock, wharf, pier, bulkhead, or building, legally existing prior to January 1, 1981, that appears on the applicable Tidelands Map or that appears on the applicable coastal wetlands map identified pursuant to N.J.A.C. 7:7-2.3(c) and chapter Appendix D or that received a waterfront development permit subsequent to the date of the

Tidelands Map or coastal wetlands map, as applicable[,]**;** provided [that] **the structure currently exists, and** the repair, replacement, renovation, or reconstruction is in the same location as the [preexisting] **existing** structure**,** and does not increase the size of the structure and the structure is used solely for residential purposes or for the docking of or servicing of pleasure vessels.

i.-ii. (No change.)

7. The repair, replacement, renovation, or reconstruction, in the same location and size, as measured in two dimensions, that is, length and width, of the preexisting structure, of any floating dock, mooring raft, or similar temporary or seasonal improvement or structure, legally existing prior to January 1, 1981, that appears on the applicable Tidelands Map, or that appears on the applicable coastal wetlands map identified pursuant to N.J.A.C. 7:7-2.3(c) and [chapter] **N.J.A.C. 7:7** Appendix D, or that received a waterfront development permit subsequent to the date of the Tidelands Map or coastal wetlands map, as applicable[,]**;** provided **the structure currently exists, and** that the repair, replacement, renovation, or reconstruction is in the same location and size as the [preexisting] **existing** structure, and does not exceed in length the waterfront frontage of the parcel of real property to which it is attached and is used solely for the docking of servicing of pleasure vessels; and

8. (No change)

(e) Those portions of a dock or pier proposed to be constructed landward of the mean high water line and in the coastal zone may be subject to the [permits-by-rule] **permits-by-registration** at N.J.A.C. 7:7-4.4 and 4.5.

(f) – (h) (No change.)

SUBCHAPTER 3. GENERAL PROVISIONS FOR [PERMITS-BY-RULE] **PERMITS-BY-REGISTRATION**, GENERAL PERMITS-BY-CERTIFICATION, AND GENERAL PERMITS

7:7-3.1 Purpose and scope

This subchapter sets forth the standards for the Department to issue, by rulemaking, [permits-by-rule] **permits-by-registration** , general permits-by-certification, and general permits; the use of these permits to conduct authorized activities; the standards governing the use of more than one of these permits on a single site; the duration of authorizations [under] **pursuant to** these permits; and the conditions that apply to these permits.

7:7-3.2 Standards for issuance, by rulemaking, of [permits-by-rule] **permits-by-registration**, general permits-by-certification, and general permits

(a) The Department will, in accordance with the rulemaking provisions of the New Jersey Administrative Procedure Act, N.J.S.A. 52:14B-1 et seq., **and 52:14F-1 et seq.,** promulgate each [permit-by-rule] **permit-by-registration**, general permit-by-certification, or general permit after publication of a notice of rule proposal in the New Jersey Register and consideration of public comment.

(b) The Department will promulgate a [permit-by-rule] **permit-by-registration**, general permit-by-certification, or general permit only if all of the following conditions are met:

1. (No change.)

2. The Department determines that the development will be in conformance with the purposes of applicable statutes**, including the minimum standards set forth in the National Flood Insurance Program pursuant to 44 CFR 60.3**; and

3. The Department has provided public notice and an opportunity for public comment with respect to the proposed [permit-by-rule] **permit-by-registration**, general permit-by-certification, or general permit. After a general permit-by-certification or general permit has been promulgated pursuant to this subchapter, the Department will not hold public hearings on individual applications for authorization [under] **pursuant to** a general permit-by-certification or general permit.

(c) Each [permit-by-rule] **permit-by-registration**, general permit-by-certification, or general permit shall contain a specific description of the type(s) of development which are authorized, including limitations for any single operation, to ensure that the conditions [of] **at** (b)1 and 2 above are satisfied. At a minimum, these limitations shall include:

1. (No change.)

2. A precise description of the geographic area to which the [permit-by-rule] **permit-by-registration**, general permit-by-certification, or general permit applies.

(d) The Department will include in each [permit-by-rule] **permit-by-registration**, general permit-by-certification, or general permit promulgated pursuant to this subchapter appropriate conditions applicable to particular types of sites or development which must be met in order for a proposed development or activity to qualify for authorization [under] **pursuant to** the [permit-by-rule] **permit-by-registration**, general permit-by-certification, or general permit.

(e) The Department may, by undertaking rulemaking in accordance with (a) above, repeal a [permit-by-rule] **permit-by-registration**, general permit-by-certification, or general permit, and thereafter require individual permits for development previously covered by the [permit-by-rule] **permit-by-registration**, general permit-by-certification, or general permit, if it finds that the [permit-by-rule] **permit-by-registration**, general permit-by-certification, or general permit no longer meets the purposes of **the** applicable statutes and of this chapter.

7:7-3.3 Use of a [permit-by-rule] **permit-by-registration**, or an authorization pursuant to a general permit-by-certification or a general permit to conduct regulated activities

(a) An activity that meets the requirements of a [permit-by-rule] **permit-by-registration** may be conducted **after online registration with the Department in accordance with N.J.A.C. 7:7-3.8, but** without prior Department approval, except that activities [under] **pursuant to** the [permits-by-rule]

permits-by-registration at N.J.A.C. 7:7-[4.4, 4.5, and 4.9]**4.2, 4.3, and 4.6 shall be considered registered upon issuance of the required waterfront development permits and activities** may be conducted only after the Department has issued the waterfront development permit that is a necessary condition of those [permits-by-rule] **permits-by-registration**. **Registration is, therefore, not required for the permits-by-registration at N.J.A.C. 7:7-4.2, 4.3 and 4.6.**

(b) [An] **Except as provided at (b)1 below, an** activity that meets the requirements of a general permit-by-certification may be conducted when the person proposing to conduct the activity receives the automatic authorization resulting from completion of the application submission through the Department's electronic system in accordance with N.J.A.C. 7:7-5.

1. For general permits-by-certification, N.J.A.C. 7:7-5.4, 5.5, 5.6, 5.7, 5.8, and 5.10, a New Jersey licensed professional engineer or registered architect, as appropriate, shall submit the online application on behalf of the applicant proposing the activity.

(c) (No change.)

(d) [A permit-by-rule] **Registering for activities pursuant to a permit-by-registration** or [an] **receiving** authorization [under] **pursuant to** a general permit-by-certification or general permit does not relieve the person conducting the authorized regulated activities from the obligation to obtain any other applicable permits or approvals required by law.

7:7-3.4 Use of more than one permit on a single site

(a) A person may undertake a regulated activity more than once on a single site. The activity may be authorized each time [under] **pursuant to** a single [permit-by-rule] **permit-by-registration**, general permit-by-certification, or general permit[,]**;**provided the individual limits and conditions of the permit are not exceeded**, either individually or cumulatively**.

(b) A person may undertake more than one regulated activity on a single site. The activities may be authorized [under] **pursuant to** one or more [permit-by-rule] **permit-by-registration**, general permit-by-certification**,** and/or general permit[,]**;** provided the individual limits and conditions of each permit are not exceeded.

(c) Once the limits and conditions of a [permit-by-rule] **permit-by-registration**, general permit-by-certification, and/or general permit have been reached on a single site:

1. – 2. (No change.)

(d) On a single site, the following may be used in combination with an individual permit:

1. Any [permit-by-rule] **permit-by-registration**;

2.-3. (No change.)

7:7-3.5 Procedure for registering to undertake an activity authorized pursuant to a permit-by-registration

(a) This section sets forth the procedure by which a person shall register to undertake one or more activities authorized pursuant to a permit-by-registration. The permits-by-registration promulgated pursuant to this chapter are set forth at N.J.A.C. 7:7-4. Undertaking an activity authorized pursuant to a permit-by-registration is not subject to the application requirements at N.J.A.C. 7:7-23, the public notice requirements at N.J.A.C. 7:7-24, or application fees pursuant to N.J.A.C. 7:7-25.

(b) Prior to undertaking an activity authorized pursuant to a permit-by-registration, the owner of the site on which the activity would take place, or a consultant, engineer, or architect that is designated by the owner to register on their behalf, shall electronically register the activity through the Department's online system at https://www.nj.gov/dep/online, which requires the registrant to identify or provide the following:

1. The permit-by-registration pursuant to which the registration is being submitted;

2. The name of or other identifier for the proposed development or project;

3. A brief description of the proposed activity, including anticipated start and completion dates;

4. The location of the proposed activity, including street address, municipality, lot, and block;

5. Contact information for both the property owner and registrant, including name, street address, telephone number, email address, organization, and organization type;

6. The following certification:

"I certify under penalty of law that the information submitted herein is true, accurate, and complete, that the activities herein registered comply with the requirements and limitations of the permit-by-registration, that the site identified in the registration is the actual location of the project, and that I am the owner of the site in question or that the owner has provided me with written consent to register for this authorization. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment."; and

7. To accomplish the certification at (b)6 above, the PIN that was issued to the registrant upon registering with the Department's online permitting system.

(c) Once the online registration process is successfully completed, documentation of the registration will be accessible to the applicant through the Department's online system at (b) above. Upon completion of registration, except where the registrant is the State and/or a public transportation entity as defined at N.J.A.C. 7:13-1.2, the registrant shall provide a copy of the documentation provided by the Department to both the construction official and floodplain administrator for each municipality in which the authorized activity will occur.

(d) Within 180 days of the date of registration pursuant to (b) above, the registrant shall certify, at https://www.nj.gov/dep/online, that the registered activities have commenced. If the required certification is not provided within 180 days of registration, activities pursuant to the permit-by-registration may commence only if the owner of the site or a person suitably designated by the owner registers anew in accordance with (b) above.

(e) Upon completion of activities authorized pursuant to a permit-by-registration, the registrant shall indicate said completion at https://www.nj.gov/dep/online.

(f) A registrant may request an adjudicatory hearing to contest the re-registration requirement at (d) above, in accordance with the procedures at N.J.A.C. 7:7-28.

7:7-[3.5]**3.6** Duration of an authorization [under] **pursuant to** a general permit-by-certification

(a) An authorization [under] **pursuant to** a general permit-by-certification is valid for five years from the date of issuance of the authorization **in accordance with N.J.A.C. 7:7-23.3**.

(b) (No change.)

(c) All regulated activities being conducted pursuant to an authorization [under] **pursuant to** a general permit-by-certification shall immediately cease [if] **when** the authorization expires.

(d) (No change.)

7:7-3.6 (Reserved)

7:7-3.7 Duration of an authorization [under] **pursuant to** a general permit [for which an application is deemed complete for review on or after July 6, 2015]

[(a) This section sets forth the duration of an authorization under a general permit for which the application is declared complete for review on or after July 6, 2015. The duration of an authorization

under a general permit for which an application was declared complete for review prior to July 6, 2015 is set forth in N.J.A.C. 7:7-3.6.]

[(b)] **(a)** Except as provided [in (c)] **at (b)** below, an authorization governed by this section is valid for five years from the date of issuance of the authorization.

Recodify existing (c) - (e) as **(b) - (d)** (No change in text.)

7:7-3.8 Conditions applicable to a [permit-by-rule] **permit-by-registration**, or to an authorization pursuant to a general permit-by-certification or a general permit

(a) A person conducting regulated activities pursuant to a [permit-by-rule] **permit-by-registration**, or pursuant to an authorization [under] **pursuant to** a general permit-by-certification or general permit, shall comply with:

1. The conditions set forth in the [permit-by-rule] **permit-by-registration**, general permit-by-certification, or general permit itself; and

2. (No change.)

(b) (No change.)

7:7-3.9 Obligations pursuant to the National Flood Insurance Program

(a) This section sets forth requirements that must be satisfied prior to commencing activities located within a FEMA-adopted regulatory floodway, or within a FEMA-adopted special flood hazard area with no regulatory floodway, in order to meet the requirements of FEMA's National Flood Insurance Program, pursuant to 44 CFR 60.3.

(b) Prior to undertaking an activity authorized pursuant to a permit-by-registration, and prior to the Department issuing an authorization pursuant to a general permit-by-certification or general permit, the applicant shall do one of the following:

1. Where activities are proposed within a FEMA-adopted regulatory floodway, and the proposed activities would result in no net increase (0.00 feet) to the 100-year flood elevation as depicted on FEMA flood mapping, the applicant shall provide an engineering certification to the local floodplain administrator having jurisdiction over the site confirming that the project will meet FEMA's no rise criteria;

2. Where activities are proposed within a FEMA-adopted regulatory floodway, and the proposed activities would result in a net increase (greater than 0.00 feet) to the 100-year flood elevation as depicted on FEMA flood mapping, the applicant shall apply for and obtain a Conditional Letter of Map Revision (CLOMR) from FEMA; or

3. Where activities are proposed within a FEMA-adopted special flood hazard area with no designated regulatory floodway, and the proposed activities would, when combined with all other existing and anticipated development within the flood hazard area, result in a cumulative increase of greater than 0.20 feet in the 100-year flood elevation depicted on FEMA flood mapping, the applicant shall apply for and obtain a Conditional Letter of Map Revision (CLOMR) from FEMA.

(c) For the purposes of this section, hydraulic calculations shall be rounded to the nearest one-hundredth of a foot. For example, a change in the water surface profile of 0.005 feet or more would round up to 0.01 feet and, therefore, trigger the requirement to obtain a CLOMR for activities within a floodway pursuant to (b)2 above. Conversely, a change in the water surface profile of 0.004 feet would round down to 0.00 feet and, therefore, meet the no net increase standard at (b)1 above.

(d) Prior to the Department's approval of the authorization, a copy of the no rise certification or approved CLOMR required at (b) above shall be uploaded to the Department's online portal at https://www.nj.gov/dep/online.

(e) Nothing in this section shall be construed to contradict or obviate the requirements of

the National Flood Insurance Program.

SUBCHAPTER 4. [PERMITS-BY-RULE] **PERMITS-BY-REGISTRATION**

7:7-[4.3]**4.1** [Permit-by-rule 3] **Permit-by-registration 1** - placement of public safety or beach/dune ordinance signs on beaches or dunes and placement of signs on beaches or dunes at public parks

(a) This [permit-by-rule] **permit-by-registration** authorizes the placement of:

1. – 2. (No change.)

7:7-[4.4]**4.2** [Permit-by-rule 4] **Permit-by-registration 2 -** construction of nonresidential docks, piers, boat ramps, and decks located landward of mean high water line

(a) This [permit-by-rule] **permit-by-registration** authorizes the construction of nonresidential docks, piers, and boat ramps located landward of the mean high water line[,]**;** provided that a waterfront development permit has been obtained for the construction waterward of the mean high water line. **In accordance with N.J.A.C. 7:7-3.3(a), activities authorized pursuant to this permit-by-registration will be considered registered upon submission of the waterfront development permit application.**

(b) (No change.)

(c) This [non permit-by-rule] **permit-by-registration** also authorizes the construction of a nonresidential deck located landward of the mean high water line[,]**;** provided:

1. – 3. (No change.)

(d) This [permit-by-rule] **permit-by-registration** does not authorize a boat ramp located within wetlands.

(e) (No change.)

7:7-[4.5]**4.3** [Permit-by-rule 5] **Permit-by-registration 3** - construction of portion of a recreational dock or pier located landward of mean high water line

(a) This [permit-by-rule] **permit-by-registration** authorizes the construction of the portion of a recreational dock or pier located landward of the mean high water line at a residential development[,]**;** provided that a waterfront development permit has been obtained for the construction waterward of the mean high water line. **In accordance with N.J.A.C. 7:7-3.3(a), activities authorized pursuant to this permit-by-registration will be considered registered upon issuance of the waterfront development permit application.**

(b) – (c) (No change.)

7:7-[4.8]**4.4** [Permit-by-rule 8] **Permit-by-registration 4** - construction of a utility line attached to a bridge or culvert

(a) This [permit-by-rule] **permit-by-registration** authorizes the construction of a utility line, including cable (for example, electric, television, or fiber optic), telecommunication, wastewater, petroleum, natural gas, or water, attached to a bridge or culvert. This [permit-by-rule] **permit-by-registration** applies only to that portion of the utility line that will be constructed across the tidal waterway up to the mean high water line[,]**;** provided a tidelands instrument has been obtained for the utility line. The construction of the utility line shall comply with the following:

1. **–** 4. (No change.)

(b) This [permit-by-rule] **permit-by-registration** does not relieve the permittee from the obligation of obtaining all necessary approvals from the [U.S. Army Corps of Engineers] **USACE**.

7:7-[4.9]**4.5** [Permit-by-rule 9] **Permit-by-registration 5** - previous filling of tidelands associated with an existing single family home or duplex

(a) Where a [single family] **single-family** home or duplex is proposed or exists on a lot [which] **that** was previously filled and is not part of a larger development, the prior filling of any lands on the lot formerly flowed by the tide shall be considered by the Department to be authorized [under] **pursuant to** this [permit-by-rule] **permit-by-registration**[,]**;** provided the filling appears on the applicable Tidelands Map.

(b) This [permit-by-rule] **permit-by-registration** applies only if a tidelands instrument has been obtained for all filled tidelands areas.

7:7-[4.10]**4.6** [Permit-by-rule 10] **Permit-by-registration 6** - construction of portion of boat ramp located landward of the mean high water line at a residential development

(a) This [permit-by-rule] **permit-by-registration** authorizes the construction of the portion of a boat ramp landward of the mean high water line at a residential development[,]**;** provided that a waterfront development permit has been obtained for the construction waterward of the mean high water line. **In accordance with N.J.A.C. 7:7-3.3(a), activities authorized pursuant to this permit-by-registration will be considered registered upon issuance of the waterfront development permit application.**

(b) This [permit-by-rule] **permit-by-registration** does not authorize a boat ramp located within wetlands.

(c) – (d) (No change.)

7:7-[4.11]**4.7** [Permit-by-rule 11] **Permit-by-registration 7** - construction and/or installation of a boat wash wastewater system at a marina, boatyard, or boat sales facility

(a) This [permit-by-rule] **permit-by-registration** authorizes the construction and/or installation, at a marina, a boatyard, or a boat sales facility, of a boat wash wastewater system that prevents the discharge of boat wash wastewater to the waters of the State, including a boat wash wastewater system necessary to comply with the Equipment and Vehicle Washing provisions of the New Jersey Pollutant Discharge Elimination System (NJPDES) Basic Industrial Stormwater General Permit NJ0088315 (5G2) established [under] **pursuant to** the NJPDES rules, N.J.A.C. 7:14A. This [permit-by-rule] **permit-by-registration** authorizes the construction of a boat wash wastewater system, including an impervious wash pad or pads connected to a collection system, reclaim/recycling system, or infrastructure to connect to an existing sanitary sewer. This [permit-by-rule] **permit-by-registration** additionally authorizes a sump or other mechanism to collect the boat wash wastewater, shed(s) to house the treatment system, and/or a tank(s) to store the wash water for reuse or collection, as applicable for the system utilized. This [permit-by-rule] **permit-by-registration** authorizes at any one marina, boatyard, or boat sales facility one to three wash pads and a maximum of three boat wash wastewater systems.

(b) This [permit-by-rule] **permit-by-registration** does not relieve a marina, boatyard, or boat sales facility of the obligation to obtain any other permits from the Department, including a Treatment Works Approval for a sanitary sewer connection or a Basic Industrial Stormwater General Permit NJ0088315 (5G2).

(c) Each boat wash wastewater system authorized [under] **pursuant to** this [permit-by-rule] **permit-by-registration** shall:

1. – 5. (No change.)

7:7-[4.13]**4.8** [Permit-by-rule 13] **Permit-by-registration 8** - installation of solar panels on a maintained lawn or landscaped area at a single-family home or duplex lot

(a) This [permit-by-rule] **permit-by-registration** authorizes the installation of solar panels on a maintained lawn or landscaped area at a single-family home or duplex lot[,]**;** provided:

1. – 4. (No change.)

7:7-[4.15]**4.9** [Permit-by-rule 15] **Permit-by-registration 9** - placement of sand fencing to create or sustain a dune

(a) This [permit-by-rule] **permit-by-registration** authorizes the placement of sand fencing to create or sustain a dune[,]**;** provided the sand fencing complies with (a)1 [through]**, 2, and** 3 below. This [permit-by-rule] **permit-by-registration** does not authorize the excavation or grading of a dune. The sand fencing shall:

1. – 3. (No change.)

7:7-[4.16]**4.10** [Permit-by-rule 16] **Permit-by-registration 10** - placement of land-based upwellers and raceways for aquaculture activities

(a) This [permit-by-rule] **permit-by-registration** authorizes the placement of land-based upwellers and raceways, including intakes and discharges, for shellfish aquaculture activities. Activities that qualify for this [permit-by-rule] **permit-by-registration** also qualify for a water quality certificate pursuant to Section 401 of the Federal Clean Water Act, 33 U.S.C. §§ 1251 et seq. The aquaculture activities shall comply with the following:

1. – 3. (No change.)

7:7-[4.17]**4.11** [Permit-by-rule 17] **Permit-by-registration 11** - placement of predator screens and oyster spat attraction devices within a shellfish lease area

(a) This [permit-by-rule] **permit-by-registration** authorizes the placement of predator screens and oyster spat attraction devices in an area subject to a valid shellfish lease pursuant to N.J.S.A. 50:1-23. Upon expiration or termination of the shellfish lease, or the cessation of the use of predator screens and oyster spat attraction devices, whichever occurs first, within five days**,** the permittee shall remove all predator screens and oyster spat attraction devices placed within the lease area. This [permit-by-rule] **permit-by-registration** does not authorize the placement of shell within a shellfish lease area. Activities that qualify for this [permit-by-rule] **permit-by-registration** also qualify for a water quality certificate pursuant to Section 401 of the Federal Clean Water Act, 33 U.S.C. §§ 1251 et seq. The placement of predator screens and oyster spat attraction devices shall comply with the following:

1. (No change.)

2. No activity undertaken pursuant to this [permit-by-rule] **permit-by-registration** shall prevent the catching and taking of free swimming fish from the tidal waters of the State in any lawful manner pursuant to N.J.S.A. 50:1-33.

7:7-[4.18]**4.12** [Permit-by-rule 18] **Permit-by-registration 12** - placement of shellfish cages **that are less than 10 square feet in size** within a shellfish lease area

(a) This [permit-by-rule] **permit-by-registration** authorizes the placement of shellfish cages **that are less than 10 square feet in size** in an area subject to a valid shellfish lease pursuant to N.J.S.A. 50:1-23. Upon expiration or termination of the shellfish lease, or the cessation of the use of shellfish cages, whichever occurs first, within five days**,** the permittee shall remove all shellfish cages placed within the lease area. Activities that qualify for this [permit-by-rule] **permit-by-registration also** qualify for**, and are automatically granted by the Department,** a water quality certificate pursuant to Section 401 of the Federal Clean Water Act, 33 U.S.C. §§ 1251 et seq. The placement of shellfish cages shall comply with the following:

1. – 3. (No change.)

4. No activity undertaken pursuant to the [permit-by-rule] **permit-by-registration** shall prevent the catching and taking of free-swimming fish from the tidal waters of the State in any lawful manner pursuant to N.J.S.A. 50:1-33.

7:7-[4.19]**4.13** [Permit-by-rule 19] **Permit-by-registration 13** - construction and/or installation of a pumpout facility and/or pumpout support facilities

(a) This [permit-by-rule] **permit-by-registration** authorizes the construction and/or installation of a pumpout facility and/or pumpout support facilities in the circumstances set forth at (a)1 and 2 below. The construction and/or installation of a pumpout facility or pumpout support facility shall have no adverse impacts to any special areas described at N.J.A.C. 7:7-9.

1. – 2. (No change.)

7:7-[4.20]**4.14** [Permit-by-rule 20] **Permit-by-registration 14** – implementation of a sediment sampling plan for sampling in a water area as part of a dredging or dredged material management activity or as part of a remedial investigation of a contaminated site

(a) This [permit-by-rule] **permit-by-registration** authorizes the implementation of a sediment sampling plan for sampling in a water area as part of a dredging or dredged material management activity or as part of a remedial investigation of a contaminated site. Activities that qualify for this [permit-by-rule] **permit-by-registration** also qualify for, and **are automatically granted by the Department,** a water quality certificate pursuant to Section 401 of the Federal Clean Water Act, 33 U.S.C. §§ 1251 et seq. This [permit-by-rule] **permit-by-registration** authorizes the implementation of a sediment sampling plan for sampling to be conducted within a water area described at N.J.A.C. 7:7-12.1, as part of a dredging or dredged material management activity or as part of a remedial investigation[,]**;** provided:

1. – 2. (No change.)

7:7-[4.21]**4.15** [Permit-by-rule 21] **Permit-by-registration 15** – application of herbicide within coastal wetlands to control invasive plant species

(a) This [permit-by-rule] **permit-by-registration** authorizes the application of herbicide within coastal wetlands to control invasive plant species[,]**;** provided:

1. – 3. (No change.)

7:7-[4.22]**4.16** [Permit-by-rule 22] **Permit-by-registration 16** - construction of a swimming pool, spa, or hot tub and associated decking on a bulkheaded lot without wetlands

(a) This [permit-by-rule] **permit-by-registration** authorizes the construction of a swimming pool, spa, or hot tub and associated decking (for example, wood or recycled plastic planking, concrete, or paver blocks) on a lot with a legally existing, functioning bulkhead along the entire waterfront portion of the site [and no wetlands landward of the bulkhead,]**;** provided:

1. There are no wetlands landward of the bulkhead;

2. The site is not a coastal bluff or is located along the Atlantic Ocean or Delaware Bay;

Recodify existing 1. - 2. as **3. - 4.** (No change in text.)

[3.] **5.** The footprint of the area covered by the current construction in combination with any existing swimming pool, spa, and/or hot tub, constructed [under] **pursuant to** this [permit-by-rule] **permit-by-registration** after July 6, 2015, at a residential development does not exceed a cumulative total of 750 square feet on the lot. For example, a 600-square-foot in-ground swimming pool could be constructed on a lot [under] **pursuant to** this [permit-by-rule] **permit-by-registration** and at a later time**,** an additional 150-square-foot spa or hot tub could be constructed on the lot [under] **pursuant to** this [permit-by-rule] **permit-by-registration**, because the cumulative footprint of the development for both

structures would not exceed 750 square feet. However, the construction of a 200-square-foot spa or hot tub would not be authorized on a lot [under] **pursuant to** this [permit-by-rule] **permit-by-registration** where a 600-square-foot in-ground swimming pool had already been constructed pursuant to this [permit-by-rule] **permit-by-registration**, because the cumulative total footprint of development for both structures would exceed 750 square feet;

[4.] **6.** The footprint of the area covered by the current construction in combination with any existing swimming pool, spa, and/or hot tub, including associated decking, constructed [under] **pursuant to** this [permit-by-rule] **permit-by-registration** after July 6, 2015, at a development other than a residential development does not exceed a cumulative total of 750 square feet on the lot. For example, a 600-square-foot in-ground swimming pool and associated decking could be constructed on a lot [under] **pursuant to** this [permit-by-rule] **permit-by-registration** and at a later time an additional 150-square-foot spa or hot tub could be constructed on the lot [under] **pursuant to** this [permit-by-rule] **permit-by-registration**, because the cumulative footprint of the development for both structures would not exceed 750 square feet. However, the construction of a 200-square-foot spa or hot tub would not be authorized on a lot [under] **pursuant to** this [permit-by-rule] **permit-by-registration** where a 600-square-foot in-ground swimming pool and associated decking had already been constructed pursuant to this [permit-by-rule] **permit-by-registration**, because the cumulative total footprint of development for both structures would exceed 750 square feet;

Recodify existing 5. – 8 as **7. – 10.** (No change in text.)

7:7-[4.23]**4.17** [Permit-by-rule 23] **Permit-by-registration 17** – installation of an at-grade dune walkover at a residential[, commercial,] or public development other than a single-family home or duplex

(a) This [permit-by-rule] **permit-by-registration** authorizes the installation of an at-grade dune walkover, such as a stabilization mat, at a residential[, commercial,] or public development other than a single-family home or duplex[,]**;** provided:

1. – 2. (No change.)

3. [For non-commercial properties, the] **The** width of the at-grade walkover structure does not exceed six feet and the total width of the at-grade walkover, fencing, and/or edging does not exceed eight feet;

[4. For commercial properties, the width of the at-grade walkover structure does not exceed 10 feet and the total width of the at-grade walkover, fencing, and/or edging does not exceed 12 feet;]

Recodify existing 5. - 6. as **4. - 5.** (No change in text)

SUBCHAPTER 5. GENERAL PERMITS-BY-CERTIFICATION

7:7-5.1 General permit-by-certification [10] **1** – reconstruction of a legally existing functioning bulkhead in-place or upland of a legally existing functioning bulkhead

(a) This **general** permit-by-certification authorizes the reconstruction of a legally existing bulkhead in-place or upland of a legally existing functioning bulkhead[,]**;** provided:

1. The bulkhead is not located along the Atlantic Ocean or Delaware Bay;

Recodify existing 1. – 5. as **2. – 6.** (No change in text.)

(**b) The reconstruction of a legally existing functioning bulkhead in-place or upland of a legally existing functional bulkhead that does not meet the requirements at (a) above may qualify for authorization pursuant to general permit 10 for the reconstruction of a legally existing functioning bulkhead at N.J.A.C. 7:7-6.10.**

7:7-5.2 General permit-by-certification [15] **2** – construction of piers, docks, including jet ski ramps, pilings, and boatlifts in man-made lagoons

(a) (No change.)

(b) The construction of piers, docks, including jet ski ramps, pilings, and boatlifts in man-made lagoons that do not meet the requirements at (a) above may qualify for authorization pursuant to general permit 15 for the construction of piers, docks, including jet ski ramps, pilings, and boatlifts in man-made lagoons, at N.J.A.C. 7:7-6.15.

7:7-5.3 General permit-by-certification [1A] **3** – installation of an elevated timber dune walkover at a residential, commercial, or public development other than a single-family home or duplex

(a) (No change.)

7:7-5.4 General permit-by-certification 4 – installation of an at-grade dune walkover at a commercial development

(a) This general permit-by-certification authorizes the installation of an at-grade dune walkover, such as a stabilization mat, at a commercial development; provided:

1. Only one walkover is installed at the site, unless New Jersey 2012 High Resolution Orthophotography (available for download at https://njgin.state.nj.us/NJ_NJGINExplorer/DataDownloads.jsp) reflects that more than one walkover was present on the site on the date depicted in the image. In such case, the maximum number of walkovers that may be installed shall be equal to the number of walkovers reflected on the 2012 orthophotography;

2. The installation does not require the grading or excavation of a beach or dune;

3. The width of the at-grade walkover structure does not exceed 10 feet and the total width of the at-grade walkover, fencing, and/or edging does not exceed 12 feet;

4. The walkover is fenced on both sides using sand fencing, split rail fencing, or open handrails, unless prohibited by the municipality; and

5. The activity complies with any applicable management plan for protection of State- or Federally listed threatened or endangered species, as approved by the Department and the USFWS, and/or the endangered or threatened wildlife or vegetation species habitat rule, N.J.A.C. 7:7-9.36.

7:7-5.5 General permit-by-certification 5- expansion of a single-family home or duplex

(a) This general permit-by-certification authorizes the expansion of a legally constructed, single-family home or duplex that has been, or could have been, legally occupied in the most recent five-year period, on the non-waterward sides of the single-family home or duplex; provided the expansion:

1. Is not proposed on a beach, dune, or wetland;

2. Meets the requirements of the flood hazard areas rule at N.J.A.C. 7:7-9.25; and

3. Does not exceed a cumulative surface area of 400 square feet on the property constructed after July 19, 1994. For example, a 200-square-foot expansion of a single-family home or duplex could be authorized pursuant to this general permit-by-certification and an additional 200-square-foot expansion could later be authorized pursuant to this permit-by-certification, since the cumulative footprint of the development for both expansions would not exceed 400 square feet on the property. However, a property on which a 300-square-foot expansion was already constructed pursuant to a permit-by-rule would not be eligible for another permit-by-certification, subsequently for an additional 200-square-foot expansion, since the cumulative total footprint of development for both expansions would exceed 400 square feet.

7:7-5.6 General permit-by-certification 6 - development of a single-family home or duplex and/or accessory development on a bulkheaded lagoon lot

(a) This general permit-by-certification authorizes the development (including expansion or reconstruction and expansion) of a single-family home or duplex and/or accessory development (such as garages, sheds, pools, driveways, grading, excavation, and clearing excluding shore protection structures) provided the single-family home or duplex and accessory development are located on a bulkheaded lagoon lot and provided the proposed single-family home or duplex and/or accessory structures comply with all of the following:

1. Development pursuant to this general permit-by-certification shall not result in development of more than one single-family home or duplex either solely or in conjunction with a previous development as defined at N.J.A.C. 7:7-2.2(b)8;

2. The site is located on a man-made lagoon lot, with an existing bulkhead along the entire waterfront portion of the site;

3. All waterfront portions of the site are protected by a currently serviceable bulkhead;

4. There are no wetlands on the site landward of the bulkhead;

5. The proposed single-family home or duplex and accessory structures, excluding decks, are set back a minimum of 15 feet from the waterward face of the bulkhead. If there is no alternative to locating the proposed single-family home or duplex and accessory structures at least 15 feet landward of the bulkhead, the setback shall be reduced if an engineering certification is provided demonstrating that, after the proposed development has been constructed, the shore protection structure can be replaced within 18 inches of the existing bulkhead and a conservation restriction is recorded for the property which states that any reconstruction of a bulkhead shall be within 18 inches of the existing bulkhead;

6. A silt fence is erected landward of the bulkhead with a 10-foot landward return on each end prior to construction. This fence shall be maintained and remain in place until all construction and landscaping activities are completed;

7. If the development includes the construction of a driveway, any newly constructed portion of the driveway shall be covered with a permeable material or shall be pitched to drain all runoff onto permeable areas of the site;

8. The development shall meet the requirements at N.J.A.C. 7:7-9.25;

9. The single-family home or duplex shall be serviced by an existing municipal sewer system; and

10. All sub-gravel liners must be made of filter cloth or other permeable material.

7:7-5.7 General permit-by-certification 7 – reconstruction of a residential or commercial development within the same footprint

(a) Other than reconstruction within the CAFRA area that meets the exemption from a CAFRA permit at N.J.A.C. 7:7-2.2(c)3, this general permit-by-certification authorizes the reconstruction, within the same footprint, of a legally constructed residential or commercial development that has been occupied within five years prior to the date of application to the Department to reconstruct, provided that such reconstruction:

1. Complies with existing requirements or codes of municipal, State, and Federal law;

2. Does not result in the enlargement or relocation of the footprint of the development;

3. In the case of a residential development, does not result in an increase in the number of dwelling units;

4. In the case of a commercial development, does not result in an increase in the number of parking spaces or equivalent paved areas associated with the development;

5. Meets the requirements at N.J.A.C. 7:7-9.25;

6. Does not result in the reconstruction of a residential or commercial development waterward of the mean high water line; and

7. Does not increase the area covered by buildings and/or asphalt or concrete pavement.

(b) This general permit-by-certification does not apply to repairs or maintenance of residential or commercial development, such as replacing siding, windows, or roofs.

7:7-5.8 General permit-by-certification 8 – expansion or relocation (with or without expansion) of the footprint of a residential or commercial development

(a) This general permit-by-certification authorizes the expansion or relocation (with or without expansion) landward of, or parallel to, the mean high water line of the footprint of a legally constructed residential development, including accessory development, such as sheds, garages, pools, and driveways, or commercial development that has been occupied within five years prior to the date of application to the Department for reconstruction; provided:

1. The expansion or relocation complies with the applicable requirements or codes of municipal, State, and Federal law;

2. Except as provided at (a)8 below, the expansion or relocation is not proposed on a beach, dune, or wetland;

3. In the case of residential development, the expansion does not result in an increase in the number of dwelling units;

4. In the case of commercial development, the expansion does not result in an increase in the number of parking spaces or equivalent parking areas associated with the development;

5. Except as provided at (a)8 below, the expansion or relocation does not result in additional impacts to special areas as defined at N.J.A.C. 7:7-9;

6. The expansion or relocation meets the requirements at N.J.A.C. 7:7-9.25 and 9.26;

7. The expansion or relocation is not located waterward of the mean high water line;

8. The expansion does not increase the surface area of the footprint of the development by a cumulative total of more than 400 square feet on the property constructed after July 19, 1994. For an example of how the cumulative total limitation would apply, see (a)3 above; and

9. Where the expansion includes structures, such as stairs or an ADA-compliant ramp that are constructed only for access to a residential or commercial development required to be elevated pursuant to the New Jersey Uniform Construction Code, N.J.A.C. 5:23, in accordance with the Flood Hazard Area Control Act Rules, N.J.A.C. 7:13, there is no feasible alternative location for these structures outside of a beach, dune, wetland, or other special areas as defined at N.J.A.C. 7:7E-3. ADA means the Americans with Disabilities Act of 1990, 42 U.S.C. §§ 1201 et seq.

7:7-5.9 General permit-by-certification 9 – reconfiguration of any legally existing dock, wharf, or pier at a legally existing marina

(a) This general permit-by-certification authorizes the reconfiguration of any legally existing dock, wharf, or pier, including pilings, located at a legally existing marina; provided the marina is not located within shellfish habitat, submerged vegetation habitat, or a wetland.

(b) Activities that qualify for this general permit-by-certification also qualify for, and are automatically granted by the Department, a water quality certificate pursuant to Section 401 of the Federal Clean Water Act, 33 U.S.C. §§ 1251 et seq.

(c) The proposed reconfiguration shall:

1. Not extend outside of the area covered by an existing Tidelands instrument;

2. Not result in an increase in the number of boat slips;

3. Not hinder navigation;

4. Not increase the total linear footage of docks or piers within the marina;

5. Minimize the water area covered by structures by:

i. Providing a minimum of eight feet of open water between any docks if the combined width of the docks over water exceeds eight feet; and

ii. For sites that have existing dock or pier structures exceeding eight feet in width over water areas and/or wetlands that were constructed prior to September 1978, and for which the applicant proposes to relocate, the existing oversized structures must be reduced to a maximum of eight feet in width over water areas and six feet in width over wetlands and intertidal flats; and

6. Provide a minimum of four feet from all property lines, for docks that are perpendicular to the adjacent bulkhead or shoreline.

7:7-5.10 General permit-by-certification 10 - construction of one to three wind turbines less than 200 feet in height having a cumulative rotor swept area no greater than 2,000 square feet

(a) This general permit-by-certification authorizes the construction of one to three wind turbines less than 200 feet in height, measured from the ground surface to the tip of the blade at its highest position, and having a cumulative rotor swept area no greater than 2,000 square feet; provided:

1. No portion of the wind turbine(s), including blades, tower, and site disturbance, shall be located in, on, or over dunes, beaches, wetlands, coastal bluffs, or wild and scenic river corridors;

2. No wind turbine tower(s) or site disturbance shall be located in floodways;

3. The wind turbine(s), including blades, tower, and site disturbance, is set back a minimum of 50 feet, as measured parallel to the ground:

i. Landward of the mean high water line and the inland limit of any beach or dune. This setback does not apply to man-made lagoons and man-made ditches; and

ii. From the boundary of any wetlands;

4. No portion of the wind turbine, including blades, tower, and site disturbance, shall be located within an area mapped as threatened or endangered species habitat on the Department's Landscape Maps of Habitat for Endangered, Threatened and Other Priority Wildlife (Landscape Maps) except as provided at (a)4i and ii below. The Landscape Maps are available from the Department's Division of Fish and Wildlife, Endangered and Nongame Species Program at https://www.nj.gov/dep/fgw/ensp/landscape/index.htm.

i. The wind turbine(s) is located within 120 feet of an existing building on an actively maintained lawn or area of land that has been manipulated by contouring of the soil and/or by intentional planting of flowers, grasses, shrubs, trees, or other ornamental vegetation that is maintained in such a condition by regular and frequent (at least one time per year) cutting, mowing, pruning, planting, weeding, or mulching; or

ii. The wind turbine(s) is located on legally existing impervious cover;

5. If the wind turbine(s) is more than 120 feet tall, measured from the ground surface to the tip of the blade at its highest position, the tower shall be a freestanding monopole(s); and

6. No lighting shall be placed on or directed at the wind turbine, except for lighting required by the Federal Aviation Administration. Shielded ground level security lighting may be used. Lighting is shielded when it is covered in a way that light rays are not emitted above the horizontal plane of the light.

(b) Development pursuant to this general permit-by-certification shall not result in construction of more than three wind turbines on a site, either solely or in conjunction with a previous wind turbine development.

7:7-5.11– General permit-by-certification 11 - shoreline stabilization using coir logs, vegetation, and plant-based materials

(a) This general permit-by-certification authorizes the stabilization of an existing shoreline through the installation of coir logs and/or the planting of vegetation to prevent erosion and stabilize the shoreline; provided:

1. The project is less than 350 feet in length;

2. The project is not located within a shellfish lease area authorized pursuant to N.J.S.A. 50:1-23;

3. The project does not interfere with, or otherwise cause a hazard to, navigation;

4. The project consists solely of coir logs, native vegetation, or natural material associated with the plantings; and

5. The project does not extend more than 10 feet waterward of the existing shoreline.

(b) At no time shall the work authorized pursuant to this general permit-by-certification interfere with existing public access points or the public's ability to utilize lands subject to the public trust doctrine.

(c) If the Department determines that construction has resulted in adverse shoreline sand movement, including erosion or shoaling, the Department may require the permittee to remove the shoreline stabilization materials.

7:7-5.12–General permit-by-certification 12 - shoreline stabilization using shellfish and/or shell bags

(a) This general permit-by-certification authorizes the stabilization of an existing shoreline using oysters, marine mussels, and/or placed, staked, or secured shell bags; provided:

1. The project is located within water other than restricted or prohibited as determined pursuant to the Shellfish Growing Water Classification Rules, N.J.A.C. 7:12;

2. The project is 350 feet or less in length;

3. Where live shellfish are used in the project, the shellfish must be of the following species:

i. Hard clam (*Mercenaria mercenaria*);

ii. Soft clam (*Mya arenaria*);

iii. Eastern oyster (*Crassostrea virginica*);

iv. Bay scallop (*Argopecten irradians*);

v. Blue mussel (*Mytilus edulis*); and/or

vi. Ribbed mussel (*Geukensia demissa*);

4. Any shellfish seed imported into New Jersey from an out-of-State source shall meet the certification requirements at N.J.S.A. 50:1-34;

5. The use of oyster castles or other structure is prohibited;

6. The project does not interfere with, or otherwise cause a hazard to, navigation;

7. The project is not located within a shellfish lease area authorized pursuant to N.J.S.A. 50:1-23. In certain limited situations where the nature-based solution is deemed necessary by the Department to protect the public interest or to protect upland structure or resources, the Department, in consultation with the New Jersey Shellfisheries Council, may modify the boundaries of the shellfish lease to accommodate a project; and

8. The project does not include the placement of shellfish or shell bags more than 10 feet waterward of the existing shoreline.

(b) At no time shall the work authorized pursuant to this general permit interfere with existing public access points or the public's ability to utilize lands subject to the public trust doctrine.

(c) If the Department determines that construction has resulted in adverse shoreline sand movement, including erosion or shoaling, the Department may require the permittee to remove the shoreline stabilization materials.

SUBCHAPTER 6. GENERAL PERMITS

7:7-6.4 General permit 4 - development of one or two single-family homes or duplexes

(a) – (b) (No change.)

(c) Development [under] **pursuant to** this general permit shall comply with N.J.A.C. 7:7-9.22, Beaches; 9.25, Flood hazard areas; 9.27, Wetlands; 9.28, Wetland buffers; [and] 9.36, Endangered or threatened wildlife or vegetation species habitats[.]**; and 9.50, Inundation risk zone.**

(d)-(e) (No change.)

(f) Development [under] **pursuant to** this general permit shall comply with N.J.A.C. 7:7-9.16, Dunes, except as provided [under] **at** (f)1 or 2 below:

1. Development that is located on the landward slope of a secondary or tertiary dune described at (f)1ii below, whichever is most landward, need not comply with the dunes rule, N.J.A.C. 7:7-9.16, if the site and the development meet all of the following conditions:

i. -ii. (No change.)

iii. The beach area adjacent to the proposed development is either naturally stable without beach nourishment or naturally accretional without beach nourishment, as determined [using the method described at N.J.A.C. 7:7-9.19, Erosion hazard areas, and] **through an analysis of the projected erosion rate and historic accretion/erosion rates of the area based on** the information in the Department's Geographic Information System (GIS) database as found in the Historical Shorelines coverage [1836-1986]; and

iv. (No change.)

2. (No change.)

(g) (No change.)

[(h) Development under this general permit shall comply with N.J.A.C. 7:7-9.18, Coastal high hazard areas, and 9.19, Erosion hazard areas, except as excluded under (h)1 below;

1. Development under this general permit that is located on a site partially or completely within an erosion hazard area, or coastal high hazard area, need not comply with the coastal high hazard areas rule, N.J.A.C. 7:7-9.18, and the erosion hazard areas rule, N.J.A.C. 7:7-9.19, if:

i. The lot was shown as a subdivided lot prior to July 19, 1993;

ii. The lot is served by a municipal sewer system; and

iii. A house or commercial building is located within 100 feet of each of the lot lines that run roughly perpendicular to the mean high water line. The 100 feet shall be measured outward from each lot line, along a line generally parallel to the mean high water line;]

Recodify existing (i)-(m) as **(h)-(l)** (No change in text.)

[(n)] **(m)** Development [under] **pursuant to** this general permit shall comply with the following setbacks:

1. - 2. (No change.)

3. On a non-oceanfront site with existing or proposed shore protection structures, the single-family home or duplex and/or accessory structures (except decks) shall be set back at least 15 feet from existing or proposed shore protection structures. If the single-family home or duplex and/or accessory structures cannot be located at least 15 feet landward of the shore protection structure, the [Department shall reduce the] required setback **shall be reduced** if an engineering certification is submitted demonstrating that, after the proposed development has been constructed, the shore protection structure can be replaced within 18 inches of the existing shore protection structure and a conservation restriction that complies with N.J.A.C. 7:7-18 is recorded for the property [which] **that** states that any reconstruction

of a shore protection structure shall be within 18 inches of the existing shore protection structure. A site with coastal bluffs shall instead comply with [(n)1] **(m)1** above. **However, in no case shall the required setback be reduced to less than 10 feet.**

[(o)] **(n)** (No change in text.)

7:7-6.5 General permit 5 – expansion[,] or reconstruction (with or without expansion)[,] of a single-family home or duplex

(a) – (c) (No change.)

(d) Development [under] **pursuant to** this general permit shall comply with N.J.A.C. 7:7-9.16, Dunes, except as provided [under] **at** (d)1 through 4 below:

1. Development that is located on the landward slope of a secondary or tertiary dune described at (d)1ii below, whichever is most landward, need not comply with the dunes rule, N.J.A.C. 7:7-9.16, if the site and the development meet all of the following conditions:

i. – ii. (No change.)

iii. The beach area adjacent to the proposed development is either naturally stable without beach nourishment or naturally accretional without beach nourishment, as determined [by using the method described at N.J.A.C. 7:7-9.19, Erosion hazard areas, and] **through an analysis of the projected erosion rate and historic accretion/erosion rates of the area based on** the information in the Department's Geographical Information System (GIS) database**,** as found in the Historical Shorelines coverage [1836-1986]; and

iv. (No change.)

2. (No change.)

3. Development that is located on a dune need not comply with the dunes rule, N.J.A.C. 7:7-9.16, if the development meets the following criteria:

i. – iv. (No change.)

v. The dune area waterward of the single-family home or duplex is enhanced as follows:

(1) (No change.)

(2) Native dune vegetation shall be planted**,** as necessary**,** to establish vegetative cover in accordance with the specifications contained in Guidelines and Recommendations for Coastal Dune Restoration and Creation Projects (DEP, 1985) and/or Restoration of Sand Dunes Along the Mid-Atlantic Coast (U.S. Soil Conservation Service, 1992). These documents are available upon request from the Department's Division of Land [Use Regulation] **Resource Protection** at the address set forth at N.J.A.C. 7:7-1.6; and

vi. (No change.)

4. Development that is located on a dune and entails the enclosure of an existing deck, patio, or porch need not comply with the dunes rule, N.J.A.C. 7:7-9.16, if the development meets the following criteria:

i. – vi. (No change.)

vii. The dune area waterward of the single-family home or duplex is enhanced as follows:

(1) (No change.)

(2) Native dune vegetation shall be planted in accordance with the specifications contained in Guidelines and Recommendations for Coastal Dune Restoration and Creation Projects (DEP, 1985) and/or Restoration of Sand Dunes Along the Mid-Atlantic Coast (U.S. Soil Conservation Service, 1992). These documents are available upon request from the Department's Division of Land [Use Regulation] **Resource Protection** at the address set forth at N.J.A.C. 7:7-1.6; and

viii. (No change.)

(e) (No change.)

(f) Development [under] **pursuant to** this general permit shall comply with N.J.A.C. 7:7-9.18, Coastal high hazard areas, [and 7:7-]9.19, Erosion hazard areas, **and 9.50, Inundation risk zone,** except as excluded [under] **pursuant to** (f)1 below[;]**.**

1. Development [under**] pursuant to** this general permit that is located on a site partially or completely within an erosion hazard area or coastal high hazard area need not comply with the coastal high hazard areas rule, N.J.A.C. 7:7-9.18, [and] the erosion hazard areas, N.J.A.C. 7:7-9.19, **and the inundation risk zone rule, N.J.A.C. 7:7-9.50,** if:

i. – iii. (No change.)

(g)-(k) (No change.)

(l) Development [under] **pursuant to** this general permit shall comply with the following setbacks:

1. – 2. (No change.)

3. On a non-oceanfront site with existing or proposed shore protection structures, the single-family home or duplex and/or accessory structures (except decks) shall be set back at least 15 feet from existing or proposed shore protection structures. If the single-family home or duplex and/or accessory structures cannot be located at least 15 feet landward of the shore protection structure, the Department shall reduce the required setback if an engineering certification is submitted demonstrating that, after the proposed development has been constructed, the shore protection structure can be replaced within 18 inches of the existing shore protection structure and a conservation restriction that complies with N.J.A.C. 7:7-18 is recorded for the property which states that any reconstruction of a shore protection structure shall be within 18 inches of the existing shore protection structure. A site with coastal bluffs shall instead comply with (l)1 above. **However, in no case shall the required setback be reduced to less than 10 feet.**

(m) (No change.)

7:7-6.17 General permit 17 - shoreline stabilization using coir logs/suitable native vegetation

(a) This general permit authorizes the stabilization of a shoreline through the installation of coir logs and/or the planting of vegetation to prevent erosion and stabilize the shoreline; provided:

1. The project is not located within a shellfish lease area authorized pursuant to N.J.S.A. 50:1-23. In certain limited situations where the nature-based solution is deemed necessary by the Department to protect the public interest or to protect upland structure or resources, the Department, in consultation with the New Jersey Shellfisheries Council, may modify the boundaries of a shellfish lease to accommodate a project;

2. The project does not interfere with, or otherwise cause a hazard to, navigation;

3. The project consists solely of coir logs, vegetation, or natural material associated with securing the plantings; and

4. Where shoreline stabilization will occur outshore of a wetland, the project shall result in minimum feasible alteration or impairment of the natural contour or the natural vegetation of the wetlands.

(b) Within 60 calendar days after the installation of coir logs and/or the planting of vegetation is completed, a construction completion report shall be submitted to the Department. The construction completion report shall include:

1. An as-built plan of the completed project showing grading, location of coir logs, if used, plantings, including species, size, and densities, and distribution; and

2. Photographs of the completed project.

(c) At no time shall the work authorized pursuant to this general permit interfere with existing public access points or the public's ability to utilize lands subject to the public trust doctrine.

(d) If the Department determines that construction has resulted in adverse shoreline sand movement, including erosion or shoaling, the Department may require the permittee to remove the shoreline stabilization materials.

7:7-6.20 General permit 20 – legalization of the filling of tidelands

(a) (No change.)

(b) The legalization of the filling of any lands formerly flowed by the tide associated with a single-family home that is not part of a larger development, is eligible for a [permit-by-rule] **permit-by-registration**. See N.J.A.C. 7:7-[4.9]**4.5**.

7:7-6.22 General permit 22 –construction of certain structures related to the tourism industry at hotels and motels, commercial developments, and multi-family residential developments over 75 units

(a) This general permit authorizes the construction of [structures such as] **temporary** equipment storage containers and sheds, **cabanas,** stage platforms, bleachers, portable restrooms, food concession stands, gazebos, lockers, [canopied] **sun** shelters, and wooden walkways**,** related to the tourism industry, at hotels and motels, commercial developments, and multi-family residential developments over 75 units**;** provided [that:] **the construction complies with (a)1 through 11 below. This general permit does not authorize sewer or underground utility lines in the City of Atlantic City, except temporary, seasonal sewer lines that comply with the Atlantic City rule at N.J.A.C. 7:7-9.47(l):**

1. Except as provided [in] **at** (a)1i below, the structure **may** remain[s] in place only from May 1 through October 31[;] **at which time the structure(s) shall be removed from the beach and relocated to a secure location.**

i. [Underground utilities, floor] **Floor** decking, open drink and food concession stand shells, and stage shells may remain in place on a year-round basis; **and**

ii. For structures on the beach that are associated with a hotel, casino, and/or restaurant development abutting the landward side of the boardwalk in Atlantic City, floor decking, open drink and food concession stand shells, and stage shells may remain in place on a year-round basis. Any temporary sewer or utility connections must be disconnected and removed from the beach seasonally from November 1 through April 30 each year;

2. All structures authorized [by] **pursuant to** this general permit that are located on a beach [, except underground utilities] shall be immediately removed from the beach and relocated to a secure place at any time that the National Weather Service issues a [Severe Weather Alert] **severe weather alert** for the municipality in which the development is located, for significant weather events, such as [Coastal Flood Warning, Extreme Wind Warning, Hurricane Warning, Tornado Warning or Tropical Storm Warning,] **coastal flood warning, extreme wind warning, hurricane warning, tornado warning, or tropical storm warning** that would directly affect structures left on the beach, until the [Severe Weather Alert] **severe weather alert** is lifted. **To demonstrate that this requirement is met, the applicant must submit for the Department's review and approval an Emergency Structure Removal Plan consisting of the following:**

i. A detailed description of how the structures will be removed, including a timeline showing that the removal can be accomplished within 24 hours of a severe weather alert;

ii. The identity and contact information of parties responsible for removal and relocation of the structures and proof of agreement for such services;

iii. A list of equipment that will be needed and confirmation of the responsible parties' access to such equipment that accounts for competing needs during storm events; and

iv. The location to which the structures will be moved during severe weather alerts;

3. (No change.)

4. Placement of the structure does not include the excavation, grading**,** or filling of a beach**, or installation of permanent footings, anchoring, or support piles**;

5. – 7. (No change.)

8. If the structure is proposed on a beach, the structure does not unreasonably conflict with ocean views**,** or other beach uses **and shall not interfere with existing public access points or the public's ability to utilize lands subject to the public trust doctrine**;

9. (No change.)

10. Public access shall be provided in accordance with the lands and waters subject to public trust rights rule, N.J.A.C. 7:7-9.48, and the public access rule, N.J.A.C. 7:7-16.9; [and]

11. Structures authorized pursuant to this general permit shall not have permanent utility connections; **and**

[11.] **12.** Where the structure(s) is located on a beach, for each year of the duration of the permit, the permittee shall submit on or before April 1st to the Department for its review and approval one copy of a revised site plan, dated no more than 30 days prior to the submittal, including supplemental documents as appropriate, [showing] **including**:

i. The location of the beach berm area; [and]

ii. An updated Emergency Structure Removal Plan as required pursuant to (a)2 above; and

[ii.] **iii.** Compliance with (a)2 through [9] **11** above. Based on review of this information, the Department may approve the structure(s) as proposed or require modifications to the footprint or design of the structures to comply with these standards.

(b) (No change.)

(c) This general permit does not authorize installation of permanent sewer lines or underground water or electric lines. However, the Department may authorize temporary sewer

lines in Atlantic City that meet all criteria in the Atlantic City rule, N.J.A.C. 7:7-9.47(l), pursuant to this general permit.

7:7-6.23 General permit 23 – geotechnical survey borings

(a) This general permit authorizes geotechnical survey borings**,** including survey borings or excavations constructed for the purpose of obtaining information on subsurface conditions, for the purpose of determining the presence or extent of contamination in subsurface soils or groundwater, and for obtaining seismic information[,]**;** provided the following conditions are met.

1. – 4. (No change.)

5. Borings and related site disturbance shall not be conducted during the [following time periods:

i. During the] migration of anadromous fish from [April] **March** 1 [thru] **through** June 30 [(inclusive);

ii. During the period from March 1 thru June 30 and from October 1 thru November 30 (inclusive), within and adjacent to waters on the Delaware River System from the mouth of bay to Delaware Memorial Bridge and tidal Maurice River, identified as American shad migratory pathways; and

iii. During the period from April 1 thru June 30 and from September 1 thru November 30 (inclusive), within and adjacent to waters on the Delaware River System from the Delaware Memorial Bridge to the New York State line and tidal portions of Rancocas and Raccoon Creeks, identified as American shad migratory pathways].

6. (No change.)

7:7-6.24 General permit 24 - **Nonstructural or hybrid nature-based solution activities, including** habitat creation, restoration, enhancement, and living shorelines activities

(a) This general permit authorizes habitat creation, restoration, enhancement, and [living shoreline] **nature-based solution** activities necessary to implement a plan for the restoration, creation, enhancement, or protection of [the] habitat, **and/or to improve** water quality functions, and values of wetlands, wetland buffers, and open water areas[, which is sponsored by a Federal or State agency or other entity described in (b) below. For the purposes of this general permit, a "sponsor" shall endorse the activities in writing].

[(b) The following habitat creation, restoration, enhancement, and living shoreline plans are acceptable provided they demonstrate compliance with (c) through (g) below:

1. A fish and/or wildlife management plan created or approved by the Department's Division of Fish and Wildlife;

2. A project plan approved under the Partners for Fish and Wildlife program, Coastal Program, or a similar program administered by the USFWS;

3. A project plan created by the U.S. Department of Agriculture's Natural Resources Conservation Service under the Wetlands Reserve program, the Conservation Reserve program, the Conservation Reserve Enhancement program, the Wildlife Habitat Incentive program (WHIP), or a similar program, and approved by the local Soil Conservation District;

4. A plan approved by the Department's Office of Natural Resource Damages for the restoration, creation or enhancement of natural resources injured as the result of an oil spill or release of a hazardous substance;

5. A mitigation project required or approved by a government agency, such as the USACE;

6. A habitat creation, restoration or enhancement plan carried out by one of the Federal or State agencies at (b)1 through 5 above or by a government resource protection agency such as a parks commission;

7. A habitat creation, restoration, or enhancement plan carried out by a charitable conservancy provided that the plan is part of a program listed at (b)2 through 5 above;

8. A living shoreline plan designed and/or sponsored by the Department, the USFWS, the Natural Resource Conservation Services, the USACE, the USEPA, or NOAA's Restoration Center; or

9. A living shoreline plan implemented by a college or university for the purpose of research.]

[(c)] **(b)** Habitat creation, restoration, enhancement, [and] living shoreline**, and other nature-based solution** activities that are authorized by this general permit include, but are not limited to, the following:

1. Altering hydrology to restore or create wetlands conditions, such as by blocking, removing, or disabling a human-made drainage ditch or other drainage structure such as a tile, culvert**, runnel,** or pipe;

2. – 4. (No change.)

5. Cutting, burning**,** or otherwise managing vegetation in order to increase habitat diversity or control nuisance flora; [or]

6. Establishing a living shoreline to protect, restore, or enhance a habitat[.]**;**

7. Marsh restoration/enhancement through the strategic placement of dredge material on the marsh to elevate the wetland platform and/or in the shallow water areas adjacent to the marsh to allow coastal processes to naturally deposit the material onto the marsh;

8. Creating a shallow submerged habitat in open water for habitat creation/enhancement or for wave energy dissipation through the beneficial use of dredged material from the same system; or

9. Fencing, for habitat connectivity projects or barriers to prevent wildlife mortality and vehicle damage, either on its own or used in conjunction with a proposed or existing culvert or bridge; provided any such fencing in a flood hazard area is designed to minimize obstruction to floodwaters.

[(d)] **(c)** To be eligible for authorization [under] **pursuant to** this general permit, an applicant shall demonstrate that the proposed project:

1. -3. (No change.)

4. Will have a reasonable likelihood of success[, or, if performed by a college or university, in accordance with (b)9 above, will advance the level of knowledge regarding living shorelines in the State].

[(e)] **(d)** Activities [under] **pursuant to** this general permit[, except for living shoreline activities, which are subject to the requirements of (f) below,] shall comply with the following:

1. (No change.)

2. The activities shall disturb the minimum amount of special areas as defined at N.J.A.C. 7:7-9 necessary to successfully implement the project [plan];

3. The activities shall not decrease the total combined area of special areas on a site. However, the Department may approve a decrease if the Department determines that the activities causing the decrease are sufficiently environmentally beneficial to outweigh the negative environmental effects of the decrease. In addition, the Department may approve conversion of one special area to another special area if the Department determines that such conversion is environmentally beneficial; [and]

4. If the activities involve the removal of a dam, the activities shall be conducted in accordance with a permit issued pursuant to N.J.A.C. 7:20 by the Department's Dam Safety Section in the Division of Engineering and Construction[.]**;**

5. The project is not located within a shellfish lease area authorized pursuant to N.J.S.A. 50:1-23. In certain limited situations where the nature-based solution is deemed necessary by the

Department to protect the public interest or to protect upland structure or resources, the Department, in consultation with the New Jersey Shellfisheries Council, may modify the boundaries of shellfish lease to accommodate a project; and

6. Nonstructural and hybrid measures shall be used according to the following hierarchy:

i. Non-structural measures that allow for the growth of vegetation shall be used unless it is demonstrated that use of non-structural measures is not feasible or practicable. Factors considered in determining whether a non-structural measure is feasible or practicable include the type of waterway on which the site is located, the distance to the navigation channel, the width of waterway, water depth at the toe of bank, the bank orientation, shoreline slope, fetch, erosion rate, the amount of sunlight the site receives, substrate composition, and presence of shellfish habitat, submerged vegetation, and wetlands at the site. For guidance on measures that may be appropriate depending upon factors impacting a site, see the Guidance for Appropriate Shoreline Protection and/or Storm Damage Reduction Measures for a Site available from the Division of Land Resource Protection's website at https://www.nj.gov/dep/landuse/guidance.html.

ii. Where the use of non-structural nature-based solution measures pursuant to (d)6i above is demonstrated to be not feasible or practicable, then hybrid nature-based solutions that allow the growth of vegetation, such as stone, riprap, sloped concrete articulated blocks or similar structures, or gabion revetments, shall be used provided the plan has a reasonable likelihood of success.

[(f)] **(e)** [Living] **In addition to the requirements in this section, living** shoreline activities shall comply with the following:

1. – 2. (No change)

3. Where the living shoreline is intended to restore an existing shoreline to a previous location, the living shoreline, including all associated fill, shall not exceed the footprint of the shoreline as it appeared on the applicable Tidelands Map, except for a structural component of the project intended to

reduce wave energy. **In some cases, the Department may approve an area with a more uniform edge that is not consistent with the applicable Tidelands Map, as long as it does not exceed the allowable footprint (see https://www.nj.gov/dep/landuse/guidance.html).**

[(g)] **(f)** (No change in text.)

(g) Within 60 calendar days after completing construction of the project, a construction completion report shall be submitted to the Department. The 60 calendar days for submittal of the completion report may be extended for an additional 60 calendar days upon mutual agreement between the Department and the responsible entity. The construction completion report shall include:

1. An as-built plan of the completed project showing grading, plantings (including species, sizes, and planting densities), and any structures;

2. Photographs of the completed project; and

3. A written description of challenges, successes, and any lessons learned during construction.

(h) (No change.)

7:7-6.25 General permit 25 – construction of one to three wind turbines less than 200 feet in height and having a cumulative rotor swept area no greater than 4,000 square feet

(a) This general permit authorizes the construction of one to three wind turbines less than 200 feet in height, measured from the ground surface to the tip of the blade at its highest position, and having a cumulative rotor swept area no greater than 4,000 square feet provided:

1. – 7. (No change.)

8. In order to assess the impact of the operation of wind turbines authorized [under] **pursuant to** this coastal general permit on avian species and bats, post-construction monitoring shall be required for

the first 15 wind turbine developments constructed [under] **pursuant to** this coastal general permit, where the rotor swept area either individually or cumulatively on a site, exceeds 2,000 square feet. The monitoring shall be conducted for one full year beginning immediately after the wind turbines begin operation and shall consist of bird and bat carcass searches**,** as well as removal and efficiency trials. The monitoring methodology shall be approved by the Department prior to initiation and a complete report of findings submitted to the Department within three months of completion of the monitoring. The Department has prepared a technical manual [titled, "]**,** Technical Manual for Evaluating Wildlife Impacts of Wind Turbines Requiring Coastal Permits,["] which provides guidance on monitoring and reporting. The technical manual is available from the Department's Division of Land [Use Regulation] **Resource Protection** website [https://www.nj.gov/dep/landuse] **https://dep.nj.gov/wlm/maps/**.

(b) In accordance with N.J.A.C. 7:7-[3.8(b)]**3.7(b)**, the Department may add a special condition to an authorization [under] **pursuant to** this general permit, that would curtail the operation of the wind turbines, as directed by the Department pursuant to (b)1 below, during peak spring (April through June) and fall (August through November) migration periods when migrating birds or bats would likely be flying at the height of the rotor swept area or be present at seasonally high densities throughout the entire air column. Such curtailment shall not exceed 360 hours in a calendar year per turbine that occurs within the normal range of operation of the turbine. Curtailment measures include establishing a minimum wind speed that must be achieved prior to starting operations and shutting down operations during certain weather conditions or migratory events. Weather conditions that may necessitate curtailment include low wind speeds, low altitude cloud cover, strong storms, or approaching weather fronts favorable to bird or bat migration (such as southerly winds in the spring or northwest winds in the fall). Migratory events that may necessitate curtailment include high concentrations of migrating birds and bats using the coastal area (for example, high concentrations of shorebirds making daily flights between coastal feeding areas, such as mudflats, and roosting areas during spring migration).

1. (No change.)

7:7-6.26 General permit 26 – construction of wind turbines less than 250 feet in height and having a cumulative rotor swept area no greater than 20,000 square feet

(a) This general permit authorizes the construction of wind turbines less than 250 feet in height, measured from the ground surface to the tip of the blade at its highest position, and having a cumulative rotor swept area no greater than 20,000 square feet provided:

1. – 8. (No change.)

9. In order to assess the impact of the operation of wind turbines authorized [under] **pursuant to** this coastal general permit on avian species and bats, post-construction monitoring shall be required. The monitoring shall be conducted for one full year beginning immediately after the wind turbines begin operation and shall include bird and bat carcass searches as well as removal and efficiency trials. The monitoring methodology shall be approved by the Department prior to initiation and a complete report of findings submitted to the Department within three months of completion of the monitoring. The Department has prepared a technical manual [titled, "]**,** Technical Manual for Evaluating Wildlife Impacts of Wind Turbines Requiring Coastal Permits,["] which provides guidance on monitoring and reporting. The technical manual is available from the Department's Division of Land [Use Regulation] **Resource Protection** website**,** https://www.nj.gov/dep/landuse.

(b) (No change.)

7:7-6.33 General permit 33 - nature-based solutions research projects

(a) This general permit authorizes the restoration, creation, or enhancement of wetlands using techniques that will advance the level of knowledge regarding habitat creation, restoration, or

enhancement, and/or nature-based solution activities for the benefit of the environment and the residents of New Jersey.

(b) To be eligible for this general permit, the research project shall be designed and implemented by the Department, USFWS, NRCS, USACE, USEPA, NOAA's Restoration Center, or an environmental NGO, college, or university.

(c) The project shall:

1. Be 0.5 acres and minimized to the extent necessary for research results, unless it is demonstrated to the Department that the research requires a larger area, and in this case, shall not be more than one acre;

2. Be conducted for the sole purpose of research;

3. Be monitored for five years after completion of construction in order to evaluate the results of the project unless a different timeframe is specified in the approved permit. The Department may modify the frequency and/or duration of required reporting, if it determines that such modification is necessary to ensure the success of the project;

4. Not interfere with, or otherwise cause a hazard to, navigation;

5. Disturb the minimum acreage of special areas (as defined at N.J.A.C. 7:7-9) necessary to implement the project; and

6. The project shall not be located within a shellfish lease area authorized pursuant to N.J.S.A. 50:1-23. In certain limited situations where the nature-based solution is deemed necessary by the Department to protect the public interest or to protect upland structure or resources, the Department, in consultation with the New Jersey Shellfisheries Council, may modify the boundaries of the shellfish lease to accommodate a project.

(d) Within 60 calendar days after the habitat creation, restoration, or enhancement, and/or nature-based solution activities are completed, a construction completion report shall be submitted to the Department. The construction completion report shall include:

1. An as-built plan of the completed project showing grading, plantings (including species, size, and densities), and any structures;

2. Photographs of the completed project; and

3. A written description of challenges, successes of the project, and any lessons learned.

(e) Public access shall be provided in accordance with the lands and waters subject to the public trust rights rule, N.J.A.C. 7:7-9.48, and the public access rule, N.J.A.C. 7:7-16.9.

(f) If the project fails to meet the stated objectives, the permittee shall be responsible for restoration of the site to the maximum extent practicable, including the possible removal of structures, if any. In such case, the permittee shall provide a restoration plan for review and approval by the Department within 60 calendar days of the determination of failure by either the permittee or the Department. Within 60 days of Department approval, the restoration plan must be implemented.

SUBCHAPTER 7. LONG BRANCH REDEVELOPMENT ZONE PERMIT

7:7-7.1 Applicability; permit conditions

(a) – (f) (No change.)

(g) For any development within the Redevelopment Zone of the City of Long Branch that does not meet the conditions for approval [under] **pursuant to** this Long Branch Redevelopment Zone Permit, the applicant shall, pursuant to the applicable requirements of this chapter, either obtain from the Department**,** a CAFRA individual permit or meet the requirements for authorization [under] **pursuant to** a CAFRA general permit or [permit-by-rule] **permit-by-registration**.

7:7-7.2 Notification to the Department regarding developments requiring planning board approval

(a) The notification requirements for developments within the Redevelopment Zone of the City of Long Branch requiring Planning Board approval are as follows:

1. The Planning Board of the City of Long Branch shall provide notice to the Manager of the Bureau of Urban Growth and Redevelopment, Division of Land [Use Regulation] **Resource Protection**, at the address set forth at N.J.A.C. 7:7-1.6, that an application for a development within the Redevelopment Zone has been filed with the Planning Board as soon as the Planning Board determines [under] **pursuant to** the Municipal Land Use Law, N.J.S.A. 40:55D-10.3, that the application is complete for review. This notice shall include a copy of the application and of the development plan(s).

2. (No change.)

3. The applicant shall provide notice, [via] **through** certified mail, to the Manager of the Bureau of Urban Growth and Redevelopment, Division of Land [Use Regulation] **Resource Protection**, at the address set forth at N.J.A.C. 7:7-1.6, of the date of the Planning Board hearing on the development application at least 10 calendar days prior to the hearing.

4. The applicant shall provide notice of the preliminary and final Planning Board approvals to the Manager of the Bureau of Urban Growth and Redevelopment, Division of Land [Use Regulation] **Resource Protection**, at the address set forth at N.J.A.C. 7:7-1.6, within seven calendar days of the Planning Board's adoption of each memorializing resolution. This notice shall include a copy of the approved development plan(s) and of the resolution.

5. If the Department determines that the Long Branch Redevelopment Zone Permit [under] **pursuant to** this section is not applicable and that a CAFRA individual permit, general permit**,** or [permit-by-rule] **permit-by-registration** is instead required, the Department shall, within 45 calendar

days of its receipt [under] **pursuant to** (a)4 above of notice of preliminary and final [Planning Board] **planning board** approval, so notify the applicant and the [Planning Board] **planning board**.

7:7-7.3 Notification to the Department regarding developments not requiring planning board approval

(a) The notification requirements for developments within the Redevelopment Zone of the City of Long Branch not requiring [Planning Board] **planning board** approval are as follows:

1. The City Council or the Redevelopment Agency of the City of Long Branch shall provide notice to the Manager of the Bureau of Urban Growth and Redevelopment, Division of Land [Use Regulation] **Resource Protection**, at the address set forth at N.J.A.C. 7:7-1.6, that a development within the Redevelopment Zone is under consideration by the City Council or Redevelopment Agency 90 calendar days prior to the solicitation of bids for construction of the development. This notice shall include a copy of the development plan(s).

2. (No change.)

3. If the Department determines that the Long Branch Redevelopment Zone Permit [under] **pursuant to** this section is not applicable and that a CAFRA individual permit, general permit**,** or [permit-by-rule] **permit-by-registration** is instead required, the Department shall, within 90 calendar days of its receipt [under] **pursuant to** (a)1 above of notice that a development is under consideration by the City Council or the Redevelopment Agency, so notify the City Council or the Redevelopment Agency.

SUBCHAPTER 8. INDIVIDUAL PERMITS

7:7-8.1 Requirement to obtain an individual permit

A person shall obtain an individual permit [under] **pursuant to** this subchapter in order to undertake any activity that does not meet the requirements of a [permit-by-rule] **permit-by-registration**

pursuant to N.J.A.C. 7:7-4, an authorization [under] **pursuant to** a general permit-by-certification pursuant to N.J.A.C. 7:7-5, or an authorization [under] **pursuant to** a general permit pursuant to N.J.A.C. 7:7-6.

7:7-8.2 Duration of an individual permit

(a)-(b) (No change.)

(c) Except as provided [in] **at** (d), (e), [and] (f)**, and (g)** below, an individual permit for any activity landward of the mean high water line is valid for five years from the date of issuance.

(d)-(f) (No change.)

(g) All regulated activities authorized by an individual permit shall immediately cease if the permit expires, including any extension thereof [under] **pursuant to** N.J.A.C. 7:7-27.3. If a person intends to commence or continue regulated activities that had been authorized [under] **pursuant to** an individual permit that has expired, the person shall obtain a new individual permit [under] **pursuant to** this chapter authorizing the regulated activities.

1. (No change.)

2. If any regulated activities have occurred prior to the expiration of the **original** individual permit, the Department shall issue a new individual permit only if the project is revised**,** where feasible**,** to comply with the requirements of this chapter in effect when the application for the new individual permit is declared complete for review. In determining the feasibility of compliance with the requirements in effect at the time the application is declared complete for review, the Department shall consider the amount of construction that has been completed prior to the expiration of the original individual permit, the amount of reasonable financial investment**, in proportion to the project, and as determined by the Department,** that has been made in the original design consistent with the requirements applicable

[under] **pursuant to** the original individual permit, and whether continuing construction as approved under the original individual permit would have an adverse impact on the environment.

7:7-8.4 Obligations pursuant to the National Flood Insurance Program

(a) This section sets forth requirements that must be satisfied prior to commencing activities located within a FEMA-adopted regulatory floodway, or within a FEMA-adopted special flood hazard area with no regulatory floodway, in order to meet the requirements of FEMA's National Flood Insurance Program, pursuant to 44 CFR 60.3.

(b) The Department shall issue an individual permit for a regulated activity or project within the areas identified at (a) above, only if the applicant does one of the following, as appropriate:

1. Where activities are proposed within a FEMA-adopted regulatory floodway, and the proposed activities would result in no net increase (0.00 feet) to the 100-year flood elevation as depicted on FEMA flood mapping, the applicant shall provide an engineering certification to the local floodplain administrator having jurisdiction over the site confirming that the project will meet FEMA's no rise criteria;

2. Where activities are proposed within a FEMA-adopted regulatory floodway, and the proposed activities would result in a net increase (greater than 0.00 feet) to the 100-year flood elevation as depicted on FEMA flood mapping, the applicant shall apply for and obtain a Conditional Letter of Map Revision (CLOMR) from FEMA; or

3. Where activities are proposed within a FEMA-adopted special flood hazard area with no designated regulatory floodway, and the proposed activities would, when combined with all other existing and anticipated development within the flood hazard area, result in a cumulative increase of greater than 0.20 feet in the 100-year flood elevation depicted on FEMA flood mapping, the

applicant shall apply for and obtain a Conditional Letter of Map Revision (CLOMR) from FEMA.

(c) For the purposes of this section, hydraulic calculations shall be rounded to the nearest one-hundredth of a foot. For example, a change in the water surface profile of 0.005 feet or more would round up to 0.01 feet and, therefore, trigger the requirement to obtain a CLOMR for activities within a floodway pursuant to (b)2 above. Conversely, a change in the water surface profile of 0.004 feet would round down to 0.00 feet and, therefore, meet the no net increase standard at (b)1 above.

(d) Prior to the Department's approval of the individual permit, a copy of the no rise certification or approved CLOMR required pursuant to (b) above shall be uploaded to the Department's online portal at https://www.nj.gov/dep/online.

(e) Nothing in this section shall be construed to contradict or obviate the requirements of the National Flood Insurance Program.

SUBCHAPTER 9. SPECIAL AREAS

7:7-9.2 Shellfish habitat

(a) Shellfish habitat is defined as an estuarine bay or river bottom [which] **that** currently supports**,** or has a history of production for hard clams (*Mercenaria mercenaria*), soft clams (*Mya arenaria*), eastern oysters (*Crassostrea virginica*), bay scallops (*Argopecten irradians*), or blue mussels (*Mytilus edulis*), or otherwise listed below in this section. A shellfish habitat area is defined as an area [which] **that** meets one or more of the following criteria:

1. (No change.)

2. The area has a history of natural shellfish production according to data available to the New Jersey Bureau of Shellfisheries, or is depicted as having high or moderate commercial value in the Distribution of Shellfish Resources in Relation to the New Jersey Intracoastal Waterway (U.S.

Department of the Interior, 1963) and/or "Inventory of New Jersey's Estuarine Shellfish Resources" [(Division of Fish, Game and Wildlife, Bureau of Shellfisheries], 1983-present[)]. **The referenced mapping is available at https://www.nj.gov/dep/landuse/shellfish.html;**

3.- 4. (No change.)

(b) (No change.)

(c) The water located under any boat mooring facility (including docks and associated structures) is automatically condemned and reduced to "prohibited" status pursuant to N.J.A.C. 7:12-2.1(a)1ii. Development [which] **that** would result in the destruction, condemnation (downgrading of the shellfish growing water classification)**,** or contamination of shellfish habitat is prohibited, unless the proposed development is a dock, pier, or boat mooring, **installation of submerged cables or pipelines, construction and/or expansion of bridges,** expansion of an existing marina or construction of a new marina in limited infill situations, dredging, [living shoreline] **nature-based solution**, or a development required for national security constructed in accordance with (d)1, 3, 4, and 5, [(e),] (f), (g), (h), **(i), (j),** [and] (k)**, and (n)** below. In addition, the construction of a dock or pier or the one-time replacement or reconstruction of a legally existing functioning bulkhead outshore of the existing bulkhead when located in waters that have been classified as prohibited for the purpose of harvesting shellfish is acceptable in accordance with (d)2 and (i) below.

1. (No change.)

(d) (No change.)

(**e) Except as provided at (f) and (h) below, new dredging (defined at N.J.A.C. 7:7-12.7) within shellfish habitat is prohibited.**

(f) New dredging within shellfish habitat for the installation of submerged cables (defined at N.J.A.C. 7:7-12.21) submerged pipelines (defined at N.J.A.C. 7:7-12.15) or submerged cables (defined at N.J.A.C. 7:7-12.21) and/or the construction and/or expansion of bridges (defined at

N.J.A.C. 7:7-12.14) is discouraged. In cases where the Department considers the proposed use to be in the public interest despite its discouraged status, in addition to requiring that mitigating or compensating measures can be taken so that there is a net gain in quality and quantity of shellfish habitat in accordance with N.J.A.C. 7:7-1.5, the Department shall only approve new dredging within shellfish habitat if:

1. There is no practicable or feasible alternative alignment that avoids impacts to shellfish habitat;

2. Impacts to shellfish habitat are minimized to the maximum extent practicable, including, where feasible, cable co-location within existing cable corridors; and

3. Mitigation for the condemnation and/or destruction of shellfish habitat or other impacts to the marine ecosystem is provided in accordance with N.J.A.C. 7:7-17.

(g) Except for the installation of submerged cables (defined at N.J.A.C. 7:7-12.21), disturbance to existing oyster reef shellfish habitats is discouraged. The installation of submerged cables is conditionally acceptable; provided:

1. There is no practicable or feasible alternate alignment, including the potential for cable co-location within existing cable corridors; and

2. Mitigation for the condemnation of shellfish habitat or other impacts to the marine ecosystem is provided in accordance with N.J.A.C. 7:7-17.

[(e)] **(h)** New dredging [(defined at N.J.A.C. 7:7-12.7)] within shellfish habitat [is prohibited, except when it is necessary] to maintain the use of public launching facilities (ramps) with 25 or more trailer parking spaces or marina facilities with 25 or more dockage units, consisting of either dry dock storage or wet slips[. New dredging for existing marinas or for the expansion of such facilities is conditionally acceptable] **is acceptable;** provided that:

1. (No change.)

2. The marina provides [on site] **onsite** restrooms, a marine sanitation disposal device**,** and pumpout station; and

3. (No change.)

Recodify existing (f) - (g) as **(i) - (j)** (No change in text.)

[(h)] **(k)** The establishment of a [living shoreline] **nature-based solution project** in shellfish habitat to address the loss of vegetated shorelines and habitat in the littoral zone is conditionally acceptable provided the [living shoreline] **project** complies with N.J.A.C. 7:7-12.23.

Recodify existing (i) - (l) as **(l) - (o)** (No change in text.)

[(m)] **(p)** Rationale: [Estuarine] **Some species of estuarine** shellfish **(primarily hard clams and oysters)** are harvested [by] **for** both commercial and recreational [shellfishermen] **purposes**. Hard clams are the most sought after species harvested as they occur in [all] **most** estuarine waters. Oysters, bay scallops, and soft clams are predominantly harvested [by commercial fishermen] **commercially**. **A significant oyster resource located in the Delaware Bay supports a considerable and sustainable commercial fishery.** In [2008] **2019**, the commercial dockside landings**, including estimated shellfish aquaculture production from leases,** for estuarine shellfish in New Jersey were valued at approximately [$6.63] **$17.19** million ([United States Department of Agriculture] **best available data accessible to the New Jersey Marine Fisheries Administration**). [Shellfish are] **The total economic impact for shellfish harvest is** typically [worth about] **calculated at approximately** six times the dockside value**. Based on this multiplier, the total value** to the State's economy through processing, distribution, and retail **is approximately $103 million**.

In addition to being a harvestable resource, shellfish play an important role in the overall ecology of the estuary [and are an important forage food source]**, which provides critical spawning, nursery, and foraging ecosystem services** for a variety of finfish species, crabs, and migratory waterfowl. Shellfish themselves are **efficient** filter feeders and are, therefore, important for maintaining or improving

water quality. **Additionally, some shellfish species, such as oysters, are reef formers and can play an unseen role in attenuating and dissipating wave energy and providing structural integrity to soft bottom habitats.**

There is an inherent conflict between the protection of shellfish habitat and water quality and boating related activities, such as mooring and dredging, though both are important water dependent activities in New Jersey. Boating related activities may affect shellfish habitat and the harvestability of shellfish. Mooring facilities can be a source of pollution with a high potential for improper disposal of human waste. Shellfish that occur in or near marinas and docks are unsafe for human consumption due to the potential health threats associated with the pollution generated by the leaching of toxic chemicals and heavy metals from waterfront construction materials and boat-related pollutants, and human waste disposed **of** in close proximity to these marinas and docks. Bivalve shellfish readily bioaccumulate and concentrate toxic substances and pathogenic microorganisms within their tissue, which poses a human health risk when contaminated shellfish is consumed. Due to the potential health threats associated with shellfish grown in polluted waters, shellfish are prohibited from being harvested for human consumption near mooring facilities.

Dredging activities have a negative effect on the recruitment of shellfish by changing the composition of the substrate. Dredging disturbs and degrades shellfish habitat by adversely altering the water quality, salinity regime, substrate characteristics, natural water circulation pattern, and natural functioning of the shellfish habitat. **Accordingly, new dredging is prohibited in shellfish habitat, except for the installation of submerged cables and to maintain large scale marinas and public launching facilities.**

New dredging for the installation of submerged cables is discouraged, but may be permissible where the submerged cable is in the public interest, there is no other practicable or feasible alignment, and measures are implemented to minimize and mitigate for impacts to the

shellfish habitat. For example, certain renewable energy facilities, such as offshore wind and associated infrastructure, are in the public interest and would, therefore, be acceptable; provided measures are implemented to minimize and compensate for impacts to shellfish habitat, such as providing a monetary contribution to the Department's dedicated account for shellfish habitat mitigation. Accordingly, the rule balances the protection of coastal resources with the furtherance of the State's clean energy and emissions reduction goals through development of renewable energy facilities described below.

New Jersey has been working to advance the sustainable development of offshore wind energy generation since the inception of the Blue-Ribbon Panel on Development of Wind Turbine Facilities in Coastal Waters in 2004. This effort has included two years of ecological baseline studies that began in 2008, followed by the Offshore Wind Economic Development Act in 2010 (P.L. 2010, c. 57) and Governor Murphy's Executive Order No. 8 (2018). This executive order directed the New Jersey Board of Public Utilities, and all agencies with responsibility pursuant to the Offshore Wind Economic Development Act, to "take all necessary action" to fully implement the act and begin the process of moving New Jersey towards a goal of 3,500 megawatts of offshore wind energy generation by the year 2030. To further New Jersey's clean energy goals, Governor Murphy's Executive Order No. 28 (2018) called for 100 percent clean energy by 2050. To fulfill this commitment, and to meet the Global Warming Response Act mandate of reducing State greenhouse gas emissions by 80 percent by 2050, known as the 80x50 goal, the 2019 New Jersey Energy Master Plan outlines strategies and implementation plans, which include accelerating the development of offshore wind. To implement the Energy Management Plan's offshore wind strategy, Executive Order No. 92 (2019) increased the offshore wind energy goal to 7,500 megawatts by the year 2035.

Oyster reef shellfish habitat is found in New Jersey's estuarine waters and plays a significant ecological role and forms a distinct community, which is different than the surrounding seabed. The term oyster reef shellfish habitat includes living oysters and/or dead oyster shell accumulations. Numerous marine organisms, such as bryozoans, hydroids, sponges, barnacles, ascidians, tube-building worms, and other bivalves attach to oysters and the associated shell structure of the reefs. These fouling organisms, in turn, attract various crustaceans and small fish. This delivers a concentrated prey source for many recreationally and commercially sought finfish species, such as the weakfish, striped bass, croaker, and black drum. Additionally, many marine species use the oyster community and the interstices of the oyster reef for foraging and spawning habitat. Accordingly, management and policy efforts to bolster these habitats not only provide major economic benefits for harvesters and local communities but add to the overall ecology of estuaries by increasing habitat and faunal diversity, while, in some cases, potentially improving water quality by reducing particulates and shifting nutrient dynamics. Accordingly, disturbance to oyster reef shellfish habitat is prohibited, except for the installation of submerged cables in cases where there is no practicable or feasible alternative alignment, including the potential for cable co-location within existing cable corridors and mitigation for the condemnation and/or destruction of shellfish habitat or other impacts to the marine ecosystem is provided in accordance with N.J.A.C. 7:7-17, Mitigation.

Motor fuels can be released into the aquatic environment [via] **through** the operation of boat engines, fueling operations, and bilge pumping. The effects of petroleum hydrocarbons on fish and shellfish include direct lethal toxicity, sublethal disruption of physiology and/or behavior, bioaccumulation, and development of an unpleasant taste to edible species. Motor fuels and exhaust can contain lead, cadmium, zinc, and other heavy metals. Heavy metals have been shown to cause suppression of growth or death of eggs, embryos, and larvae of hard clams. In addition, such

contaminants are known to cause a variety of sublethal effects, including inhibited feeding behavior, retarded shell growth, and depression of cardiovascular function and respiration in various species of shellfish.

Boat maintenance operations may also have adverse impacts to estuarine organisms. Some detergents used to wash boats can be toxic to fish and invertebrates and may contribute to elevated nutrient levels, particularly of phosphorous. Toxins from various antifouling paints are harmful to shellfish and other invertebrates.

This rule intends to strike a balance between protection of shellfish habitat and recreational boating-related uses by allowing maintenance dredging in shellfish habitats where an area has already been previously dredged and by allowing new dredging at existing public boat launching facilities and major mooring/docking facilities. The dredging of larger marinas and boat launching facilities will allow the greatest number of boaters access to the water areas with the least amount of habitat disturbances and degradation. This is partly because larger marinas are more likely than smaller ones to generate sufficient demand for a full service marina, and are required to provide restrooms, and a pumpout facility, as a condition for the dredging approval if they did not already have them. Dredging is allowed at larger marinas and boat launching facilities because their highly concentrated use pattern minimizes the overall physical space required for dockage/mooring area and channel maintenance. Additionally, direct disposal of human waste into the water is expected to be reduced when these better equipped marina facilities are equipped with pumpout facilities. Therefore, maintenance of these facilities is considered acceptable.

Marinas have infrastructure necessary to support recreational boating including pumpout facilities. The State has seen a decrease in the number of marina facilities through their conversion to other non-water dependent uses. The Marine Trades Association of New Jersey has provided a report based on information provided from marine businesses which indicates that over 500 boat slips and 17 marinas have been lost as of 2011. Not only does this result in a loss of slips available to the public, it

results in the loss of jobs, revenue**,** and marina services. To preserve existing marinas and the necessary services they provide, encourage new marinas and ensure there is a sufficient amount of boat slips available to the public, expansion of existing commercial marinas and construction of new "infill" marinas in limited situations is acceptable where mitigation through the minimization of the area covered by structures, the use of non-polluting materials, the prohibition of dredging**,** and the provision of a monetary contribution to the Department's dedicated account for shellfish habitat mitigation is provided.

In accordance with N.J.A.C. 7:7-17.9, mitigation for impacts to shellfish habitat and the marine ecosystem associated with the construction of a dock, pier, mooring, or marina include the recording of a conservation restriction and a monetary contribution to the Department's dedicated account for shellfish habitat mitigation. The conservation restriction is intended to reduce any future impacts to the marine ecosystem by prohibiting the construction of a shoreline protection structure other than stone rip-rap or other sloped revetments on an unbulkheaded lot, or the replacement, reconstruction, or rehabilitation of an existing bulkhead with anything other than non-polluting materials. In addition, the monetary contribution to the Department's dedicated fund for shellfish habitat mitigation and restoration is based on the area of shellfish habitat covered by planned structures and mooring areas, the documented shellfish density supported by the local habitat, and the commercial value of the resource. This contribution is intended to ensure that adverse impacts to the shellfish resource are minimized and habitat improvements are promoted in areas outside of the impacted area through the use of the mitigation funds. In 2016, the Assistant Commissioners of Land Use Management **(now Watershed and Land Management)** and Natural and Historic Resources signed a Memorandum of Understanding that establishes a framework for the use and management of funds from the Department's dedicated account for shellfish habitat mitigation.

[Living shorelines are a shoreline management practice that addresses the loss of vegetated shorelines by providing protection, restoration, or enhancement of these habitats] **Nature-based solution**

projects are intended to protect, restore, or enhance shorelines, wetlands, and in-water areas utilizing natural features and processes to address erosion and flooding issues, and to restore or create ecological habitats.

Nature-based solution projects include, but are not limited to, living shorelines; marsh restoration/enhancement through the strategic placement of material (sediment or the beneficial use of dredged material) on the marsh; elevation of the wetland platform using methods, such as the beneficial use of dredged material placement, or through the strategic placement of material in the shallow water areas adjacent to the marsh to allow coastal processes to naturally move the material onto the marsh; or using material to create a shallow submerged habitat in open water for habitat creation/enhancement or for wave energy dissipation.

[The establishment of living shorelines is] **Nature-based solution projects are** conditionally acceptable provided the [living shoreline] activities disturb the minimum [amount] **acreage** of special areas necessary to successfully implement the restoration, creation, enhancement, or protection of habitat, water quality functions, and values of wetlands, wetland buffers, and open water areas. This may include a decrease in the existing special area or the conversion of one special area to another where it is determined that such changes are environmentally beneficial.

The one-time replacement, reconstruction, or renovation of a legally-existing bulkhead outshore of the existing bulkhead within waters classified as prohibited for harvesting shellfish is conditionally acceptable where the bulkhead is constructed of non-polluting materials and is located within 18 inches of the existing bulkhead, except where the replacement bulkhead is constructed of a corrugated material**,** in which case**,** it shall be located no more than 24 inches from the existing bulkhead. Non-polluting materials are required to minimize impacts to water quality. These requirements minimize impacts to water quality and the amount of substrate impacted by the bulkhead. The replacement or reconstruction of a bulkhead outshore of the existing bulkhead is allowed in waters classified as prohibited for harvesting

shellfish in order to encourage the elimination of any polluting material in shellfish habitat and the correction or prevention of erosion, and because, in some cases, replacement in kind (requiring the removal of the existing bulkhead which in most, if not all, instances will be constructed of a treated material that is not considered to be non-polluting) will have a detrimental impact to water quality through the sloughing of soil that has been in contact with the bulkhead sheathing that is being replaced. The replacement or reconstruction is limited to one time only in order to limit the encroachment into shellfish habitat.

The Navesink [River], Shrewsbury [River], and Manasquan River**s** (upstream of the Route 35 Bridge), and St. George's Thorofare contain highly productive shellfish habitat. The Navesink and Shrewsbury Rivers are unique in that only three estuaries within the State have commercial soft clam densities. St. George's Thorofare is a commercially and recreationally valuable area that contains a high hard clam density according to the 1985 Shellfish inventory conducted by the Division of Fish[, Game] and Wildlife. In 1985, this 107-acre area was estimated to contain 6.2 million hard clams. The high abundance of hard clams, together with the fact that this waterbody is poorly flushed**,** makes St. George's Thorofare a critical area that is sensitive to any potential pollution activities. Compliance with specific standards for boat mooring facilities with five or more slips within these watercourses is required so as to not adversely impact this highly productive shellfish habitat.

Federal, State, and local officials have recognized the importance of these rivers as shellfish habitat and the need to protect their water quality. As a result, pollution control programs have been formed to protect these rivers. For example, the Navesink River Shellfish Protection Program represents a multi-agency pollution control program. On August 21, 1986, a Memorandum of Understanding was signed by the New Jersey Departments of Environmental Protection and Agriculture, the United States Department of Agriculture, and the USEPA. The memorandum serves to "... formalize our commitment to the Navesink River Water Control Shellfish Protection Program, its primary goal of improving water

quality in the Navesink River watershed to a point at which the river's full shellfishery and recreational potential may be attained." Water quality monitoring during 6 years of implementation of pollution controls (1987-93) has shown significant reductions in bacterial contamination of the Navesink River, to the point where, after 25 years of being closed to shellfish harvest, the shellfish classification of the Lower Navesink River was upgraded to seasonally approved. Other parts of the river are classified as special restricted. The Shrewsbury River is a unique shellfish habitat in that it is only one of the three estuaries in New Jersey to have commercial densities of soft clams. Studies indicate that the Shrewsbury River is hydrologically connected to the Navesink River. As such, the Shrewsbury River was included as part of the "Navesink River Shellfish Protection Program." In addition, the Monmouth/Ocean Alliance to Enhance the Manasquan River was formed by Monmouth and Ocean Counties and the New Jersey Department of Environmental Protection to identify causes of shellfish water degradation and plan solutions for improved water quality and uses in the Manasquan River. The Alliance requested that the Department ask USEPA to designate the Manasquan River Estuary a No Discharge Zone pursuant to the Federal Clean Water Act. The Department sought such a designation from USEPA**,** and the Manasquan River Estuary was officially declared a No Discharge Zone by USEPA in June 1998.

7:7-9.6 Submerged vegetation habitat

(a) (No change.)

(b) Development in submerged vegetation habitat is prohibited except for the following:

1.-5. (No change.)

6. Construction of a single noncommercial dock or pier provided that:

i.-v. (No change.)

vi. A minimum water depth of four feet at mean low water must be present [in the area where the boats will be moored] **in the water areas under, and adjacent to, the most waterward 10 feet of the dock or pier**; and

vii. (No change.)

7. (No change.)

8. The establishment of a [living shoreline] **nature-based solution project** in submerged vegetation habitat to address the loss of vegetated shoreline**,** and habitat in the littoral zone is conditionally acceptable provided the [living shoreline] **project** complies with N.J.A.C. 7:7-12.23.

(c)-(d) (No change.)

(e) Rationale: New Jersey's estuarine waters are relatively shallow, rich in nutrients**,** and highly productive. The submerged vegetation of these shallow habitats serve important functions as suspended sediment traps, important winter forage for migratory waterfowl, nursery areas for juvenile fin fish, bay scallops**,** and blue crabs, and by nourishing fishery resources through primary biological productivity (synthesis of basic organic material) through detrital food webs in a similar manner to salt marsh emergent *Spartina* cord grasses. In addition, seagrasses absorb wave energy and root networks help stabilize silty bay bottoms. The value of seagrasses was dramatically illustrated during the [1930's] **1930s** when a disease epidemic virtually eliminated eelgrass from the eastern U.S. Atlantic [ocean] **Ocean** coastline. The number of finfish, shellfish, and waterfowl drastically decreased, threatening their survival. The oyster industry of the Atlantic coast was ruined. Bays became choked with silt and new mudflats were formed.

Most of the submerged vegetation species, in particular eelgrass and widgeon grass, grow in patches which often cluster together. This growth pattern forms a vegetative community which migrates from year to year about shoal areas. Disturbances to the substrate such as dredging usually result in permanent habitat destruction and loss. In shallow areas, propeller action may severely damage the roots

and churn up the substrate and increase turbidity, damaging or destroying the plants**,** and reducing their productivity. Other activities that can also have a negative impact on the plants and/or habitat include wake actions, upland runoff, and shading from structures.

This rule aims to protect submerged vegetation as a resource. Areas where submerged aquatic vegetation grows or has been known to grow are identified as habitat areas which currently or potentially could support the submerged vegetation plant communities. Dredging of the habitat area is permitted for maintaining the depth of existing State and Federal channels since the navigability of these channels is essential to commerce and navigation. New and maintenance dredging to existing large marinas and public launching facilities provides the greatest number of boaters access to water areas with the least amount of disturbance to the habitat area. Limited boating related uses are also permitted in habitat areas with greater than four feet of water depth, where impacts from boating are not likely to be destructive to the plants or their habitat environment.

New Jersey's coastal environment is dynamic, and shaped by natural forces such as wind, waves, and storms. Shorelines lost due to erosion eliminate intertidal habitat, reduce the amount of sandy beach, and decrease the amount of organic matter necessary to maintain tidal wetlands. This erosion results in the degradation of the coastal environment through impacts to natural habitats, such as tidal wetlands and spawning grounds. Coastal states are seeking [natural] **nature-based** solutions[, such as the creation of living shorelines, to address erosion as an alternative that adds diversity to other shore protection measures. Living shorelines are a shoreline management practice that addresses erosion by providing protection, restoration, or enhancement of vegetated shoreline habitats. The establishment of living shorelines is] **to reduce shoreline erosion, restore eroded wetlands, and/or create habitats through restoration and enhancement of vegetated shorelines, beaches, dunes, and wetlands. Nature-based solution projects include, but are not limited to, establishing living shorelines, elevating the wetland platform through the placement of dredged material, placing dredged material adjacent to the**

wetland platform; or strategically placing sediment in water areas to allow natural coastal processes to move the material onto the marsh, to create a shallow submerged habitat adjacent to the platform, or to dissipate wave energy.

Nature-based solution projects are conditionally acceptable**,** provided the [living shoreline] activities disturb the minimum amount of special areas necessary to successfully implement the restoration, creation, enhancement, or protection of habitat, water quality functions, and values of wetlands, wetland buffers, and open water areas. This may include a decrease in the existing special area or the conversion of one special area to another where it is determined that such changes are environmentally beneficial.

7:7-9.15 Intertidal and subtidal shallows

(a) – (f) (No change.)

(g) The establishment of a [living shoreline] **nature-based solution project** in intertidal and subtidal shallows to address the loss of vegetated shorelines and habitat in the littoral zone is conditionally acceptable provided the [living shoreline] **project** complies with N.J.A.C. 7:7-12.23.

(h) - (i) (No change.)

(j) Rationale: Intertidal and subtidal shallows play a critical role in estuarine ecosystems. They are a land-water ecotone, or ecological edge where many material and energy exchanges between land and water take place. They are critical habitats for many benthic organisms and are critical forage areas for fishes and many migrant waterfowl. The sediments laid down in intertidal and subtidal flats contain much organic detritus from decaying land and water's edge vegetation, and the food webs in these areas are an important link in the maintenance of estuarine productivity. Preservation is, therefore, the intent of these rules, with limited exceptions to allow for needed water-dependent uses and submerged

infrastructure. In most cases, mitigation is required to offset habitat losses where new disturbance of intertidal and subtidal shallows is permitted.

New Jersey's coastal environment is dynamic and shaped by natural forces such as wind, waves, and storms. Shorelines lost due to erosion eliminate intertidal habitat, reduce the amount of sandy beach, and decrease the amount of organic matter necessary to maintain tidal wetlands. This results in the degradation of the coastal environment through impacts to natural habitats, such as tidal wetlands, intertidal and subtidal shallows, and spawning grounds. Coastal states are seeking [natural] **nature-based** solutions[, such as the creation of living shorelines, to address erosion as an alternative that adds diversity to other shore protection measures. Living shorelines are a shoreline management practice that addresses erosion by providing protection, restoration or enhancement of vegetated shoreline habitats.] **to reduce shoreline erosion, restore eroded wetlands, and create habitats. This is accomplished through restoration and enhancement of habitats, including, but not limited to, vegetated shorelines, beaches, dunes, and wetlands and may include establishing living shorelines, elevating the wetland platform through the placement of dredged material, placing dredged material adjacent to the wetland platform; or strategically placing sediment in water areas to allow natural coastal processes to move the material onto the marsh, create a shallow submerged habitat adjacent to the platform, or to dissipate wave energy.**

7:7-9.16 Dunes

(a) A dune is a wind or wave deposited or man-made formation of sand (mound or ridge), that lies generally parallel to, and landward of, the beach and the foot of the most inland dune slope. "Dune" includes the foredune, secondary or tertiary dune ridges and mounds, and all landward dune ridges and mounds, as well as man-made dunes, where they exist.

1. – 2. (No change.)

3. The presence of engineered dunes created for the purpose of shore protection shall not diminish the importance of any other dune areas.

(b) – (d) (No change.)

(e) Rationale: Ocean and bayfront dunes are an irreplaceable physical feature of the natural environment possessing outstanding geological, recreational, scenic, and protective value. Protection and preservation in a natural state is vital to this and succeeding generations of citizens of the State and the Nation. The dunes are a dynamic migrating natural phenomenon that helps protect lives and property in adjacent landward areas, and buffers barrier islands and barrier beach spits from the effects of major natural coastal hazards such as hurricanes, storms, flooding, and erosion. Natural dune systems also help promote wide sandy beaches and provide important habitats for wildlife species.

Extensive destruction of dunes has taken place in this century along much of the coast. This disruption of the natural processes of the beach and dune system has led to severe erosion of some beach areas; jeopardized the safety of existing structures on and behind the remaining dunes and upland of the beaches; increased the need to manage development in shorefront areas no longer protected by dunes; interfered with the sand balance that is so essential for recreational beaches and the coastal resort economy; necessitated increased public expenditures by citizens of the entire State for shore protection structures and programs; and increased the likelihood of major losses of life and property from flooding and storm surges.

The rule encourages the natural functioning of the dune system and encourages restoration of destroyed dunes, to protect and enhance the coastal beach dune areas, and to devote these precious areas to only those limited land uses which preserve, protect, and enhance the natural environment of the dynamic dune system.

The Department strongly supports the creation, enhancement, and maintenance of coastal sand dunes as cost-effective shore protection. The value of dunes in protecting the densely developed

oceanfront from coastal storm hazards has been well documented by the Department, the Federal Emergency Management Agency, the Army Corps of Engineers, and others. In fact, the New Jersey Hazard Mitigation Plan (Section 406) specifically identifies dune creation and enhancement as a primary storm hazard mitigation strategy. A study from the Coastal Research Center at the Richard Stockton College of New Jersey (Barone, D.A., McKenna, K. K., and S.C. Farrell, 2014, Hurricane Sandy: Beach-dune performance at New Jersey Beach Profile Network sites) concluded that Federally designed shore protection projects that included engineered dunes provided protection to landward structures during Superstorm Sandy. The communities that suffered the greatest damages from Superstorm Sandy were those where dunes were nonexistent, or where the elevations of dunes and beach berms were low or beach widths were narrow.

In addition to the benefits that dunes provide as a natural form of shore protection, dunes often provide important habitat for numerous species of plants and wildlife. Moreover, dunes are important aesthetic resources that complement and promote tourism along the New Jersey shore. With large quantities of sand being placed on New Jersey beaches as part of the State-Federal shore protection program, opportunities to restore beach and dune habitats and associated biodiversity have increased tremendously. Beach nourishment provides the basis for restoration of coastal landforms (beaches and dunes) and biota, and rediscovery of lost environmental heritage. A large variety of species inhabit coastal dune environments, including plants (beachgrass, beach plum, beach pea, goldenrod, bayberry, juniper, cedar, virginia creeper) and animals (sparrows, warblers, waxwings, kinglets, tanagers, tiger beetles, burrowing spiders, grasshoppers, butterflies).

The natural and aesthetic values of habitat restoration are an important byproduct of the State's beach and dune restoration efforts. Dunes can evolve as natural dynamic landforms that restore an important component of New Jersey's coastal heritage, while providing significant areas of vegetated habitat for coastal biota. The restoration of the natural and beneficial functions of beaches and dunes has

become the cornerstone of New Jersey's shore protection program. These benefits are described in Nordstrom and Mauriello (2001), Restoring and Maintaining Naturally Functioning Landforms and Biota on Intensively Developed Barrier Islands under a No-Retreat Scenario. In addition, dune restoration for the purpose of providing wildlife habitat and scenic amenities is consistent with the goals of CAFRA to preserve and enhance the unique environmental and aesthetic resources of the coastal area.

Typically, beach nourishment projects include the construction of dunes for shore protection and/or storm damage reduction purposes. These engineered dunes are designed to a specific height, width, slope, and length, in accordance with a dune design template. In some instances, the engineered dunes may capture sand and grow beyond their design template. In these cases, maintenance of the dune to its design template may be necessary to minimize the effects that an influx of sand can have on infrastructure, access, and public safety. This excess sand can then be utilized along sections of dune or upper beach berm that are below the design template. Engineered dunes are designed to provide storm damage reduction in addition to the beach berm, and are subject to the influx of windblown sand from the beach berm as well as erosion from wave and tidal current activity. Engineered dunes may be supplemented during periodic renourishment cycles to replenish lost material to maintain the overall design template. Maintenance activities between renourishment cycles can potentially reduce the volume of material needed when accreted sand is transferred from areas that have expanded above the design template to areas that have experienced increased erosion. However, maintenance of the engineered dune must not reduce any part of the dune to less than the dune design template.

Beach nourishment and the creation of engineered dunes are essential for storm protection to upland properties and infrastructure; however, the creation of this engineered system should not undervalue the current and future importance of existing dune areas that are not part of this engineered design. The continued protection of this system is critical for the protection of upland

structures and infrastructure, as climate change induced sea level rise and associated storms continue to push this system and its functions and protection of properties landward.

This dynamic environment continues to change based upon factors, such as sea level rise and the continued loss of sand that will ultimately erode the materials of these engineered systems. These areas have engineered systems because they are already suffering from a negative sediment budget, and this lack of available sediment will be exacerbated by the impacts of sea-level rise and more intense storm events/surge and the resulting increased erosion of the existing constructed system. As sea level rises, the availability of upland areas for the construction of engineered systems will become more challenging. Wind transport of sediment and sediment storage will continue to occur within areas landward and outside of this constructed environment, a process which is typically associated with natural barrier island evolution and resilience. This area will become a next line of defense as an accommodation zone accumulating and storing wind transported sediments resulting from the increased frequency of storms and the current engineered system, and continuing to form higher elevations that protect against storm surge and breaching. Therefore, it is essential that these areas continue to be protected to allow the natural dune systems to provide valuable functions, regardless of whether an engineered dune is present. As the consequences of sea level rise are realized, it becomes more important to protect and support these areas to ultimately sustain the migrating system's values and functions, including the geomorphological character and function, and the storm protection and wildlife habitat benefits that they provide.

7:7-9.18 Coastal high hazard areas

(a) – (b) (No change.)

(c) Residential development landward of the mean high water line in coastal high hazard areas is conditionally acceptable provided the development is:

1. A single-family home or duplex infill development that meets the standards [of] **at** N.J.A.C. 7:7-15.2(e) or (f) and complies with Federal flood reduction standards at 44 CFR Part 60 and the UCC; [or]

2. Located in Atlantic City or in a special urban area within the Hudson River Waterfront Area**,** as described at N.J.A.C. 7:7-9.46(a)2, complies with the special urban area rule and Hudson River Waterfront rules, N.J.A.C. 7:7-9.41 and 9.46, as applicable, the Federal flood reduction standards at 44 CFR Part 60, and the UCC[.]**; or**

3. A cabana; provided the development complies with (h) below.

(d) – (g) (No change.)

(h) Temporary and seasonal beach-use related structures and cabanas are conditionally acceptable in coastal high hazard areas provided:

1. The structures remain in place only from May 1 through October 31;

2. The structures are immediately removed from the coastal high hazard area and relocated to a secure location any time the National Weather Service issues a severe weather alert for the municipality in which the development is located, for significant weather events, such as coastal flood warning, extreme wind warning, hurricane warning, tornado warning, or tropical storm warning, that would directly affect structures left on the beach, until the severe weather alert is lifted. To demonstrate that this requirement is met, the applicant must submit for the Department's review and approval an Emergency Structure Removal Plan consisting of the following:

i. A detailed description of how the structures will be removed including a timeline showing that the removal can be accomplished within 24 hours of a severe weather alert;

ii. The identity and contact information of parties responsible for removal and relocation of the structures and proof of agreement for such services;

iii. A list of equipment that will be needed and confirmation of the responsible parties' access to such equipment that accounts for competing needs during storm events; and

iv. The location to which the structures will be moved during severe weather alerts;

3. The structures shall not be connected to underground utilities;

4. The structures are not located on a dune, coastal bluff, or in a wetland;

5. Placement of the structures does not include the excavation, grading, or filling of a beach or installation of permanent footings, or anchoring and support piles;

6. The structures shall have no adverse impact on special areas defined at N.J.A.C. 7:7-9;

7. The structures are located on the most landward portion of the beach and shall occupy a maximum of 33 percent of the total width of the beach berm area;

8. The total area of beach coverage, including the structures and support facilities, shall not exceed one acre. However, the Department reserves the right to limit the coverage to a greater extent due to prevailing beach conditions, public access, and safety concerns;

9. The structures are located a minimum of 50 feet from any wetlands;

10. The structures do not unreasonably conflict with ocean views or other beach uses;

11. The beach and structures are open to the public;

12. Public access shall be provided in accordance with the lands and waters subject to public trust rights rule, N.J.A.C. 7:7-9.48 and the public access rule, N.J.A.C. 7:7-16.9; and

13. For each year of the duration of the permit, the permittee shall submit on or before April 1st to the Department for its review and approval one copy of a revised site plan, dated no more than 30 days prior to the submittal, including supplemental documents, as appropriate, showing the current location of the beach berm area and compliance with (h)1 through 12 above. Based upon review of this information, the Department may approve the structures as proposed or require modifications to the footprint or design of the structures to comply with these standards.

Recodify existing (h) - (i) as **(i) - (j)** (No change in text.)

7:7-9.22 Beaches

(a) (No change.)

(b) Development is prohibited on beaches, except for development that has no prudent or feasible alternative in an area other than a beach, and that will not cause significant adverse long-term impacts to the natural functioning of the beach and dune system, either individually or in combination with other existing or proposed structures, land disturbances**,** or activities. Examples of acceptable activities are:

1.- 5. (No change.)

6. Linear development which meets the rule on location of linear development, N.J.A.C. 7:7-14.1**, except that sanitary sewer and utility lines are not permissible except temporary, seasonal sewer lines in Atlantic City that meet the requirements at N.J.A.C. 7:7-9.47(l)**;

7. – 10. (No change.)

(c) – (d) (No change.)

7:7-9.25 Flood hazard areas

(a) Flood hazard areas are areas subject to flooding [from the flood hazard area design flood] **to the climate-adjusted flood elevation**, as defined by the Department [under] **pursuant to** the Flood Hazard Area Control Act rules at N.J.A.C. 7:13. Flood hazard areas include those areas mapped as such by the Department, areas defined or delineated as an A or a V zone by FEMA, and any unmapped areas [subject to flooding by the flood hazard area design flood] **that lie below the climate-adjusted flood elevation**. Flood hazard areas are subject to either tidal or fluvial flooding and the extent of flood hazard areas shall be determined or calculated in accordance with the procedures at N.J.A.C. 7:13-3.

(b) – (e) (No change.)

(f) Development in flood hazard areas shall conform with the applicable design and construction standards of the following:

1. The Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq., and implementing rules at N.J.A.C. 7:13, except in lands regulated [under] **pursuant to** the Wetlands Act of 1970, N.J.S.A. 13:9A-1 et seq., pursuant to N.J.S.A. 58:16A-60**, or unless exempted at N.J.A.C. 7:13-2.5**;

2. – 3. (No change.)

(g) – (j) (No change.)

7:7-9.26 Riparian zones

(a) – (g) (No change.)

(h) Development in riparian zones shall conform with the requirements of the Flood Hazard Area Control Act Rules for a [permit-by-rule] **permit-by-registration** at N.J.A.C. 7:13-6 and 7, a general permit-by-certification at N.J.A.C. 7:13-6 and 8, a general permit at N.J.A.C. 7:13-6 and 9, or an individual permit at N.J.A.C. 7:13-10, 11, and 12, as applicable**, unless exempted at N.J.A.C. 7:13-2.5**.

(i) – (k) (No change.)

7:7-9.27 Wetlands

(a) Wetlands or wetland means an area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that**,** under normal circumstances**,** does support, a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation.

1. Wetlands areas are identified and mapped on the following:

i. – ii. (No change.)

iii. Freshwater wetland maps prepared by DEP at a scale of 1:12,000 (generalized locations only).

Note: Maps referenced [in] **at** (a)1ii above are available from the Division of Land [Use Regulation] **Resource Protection** at the address set forth at N.J.A.C. 7:7-1.6, and those referenced [in] **at** (a)1iii above are available through NJ-GeoWeb (see https://www.nj.gov/dep/gis/geowebsplash.htm).

2. – 4. (No change.)

(b) (No change.)

(c) Except as provided at (d) **or (e)** below, development of all kinds in all other wetlands not defined in (b) above is prohibited unless the Department can find that the proposed development meets the following four conditions:

1. - 4. (No change.)

(d) [The establishment of a living shoreline in wetlands to address the loss of vegetated shorelines and habitat in the littoral zone is] **The construction of a habitat creation, restoration, or enhancement project using nature-based solutions, including living shorelines, to enhance the resilience of a wetland threatened by sea level rise and climate change, to protect existing shorelines or habitat areas, or that provides other environmental benefits is** conditionally acceptable**,** provided the [living shoreline] **nature-based solution project** complies with N.J.A.C. 7:7-12.23. Where the Department finds the establishment of a [living shoreline] **nature-based solution** acceptable, mitigation shall not be required.

(e) (No change.)

(f) Where the habitat creation, restoration, or enhancement project involves a nature-based solution, it shall be designed to use sediment from the same regulated water, estuary, or ecosystem to the maximum extent practicable.

Recodify existing (f) - (i) as **(g) - (j)** (No change in text.)

[(j)] **(k)** Rationale: The environmental values and fragility of wetlands have been officially recognized in New Jersey since the passage of the Wetlands Act of 1970 (N.J.S.A. 13:9A-1 et seq.) and

the passage of the Freshwater Wetlands Protection Act of 1987 (N.J.S.A. 13:9B-1 et seq.). Tidal and freshwater wetlands are the most environmentally valuable land areas within the coastal zone.

Wetlands contribute to the physical stability of the coastal zone by serving as (i) a transitional area between forces of the open sea and upland areas that absorb and dissipate wind-driven storm waves and storm surges[,]**;** (ii) a flood water storage area[,]**;** and (iii) a sediment and pollution trap.

Also, wetlands naturally perform the wastewater treatment process of removing [phosphorous] **phosphorus**, nitrogenous**,** and other water pollutants, unless the wetlands are stressed.

The biological productivity of New Jersey's wetlands is enormous and critical to the functioning of estuarine and marine ecosystems. The emergent cord grasses and associated algal mats convert inorganic nutrients into organic plant material through the process of photosynthesis. In this way, the primary base for estuarine and marine food webs is provided. The principal direct dietary beneficiaries of organic wetland detritus are bacteria and protozoan, which are in turn fed upon by larger invertebrates. Important finfish, shellfish, and other resources feed upon these invertebrates. New Jersey's wetlands are prime wintering habitat annually for hundreds of thousands of migratory waterfowl. Approximately two-thirds of marine finfish and shellfish are known to be estuarine, and, therefore, wetlands dependent.

Inland herbaceous wetlands, such as bogs and marshes, play an important role in regulating the quality of the water in streams that flow to the estuaries. They retard runoff and store storm waters. They are important areas for primary productivity for estuarine systems. They are critical habitats and movement corridors for several species of plants and animals that are endangered or threatened.

They are productive habitats for other game and non-game animals, such as fur bearers and song birds. These wetlands also serve as fire breaks and may limit the spread of forest, brush, or grass fires. They are inappropriate development sites due to poor drainage and load bearing capacity of the underlying soils.

Forested wetlands play a critical role in coastal and other ecosystems. Roots and trunks stabilize shorelines and trap sediment. They are physical and biochemical water filter areas maintaining stream water quality. High productivity, high water availability**,** and high edge to area ratio make these areas especially productive wildlife areas.

White cedar stands, as well as other lowland swamp forests, play an important role in purifying water in coastal streams, retarding runoff, providing scenic value, and serving as a rich habitat for many endangered plant and animal species, as well as game species, such as deer. White cedars also act as forest fire breaks. White cedar stands most commonly occur in flood plains and in the fringe areas of drainage ways and bogs, which are frequently underlain with saturated organic peat deposits. This material is particularly unsuited for development.

White cedar is New Jersey's most valuable timber species and grows in discrete stands. The wood has a long tradition of maritime and local craft uses. Unfortunately, white cedars have been eliminated from much of their previous range in New Jersey.

New Jersey’s coastal environment is dynamic, and shaped by natural forces such as wind, waves, and storms. To protect development from these forces, shorelines are typically armored with hard structures such as bulkheads, gabions**,** or revetments. Shorelines lost due to erosion eliminate intertidal habitat, reduce the amount of sandy beach, and decrease the amount of organic matter necessary to maintain tidal wetlands. This erosion results in the degradation of the coastal environment through impacts to natural habitats, such as tidal wetlands, intertidal and subtidal shallows**,** and spawning grounds. Coastal states are seeking [natural] **nature-based** solutions[, such as the creation of living shorelines,] to address erosion as an alternative that adds diversity to other shore protection measures. **Nature-based solutions are projects designed to reduce shoreline erosion, restore eroded wetlands, and/or create habitats through restoration and enhancement of vegetated shorelines, beaches, dunes, and wetlands.**

Nature-based solution projects include, but are not limited to, establishing living shorelines, elevating the wetland platform through the placement of dredged material, placing dredged material adjacent to the wetland platform; or strategically placing sediment in water areas to allow natural coastal processes to move the material onto the marsh, create a shallow submerged habitat adjacent to the platform, or to dissipate wave energy.

Living shorelines**, a type of nature-based solution,** are a shoreline management practice that addresses erosion by providing protection, restoration, or enhancement of vegetated shoreline habitats.

In addition, New Jersey's coastal wetlands are being threatened by climate change and sea level rise. For these wetlands to survive, they need to adapt to future conditions. Placement of sediment on the wetland platform (surface) or outshore of the marsh to maintain or add elevation to the platform is a technique used to enhance the resilience of the wetland, allow the wetland to maintain elevation, and allow it to adapt to sea level rise. In addition, the use of sediment from the same regulated water, estuary, or ecosystem further allows wetlands to adapt to changing conditions and helps prevent sediment loss within the ecosystem.

7:7-9.34 Historic and archaeological resources

(a) – (g) (No change.)

(h) The ultimate decision on the requirement for a cultural resource survey will be made by the Department's Division of Land [Use Regulation] **Resource Protection**, based on information received in response to public comments or information provided by the New Jersey Historic Preservation Office regarding the presence of known historic and prehistoric resources or the potential for their presence.

(i) Rationale: The range of historic and archaeological resources along the coast is diverse, consisting of oceanfront Victorian era architecture, examples of New Jersey's maritime heritage, colonial homes, and Native American sites. The public interest requires the preservation of both representative

and unique examples of historic and archaeological (cultural) resources of the coast, in order to provide present and future generations with a sense of the people who lived, worked, and visited the coast in the past. New Jersey's cultural heritage has become an important component of the coastal tourism economy, as more and more people visit these historic sites. Public interest in these historic and archaeological resources translates to significant commercial and economic contributions throughout the coastal zone, as manifested in hotel stays, sightseeing, food service patronage, historical tours, museum visits, recreational diving, and other historic/archaeological tourism related activities.

The Department's Historic Preservation Office maintains an up-to-date list of properties on the New Jersey Register of Historic Places. As the State Historic Preservation Officer, the Commissioner of the Department of Environmental Protection and the staff of the Department's Historic Preservation Office advise the Department's Division of Land [Use Regulation] **Resource Protection** on the historic resources aspects of coastal decisions.

For shipwrecks and shipwreck sites, the ability of the archaeologists to appropriately retrieve and preserve artifacts is gradually improving**,** but remains limited. Generally, the best way to preserve historic shipwrecks is to leave them in place until retrieval and preservation techniques improve. However, when the shipwreck is threatened by destruction or when the research and/or public benefits of immediate retrieval outweigh the impacts, salvage may be approved subject to conditions developed in consultation with the Historic Preservation Office, the State Museum, and other interested parties, including research and educational institutions. The decision to allow a project to proceed which could affect a shipwreck or shipwreck site will include consideration of a number of issues, including the recreational and educational opportunities provided by wrecks and wreck sites, their historic significance, and their habitat value. The preservation and salvage of New Jersey's historic shipwrecks and shipwrecks sites will be consistent with the Federal Abandoned Shipwreck Act Guidelines, issued [under] **pursuant to** the authority of the Abandoned Shipwreck Act, 43 U.S.C. §§ [2101-06] **2101 through 2106**.

The requirement for historic and prehistoric resource surveys varies from site to site, and project to project. Therefore, the Department has established several categories of sites and projects which generally will not require such surveys. However, in an effort to ensure adequate protection of historic and of prehistoric resources, the Department may require such surveys, on a case-by-case basis. This requirement will be based on the determination that there is a known historic or prehistoric resource, or a reasonable potential for the presence of such a resource, which may be affected by the proposed development. Such a determination will be based on such factors as the presence of known cultural sites, the presence of known sites nearby, and the known presence of sites in a similar topographic setting.

7:7-9.41 Special urban areas

(a) Special urban areas are those municipalities defined in urban aid legislation (N.J.S.A. 52:27D-178) qualified to receive State aid to enable them to maintain and upgrade municipal services and offset local property taxes. [Under] **Pursuant to** N.J.S.A. 52:27D-178 et seq., the Department of Community Affairs (DCA) establishes a list of qualifying municipalities each fiscal year. DCA's list of qualifying municipalities may be obtained on request from the Department's Division of Land [Use Regulation] **Resource Protection** at the address set forth at N.J.A.C. 7:7-1.6.

(b) – (e) (No change.)

7:7-9.42 Pinelands National Reserve and Pinelands Protection Area

(a) (No change.)

(b) Coastal development shall be consistent with the intent, policies**,** and objectives of the National Parks and Recreation Act of 1978, P.L. 95-625, Section 502, creating the Pinelands National Reserve, and the State Pinelands Protection Act of 1979 (N.J.S.A. 13:18A-1 et seq.).

1. (No change.)

2. The Department's Division of Land [Use Regulation] **Resource Protection** and the Pinelands Commission will coordinate the permit review process through the procedure outlined in the February 8, 1988, Memorandum of Agreement between the two agencies and any subsequent amendments to that agreement. Copies are available from the Department's Division of Land [Use Regulation] **Resource Protection** at the address and telephone number set forth at N.J.A.C. 7:7-1.6.

(c) – (d) (No change.)

7:7-9.43 Meadowlands District

(a) – (f) (No change.)

(g) The Department's Division of Land [Use Regulation] **Resource Protection** and New Jersey Sports and Exposition Authority (formerly the New Jersey Meadowlands Commission) will coordinate the review of proposed developments and activities within the Meadowlands District through the process outlined in the November 9, 2005, Memorandum of Agreement between the two agencies and any subsequent amendments to that agreement. A copy of the Memorandum of Agreement may be obtained from the Department's Division of Land [Use Regulation] **Resource Protection** at the address or telephone number set forth at N.J.A.C. 7:7-1.6.

(h) (No change.)

7:7-9.46 Hudson River waterfront area

(a) The following terms, when used in this section, shall have the following meanings:

1. – 4 (No change.)

5. "Pier deck level" means the lowest deck surface that is at or above the [flood hazard area design] **climate-adjusted** flood elevation as defined at and determined in accordance with N.J.A.C. 7:13.

6. – 8. (No change.)

(b) – (g) (No change.)

7:7-9.47 Atlantic City

(a) – (k) (No change.)

(l) Temporary sanitary sewer and underground water and electric utility lines are conditionally acceptable on beaches in Atlantic City if necessary to serve a food and/or drink service establishment and which is associated with a hotel, casino, and/or commercial development immediately upland/abutting the landward side of the boardwalk, provided the following criteria are met:

1. The temporary sewer line is connected to the existing facilities of the upland development;

2. The temporary sewer line is disconnected and removed from the beach seasonally from November 1 through April 30 each year;

3. The applicant provides a certification that the temporary utility lines on the beach will be immediately disconnected from the upland development and removed from the beach any time the National Weather Service issues a severe weather alert for the municipality in which the development is located, for significant weather events, such as coastal flood warning, extreme wind warning, hurricane warning, tornado warning, or tropical storm warning, that would directly affect structures left on the beach, until the severe weather alert is lifted, including detailed information about how the disconnection and removal will be accomplished and the name, title, and contact information for the party responsible for removal;

4. The temporary utility lines on the beach are buried no more than four feet below the beach surface; and

v. The temporary sewer connection is consistent with the applicable water quality management plan.

Recodify existing (l) – (m) as **(m) - (n)** (No change in text.)

7:7-9.50 Inundation risk zone

(a) This section sets forth specific design and construction standards that apply to the construction or improvement of the structures described at (a)1 and 2 below within an inundation risk zone. This section does not apply to any non-critical commercial, industrial, hospitality, gaming, or recreational structures.

1. Any residential or critical building, except for repair and maintenance activities that do not alter the building's height or footprint area, or increase the habitable area of the building; and

2. Any infrastructure, excluding buildings, that is critical for emergency response and recovery during and after a flood, or that poses a risk to public health, safety, and welfare should it be damaged or unable to perform its intended functions during or after a flood, except as follows:

i. The construction of drainage improvements and associated stormwater management structures that are necessary to ameliorate periodic inundation along a lawfully existing roadway;

ii. Safety or state of good repair improvements to a lawfully existing railroad or public roadway, such that there is no reasonable opportunity to meet the requirements at (b) below as part of the project's overall scope and purpose; or

iii. Where the applicant is a public transportation entity, as defined at N.J.A.C. 7:13-1.2, any project that reached a milestone in its development and design, prior to (the effective date of this rulemaking), such that meeting the requirements at (b) below would necessitate reevaluation of the selected preferred alternative or equivalent milestone, a significant redesign, or significant modifications or additions to private land acquisition plans, whether in fee or easement.

(b) The Department shall issue an individual permit pursuant to this section, only if the applicant:

1. Provides the following data with regard to potential permanent or daily inundation expected within the inundation risk zone, as determined in accordance with the Flood Hazard Area Control Act rules at N.J.A.C. 7:13-3.4(c):

i. The mean higher high-water elevation(s) nearest the site;

ii. The minimum amount(s) of inundation that would cause the lowest portion of the project site to be inundated on a regular basis, such as during daily or seasonal high tides, and the corresponding maximum depth of inundation on the site; and

iii. Where the project involves construction of or improvements to a building that is subject to this section, the minimum amounts of inundation that would cause the lowest portion of the primary roadway(s) providing regular or emergent access to the site to be inundated daily and the corresponding maximum depth of inundation on the roadway;

2. Prepares and provides an Inundation Risk Assessment that analyzes the potential adverse impacts of inundation on the site of the regulated activity, including the risk of:

i. Injury to, or loss of life of, people inhabiting or relying upon the subject building or infrastructure due to inundation, including the risk that individuals may become isolated from evacuation routes;

ii. Damage to, or loss of use of, the subject building or infrastructure due to inundation, including the potential for disruption of public transportation, government services, or commerce; and

iii. Increases in short- and long-term costs due to inundation, such as potential costs associated with evacuation, storm response, and recovery, including the potential costs of operation, maintenance, repair, replacement, reconstruction, demolition, and removal of structures; and

3. Demonstrates the use of all reasonable measures for accomplishing the basic purpose of the project in a manner that is likely to avoid or substantially reduce the potential for adverse impacts on public health, safety, and welfare, and the environment, including:

i. Alteration of onsite topography that reduce, or eliminate, inundation of the project;

ii. Alternative onsite configurations that reduce or eliminate inundation of the project, such as onsite configurations that locate as much of the project as practicable outside the inundation risk zone or upon portions of site where less inundation is anticipated; and

iii. For buildings designated as Flood Design Class 4, and infrastructure as described at (a)2 above, the applicant demonstrates that there are no practicable alternative offsite locations to accomplish the purpose of the proposed regulated activity that would meet the requirements of this section.

(c) Any new or substantially improved habitable building that is financed or subsidized by public funds, other than a single-family home or duplex, shall permanently incorporate signage on the property indicating projected sea level elevations in accordance with (c)1 through 5 below. Examples of signage that meet the requirements of this subsection are provided in the Flood Hazard Area Technical Manual pursuant to N.J.A.C. 7:13-1.3.

1. Each building subject to this subsection shall incorporate at least one sign, which is in the inundation risk zone, and prominently displayed as close in proximity to the entrance. The signage shall be affixed to the street facing façade of the building or on a kiosk, placard, or informative display, located on the walkway accessing the building within the line of sight of anyone approaching the entrance;

2. Where a building has multiple entrances, signage shall be located by the primary entrance to the building, provided that the entrance is located within an inundation risk zone. Where only a portion of a building subject to this subsection is located within an inundation risk

zone, signage shall be located by any entrance located within the inundation risk zone, or closest to the portion of the building in the inundation risk zone;

3. The signage shall include the year the sign is installed, as well as illustrate the sea level rise data set forth at Table 9.50 below, which provides projections for years 2050, 2070, and 2100, assuming a moderate climate pollutant emissions scenario, and additionally indicates the 17 percent exceedance value as the "high" projection and the 83 percent exceedance value as the "low" projection for sea level rise within the inundation risk zone;

4. The information required pursuant to (c)3 above shall be depicted on each sign using letters and numbers of no less than two inches in height and shall be of a font and color that are readily legible to individuals entering the building; and

5. The signage shall be affixed or constructed to correspond with the elevations set forth at Table 9.50 below. For example, the projection at Table 9.50 indicates that sea levels are likely to rise between 0.9 feet and 2.1 feet by year 2050. The bottom of the 2050 sea level rise indicator on the signage shall, therefore, be set 0.9 feet above current sea level and the top of the 2050 sea level rise indicator shall be set 2.1 feet above current sea level. If the ground elevation on which the building is situated lies above one or more projected sea level elevations set forth at Table 9.50, the signage shall indicate only those projections located above the subject ground elevation. Where the entire building is situated on land that has been raised above all projected sea level elevations set forth at Table 9.50, signage pursuant to this subsection is not required.

TABLE 9.50

PROJECTED SEA LEVEL RISE ELEVATIONS BY YEAR (ABOVE YEAR 2000 BASELINE ELEVATIONS)

Probability that sea level rise will exceed the elevations listed in this table:	2050	2070	2100
Greater than 83 percent	0.9 feet	1.4 feet	2.0 feet
Less than 17 percent	2.1 feet	3.1 feet	5.1 feet

(d) Rationale: As sea levels rise, dry land adjacent to the current shoreline will become inundated more frequently and, in some cases, permanently. Current and proposed development in this area, therefore, carries exceptional risk to life and property. Accordingly, this new special area, the "inundation risk zone" was created, which encompasses currently dry land that is expected to be inundated by tidal waters daily or permanently by 2100, based on the findings of the Rutgers STAP report. Specifically, the inundation risk zone includes all land that lies within five feet of the elevation of the mean higher high water line.

While a large portion of the inundation risk zone is currently developed or encumbered by environmental or other constraints, such as wetlands, threatened or endangered species habitat, and frequent flooding, portions of the inundation risk zone remain developable. For new development in the inundation risk zone, applicants proposing a development within this area are required to provide data with regards to the potential permanent or daily inundation expected within the inundation risk zone, prepare an Inundation Risk Assessment that analyzes the potential adverse impacts of inundation on the site of the regulated activity, and demonstrate the use of all reasonable measures for accomplishing the basic purpose of the project in a manner that is likely to avoid or substantially reduce the potential for adverse impacts on public health, safety and welfare, and the environment.

7:7-10.2 Standards applicable to routine beach maintenance

(a) Routine beach maintenance includes debris removal and clean-up; mechanical sifting and raking; maintenance of accessways; removal of sand accumulated beneath a boardwalk; removal of sand from street ends, boardwalks/promenades, and residential properties; the repair or reconstruction of existing boardwalks, gazebos, and dune walkover structures; and limited sand transfers from the lower beach to the upper beach or alongshore (shore parallel). Sand transfers from the lower beach profile to the upper beach profile are specifically designed to restore berm width and elevation, to establish/enhance dunes, and to repair dune scarps. Activities which preclude the development of a stable dune along the back beach are not considered to be routine beach maintenance activities, pursuant to this section. Specifically, the bulldozing of sand from the upper beach (berm) to the lower beach (beach face), for the purpose of increasing the berm width or flattening the beach profile, is not considered to be routine maintenance, except as provided at (a)9 below.

1. – 2. (No change.)

3. All guidelines and specifications of this section must be incorporated into any contract documents or work orders related to proposed beach and dune activities, as described in this section. The Division of Land [Use Regulation] **Resource Protection** is available to assist in the development of specific maintenance plans for oceanfront locations, upon request.

4. In areas documented by the Department as habitat for threatened or endangered beach nesting shorebirds such as Piping Plovers (*Charadrius melodus*), Least Terns (*Sternula antillarum*), and Black Skimmers (*Rynchops niger*), no beach raking, other mechanical manipulation of the beach, or use of non-emergency vehicles, shall take place between March 15 and August 31.

i. The Department's Division of Fish and Wildlife shall develop a list of specific areas where this restriction shall apply, based on documented habitat during the most recent nesting seasons. The list of restricted areas shall be updated annually by the Division of Fish and Wildlife, at the end of each nesting

season and will be available from the Division of Land [Use Regulation] **Resource Protection** at the address set forth at N.J.A.C. 7:7-1.6. The updated list shall be provided by the Department to each permittee prior to March 1 of each year.

ii. – iii. (No change.)

iv. The restrictions [contained in] **at** (a)4 above may be waived if the Department's Division of Fish and Wildlife determines that the identified areas do not represent suitable threatened or endangered beach nesting shorebird habitat, due to beach erosion or other causes. Requests for such a waiver shall be made**,** in writing**,** to the Division of Land [Use Regulation] **Resource Protection** at the address set forth at N.J.A.C. 7:7-1.6.

5. In areas documented by the Department as supporting known occurrences of Federally listed endangered or threatened plant species such as seabeach amaranth (*Amaranthus pumilus*), or known occurrences of State listed endangered plant species, such as sea-beach knotweed (*Polygonum glaucum*), no beach raking, other mechanical manipulation of the beach, or use of non-emergency vehicles, shall take place between May 15 and November 30.

i. The Department, in cooperation with the USFWS, shall develop a list of present and documented habitat areas where this restriction shall apply based on occurrence locations during the previous seasons. The list of restricted areas shall be updated annually and will be available from the Division of Land [Use Regulation] **Resource Protection** at the address set forth at N.J.A.C. 7:7-1.6. The updated list shall be provided by the Department to each permittee prior to May 1 of each year.

ii. (No change.)

iii. The restrictions [contained in] **at** (a)5 above may be waived if the Department determines that the identified areas do not support occurrences of Federally listed endangered or threatened plant species, or occurrences of State listed endangered plant species. Requests for such a waiver shall be made**,** in

writing**,** to the Division of Land [Use Regulation] **Resource Protection** at the address set forth at N.J.A.C. 7:7-1.6.

6. – 9. (No change.)

(b) Projects involving the transfer of sand from the lower beach profile to the upper beach profile, or alongshore, are acceptable, in accordance with the following standards:

1. – 5. (No change.)

6. In areas of documented habitat for threatened or endangered beach nesting shorebirds such as Piping Plovers (*Charadrius melodus*), Least Terns (*Sternula antillarum*), and Black Skimmers (*Rynchops niger*), no sand transfers shall take place between March 15 and August 31.

i. The Department's Division of Fish and Wildlife shall develop a list of specific areas where this restriction shall apply, based on documented habitat during the most recent nesting seasons. The list of restricted areas shall be updated annually by the Division of Fish and Wildlife, at the end of each nesting season and will be available from the Division of Land [Use Regulation] **Resource Protection** at the address set forth at N.J.A.C. 7:7-1.6. The updated list shall be provided by the Department to each permittee prior to March 1 of each year.

ii. – iii. (No change.)

iv. The restrictions [contained in] **at** (b)6 above may be waived if the Department's Division of Fish and Wildlife determines that the identified areas do not represent suitable threatened or endangered beach nesting shorebird habitat due to beach erosion or other causes. Requests for such a waiver shall be made**,** in writing**,** to the Division of Land [Use Regulation] **Resource Protection** at the address set forth at N.J.A.C. 7:7-1.6.

7. In areas documented by the Department as supporting known occurrences of [Federally-listed] **Federally listed** endangered or threatened plant species, or known occurrences of State-listed endangered plant species, no sand transfers shall take place between May 15 and November 30.

i. The Department, in cooperation with the USFWS, shall develop a list of present and documented habitat areas where this restriction shall apply, based on occurrence locations during the previous seasons. The list of restricted areas shall be updated annually and will be available from the Department's Division of Land [Use Regulation] **Resource Protection** at the address set forth at N.J.A.C. 7:7-1.6. The updated list shall be provided by the Department to each permittee prior to May 1 of each year.

ii. (No change.)

iii. The restrictions [contained in] **at** (b)7 above may be waived if the Department determines that the identified areas do not support occurrences of a Federally listed endangered or threatened plant species, or occurrences of [State listed] **State-listed** endangered plant species. Requests for such a waiver shall be made**,** in writing**,** to the Division of Land [Use Regulation] **Resource Protection** at the address set forth at N.J.A.C. 7:7-1.6.

8. – 9. (No change.)

(c) (No change.)

SUBCHAPTER 12. GENERAL WATER AREAS

7:7-12.6 Maintenance dredging

(a) – (b) (No change.)

(c) Maintenance dredging is conditionally acceptable to the authorized depth, length, and width within all general water areas to ensure that adequate water depth is available for safe navigation, provided:

1. – 7. (No change.)

8. Maintenance dredging side slopes shall not be steeper than three [vertical] **horizontal** to one [horizontal] **vertical** adjacent to wetlands to prevent undermining and/or sloughing of the wetlands.

(d) – (f) (No change.)

7:7-12.7 New dredging

(a) – (b) (No change.)

(c) New dredging is conditionally acceptable in all general water areas for boat moorings, navigation channels, anchorages, or submerged cable or pipelines**;** provided:

1. – 8. (No change.)

9. No dredging shall occur within 10 feet of any wetlands. The proposed slope from this [10 foot] **10-foot** buffer to the nearest edge of the dredged area shall not exceed three [vertical] **horizontal** to one [horizontal] **vertical**; and

10. The new dredging shall be accomplished consistent with all of the following conditions, as appropriate to the dredging method:

i. – vii. (No change.)

viii. Side slopes shall not be steeper than three [vertical] **horizontal** to one [horizontal] **vertical** adjacent to wetlands to prevent undermining and/or sloughing of the wetlands.

(d) – (h) (No change.)

7:7-12.11 Filling

(a) –(c) (No change.)

(d) Filling to [establish a living shoreline] **construct a nature-based solutions project** to protect, restore**,** or enhance a habitat area is conditionally acceptable**,** provided the [living shoreline] **nature-based solution project** complies with N.J.A.C. 7:7-12.23.

(e) (No change.)

(f) Mitigation shall be required for the filling of tidal water areas in accordance with N.J.A.C. 7:7-17. Mitigation shall not be required for the following:

1. – 3. (No change.)

4. [Establishment of living shorelines] **Construction of a nature-based solution project** in accordance with N.J.A.C. 7:7-12.23; and

5. (No change.)

(g) (No change.)

(h) Filling using clean sediment of suitable particle size and composition, or dredged material for which the Department has issued an acceptable use determination in accordance with Appendix G, is acceptable for beach nourishment and [living shoreline] **nature-based solution** projects provided it meets the standards of the coastal engineering rule, N.J.A.C. 7:7-15.11(f) or the [living shoreline] **nature-based solutions** rule, N.J.A.C. 7:7-12.23, respectively.

(i) (No change.)

(j) Rationale: In general, filling is discouraged because it results in: loss of aquatic habitat including nursery areas for commercially or recreationally important species; loss of estuarine productivity since shallow estuarine water frequently has a higher biological value and is more important than deeper water; loss of habitat important for certain wading birds and waterfowl; and loss of dissolved oxygen in the water body since the shallows facilitate oxygen transfer from air to water.

Lagoons, as a result of limited freshwater inflow, multiple dead-end branches, and deeper bottoms than adjacent bay waters, have poor circulation which causes anoxic (devoid of oxygen) and stagnant bottoms. However, the shallow water edges of lagoons have been shown by the Department (1984) to support a wide variety of finfishes and shrimp. The above rules are intended to conserve this aquatic productivity found along shallow lagoon edges, while allowing use by the property owners.

New Jersey's coastal environment is dynamic, and shaped by natural forces such as wind, waves, and storms. Shorelines lost due to erosion eliminate intertidal habitat, reduce the amount of sandy beach, and decrease the amount of organic matter necessary to maintain tidal wetlands. This erosion results in the degradation of the coastal environment through impacts to natural habitats, such as tidal wetlands, intertidal and subtidal shallows, and spawning grounds. [Coastal states are seeking natural solutions, such as the creation of living shorelines, to address erosion as an alternative that adds diversity to other shore protection measures. Living shorelines are a shoreline management practice that addresses erosion by providing protection, restoration or enhancement of vegetated shoreline habitats.] **Nature-based solution projects are intended to reduce shoreline erosion, restore eroded wetlands, and/or create habitats in coastal areas through restoration and enhancement of habitats including, but not limited to, vegetated shorelines, beaches, dunes, and wetlands. Nature-based solution projects include, but are not limited to, living shorelines, the elevation of the wetland platform through the placement of dredged material on the wetland platform, the placement of dredged material adjacent to the wetland platform, or strategic sediment placement sites in water areas to allow natural coastal processes to move material onto the wetland or create a shallow submerged habitat adjacent to the platform or to dissipate wave energy.**

The use of dredged material of appropriate grain size and chemical composition in beach nourishment and [living shoreline] **nature-based solutions** projects promote[s] the State's long-standing policy of treating dredged material as a resource.

7:7-12.21 Submerged cables

(a) Submerged cables (cables) are underwater telecommunication **and electric transmission** cables, and shall include all associated structures in the water such as repeaters.

(b) Submerged cables, or portions thereof, which are not located in the Atlantic Ocean shall meet the following conditions:

1. The cable shall not be sited within special areas, unless [no prudent and feasible alternate route exists]**:**

i. A feasibility analysis including evaluation of the potential for cable co-location within existing cable corridors demonstrates that no practicable alternate route exists; and

ii. Onshore landing of submerged cables are located in, or adjacent to, existing developed or disturbed areas, such as roadways, utility, or other rights-of-way, to the maximum extent practicable;

2. Directional drilling for the installation of cables is encouraged [over the use of trenching];

3. - 4. (No change.)

5. The submerged cable shall be buried in accordance with (d) or (e) below depending upon the type of cable to be installed;

6. If portions of the cable are located either within the shellfish habitat, N.J.A.C. 7:7-9.2, or within areas where marine fish, as defined at N.J.A.C. 7:7-16.2, are commercially harvested using mobile bottom-tending gear, are not buried to a depth of 0.6 meters for telecommunication cables or a depth of 2.0 meters for electric transmission cables, the permittee shall provide a one-time monetary contribution to the Department's dedicated account for shellfish habitat mitigation. The amount of each mitigation contribution provided pursuant to this section shall be based on the length of cable that is not buried to a depth of 0.6 meters for telecommunication cables or 2.0 meters for electric transmission cables, based on the inspection required at (c)6i below. The contribution will be calculated at the rate of $100.00 per meter of cable which is buried to a depth of less than 0.6 meters for telecommunication cables or 2.0 meters for electric transmission cables. Monies in the Department's dedicated account for shellfish habitat mitigation are to be

administered by the Department's Bureau of Shellfisheries and utilized for shellfish habitat restoration, enhancement, and related research projects.

(c) Submerged cables, or portions thereof, which are sited in the Atlantic Ocean shall meet the following conditions:

1. Siting a cable in the Atlantic Ocean is discouraged unless the cable complies with the following:

i. If the cable is either sited within surf clam areas, N.J.A.C. 7:7-9.3, or sited within areas where marine fish, as defined at N.J.A.C. 7:7-16.2, are commercially harvested using mobile bottom-tending gear, no prudent and feasible land-based alternate route exists and the cable follows the shortest **practicable** route to waters beyond the surf clam areas and areas where marine fish are commercially harvested using mobile bottom-tending gear; [and]

ii. (No change.)

iii. A feasibility analysis including evaluation of the potential for cable co-location within existing cable corridors demonstrates that no practicable alternate route exists; and

iv. Onshore landing of submerged cables shall be located in or adjacent to existing developed or disturbed areas such as roadways, utility, or other rights-of-way, to the maximum extent practicable;

[2. The submerged cable, shall be buried to a depth of at least 1.2 meters both in surf clam areas, N.J.A.C. 7:7-9.3, and in areas where marine fish, as defined at N.J.A.C. 7:7-16.2, are commercially harvested using mobile bottom-tending gear except where it is demonstrated that it is not practicable to bury the cable to 1.2 meters due to geologic or topographic features or crossing of existing in-service cables. Where it is demonstrated that achieving the depth of 1.2 meters is not practicable, the cable shall be buried as close as practicable to the above standard;

3. Where a submerged cable will cross an existing in-service cable either within surf clam areas, N.J.A.C. 7:7-9.3, or within areas where marine fish, as defined at N.J.A.C. 7:7-16.2, are commercially harvested using mobile bottom-tending gear, the cable company shall minimize the impact of cable crossings on commercial fishing and minimize the risks to the proposed and existing cables, as follows:

i. The cable shall be buried to the depth of the existing cable or as close thereto as practicable at the crossing;

ii. The number of cable crossings shall be minimized;

iii. The location of the cable route shall be adjusted after consultation with the fishing interest groups identified in N.J.A.C. 7:7-24.3(f) in order to reduce the impact of cable crossings on commercial fishing, to the maximum extent practicable; and

iv. The permittee shall, to the maximum extent practicable, share information and otherwise cooperate with those responsible for any cables being crossed and with installers of subsequent cables crossing the subject cable so as to reduce the impacts of cable crossings on commercial fishing.

4. Where a submerged cable will cross an existing out-of-service cable either within surf clam areas, N.J.A.C. 7:7-9.3, or within areas where marine fish, as defined at N.J.A.C. 7:7-16.2, are commercially harvested using mobile bottom-tending gear, the cable company shall minimize the impact of cable crossings on commercial fishing and minimize the risks to the proposed and existing cables, as follows:

i. Where the out-of-service cable is buried less than 0.6 meter, the out-of-service cable shall be cut, and recovered for proper disposal**,** for a distance of at least 500 meters on each side of the selected cable crossing. For surface laid out-of-service cables, the ends of the remaining out-of-service cable shall be re-laid flat on the seabed to minimize problems for other seabed users. For buried out-of-service cables, the ends of the remaining out-of-service cable shall be re-buried to the original depth;

ii. Where the out-of-service cable is buried between 0.6 and 1.2 meters, the out-of-service cable shall, if practicable, be cut and recovered for proper disposal for a distance of at least 500 meters on each side of the selected cable crossing. The ends of the remaining out-of-service cable shall be re-buried as close as practicable to the original depth, and in no case to a depth of less that 0.6 meters. If the out-of-service cable cannot be cut and recovered, the cable crossing shall comply with (c)3 above; and

iii. Where the out-of-service cable is buried more than 1.2 meters, the cable shall be laid over the out-of-service cable at the depth prescribed in (c)2 above;]

2. The submerged cable shall be buried in accordance with (d) or (e) below, dependent upon the type of cable to be installed;

[5.] **3.** Directional drilling for the submerged cable landing is encouraged [over the use of trenching] to minimize impacts to beaches, dunes, and shallow water areas;

Recodify existing 6. - 7. as **4. - 5.** (No change in text.)

[8.] **6.** After the submerged cable has been installed, a long-term inspection and maintenance plan, approved by the Department, shall be implemented both within surf clam areas, N.J.A.C. 7:7-9.3, and within areas where marine fish, as defined at N.J.A.C. 7:7-16.2, are commercially harvested using mobile bottom tending gear, to ensure that the cable remains at the authorized depth and location. The plan shall provide for the following:

i. – ii. (No change.)

iii. An inspection every five years after the inspection required at [(c)8ii] **(c)6ii** above;

iv. An investigation within six months after the Department reports to the permittee that it has received information suggesting that the cable has been uncovered. If appropriate, such investigation shall include an inspection of the cable. The Department may require an inspection after reviewing the report submitted pursuant to [(c)9] **(c)7** below; and

v. Reburial of the cable within 90 days, if practicable, and in no case later than six months after the permittee discovers that the cable has been uncovered. Reburial shall be to the depth prescribed [in (c)2 above to the maximum extent practicable] **at (d) or (e) below**;

[9.] **7.** A report containing the results of the initial inspection required [in (c)8i] **at (c)6i** above shall be submitted by the permittee to the Department within six months following the inspection. The report shall **provide the installed route of the cable,** identify all areas where inactive cable**s** [has] **have** been cut**,** and **identify** all areas where the cable is not buried to [a] **the** depth [of 1.2 meters] **specified at (d) or (e) below**, and indicate the actual **burial** depth in those areas. [The report shall also provide the installed route of the cable.] All locations shall be reported using latitude and longitude coordinate pairs, in the WGS 84 (World Geodetic System 1984) datum, that were arrived at using the global positioning system (GPS). To reduce the impacts of fishing on cables by notifying the commercial fishing industry of the locations of areas where the cable is buried less than [1.2 meters deep] **the depths prescribed at (d) or (e) below**, a copy of the report shall be submitted to the fishing interest groups identified [in] **at** N.J.A.C. 7:7-24.3(f);

[10.] **8.** A report containing the results of inspection and maintenance of the submerged cable required [in (c)8] **at (c)6** above, if applicable in the reporting year, a discussion of storm events which could have affected the cable, and reported hits of the cable for the previous year shall be submitted by the permittee to the Department in January of each year. The report shall also indicate if and when the cable becomes out-of-service;

[11.] **9.** [Within] **For submerged telecommunication cables only, within** two years of taking the cable out of service pursuant to Federal Communications Commission regulations, the submerged cable shall be removed both from surf clam areas, N.J.A.C. 7:7-9.3, and from areas where marine fish, as defined at N.J.A.C. 7:7-16.2, are commercially harvested using mobile bottom-tending gear. The Department may allow all or portions of the cable to remain in place if leaving the cable in place would

not result in a [long term] **long-term** adverse impact to the ocean and/or ocean resources, and the cable would not unreasonably interfere with fishing or other uses of the seabed. A permittee who seeks to leave an inactive cable in place shall submit a request, including the reasons and justification for leaving the cable in place. The Department shall solicit public input on the request, including input from the fishing interest groups identified [in] **at** N.J.A.C. 7:7-24.3(f); and

[12.] **10.** If portions of the cable located either within surf clam areas, N.J.A.C. 7:7-9.3, or within areas where marine fish, as defined at N.J.A.C. 7:7-16.2, are commercially harvested using mobile bottom-tending gear, are not buried to a depth of 0.6 meters **for telecommunication cables or a depth of 2.0 meters for electric transmission cables**, the permittee shall provide a one-time monetary contribution to the Department's dedicated account for shellfish habitat mitigation. The amount of each mitigation contribution provided [under] **pursuant to** this section shall be based on the length of cable that is not buried to a depth of 0.6 meters **for telecommunication cables or 2.0 meters for electric transmission cables**, based on the inspection required [in (c)8i] **at (c)6i** above. The contribution will be calculated at the rate of $100.00 per meter of cable which is buried to a depth of less than 0.6 meters **for telecommunication cables or 2.0 meters for electric transmission cables**. Monies in the Department's dedicated account for shellfish habitat mitigation are to be administered by the Department's Bureau of Shellfisheries and utilized for shellfish habitat restoration, enhancement, and related research projects.

(d) Submerged telecommunication cables shall be buried in accordance with the following:

1. The submerged cable shall be buried to a depth of at least 1.2 meters in surf clam areas, N.J.A.C. 7:7-9.3, and in areas where marine fish, as defined at N.J.A.C. 7:7-16.2, are commercially harvested using mobile bottom-tending gear, except where it is demonstrated that it is not practicable to bury the cable to 1.2 meters due to geologic or topographic features or crossing of existing in-service cables. Where it is demonstrated that achieving the depth of 1.2 meters is not practicable, the cable shall be buried as close as practicable to a depth of 1.2 meters;

2. Where a submerged cable will cross an existing in-service cable either within surf clam areas, N.J.A.C. 7:7-9.3, or within areas where marine fish, as defined at N.J.A.C. 7:7-16.2, are commercially harvested using mobile bottom-tending gear, the cable company shall minimize the impact of cable crossings on commercial fishing and minimize the risks to the proposed and existing cables, as follows:

i. The cable shall be buried to the depth of the existing cable or as close thereto as practicable at the crossing;

ii. The number of cable crossings shall be minimized;

iii. The location of the cable route shall be adjusted after consultation with the fishing interest groups identified at N.J.A.C. 7:7-24.3(f), in order to reduce the impact of cable crossings on commercial fishing, to the maximum extent practicable; and

iv. The permittee shall, to the maximum extent practicable, share information and otherwise cooperate with those responsible for any cables being crossed and with installers of subsequent cables crossing the subject cable, so as to reduce the impacts of cable crossings on commercial fishing; and

3. Where a submerged cable will cross an existing out-of-service cable either within surf clam areas, N.J.A.C. 7:7-9.3, or within areas where marine fish, as defined at N.J.A.C. 7:7-16.2, are commercially harvested using mobile bottom-tending gear, the cable company shall minimize the impact of cable crossings on commercial fishing and minimize the risks to the proposed and existing cables, as follows:

i. Where the out-of-service cable is buried less than 0.6 meters, the out-of-service cable shall be cut and recovered for proper disposal for a distance of at least 500 meters on each side of the selected cable crossing. For surface-laid out-of-service cables, the ends of the remaining out-of-service cable shall be re-laid flat on the seabed to minimize problems for other seabed users. For

buried out-of-service cables, the ends of the remaining out-of-service cable shall be reburied to the original depth;

ii. Where the out-of-service cable is buried between 0.6 and 1.2 meters, the out-of-service cable shall, if practicable, be cut and recovered for proper disposal for a distance of at least 500 meters on each side of the selected cable crossing. The ends of the remaining out-of-service cable shall be re-buried as close as practicable to the original depth, and in no case to a depth of less than 0.6 meters. If the out-of-service cable cannot be cut and recovered, the cable crossing shall comply with (c)3 above; and

iii. Where the out-of-service cable is buried more than 1.2 meters, the cable shall be laid over the out-of-service cable at the depth prescribed at (c)2 above.

(e) Submerged electric transmission cables shall be buried in accordance with the following, unless site specific conditions indicate another depth is required (as determined by evaluating the project area, a cable burial risk assessment as required at (f) below, ground conditions, seabed mobility, and/or the requirements of another government entity) and the Department determines that a different depth is appropriate:

1. Except as specified at (e)2 below, the burial depth of submerged electric transmission cables shall be at least 2.0 meters; and

2. Where the submerged cable is located within an anchorage, the cable shall be buried to a depth of at least 4.5 meters. Where the submerged cable is located within shellfish habitat, N.J.A.C. 7:7-9.2, surf clam areas, N.J.A.C. 7:7-9.3, and in areas where marine fish, as defined at N.J.A.C. 7:7-16.2, are commercially harvested using mobile bottom-tending gear, the cable shall be buried to a depth of at least 2.0 meters.

(f) If an applicant proposes a cable burial depth that differs from the depths set forth at (e) above, a cable burial risk assessment and any other factors relevant to cable burial depth evaluated

in project design for submerged electric transmission cables shall be prepared by the applicant and submitted to the Department as part of the permit application and shall include a narrative describing the following elements for the project site:

1. NOAA's nautical charts and NOAA's Tide Tables and Tidal Current Tables of the project site;

2. All burial requirements issued to the project by governmental authorities, and agreements reached with stakeholders;

3. Geotechnical and geophysical data of the project site, including sediment sampling data collected in accordance with N.J.A.C. 7:7 Appendix G to evaluate the chemical composition of the sediments and to evaluate compliance with New Jersey's Surface Water Quality Standards, N.J.A.C. 7:9B;

4. Ground models to establish a comprehensive understanding of the seabed across the project site;

5. Publicly available, local, and region-specific documentation, including historical or publicly available geological data and marine wildlife data;

6. Automatic Identification System (AIS) vessel traffic;

7. Studies to identify the commercial and recreational fishing activities that occur in the area, including vessel and gear types;

8. Mobility study to determine historical changes in the seabed;

9. Preliminary cable design and specifications;

10. Future development plans, such as potential dredging projects to deepen or lengthen shipping channels and anchorages;

11. Other activities, such as dumping grounds and sand mining borrow areas;

12. Information on existing and planned seabed infrastructure, including fiber optic and power cables, pipelines, and sewer outfalls;

13. Seismic activity and the risk of submarine landslides;

14. Thermal load considerations; and

15. Any other relevant data to make the determination regarding the appropriate burial depth.

[(d)] **(g)** Rationale: **To further New Jersey's clean energy goals, Governor Murphy's Executive Order No. 28 (2018) called for 100 percent clean energy by 2050. To fulfill this commitment, and to meet the Global Warming Response Act, N.J.S.A. 26:2C-37 et seq., mandate of reducing State greenhouse gas emissions by 80 percent by 2050, known as the 80x50 goal, the 2019 New Jersey Energy Master plan outlines strategies and implementation plans, which include accelerating the development of offshore wind. To implement the Energy Management Plan's offshore wind strategy, Executive Order No. 92 (2019) increased the offshore wind energy goal to 7,500 megawatts by the year 2035.**

The construction of wind farms off the coast of New Jersey includes accessory development, such as electric transmission cables, to bring the generated power onshore. Due to its ocean location, a wind farm developer has no alternative but to install electric transmission cables in the ocean and in some cases, within the State's estuarine waters to the chosen upland substation location. The rule balances the protection of coastal resources and uses with the furtherance of the State's clean energy and emissions reduction goals by facilitating the development of offshore renewable energy facilities by ensuring that impacts to these resources and uses are avoided, minimized, and, where necessary, mitigated.

Historically, the installation of surface laid submerged cables in the ocean has made certain areas effectively off limits to certain elements of the fishing industry, due to the possibility of snagging a cable.

In estuarine areas, the installation of submerged cables may disrupt the ecosystem in which a submerged cable is placed. Therefore, the installation of submerged cables is discouraged in estuarine special areas unless no prudent and feasible alternate route exists. In the ocean, cable routes may encounter the surf clam and historic and archaeological resources special areas, as well as areas where marine fish are commercially harvested using mobile bottom-tending gear. Trans-Atlantic submerged **telecommunication** cables have no alternative to crossing the ocean, but cables extending from one United States landing to another United States landing may have alternatives available. **Electric transmission cables associated with renewable energy facilities located in the Atlantic Ocean have no alternative to being installed in the ocean in order to bring the generated power to the mainland United States. However, measures can be implemented to minimize disturbance to marine resources.** Therefore, the installation of such cables is discouraged in areas where marine fish, as defined at N.J.A.C. 7:7-16.2, are commercially harvested using mobile bottom-tending gear and in surf clam areas, unless no prudent and feasible alternate land-based route exists. To minimize conflict between cables and marine fisheries, including surf clamming, a cable for which there is no alternative location must take the shortest route to waters beyond Surf clam areas and areas where [which] marine fish are harvested using mobile bottom-tending gear. These standards governing installation and long-term maintenance of ocean cables have been developed**,** taking into account current fishing technology, fishing practices, and burial technology in order to minimize the conflict between the cable and fishing industries. **Submission of a comprehensive cable burial risk assessment forms a key component of a risk mitigation strategy in those cases where the cable cannot be buried at prescribed depths and allows the Department to consider alternate burial depths based on project site conditions, which ensures the protection of public health and safety as well as protection of marine resources.**

7:7-12.23 Nature-based solutions

(a) Nature-based solutions are projects designed to protect, restore, or enhance shorelines and in-water areas to reduce erosion and flooding, and to restore or create habitats while mimicking the function of natural shorelines in the local system to increase resilience. Nature-based solution projects have a substantial biological design component and include, but are not limited to: living shorelines; marsh restoration/enhancement through the strategic placement of material on the marsh to elevate the wetland platform, such as beneficial use of dredged material, and/or in the shallow water areas adjacent to the marsh to allow coastal processes to naturally move the material onto the marsh; or using dredged material to create a shallow submerged habitat in open water for habitat creation/enhancement or for wave energy dissipation.

(b) Nature-based solution projects to protect, restore, or enhance a habitat area are conditionally acceptable provided that the project:

1. Is part of a plan for the restoration, creation, or enhancement of the habitat and water quality functions and values of wetlands, wetland buffers, and open water areas;

2. Is consistent with the requirements of the Wetlands Act of 1970, the Waterfront Development Law, CAFRA, the Flood Hazard Area Control Act, and/or the Freshwater Wetlands Protection Act, as well as the associated implementing rules;

3. Will improve or maintain the values and functions of the ecosystem;

4. Will have a reasonable likelihood of success, or, if performed by a college, university, or environmental NGO, will advance the level of knowledge regarding nature-based solutions in the State;

5. Disturbs the minimum amount of special areas, as defined at N.J.A.C. 7:7-9, necessary to successfully implement the project plan. The Department may approve a reduction in the size of a particular special area in order to allow an increase in a different special area if the Department

determines that the activities causing the reduction are sufficiently environmentally beneficial to outweigh the negative environmental effects of the reduction;

6. Minimizes the placement of fill necessary to achieve the protection, restoration, or enhancement of habitat; and

7. Is designed to achieve project success considering site specific factors including, but not limited to, the erosion history of the site, fetch and tidal range, shore width and shoreline location, water depths, and soil bearing capacity.

(c) Where the habitat creation, restoration, or enhancement project involves the use of dredged material, it shall be designed to use sediment from the same regulated water, estuary, or ecosystem.

(d) Within 60 calendar days after the habitat creation, restoration, or enhancement project is completed, a construction completion report shall be submitted to the Department. The construction completion report shall include:

1. An as-built plan of the completed project showing grading, plantings (including species, size, and densities), and any structures;

2. Photographs of the completed project;

3. A written description of the project's challenges, successes, and any knowledge or understanding gained by experience; and

4. The 60 calendar days for submittal of the completion report may be extended for an additional 60 calendar days upon mutual agreement between the Department and the responsible entity.

(e) Rationale: New Jersey's coastal environment is dynamic and is shaped by natural forces such as wind, waves, and storm events. Shorelines lost due to erosion eliminate intertidal habitat, reduce the amount of sandy beach, and decrease the availability of the amount of organic matter

necessary to maintain tidal wetlands. This erosion results in the degradation of the coastal environment through impacts to natural habitats, such as tidal wetlands and spawning grounds. Coastal states are seeking nature-based solutions, such as the creation of living shorelines, to address erosion as an alternative that adds diversity to other shore protection measures. Nature-based solutions are intended to reduce shoreline erosion, restore eroded wetlands, and create habitats that are rapidly diminishing in coastal areas through restoration and enhancement of habits including, but not limited to, vegetated shoreline, the elevation of the wetlands platform through the placement of dredged material on the wetland platform, and the placement of dredged material adjacent to the wetland platform to allow natural coastal processes to move material onto the marsh or create a shallow, submerged habitat adjacent to the platform. Nature-based solution activities are conditionally acceptable, provided the activities disturb the minimum amount of special areas necessary to successfully implement the restoration, creation, enhancement, or protection of habitat, water quality functions and values of waters of the State, and waters of the United States. This may include a reduction in the size of a particular special area in order to allow an increase in a different special area where the Department determines that the activities causing the reduction are sufficiently environmentally beneficial to outweigh the negative environmental effects of the reduction.

New Jersey's coastal wetlands are being threatened by climate change and sea level rise. For these wetlands to survive, they need to adapt to future conditions. Placement of sediment on the wetland platform (surface) to maintain or add elevation to the platform is a technique used to enhance the resilience of the wetland and allow the wetland to maintain elevation and allow it to adapt to sea level rise. In addition, the use of sediment from the same regulated water, estuary, or ecosystem further allows wetlands to adapt to changing conditions and helps prevent sediment loss within the ecosystem. The use of dredged material of appropriate grain size and chemical

composition in nature-based solution projects promotes the State's long-standing policy of treating dredged material as a resource. In addition, the use of sediment from the same regulated water, estuary, or ecosystem further allows wetlands to adapt to changing conditions and helps prevent sediment loss within the ecosystem.

SUBCHAPTER 13. REQUIREMENTS FOR IMPERVIOUS COVER AND VEGETATIVE COVER FOR GENERAL LAND AREAS AND CERTAIN SPECIAL AREAS

7:7-13.1 Purpose and scope

(a) This subchapter sets forth requirements applicable in general land areas and certain special areas for impervious cover and vegetative cover on sites in the upland waterfront development area and in the CAFRA area. These requirements are set forth as follows:

1. (No change.)

2. For a site in the CAFRA area, the applicable impervious cover limits and vegetative cover percentages are determined [under] **pursuant to** N.J.A.C. 7:7-13.15 through 13.19, based on the site's location [in a coastal center;] in a Coastal Planning Area; in a CAFRA center, CAFRA core, [or] CAFRA node**, or CAFRA critical environmental site**; or on a military installation.

(b) – (k) (No change.)

7:7-13.2 Definitions

In addition to the terms defined at N.J.A.C. 7:7-1.5, the following terms are defined for purposes of this subchapter:

. . .

"CAFRA critical environmental site" means a critical environmental site with a boundary incorporated by reference and as revised in accordance with N.J.A.C. 7:7-13.16.

...

["Coastal center" means a center in the CAFRA area with a boundary delineated by the Department for the purpose of applying the requirements for impervious cover and vegetative cover at N.J.A.C. 7:7-13.1 through 13.5 and 13.15 through 13.19 until such time as, in accordance with N.J.A.C. 7:7-13.19, the coastal center expires or in accordance with N.J.A.C. 7:7-13.16, the coastal center is superseded by the CAFRA center. There are two categories of coastal centers, mainland coastal centers and non-mainland coastal centers. Each of these centers may be further categorized as a coastal regional center, coastal town, coastal village or coastal hamlet.

"Coastal Critical Environmental Site" means a Critical Environmental Site in the CAFRA area with a boundary incorporated by reference in accordance with N.J.A.C. 7:7-13.19(f).]

...

"Critical Environmental Site" means an area generally less than a square mile which includes one or more environmentally sensitive features located either outside of a planning area classified as environmentally sensitive or within [centers located within such planning areas.] **a center, core, or node.**

...

"Formal action by the State Planning Commission" means the approval of any new or changed Planning Area boundary, community development boundary, any new or changed core or node boundary, or any new or changed critical environmental site boundary; or the expiration or extension of any new or changed Planning Area boundary, community development boundary, any new or changed core or node boundary, or any new or changed critical environmental site boundary pursuant to N.J.A.C. 15:30, which establishes the period of endorsement to be 10 years.

...

7:7-13.16 Boundaries for Coastal Planning Areas, CAFRA centers, CAFRA cores, [and] CAFRA nodes[; non-mainland coastal centers]**, and CAFRA critical environmental sites**

(a) The boundaries of the Planning Areas, the community development boundaries of centers, and the boundaries of cores and nodes formally approved by the State Planning Commission as of August 1, 1999**, and the boundaries of the critical environmental sites formally approved by the State Planning Commission between August 5, 2024, and (the effective date of this rulemaking)**, are incorporated by reference into this subchapter. These boundaries are the boundaries of the Coastal Planning Areas, CAFRA centers, CAFRA cores, [and] CAFRA nodes**, and CAFRA critical environmental sites** and shall be operative for the purposes of applying the requirements for impervious cover and vegetative cover [under] **in** this subchapter, unless the Department, in accordance with (b) and (c) below, accepts a State Planning Commission formally approved new or changed boundary, or unless the Department, in accordance with (b) and (e) below, rejects a State Planning Commission formally approved new or changed boundary and subsequently promulgates a revised boundary.

(b) Whenever [the State Planning Commission formally approves (see (h) below) any new or changed Planning Area boundary, any new or changed community development boundary, or any new or changed core or node boundary] **there is a formal action by the State Planning Commission,** the Department shall evaluate the new or changed boundary to determine whether it is consistent with the purposes of CAFRA and this chapter**, as set forth at (f) below**. **The criteria at (f) below applies to any formal action by the State Planning Commission approved after (the effective date of this rulemaking).** The Department shall not reject or reject and revise a boundary unless it finds that accepting the State Planning Commission approved boundary would result in unacceptable harm to the coastal ecosystem or the resources of the built or natural environment**,** or would otherwise be clearly inconsistent with the purposes of CAFRA or this chapter. For those new or changed community development boundaries or new or changed core**,** [or] node**, or critical environmental site** boundaries

which are located within the Pinelands National Reserve, the Department shall also, in consultation with the New Jersey Pinelands Commission, determine whether the boundaries are consistent with the intent, policies and objectives of the National Parks and Recreation Act of 1978, P.L. 95-625, section 502, creating the Pinelands National Reserve, and the State Pinelands Protection Act of 1979 (N.J.S.A. 13:18A-1 et seq.). Within [90] **120** calendar days after the date on which [the State Planning Commission formally approves such boundary,] **there is a formal action by the State Planning Commission, and provided that the petitioner to the State Planning Commission submits the information at (f)4 below in a timely manner,** the Department shall publish in the New Jersey Register a notice of its determination to accept, reject, or reject and revise the boundary for the purposes of this subchapter.

(c) If the Department determines [under] **pursuant to** (b) above to accept [the State Planning Commission formally approved new or changed Planning Area boundary, community development boundary, or core or node boundary,] **the formal action by the State Planning Commission,** the accepted new or changed boundary is incorporated by reference as the boundary of the Coastal Planning Area, CAFRA center, CAFRA core, [and] CAFRA node, **and CAFRA critical environmental site**, and shall be operative 30 calendar days after the date of publication of the New Jersey Register notice [under] **pursuant to** (b) above. [A CAFRA center boundary shall supersede the boundary for a corresponding coastal center, if any, in Appendix H.] CAFRA centers are listed for informational purposes [in] **at N.J.A.C. 7:7** Appendix [I of this chapter] **H**. As part of the New Jersey Register notice published [under] **pursuant to** (b) above, the Department shall incorporate into **N.J.A.C. 7:7** Appendix [I] **H,** by administrative change**,** the name of each CAFRA center for which the Department has accepted the boundary. **The Department will also denote at N.J.A.C. 7:7 Appendix H, those CAFRA centers that contain CAFRA critical environmental sites.** However, in order to determine the location of a site with reference to the accepted boundaries of a CAFRA center, CAFRA core, [or] CAFRA node**, or CAFRA critical environmental site** for purposes of determining the applicable impervious cover limit **and**

vegetative cover requirement, an applicant shall refer to the CAFRA Planning Map in accordance with N.J.A.C. 7:7-13.17(b) **and 13.18, respectively**.

(d) If the Department determines [under] **pursuant to** (b) above to reject the **formal action by the** State Planning Commission [formally approved new or changed Planning Area boundary, community development boundary, or core or node boundary], the boundary incorporated by reference [under] **at** (a) above shall continue to be operative, except as provided [under] **pursuant to** (e) below.

(e) The Department may determine [under]**, pursuant to** (b) above**,** to reject the **formal action by the** State Planning Commission [formally approved new or changed Planning Area boundary, community development boundary, or core or node boundary] and to establish a revised Coastal Planning Area, CAFRA center, CAFRA core, [or] CAFRA node**, or CAFRA critical environmental site** boundary by promulgating an amendment to this chapter in accordance with the Administrative Procedure Act, N.J.S.A. 52:14B-1 et seq.**, and 52:14F-1 et seq.** Until the Department promulgates such revised boundary, the Coastal Planning Area, CAFRA center, CAFRA core, [or] CAFRA node**, or CAFRA critical environmental site** boundary [under] **pursuant to** (a) above shall continue to be operative.

(f) To determine whether a formal action by the State Planning Commission is consistent with the purposes of CAFRA and this chapter in accordance with (b) above, the Department shall require that:

1. The boundaries are consistent with the coastal goals described at N.J.A.C. 7:7-1.1(c);

2. The boundaries are consistent with the standards at N.J.A.C. 7:7-1.4(b), as applicable;

3. To the maximum extent practicable, the special areas regulated at N.J.A.C. 7:7-9, as set forth in this paragraph, shall be excluded from, or shall be designated as a critical environmental site(s) within, Coastal Metropolitan Planning Areas, Coastal Suburban Planning Areas, CAFRA centers, CAFRA cores, or CAFRA nodes:

i. Dunes, at N.J.A.C. 7:7-9.16;

ii. Overwash areas, at N.J.A.C. 7:7-9.17;

iii. Coastal high hazard areas, at N.J.A.C. 7:7-9.18;

iv. Bay islands, at N.J.A.C. 7:7-9.21;

v. Beaches, at N.J.A.C. 7:7-9.22;

vi. Existing lagoon edges, at N.J.A.C. 7:7-9.24;

vii. Flood hazard areas, at N.J.A.C. 7:7-9.25;

viii. Riparian zones, at N.J.A.C. 7:7-9.26;

ix. Wetlands, at N.J.A.C. 7:7-9.27;

x. Coastal bluffs, at N.J.A.C. 7:7-9.29;

xi. Endangered or threatened wildlife or plant species habitats, at N.J.A.C. 7:7-9.36;

xii. Critical wildlife habitat, at N.J.A.C. 7:7-9.37;

xiii. Special hazard areas, at N.J.A.C. 7:7-9.39;

xiv. Excluded Federal lands, at N.J.A.C. 7:7-9.40; and

xv. Inundation risk zones, at N.J.A.C. 7:7-9.50; and

4. The petitioner to the State Planning Commission for the new or changed Planning Area boundary, new or changed community development boundary, or new or changed core, node, or critical environmental site boundary, or the State Planning Commission where the changed or new boundary is approved without a petition, shall submit:

i. A narrative statement that demonstrates compliance with each item at (f)1, 2, and 3 above; and

ii. After consultation with the Department, any additional information necessary to demonstrate compliance with (f)1, 2, and 3 above, such as ordinances, planning documents, and studies, that were not previously submitted to the State Planning Commission.

[(f)] **(g)** The CAFRA Planning Map, with all Coastal Planning Area, CAFRA center, CAFRA core, [and] CAFRA node**, and CAFRA critical environmental site** boundaries operative [under] **pursuant to** this section for purposes of this subchapter, is available on the Department's Geographic Information System (GIS) and may be reviewed at the Department, 401 East State Street, Trenton, New Jersey 08625, 609-777-0672.

[(g) The boundaries delineated by the Department for non-mainland coastal centers, as defined at N.J.A.C. 7:7-13.2, are described in Appendix H of this chapter.]

(h) (No change.)

(i) A site in the CAFRA area may include land in more than one [coastal center,] Coastal Planning Area, CAFRA center, CAFRA core, [or] CAFRA node**, or CAFRA critical environmental site**. Where this occurs, the impervious cover limits and vegetative cover percentages appropriate to the respective [coastal center,] Coastal Planning Area, CAFRA center, CAFRA core, [or] CAFRA node**, or CAFRA critical environmental site** portions of the site apply.

(j) Neither formal approval by the State Planning Commission [of a new or changed boundary for a Planning Area, a new or changed community development boundary, or a new or changed core or node boundary], nor the incorporation by reference and acceptance or revision by the Department of such boundary as the Coastal Planning Area, CAFRA center, CAFRA core, [or] CAFRA node**, or CAFRA critical environmental site** boundary [under] **pursuant to** this section shall exempt any development from this subchapter or from any of the requirements in this chapter.

(k) Rationale: The boundaries of Planning Areas, community development boundaries of centers, and the boundaries of cores and nodes formally approved by the State Planning Commission as of August 1, 1999, were drawn after a lengthy public process that involved the participation of municipal, county, and State officials and the submittal of thousands of documents from public officials and private organizations and individuals. [The] **Similarly, public participation, if required, pursuant to the State**

Planning Rules at N.J.A.C. 15:30-1.6 for the development and approval of new or changed Planning Area boundaries, community development boundaries, or cores, nodes, or critical environmental sites after August 5, 2024, the Department determined that the boundaries drawn by the State Planning Commission **as of August 1, 1999, will ensure that those critical environmental sites approved after August 5, 2024,** in the CAFRA area are in keeping with the purposes of the CAFRA statute to "encourage the development of compatible land uses in order to improve the overall economic position of the inhabitants of the [{]CAFRA[}] area within the framework of a comprehensive environmental design strategy which preserves the most ecologically sensitive and fragile area from inappropriate development and provides adequate environmental safeguards for the construction of any developments in the coastal area." These State Planning Commission boundaries are, therefore, an appropriate starting point for the boundaries depicted in the CAFRA Planning Map, which are used for the purposes of determining impervious cover limits and vegetative cover percentages. However, **with the exception of those boundaries incorporated by reference,** the CAFRA Planning Map boundaries for Coastal Planning Areas, CAFRA centers, CAFRA cores, [and] CAFRA nodes**, and CAFRA critical environmental sites** will not necessarily always be the same as the boundaries formally approved by the State Planning Commission. The Department evaluates any new or revised boundaries approved by the State Planning Commission in order to determine if the changes are consistent with the purposes of CAFRA and this chapter. If the changes are not consistent with CAFRA and the CZM rules, the Department can choose not to incorporate the changes and may propose modifications to boundaries approved by the State Planning Commission through rulemaking, which allows public input.

The incorporation of CAFRA critical environmental sites allows the delineation of boundaries for Coastal Planning Areas and CAFRA Centers consistent with the rules and policies of the State Planning Commission, while also recognizing the critical nature of the underlying environmental resource. For example, the State Planning Commission rules definition of "Planning

area" includes a size criterion of "an area of greater than one square mile that shares a common set of conditions, such as population density, infrastructure systems, level of development, or environmental sensitivity." The same rules include a size criterion in the definition of critical environmental site as "an area generally greater than two acres and less than a square mile." These criteria allow for planning areas and centers at an appropriate scale for Statewide planning. The CAFRA critical environmental site allows for the appropriate consideration of the underlying natural and environmental resources at a scale appropriate for site specific reviews consistent with the goals of resource protection pursuant to CAFRA.

7:7-13.17 Impervious cover limit[s] for a site in the CAFRA area

(a) The impervious cover limit for a site in the CAFRA area shall be determined as follows:

1. - 2. (No change.)

3. If a site is not located in a CAFRA center, CAFRA core, or CAFRA node, and is not located in the Coastal Metropolitan Planning Area [or in a coastal center], the impervious cover limit is determined [under] **pursuant to** (e) below; [and]

4. If a site is located on a military installation, the impervious cover limit is determined [under] **pursuant to** (f) below[.]**; and**

5. If a project site is located in a CAFRA critical environmental site, the impervious cover limit is determined in accordance with (g) below.

(b) To determine the location of a site for the purposes of determining the applicable impervious cover limit:

1. Determine if the site is located in a CAFRA center, CAFRA core, [or] CAFRA node**, or CAFRA critical environmental site** by referring to the CAFRA Planning Map;

[2. If the site is not located in a CAFRA center, CAFRA core, or CAFRA node, determine if the site is located in a coastal center by referring to Appendix H;]

[3.] **2.** If the site is not located in a CAFRA center, CAFRA core, [or] CAFRA node, [and is not located in a coastal center,] **or CAFRA critical environmental site,** determine the Coastal Planning Area in which the site is located by referring to the CAFRA Planning Map; and

[4.] **3.** (No change in text.)

(c) If a site is located in a CAFRA center, CAFRA core, [or] CAFRA node, **or CAFRA critical environmental site,** the impervious cover limit is the limit at (c)1, 2, or 3 below, whichever is higher:

1.-2. (No change.)

3. The amount of legal, existing impervious cover located on the site, as determined [under (g)] **pursuant to (h)** below.

(d) [Subject to the limitations regarding mainland coastal centers at N.J.A.C. 7:7-13.19(e), if] **If** a site is located in the Coastal Metropolitan Planning Area [or in a coastal center], the impervious cover limit is the limit at (d)1 or 2 below, whichever is higher:

1. The acreage of the net land area on the site as determined [under] **pursuant to** N.J.A.C. 7:7-13.3(e), multiplied by the impervious cover percentage [in] **at** Table H below [for the type of coastal center in which the site is located]; or

2. (No change.)

(e) If the site is not located in a CAFRA center, CAFRA core, [or] CAFRA node, **or CAFRA critical environmental site and,** is not located in the Coastal Metropolitan Planning Area, [and is not located in a coastal center,] the impervious cover limit is the limit at (e)1, 2, or 3 below, whichever is higher:

1. – 3. (No change.)

(f) If a site is located on a military installation, the impervious cover limit is the limit at (f)1 or 2 below, whichever is higher:

1. (No change.)

2. The amount of legal, existing impervious cover located on the site, as determined [under (g)] **pursuant to (h)** below.

(**g) If a project site is located in a CAFRA critical environmental site, the impervious cover limit is the limit at (g)1 or 2 below, whichever is higher:**

1. The acreage of the net land area on the site as determined pursuant to N.J.A.C. 7:7-13.3(e), multiplied by the impervious cover percentage for a CAFRA critical environmental site at Table H below; or

2. The amount of legal, existing impervious cover located on the site, as determined pursuant to (h) below.

[(g)] **(h)** (No change in text.)

TABLE H

Percentages For Calculating Impervious Cover

Limits [Under] **Pursuant to** N.J.A.C. 7:7-13.17

Site Location	Impervious Cover Percentage
CAFRA urban center	90 percent
CAFRA regional center [Coastal regional center] CAFRA core CAFRA node	80 percent
CAFRA town	70 percent

[Coastal town] Military installation	
CAFRA village [Coastal village]	60 percent
CAFRA hamlet [Coastal hamlet]	50 percent

Coastal Metropolitan Planning Area	80 percent
Coastal Suburban Planning Area, within a sewer service area	30 percent
Coastal Suburban Planning Area, outside a sewer service area	5 percent
Coastal Fringe Planning Area	5 percent
Coastal Rural Planning Area	3 percent
Coastal Environmentally Sensitive Planning Area **CAFRA critical environmental site**	3 percent

[(h)] **(i)** Rationale: The impervious cover percentage for sites located in a CAFRA center, CAFRA core, or CAFRA node is determined by multiplying the total land area, rather than the net land area, by the applicable impervious cover percentage, and comparing the resulting amount to the amount of existing legal impervious cover on the site, with the impervious cover limit being whichever is higher. If a site in a CAFRA center, CAFRA core, or CAFRA node is also in the Coastal Metropolitan Planning

Area, in addition to the above two factors, the net land area is multiplied by the impervious cover percentage applicable to the Coastal Metropolitan Planning Area, with the impervious cover limit being the highest of the three resulting amounts. Development in these areas furthers the goal of encouraging the concentration of development and discouraging sprawl. Accordingly, more impervious cover is afforded to these areas.

[Impervious] **The impervious** cover limit[s] for sites in the Coastal Metropolitan Planning Area [or in a coastal center are] **is** based either on the acreage of net land area multiplied by the applicable impervious cover percentage, or [are] **is** equal to the amount of existing impervious cover on the site, whichever is higher. Again, it is likely that there is already impervious cover existing on the site. Sites in this planning area [or in coastal centers] are often already developed and surrounded by development; these rules seek to concentrate development around existing development and infrastructure.

For other sites, the maximum amount of impervious cover allowed is the acreage of net land area multiplied by the applicable impervious cover percentage or the acreage covered by buildings, asphalt, and/or concrete pavement, whichever is higher. Impervious cover for marina support facilities may also equal the amount of legal existing impervious cover on the site if it results in a larger amount of impervious cover than the first two alternatives. This flexibility for marinas is intended to facilitate marina development in order to promote boating in New Jersey and specifically promote the concentration of boating-related development in marinas rather than individual docks.

Military installations are allowed impervious cover equal to the net land area multiplied by 70 percent, or equal to the existing amount of impervious cover, whichever is larger. Military installations are important for national security and require the placement of impervious surface for buildings, pavement, and other structures in order to serve their intended purpose.

Impervious cover percentages set forth [in] **at** Table H **above** serve to concentrate development in areas with existing development, infrastructure, and capacity for growth. For example, for sites in the

Coastal Suburban Planning Area that are within a sewer service area, impervious cover can be up to 30 percent of the net land area of the site. In the same planning area but outside of a sewer service area, impervious cover can only equal five percent of the net land area. This distinction steers suburban development towards areas with adequate infrastructure to support growth.

CAFRA critical environmental sites share the same features as the Coastal Environmentally Sensitive Planning Area, but do not meet the size criteria for designation as such. Specifically, planning areas are greater than one square mile in size while critical environmental sites are less than one square mile, but greater than two acres. Consistent with the application of the impervious cover limits for the Coastal Environmentally Sensitive Planning Area and the goals of the rules to protect and manage environmental resources, it is appropriate to apply the lower impervious cover percentage of three percent for CAFRA critical environmental sites.

7:7-13.18 Vegetative cover percentages for a site in the CAFRA area

(a)-(c) (No change.)

TABLE I

Tree Preservation and Planting Percentages

for Forested and Unforested Sites

Site Location	Tree preservation percentage for forested portion of site	Tree preservation and/or planting percentage for unforested portion of site

CAFRA urban center CAFRA regional center [Coastal regional center] CAFRA core CAFRA node Military installation	10 percent	0 percent
CAFRA town [Coastal town]	25 percent	5 percent
CAFRA village [Coastal village]	30 percent	5 percent
CAFRA hamlet [Coastal hamlet]	40 percent	5 percent
Coastal Metropolitan Planning Area	10 percent	0 percent
Coastal Suburban Planning Area, within a sewer service area	35 percent	5 percent
Coastal Suburban Planning Area, outside a sewer service area Coastal Fringe Planning Area Coastal Rural Planning Area Coastal Environmentally Sensitive Planning Area	70 percent	5 percent

CAFRA critical environmental site		

(d) Rationale: Vegetative cover percentages are based upon whether the site or portion of the site is forested or unforested, as well as location and existing development patterns. The area of trees required to be preserved and/or planted is calculated by multiplying the net land area by the applicable percent. The acreage of the site remaining after subtracting the impervious cover acreage and acreage of tree planting/preservation from the acreage of the net land area must be planted with herb/shrub vegetation. If the sum of the acreage of tree planting and the existing area of impervious cover or existing area covered by buildings, asphalt, and/or concrete pavement exceeds the net land area acreage, then only the area remaining after the area of impervious cover/buildings/pavement is subtracted from the net land area must be planted with trees. This requirement balances tree planting with existing site conditions and serves to facilitate the redevelopment of sites already covered with impervious surfaces. A higher percentage of the net land area must be preserved trees in forested than in unforested sites or portions of sites in order to protect existing forest habitat. It is important to note that, while Table I includes tree preservation/planting percentages for CAFRA centers, CAFRA cores, and CAFRA nodes, these areas are not subject to the standard tree requirements**,** but instead to the more flexible requirements described at N.J.A.C. 7:7-13.4(b). However, the area subject to those requirements is determined by using Table I, so these areas are included in the table.

As reflected in the other policies within this subchapter, the vegetative cover requirements are intended to concentrate development in areas where infrastructure and services already exist and limit development in outlying and environmentally sensitive areas.

CAFRA critical environmental sites share the same features as the Coastal Environmentally Sensitive Planning Area, but do not meet the size criteria for designation as a planning area. Specifically, planning areas are greater than one square mile in size while critical environmental sites are less than one square mile, but greater than two acres. Consistent with the application of the vegetative cover limits for the Coastal Environmentally Sensitive Planning Area and the goals of the rules to protect and manage environmental resources, it is appropriate to apply the higher tree preservation and planting percentages of 70 percent and five percent, respectively, for CAFRA critical environmental sites.

SUBCHAPTER 15. USE RULES

7:7-15.2 Housing

(a) – (d) (No change.)

(e) Standards relevant to the development of one or two single-family homes or duplexes and/or accessory development (such as garages, sheds, pools, driveways, grading, excavation, filling, and clearing, excluding shore protection structures), which does not result in the development of more than two single-family homes or duplexes either solely or in conjunction with a previous development as defined at N.J.A.C. 7:7-2.2(b)8, and provided the single-family home(s) or duplex(es) and accessory development are located landward of the mean high water line are as follows:

1. – 3. (No change.)

4. Development shall comply with N.J.A.C. 7:7-9.16, Dunes, except as provided [under] **at** (e)4i or ii below.

i. Development that is located on the landward slope of a secondary or tertiary dune as described at (e)4i(2) below, whichever is most landward, need not comply with the dunes rule, N.J.A.C. 7:7-9.16, if the site and the development meet all of the following criteria:

(1) – (2) (No change.)

(3) The beach area adjacent to the proposed development is either naturally stable without beach nourishment or naturally accretional without beach nourishment, as determined [by using the method described at N.J.A.C. 7:7-9.19, Erosion hazard areas, and] **through an analysis of the projected erosion rate and historic accretion/erosion rates of the area based on** the information in the Department's Geographic Information System (GIS) database as found in the Historical Shoreline coverage [1836-1986]; and

(4) (No change.)

ii. (No change.)

5. (No change.)

6. Development shall comply with N.J.A.C. 7:7-9.18, Coastal high hazard areas, [and] 9.19, Erosion hazard areas, [except as excluded under (i) below] **and 9.50, inundation risk zone rules**;

[i. Development that is located on a site partially or completely within a coastal high hazard area, or erosion hazard area need not comply with the coastal high hazard areas rule, N.J.A.C. 7:7-9.18, or erosion hazard areas rule at N.J.A.C. 7:7-9.19 if:

(1) The lot was shown as a subdivided lot prior to July 19, 1993;

(2) The lot is served by a municipal sewer system; and

(3) A house or commercial building is located within 100 feet of each of the lot lines that run roughly perpendicular to the mean high water line. The 100 feet shall be measured outward from each lot line, along a line generally parallel to the mean high water line;]

7.- 12. (No change.)

13. Development shall comply with the following setbacks:

i. - ii. (No change.)

iii. On a non-oceanfront site with existing or proposed shore protection structures, the single-family home or duplex and/or accessory structures (except decks) shall be set back at least 15 feet from existing or proposed shore protection structures. If there is no alternative to locating the proposed development at least 15 feet landward of the shore protection structure, the Department shall reduce the required setback if an engineering certification is submitted demonstrating that, after the proposed development has been constructed, the shore protection structure can be replaced within 18 inches of the existing shore protection structure and a conservation restriction that complies with N.J.A.C. 7:7-18 is recorded for the property which states that any reconstruction of a shore protection structure shall be within 18 inches of the existing shore protection structure. A site with coastal bluffs shall instead comply with [(e)12i] **(e)13i** above[; and]. **However, in no case shall the required setback be reduced to less than 10 feet; and**

14. (No change.)

(f) Standards relevant to the expansion, or reconstruction (with or without expansion) of a legally constructed [habitable] single-family home or duplex **that has been or could have been legally occupied in the most recent five-year period** and/or accessory development (such as garages, sheds, pools, driveways, grading, excavation, filling, and clearing, excluding shore protection structures) which does not result in the development of more than one single-family home or duplex either solely or in conjunction with a previous development as defined at N.J.A.C. 7:7-2.2(b)8, and provided the single-family home or duplex and accessory development are located landward of the mean high water line are as follows:

1. (No change.)

2. Development shall comply with N.J.A.C. 7:7-9.16, Dunes, except as provided [under] **at** (f)2i, ii, and iii below.

i. Development that is located on the landward slope of a secondary or tertiary dune as described at (f)2i(2) below, whichever is most landward, need not comply with the dunes rule, N.J.A.C. 7:7-9.16, if the site and the development meet all of the following criteria:

(1) – (2) (No change.)

(3) The beach area adjacent to the proposed development is either naturally stable without beach nourishment or naturally accretional without beach nourishment, as determined [by using the method described at N.J.A.C. 7:7-9.19, Erosion hazard areas, and] **through an analysis of the projected erosion rate and historic accretion/erosion rates of the area based on** the information in the Department's Geographic Information System (GIS) database as found in the Historical Shoreline coverage [1836-1986]; and

(4) (No change.)

ii. (No change.)

iii. Development that is located on a dune need not comply with the dunes rule, N.J.A.C. 7:7-9.16, if the development meets the following criteria:

(1) – (4) (No change.)

(5) The dune area waterward of the single-family home or duplex is enhanced as follows:

(A) (No change.)

(B) Native dune vegetation shall be planted as necessary to establish vegetative cover in accordance with the specifications [contained] in the Guidelines and Recommendations for Coastal Dune Restoration and Creation Projects (DEP, 1985) and/or Restoration of Sand Dunes Along the Mid-Atlantic Coast (U.S. Soil Conservation Service, 1992). These documents are available upon request from the Department's Division of Land [Use Regulation] **Resource Protection** at the address set forth at N.J.A.C. 7:7-1.6; and

(6) (No change.)

iv. Development that is located on a dune and entails the enclosure of an existing deck, patio, or porch, need not comply with the dunes rule, N.J.A.C. 7:7-9.16, if the development meets the following criteria:

(1) – (6) (No change.)

(7) The dune area waterward of the single-family home or duplex is enhanced as follows:

(A) (No change.)

(B) Native dune vegetation shall be planted in accordance with the specifications [contained] in the Guidelines and Recommendations for Coastal Dune Restoration Projects (DEP, 1985) and/or Restoration of Sand Dunes Along the Mid-Atlantic Coast (U.S. Soil Conservation Service, 1992). These documents are available upon request from the Department's Division of Land [Use Regulation] **Resource Protection** at the address set forth at N.J.A.C. 7:7-1.6; and

(8) (No change.)

3. (No change.)

4. Development shall comply with N.J.A.C. 7:7-9.18, Coastal high hazard areas, [and] N.J.A.C. 7:7-9.19, Erosion hazard areas**, and N.J.A.C. 7:7-9.50, Inundation risk zone**, except as excluded [under] **pursuant to** (i) below.

i. Development that is located on a site partially or completely within a coastal high hazard area [or]**,** erosion hazard area**, or inundation risk zone** need not comply with the coastal high hazard areas rule, N.J.A.C. 7:7-9.18, [or] erosion hazard areas rule at N.J.A.C. 7:7-9.19**, or inundation risk zone rule at N.J.A.C. 7:7-9.50,** if:

(1)-(3) (No change.)

5. – 10. (No change.)

11. Development shall comply with the following setbacks:

i. – ii. (No change.)

iii. On a non-oceanfront site with existing or proposed shore protection structures, the single-family home or duplex and accessory structures (except decks) shall be set back at least 15 feet from existing or proposed shore protection structures. If there is no alternative to locating the proposed development at least 15 feet landward of the shore protection structure, the Department shall reduce the required setback if an engineering certification is submitted demonstrating that, after the proposed development has been constructed, the shore protection structure can be replaced within 18 inches of the existing shore protection structure and a conservation restriction that complies with N.J.A.C. 7:7-18 is recorded for the property which states that any reconstruction of a shore protection structure shall be within 18 inches of the existing shore protection structure. A site with coastal bluffs shall instead comply with (f)11i above**. However, in no case shall the required setback be reduced to less than 10 feet**; and

12. (No change.)

(g) – (h) (No change.)

7:7-15.4 Energy facility

(a) – (c) (No change.)

(d) Standards relevant to Outer Continental Shelf (OCS) oil and gas exploration and development are as follows:

1. (No change.)

2. Rationale: The Rationale statement for this subsection is not reproduced in the Code. The Rationale statement may be reviewed by contacting the Division of Land [Use Regulation] **Resource Protection** at the address set forth at N.J.A.C. 7:7-1.6.

(e) – (q) (No change.)

(r) Standards relevant to electric generating stations are as follows:

1. New or expanded electric generating facilities (for base load, cycling, or peaking purposes) and related facilities are conditionally acceptable provided:

i. – vi. (No change.)

vii. In order to minimize adverse effects on birds and bats, wind energy facilities located on land shall:

(1) – (3) (No change.)

(4) Perform pre and/or post construction monitoring in order to establish the flight patterns and distribution of avian species and bats and impacts of the operation of these facilities on these species. Information shall be gathered on species composition, abundance, distribution, behavior, and flight pattern heights, as well as collisions associated with wind turbine construction and/or operation. Pre and/or post construction monitoring is dependent upon the scope of the facility including the number, height**,** and rotor swept area of the turbines. Pre and post-construction monitoring may include visual, radar, and acoustic surveys. Post construction monitoring shall also include carcass searches as well as removal and efficiency trials. The Department has prepared a technical manual titled, "Technical Manual for Evaluating Wildlife Impacts of Wind Turbines Requiring Coastal Permits," which provides guidance on monitoring and reporting. The technical manual is available from the Department's Division of Land [Use Regulation] **Resource Protection** website [https://www.nj.gov/dep/landuse] **https://www.nj.gov/dep/wlm/**; and

(5) (No change.)

viii. In order to minimize adverse effects on birds, bats, and marine organisms, wind energy facilities located in tidal waters shall:

(1) – (2) (No change.)

(3) Perform a habitat evaluation, including species surveys, an impact assessment and post-construction monitoring in order to establish the movement corridors and distribution of avian species,

bats, and marine organisms and impacts of the construction and/or operation of these facilities on these species. Information shall be gathered on species composition, abundance, distribution, behavior and, for avian species and bats, flight pattern heights, as well as collisions and behavioral changes associated with wind turbine construction and/or operation. The habitat evaluation, impact assessment, and post construction monitoring are dependent upon the scope of the facility**,** including the number, height, and rotor swept area of the turbines. Habitat evaluations may include visual, radar, and acoustic surveys. Post construction monitoring may include visual surveys and other collision detection systems. Habitat evaluations, impact assessments, and post-construction monitoring and reporting requirements will be coordinated with the Department, U.S. Fish and Wildlife Service, and National Marine Fisheries Service. The Department has prepared a technical manual titled, "Technical Manual for Evaluating Wildlife Impacts of Wind Turbines Requiring Coastal Permits," which provides guidance on habitat evaluations and assessments, monitoring, and reporting. The technical manual is available from the Department's Division of Land [Use Regulation] **Resource Protection** website [https://www.nj.gov/dep/landuse] **https://www.nj.gov/dep/wlm/**; and

(4) (No change.)

2. – 4. (No change.)

(s) (No change.)

7:7-15.11 Coastal engineering

(a) Coastal engineering measures include a variety of non-structural, hybrid, and structural shore protection and storm damage reduction measures to manage water areas and protect the shoreline from the effects of erosion, storms, and sediment and sand movement. Beach nourishment, sand fences, pedestrian crossing of dunes, stabilization of dunes, dune restoration projects, dredged material

management, [living shorelines] **nature-based solutions**, and the construction of retaining structures such as bulkheads, gabions, revetments, and seawalls are all examples of coastal engineering measures.

(b) Nonstructural, hybrid, and structural shore protection and/or storm damage reduction measures shall be used according to the following hierarchy:

1. Non-structural shore protection and/or storm damage reduction measures that allow for the growth of vegetation shall be used unless it is demonstrated that use of non-structural measures is not feasible or practicable. Factors considered in determining whether use of a non-structural measure is feasible include the type of waterway on which the site is located, the distance to the navigation channel, the width of waterway, water depth at the toe of bank, the bank orientation, shoreline slope, fetch, erosion rate, the amount of sunlight the site receives, substrate composition, and presence of shellfish habitat, submerged vegetation**,** and wetlands at the site. For guidance on measures that may be appropriate depending upon factors impacting a site, see Guidance for Appropriate Shoreline Protection and/or Storm Damage Reduction Measures for a Site available from the Division of Land [Use Regulation's] **Resource Protection** website at [https://www.nj.gov/dep/landuse/guidance.html] **https://dep.nj.gov/wlm/maps/**. This guidance follows N.J.S.A 52:14B-3a and does not impose any new or added requirements nor can it be used for enforcement purposes.

2. – 3 (No change.)

(c) (No change.)

(d) Non-structural, hybrid, and structural shore protection shall comply with the following:

1. The structure will not cause significant adverse impacts on local shoreline sand supply;

2. The structure will not create net adverse shoreline sand movement downdrift, including erosion or shoaling; and

3. The structure will cause minimum feasible adverse impact to living marine and estuarine resources.

[(d)] **(e)** The construction, maintenance, or reconstruction of a bulkhead shall comply with the following:

1. A bulkhead that is subject to wave runup forces, specifically, a bulkhead in a V zone as described at N.J.A.C. 7:7-9.18, shall be designed and certified by a professional engineer to withstand the forces of wave runup. The use of rip-rap along the seaward toe of the bulkhead structure may be required on a case-by-case basis as a means to limit the scour potential[;]**. The bulkhead shall further comply with the following:**

i. The structure will not cause significant adverse impacts on local shoreline sand supply;

ii. The structure will not create net adverse shoreline sand movement downdrift, including erosion or shoaling; and

iii. The structure will cause minimum feasible adverse impact to living marine and estuarine resources;

2. Maintenance or reconstruction of an existing bulkhead is conditionally acceptable provided that it meets (d)2i, ii, or iii below. All measurements specified below shall be made from the waterward face of the original bulkhead alignment of the existing bulkhead to the waterward face of the replacement bulkhead.

i.-ii. (No change.)

iii. Maintenance or reconstruction of an existing bulkhead that does not meet (d)2i or ii above shall be considered new construction, unless it can be demonstrated that the existing bulkhead cannot physically accommodate a replacement in accordance with (d)2i or ii above. In that case, the replacement bulkhead shall [beas] **be as** close as physically possible to the original bulkhead alignment[.]**; and**

3. Construction of a new bulkhead shall comply with the following:

i. The structure will not cause significant adverse impacts on local shoreline sand supply;

ii. The structure will not create net adverse shoreline sand movement downdrift, including erosion or shoaling; and

iii. The structure will cause minimum feasible adverse impact to living marine and estuarine resources.

Recodify existing (e) - (g) as **(f) - (h)** (No change in text.)

[(h)] **(i)** Rationale: New Jersey's coastal environment is dynamic, and shaped by natural forces such as wind, waves, and storms. To manage the effects of these forces on development, water areas, and the shoreline, non-structural and structural shoreline stabilization measures and shore protection and storm damage reduction measures are employed. These measures, collectively known as coastal engineering, include **nature-based solutions and** living shorelines, rip-rap**,** and gabion hybrid structures, bulkheads, revetments, seawalls, and dune restoration and beach nourishment projects.

[Vegetated or living shorelines] **Nature-based solutions** are a shore protection and/or storm damage reduction measure that addresses the loss of vegetated shorelines and habitat in the littoral zone **and beyond** by providing for the protection, restoration**,** or enhancement of these habitats. This measure provides "living space" for organisms through the strategic placement of plants, sand**,** or other structural and organic materials.

Structural solutions as shore protection [and] **and/or** storm damage reduction measures are appropriate and essential at certain locations, given the existing pattern of urbanization of New Jersey's shoreline. However, the creation, repair, or removal of [publicly-funded] **publicly funded** shore protection structures must serve clear and broad public purposes and **any shore-protection structure** must be undertaken only with a clear understanding, on [a] **an individual site and** regional basis, of the consequences to natural shoreline sand systems.

As documented by the Department, the Federal Emergency Management Agency**,** and others, dunes have proven to be very effective in providing protection from coastal storm surges, wave action**,**

and flooding. Dunes have been shown to reduce the level of storm damage particularly to boardwalks, gazebos, and residential oceanfront structures. Creation, restoration, enhancement, and maintenance of dunes are, therefore, encouraged.

New Jersey's unique geography places the State in the potential path of hurricanes, tropical storms, and nor'easters. Healthy beaches provide mitigation from these natural disasters by acting as a buffer between the ocean or bay and the homes, businesses, and infrastructure along the coast. Beach nourishment projects consist of the initial placement of sand along a beach that has experienced erosion. Beach nourishment depends upon adequate quantity and suitable quality of beach nourishment material; otherwise the material may quickly return to the ocean or bay. Sources of sand for such projects can include a local source such as from a neighboring beach or sandbar, a dredged source such as a nearby inlet or waterway, an inland source such as a mining quarry, or, as used most commonly in large-scale projects, an offshore source such as a borrow site along the ocean bottom. This sand can be brought in with trucks or barges, hydraulically pumped or any combination of the above, and is then spread evenly along the beach using a common bulldozer. This completes the initial beach nourishment phase. As nourished beaches undergo erosion, they must be maintained through beach re-nourishment.

The Public Trust Doctrine requires that access be provided to publicly funded shore protection structures and that such structures not impede public access.

The New Jersey Supreme Court in *Borough of Neptune v. Avon-by-The-Sea*, 61 *N.J.* 296 (1972) held that:

"…at least where the upland sand area is owned by a municipality – a political subdivision and creature of the state -and dedicated to public beach purposes, a modern court must take the view that the Public Trust Doctrine dictates that the beach and ocean waters must be open to all on equal terms and without preference and that any contrary state or municipal action is impermissible." (61 *N.J.* at 308-309).

Shore protection structures, when located on wet sand beaches, tidally flowed, or formerly tidally flowed lands, are subject to the Public Trust Doctrine. Once built, most publicly funded shore protection structures become municipal property and are, therefore, subject to the Public Trust Doctrine in the same manner as municipally owned dry beaches.

SUBCHAPTER 16. RESOURCE RULES

7:7-16.2 Marine fish and fisheries

(a) – (b) (No change.)

(c) The following coastal activities are conditionally acceptable provided that the activity complies with the appropriate general water area rule(s) at N.J.A.C. 7:7-12;

1. – 3. (No change.)

4. The establishment of [living shorelines] **nature-based solutions** to protect, restore, or enhance a habitat area, in accordance with N.J.A.C. 7:7-12.23; [and]

5. Construction of a recreational dock or pier in accordance with N.J.A.C. 7:7-12.5[.]**; and**

6. The construction of renewable energy facilities, excluding solar panels, and associated infrastructure provided:

i. There is no practicable or feasible alternative placement or alignment;

ii. There is no disturbance to existing oyster reef shellfish habitat, unless there is no practicable or feasible alternative; and

iii. Measures are implemented to minimize and mitigate impacts to marine fish and fisheries.

(d) Rationale: Finfish (freshwater, estuarine, and marine) and shellfish [resources], and [the] **their** habitats [that] support [these resources provide significant recreation experiences for] **valuable commercial and recreational fisheries. Recreational fishing is enjoyed by** residents of New Jersey

and interstate visitors. These resources also help the State's economy, by leading to expenditures of approximately $1.4 billion per year (U.S. Department of Commerce, National Marine Fisheries Service, 2008). The Department also estimates that 1.2 million people participated in marine/estuarine recreational fishing in 2010 in New Jersey. (U.S. Department of Commerce, National Marine Fisheries Service, 2011) The value of and participation in recreational saltwater fishing is underestimated here as these figures only include finfish data and do not include recreational crabbing and clamming, which are important activities in New Jersey. Commercial landings for all finfish and shellfish in New Jersey during 2010 were 161,831,909 pounds, valued at $177 million dockside, according to U.S. Department of Commerce statistics (2011). The total ripple effect on the State economy is estimated at $2.6 billion, with recreational fishing yielding $1.6 billion and commercial fishing yielding $1.06 billion. (U.S. Department of Commerce, National Marine Fisheries Service, 2008 and 2011).

Activities that may interfere with marine fish and fisheries include blockage of diadromous finfish spawning runs, reduction in the critical capacity of estuaries to function as finfish nursery or spawning areas, reduction of summer dissolved oxygen level below 4 ppm stimulating anoxic phytoplankton blooms, introduction of heavy metals or other toxic agents into coastal water, rise in ambient water temperature regime especially during summer and fall periods, unacceptable increase in turbidity levels, siltation, or resuspension of toxic agents, excavation of marine substrate to obtain sand resources or to install submarine cables and pipelines, and introduction of effluents from domestic and industrial sources.

Water presently condemned for the harvesting of shellfish may not be directly or immediately important to human economics although these areas have been used for resource recovery programs, relay and depuration, and as source areas. These areas, however, serve for restocking fishable areas through production of motile larvae. Shellfish in condemned waters also are not lost to estuarine ecological food-webs, but serve as a food source to other species of wildlife.

Sand mining for the purpose of beach nourishment has the potential to impact marine fish and fisheries by altering the contours of the water bottom (bathymetry) within borrow areas or by covering fishery resources and/or habitat through the placement of sand, thereby reducing the productivity of these areas. Measures to minimize and compensate for impacts to marine fish and fisheries may include, but are not limited to, modifying the location and dimensions of proposed borrow areas, creating and/or enhancing habitat at or near the borrow site, requiring timing restrictions on sand mining activities, limiting frequency of borrow activities, and reducing allowable sand mining volumes.

New Jersey has been working to advance the sustainable development of offshore wind energy generation since the inception of the Blue-Ribbon Panel on Development of Wind Turbine Facilities in Coastal Waters in 2004. This effort has included two years of ecological baseline studies begun in 2008, followed by the Offshore Wind Economic Development Act in 2010 (P.L. 2010, c. 57) and Governor Murphy's Executive Order No. 8 (2018). This executive order directed the New Jersey Board of Public Utilities, and all agencies with responsibility pursuant to the Offshore Wind Economic Development Act, to "take all necessary action" to fully implement the act and begin the process of moving New Jersey towards a goal of 3,500 megawatts of offshore wind energy generation by the year 2030. To further New Jersey's clean energy goals, Governor Murphy's Executive Order No. 28 (2018) called for 100 percent clean energy by 2050. To fulfill this commitment, and to meet the Global Warming Response Act mandate of reducing State greenhouse gas emissions by 80 percent by 2050, known as the 80x50 goal, the 2019 New Jersey Energy Master Plan outlines strategies and implementation plans, which include accelerating the development of offshore wind. To implement the Energy Management Plan's offshore wind strategy, Executive Order No. 92 (2019) increased the offshore wind energy goal to 7,500 megawatts by the year 2035.

With New Jersey's commitment to the pursuit of increased expansion of its renewable energy resources, the development of renewable energy facilities in the Atlantic Ocean is fast becoming a reality for achieving the State's objectives on producing clean energy. However, with the creation of these facilities, there are risk-associated environmental and ecological impacts that may require mitigation when these impacts cannot be avoided. Impacts from such development are anticipated to be greatest during the construction and operation phases, both of which have the potential to produce short- and long-term impacts on marine fish and fisheries. In addition, the potential for short- or long-term adverse impacts to those whose livelihood depends on the ocean are also likely, which could occur through the creation of hazards from the structures to navigation, impairment of commercial fishing activities, changes to the ecosystem, and modification or removal of benthic habitat. Accordingly, measures must be implemented to minimize and compensate for impacts to marine fish and fisheries. Such measures may include avoiding placement of structures and cables in critical habitat areas and migration corridors; using materials and layout designs conducive to minimizing negative impacts; reducing noise and vibration impacts by requiring soft start procedures and/or bubble curtains; minimizing the footprint size of the facility and construction schedules to minimize negative impacts; requiring the burying and ongoing monitoring of power cables to reduce electromagnetic fields; and, compensation for loss of the resource.

Shorelines lost due to erosion eliminate intertidal habitat, reduce the amount of sandy beach, and decrease the amount of organic matter necessary to maintain tidal wetlands. This erosion results in the degradation of the coastal environment through impacts to natural habitats, such as tidal wetlands and spawning grounds. Coastal states are seeking [natural] **nature-based** solutions[, such as the creation of living shorelines, to address erosion as an alternative that adds diversity to other shore protection measures. Living shorelines are a shoreline management practice that addresses the loss of vegetated

habitats by providing for their protection, restoration or enhancement.] **to reduce shoreline erosion, restore eroded wetlands, and/or create habitats through restoration and enhancement of habits, including, but not limited to, creation of a vegetated shoreline, the elevation of the wetlands platform through the placement of dredged material on the wetland platform, the placement of dredged material adjacent to the wetland platform or uplands to allow natural coastal processes to move material onto the marsh or create a shallow, the creation of submerged habitat adjacent to the platform, and the strategic placement of sediment sites.**

Fishery Management Plans are developed by the Regional Fisheries Management Councils, National Marine Fisheries Service**,** and Atlantic States Marine Fisheries Commission in accordance with the Federal Fisheries Conservation and Management Act of 1976, P.L. 94-265, as amended**,** or the Federal Atlantic Coastal Fisheries Cooperative Management Act, P.L. 103-206, as amended. Fishery Management Plans are also developed by the Department pursuant to the State's Marine Fisheries Management and Commercial Fisheries Act, N.J.S.A. 23:2B-1 et seq. Fishery Management Plans are intended to prevent overfishing of marine fish and to achieve optimal yield from each fishery on a continuing basis. These Plans are adopted on a regional basis and provide for long-term viability of marine fish and fisheries. This rule provides the Department the ability to ensure that Fishery Management Plans, as well as developmental and other activities, will not adversely affect New Jersey's recreational and commercial marine fisheries.

7:7-16.12 Traffic

(a) – (c) (No change.)

(d) Any development that [causes a location on a roadway to] **would cause, or increase, the likelihood that any part of a roadway, including, but not limited to, turning movements, would be required to** operate in excess of capacity Level D **either during the construction of the proposed**

development or after completion of construction is discouraged. [A developer shall undertake mitigation or other corrective measures as may be necessary so that the traffic levels at any affected intersection remain at capacity Level D or better.] **If a roadway is currently operating in excess of capacity of Level D, the applicant is responsible for maintaining the pre-development level of service.** A developer may, by incorporating design modification or by contributing to the cost of traffic improvements, be able to address traffic problems resulting from the development, in which case**,** development would be conditionally acceptable. Determinations of traffic levels which will be generated will be made by the New Jersey Department of Transportation.

(e) – (f) (No change.)

SUBCHAPTER 17. MITIGATION

7:7-17.5 Property suitable for mitigation

(a) - (f) (No change.)

(g) The Department shall not approve mitigation or a mitigation bank in an area where the proposed mitigation poses an ecological risk. For purposes of this section, ecological risk means [that the mitigation or mitigation bank activities have the potential to result in the reintroduction of contamination to ecological communities, the exposure of humans to contamination, or the contamination of the mitigation site by subsequent exposure to new areas of contamination requiring remediation] **a quantitative assessment of the actual or potential impacts of contaminants of potential ecological concern on wildlife and plants.** The proposed mitigation site shall be properly characterized to determine ecological risk. The mitigator shall prepare this characterization and assessment in accordance with the Technical Requirements for Site Remediation at N.J.A.C. 7:26E-1.16 and 4.9.

1.-2. (No change.)

(h) (No change.)

7:7-17.7 Basic requirements for mitigation proposals

(a) – (g) (No change.)

(h) The mitigation proposal checklists identified at (d) above require the following information:

1. – 11. (No change.)

12. A discussion of the projected impact of climate change on the site in the future and any special considerations that may be necessary as part of the current mitigation project (for example, proposed site elevations and the type of plants selected for the site) to promote the immediate and long-term sustainability of the site. The discussion shall include all assessments applicable to the site under consideration, such as: an assessment of the site anticipating the effects of climate change and sea level rise by 2100, including five feet of sea level rise above the mean higher high water elevation as it exists on (the effective date of this rulemaking); assessment of potential changes to precipitation including an increase in the intensity and amount of precipitation, and a potential increase in summertime drought; and if proposing forested wetland mitigation, an assessment of the vigor of reference forested systems;

Recodify existing 12. – 15. as **13. – 16.** (No change in text.)

(i) - (j) (No change.)

7:7-17.9 Requirements for shellfish habitat mitigation

(a) - (b) (No change.)

(c) For all other coastal development projects, mitigation for impacts to shellfish habitat shall include a monetary contribution to the Department's dedicated account for shellfish habitat mitigation. The amount of the monetary contribution shall be based on the area of shellfish habitat condemned due to coverage by the structure and/or the area of shellfish habitat disturbed due to

installation of submerged cables, pipelines, and associated infrastructure or construction and/ or expansion of bridges, the documented shellfish density on the property, and the commercial value of the shellfish resource.

(d) Where disturbance of oyster reef shellfish habitat is unavoidable, measures shall be implemented to minimize and mitigate for such impacts as follows:

1. Restoration of habitat in accordance with scientifically documented reef enhancement and seed transplanting methods;

2. Restoration of the disturbed area to its preconstruction bathymetric relief, shell and oyster density, and population conditions. This shall include reef reconstruction, oyster seeding, replanting, and monitoring of the disturbed area. Monitoring shall be carried out annually to demonstrate persistence of the compensatory habitat for a minimum of three years;

3. Restoration of oyster reef shellfish habitats shall occur within the disturbed area, where practicable; and

4. Where the Department determines that mitigation as outlined at (d)1, 2, and 3 above is not practicable, a monetary contribution to the Department's dedicated account for shellfish habitat mitigation shall be provided. The amount of each monetary contribution shall be based on the area of shellfish habitat condemned due to coverage by the structure and/or the area of shellfish habitat disturbed due to installation of submarine cables, pipelines, and associated infrastructure or construction and/ or expansion of bridges, the documented shellfish density on the property, and the commercial value of the shellfish resource.

SUBCHAPTER 21. EMERGENCY AUTHORIZATIONS

7:7-21.3 Issuance of emergency authorization; conditions

(a) The Department shall issue or deny an emergency authorization within 15 calendar days after receiving a request that meets the requirements [of] **at** N.J.A.C. 7:7-21.2. The Director of the Division of Land [Use Regulation] **Resource Protection**, or the Director's designee, shall provide this decision to the person who requested the emergency authorization verbally and, if the decision is to issue the emergency authorization, shall provide written confirmation within five working days thereafter.

(b) – (k) (No change.)

SUBCHAPTER 23. APPLICATION REQUIREMENTS

7:7-23.1 Purpose and scope

(a) (No change.)

(b) The application requirements for the following are set forth elsewhere in this chapter:

1. – 2. (No change.)

3. For a permit-by-registration, see N.J.A.C. 7:7-3.5;

Recodify existing 3. – 5. as **4. – 6.** (No change in text.)

7:7-23.2 General application requirements

(a) The Department provides a checklist for each type of application submitted [under] **pursuant to** this subchapter. The checklist identifies all of the submissions required [under] **pursuant to** the rules to be part of an application, and also the appropriate level of detail and the format of the information to be submitted for each type of application. For example, where the rules require, as part of an application, the submittal of photographs showing certain types of information, the corresponding checklist will indicate, based on the type of development the particular permit covers, the number**,** and orientation of photographs of the location of the proposed development. Where the rules require the submittal of a site plan, the corresponding checklist will indicate, based on the type of development the particular permit

covers, the scale and details of the information to be illustrated on the plan. Checklists can be downloaded from the Department's website at [https://www.nj.gov/dep/landuse] **https://www.nj.gov/dep/wlm** or obtained by contacting the Department at the address set forth at N.J.A.C. 7:7-1.6.

(b) – (c) (No change.)

(d) An application shall be certified as set forth [in (j)] **at (k)** below by the following individual(s), or by a duly authorized representative, as described at (e) below:

1. – 4. (No change.)

(e) – (f) (No change.)

(g) If an application includes activities within [a] **an existing** right-of-way or easement, the application shall include written consent for the activity from the holder(s) of the right-of-way or easement.

1. For a gas pipeline located within a municipally owned right-of-way, written consent shall consist of one of the following:

i. – ii. (No change.)

iii. A Board of Public Utilities designation of route pursuant to N.J.S.A. 48:9-25.4[.]**;**

2. For any application involving holder(s) of a right-of-way or easement not covered at (g)1 above, written consent shall consist of the following:

i. Documentation that the holder of the right-of-way or easement does not object to the submittal of an application to the Department for activities within the right-of-way or easement, with the understanding that said activities may commence only upon receipt of all necessary approvals; or

ii. Documentation of the following:

(1) A copy of certified mail receipt that the applicant requested documentation pursuant to (g)2i above and the holder of the right-of-way or easement failed to provide said documentation

within 30 calendar days; and

(2) A copy of the instrument establishing the right-of-way or easement, which indicates that the proposed activities are permitted as a condition of the right-of-way or easement.

(h) Other than for a CAFRA individual permit application, where the applicant is a State agency endowed with the power of eminent domain, acting as the sovereign, which currently does not own, possess title to, or have a right of access on the land on which the regulated activities are proposed, the Department will not, on that basis alone, consider such an application administratively incomplete, but the Department shall require the applicant to issue notice compliant with N.J.A.C. 7:7-24.3(b)6, regardless if the project meets the requirements at N.J.A.C. 7:7-24.3(c). For the purposes of this section, "State agency" does not include a private or quasi-private entity using delegated condemnation authority. For CAFRA individual permits, notice shall be given in accordance with N.J.A.C. 7:7-24.4; however, when the Department schedules the public comment period in accordance with N.J.A.C. 7:7-26.4, the Department shall require the applicant to issue notice compliant with N.J.A.C. 7:7-26.4(b), regardless of whether the project meets the requirements at N.J.A.C. 7:7-26.4(c). In addition, where site access is necessary to complete the Department's technical review of the application, the Department shall require the applicant to obtain a right of access sufficient to provide consent as required at (n) above, prior to the Department declaring the application is complete for review.

Recodify existing (h) – (m) as **(i) – (n)** (No change in text.)

7:7-23.3 Additional application requirements for an authorization [under] **pursuant to** a general permit-by-certification

(a) An application for authorization [under] **pursuant to** a general permit-by-certification shall be submitted electronically through the Department's online system at https://www.nj.gov/dep/online.

(b) In addition to meeting the requirements at N.J.A.C. 7:7-23.2, the applicant is required to provide the following in the online application for a general permit-by-certification:

1. – 3. (No change.)

4. Information specific to the proposed project related to the requirements of the general permit-by-certification under which the application is being submitted, such as, for example, the length in linear feet of bulkhead that is being replaced [under] **pursuant to the** general permit-by-certification [10] **1** (see N.J.A.C. 7:7-5.1);

5. Contact information for [both] the applicant**,** [and] the property owner, **the municipal clerk for each municipality in which the project is located, and the county clerk for each county in which the project is located**, including: name, address, telephone number, email address, municipality, county, organization, and organization type;

6. A certification, as set forth [in] **at** N.J.A.C. 7:7-23.2(j), as to each of the following:

i. – ii. (No change.)

iii. That the applicant **is the property owner or** has obtained written consent from the property owner [that the application can be made] **to submit the permit-by-certification** on the property owner's behalf[. This certification is required regardless of whether the applicant and property owner are the same person]; and

iv. That conditions specific to the general permit-by-certification under which the application for authorization is being submitted are or will be met. For example, an applicant for authorization [under] **pursuant to the** general permit-by-certification [10] **1** must certify that the proposed bulkhead will be constructed of non-polluting materials, and an applicant for authorization [under] **pursuant to the** general permit-by-certification [15] **2, N.J.A.C. 7:7-5.2,** must certify that the property is located on a man-made lagoon;

7. – 8. (No change.)

(c) (No change.)

7:7-23.4 Additional application requirements for an authorization [under] **pursuant to** a general permit or for an individual permit

(a) (No change.)

(b) In addition to meeting the requirements at N.J.A.C. 7:7-23.2, the applicant is required to provide the following in the online application for a general permit or individual permit:

1. – 4. (No change.)

5. Contact information for the applicant, the property owner, any designated agent(s), [and] the municipal clerk for each municipality in which the project is located, **and the county clerk for each county in which the project is located,** including: name, address, telephone number, email address, municipality, county, organization, and organization type;

6. – 7. (No change.)

(c) In addition to meeting the requirements at (b) above, an application for an authorization [under] **pursuant to** a general permit or for an individual permit shall include the following digital documents, which must be uploaded to the online service in the format specified in the appropriate application checklist:

1. – 3. (No change.)

4. Site plans, certified in accordance with N.J.A.C. 7:7-23.2(i), which include the following, both on and adjacent to the site:

i. – ii. (No change.)

iii. Existing and proposed topography where necessary to demonstrate that the proposed development meets the requirements of this chapter. All topography shall reference [the National

Geodetic Vertical Datum of 1929 (NGVD)] **NAVD 88**, or include the appropriate conversion factor to [NGVD] **NAVD 88**;

iv. – viii. (No change.)

5. – 6. (No change.)

7. Any information necessary to ensure compliance with State and/or Federal law, and/or to determine whether an application for authorization [under] **pursuant to** a general permit or for an individual permit meets State and/or Federal standards; [and]

8. A copy of all conservation restrictions that impact any portion of the site that is the subject of the application[.]**; and**

9. Except for improvements undertaken by a public transportation entity, as defined at N.J.A.C. 7:13-1.2, along a public roadway, railroad, parking area, or airport runway or taxiway where development is proposed within a flood hazard area, an acknowledgement of potential flood and inundation risk as required at (d) below.

(d) An acknowledgment of potential flood and inundation risk required at (c)9 above shall consist of the following:

1. The acknowledgement required pursuant to (c)9 above shall be signed by:

i. The owner(s) of the site on which the regulated activity is proposed, not by any agent; or

ii. Where work is proposed by a government entity, an individual with executive level signatory authority; and

2. The appropriate person(s) listed at (d)1 above shall complete a checklist, available at https://dep.nj.gov/wlm, acknowledging the significant risks associated with undertaking the project within the flood hazard area, including potential economic or other costs to current and future property owners, including government entities for activities on public land, associated with the projected present and future flooding and inundation risk, such as increased insurance costs

throughout the lifespan of any new or improved structure, and the cost of restoration and cleanup following flooding to the climate-adjusted flood elevation.

SUBCHAPTER 24. REQUIREMENTS FOR AN APPLICANT TO PROVIDE PUBLIC NOTICE OF AN APPLICATION

7:7-24.1 Purpose and scope

(a) - (b) (No change.)

(c) An applicant is not required to provide public notice for the following:

1. – 2. (No change.)

3. Conducting an activity [under] **pursuant to** a [permit-by-rule] **permit-by-registration** pursuant to N.J.A.C. 7:7-3 and 4;

4. – 7. (No change.)

(d) – (e) (No change.)

7:7-24.3 Contents and recipients of public notice of an application

(a) (No change.)

(b) For any of the applications listed [in] **at** N.J.A.C. 7:7-24.1(a), the applicant shall provide notice of the application to all of the persons or entities at (b)1 through [7] **8** below, in accordance with the time frames specified [in] **at** N.J.A.C. 7:7-24.2. The notice shall include the information specified at (d) below.

1.-5. (No change.)

6. All owners of real property, including easements, located within 200 feet of the property boundary of the site in the manner set forth in the Municipal Land Use Law at N.J.S.A. 40:55D-12b, unless the proposed development is one of those listed at (c)1 [through]**, 2, 3, or** 4 below, in which case

the notice shall be provided as set forth [in] **at** (c) below. The owners of real property, including easements, shall be those on a list that was certified by the municipality. The date of certification of the list shall be no earlier than one year prior to the date the application is submitted to the Department; [and]

7. If the site lies within the 12-mile circle or within 200 feet of the 12-mile circle described at N.J.A.C. 7:7-1.2(c), the State of Delaware. Notice shall be sent to the State of Delaware, Department of Natural Resources & Environmental Control, Delaware Coastal Management Program, 89 Kings Highway, Dover, DE 19901[.]**; and**

8. Local emergency responders serving the project site, including the police department, fire department, emergency medical services, and office of emergency management, for development located in an inundation risk zone. If a municipality does not possess one or more emergency responders listed above, then the notice shall instead be provided to the corresponding county or State equivalent emergency responder.

(c) (No change.)

(d) The public notice required at (b) and (c) above, other than newspaper notice, shall:

1. Include all of the following:

i. (No change.)

ii. A description of the activities located within an inundation risk zone, if the development is subject to the requirements at N.J.A.C. 7:7-9.50;

Recodify existing ii. - iii. as **iii. - iv.** (No change in text.)

2. (No change.)

(e) (No change.)

(f) In addition to the public notice required at (a) and (b) above, an applicant for a waterfront development individual permit to install a [submarine] **submerged** cable **as defined at N.J.A.C. 7:7-12.21,** in the ocean, or to perform sand mining in the ocean, shall provide to all of the entities listed below

a description of the project, the specific permit(s)/authorization(s) being sought, and a copy of the NOAA nautical chart showing the proposed cable route or the limits of the proposed sand mining area that were submitted to the Department as part of the permit application:

1. – 6. (No change.)

7:7-24.4 Additional requirements for public notice of an application for a CAFRA individual permit

(a) (No change.)

(b) An applicant for a CAFRA individual permit shall provide notice of the public comment period on the application when the Department schedules the public comment period in accordance with N.J.A.C. 7:7-26.4. The notice shall include the information listed [in (d)1] **at (d)** below and shall be sent to all of the following:

1.-2. (No change.)

3. The planning board of each municipality in which the project is located; [and]

4. All owners of real property, including easements, located within 200 feet of the property boundary of the site in the manner set forth in the Municipal Land Use Law at N.J.S.A. 40:55D-12.b, unless the proposed development is one of those listed at (c)1 [through]**, 2, 3, or** 4 below, in which case the notice shall be provided as set forth [in] **at** (d) below. The owners of real property, including easements, shall be those on a list that was certified by the municipality. The date of certification of the list shall be no earlier than one year prior to the date the application is submitted to the Department[.]**; and**

5. Local emergency responders serving the project site, including the police department, fire department, emergency medical services, and office of emergency management for development located in an inundation risk zone. If a municipality does not possess one or more

emergency responders listed above, then the notice shall instead be provided to the corresponding county or State equivalent emergency responder.

(c) (No change.)

(d) The public notice required at (b) and (c) above, other than newspaper notice, shall include all of the following:

1. (No change.)

2. A description of the activities located within an inundation risk zone, if the development is subject to the requirements at N.J.A.C. 7:7-9.50;

Recodify existing 2. - 4. as **3. - 5.** (No change in text.)

(e) (No change.)

7:7-24.5 Content and format of newspaper notice

(a) (No change.)

(b) The newspaper notice pursuant to N.J.A.C. 7:7-24.3(c) and 24.4(a) shall include all of the following:

1.-4. (No change.)

5. A description of the activities located within an inundation risk zone, if the development is subject to the requirements at N.J.A.C. 7:7-9.50;

Recodify existing 5. - 7. as **6. - 8.** (No change in text.)

(c) The newspaper notice pursuant to N.J.A.C. 7:7-24.4(c) shall include all of the following:

1. (No change.)

2. A description of the activities located within an inundation risk zone, if the development is subject to the requirements at N.J.A.C. 7:7-9.50;

Recodify existing 2. - 4. as **3. - 5.** (No change in text.)

(d) The newspaper notice pursuant to N.J.A.C. 7:7-24.4(e) shall include all of the following:

1. (No change.)

2. A description of the activities located within an inundation risk zone, if the development is subject to the requirements at N.J.A.C. 7:7-9.50;

Recodify existing 2. - 3. as **3. - 4.** (No change in text.)

SUBCHAPTER 25. APPLICATION FEES

7:7-25.1 Application fees

(a) This subchapter establishes the application fees for:

1. A written determination of exemption from CAFRA pursuant to N.J.A.C. 7:7-2.2(f), or from the Waterfront Development Law pursuant to N.J.A.C. 7:7-2.4(h);

2. An authorization [under] **pursuant to** a general permit-by-certification**,** pursuant to N.J.A.C. 7:7-3 and [5] **5.1 through 5.12**, except as provided at (b)4 below;

3. An authorization [under] **pursuant to** a general permit, pursuant to N.J.A.C. 7:7-6.1 through [6.32] **6.33**, except [for the general permit for habitat creation, restoration, enhancement, and living shoreline activities, N.J.A.C. 7:7-6.24] **as provided at (b)5 below**;

4. – 5. (No change.)

(b) There is no application fee for:

1. – 2. (No change.)

3. A [permit-by-rule] **permit-by-registration** pursuant to N.J.A.C. 7:7-4;

4. An authorization [under general permit-by-certification 1A for the installation of an elevated timber dune walkover at N.J.A.C. 7:7-5.3;] **pursuant to the following general permits-by-certification:**

i. General permit-by-certification 3 for the installation of an elevated timber dune walkover at N.J.A.C. 7:7-5.3;

ii. General permit-by-certification 4 for the installation of an at-grade dune walkover at a commercial development at N.J.A.C. 7:7-5.4;

iii. General permit-by-certification 11 for shoreline stabilization using coir logs, vegetation, and plant-based materials at N.J.A.C. 7:7-5.11; and

iv. General permit-by-certification 12 for shoreline stabilization shellfish and/or shell bags at N.J.A.C. 7:7-5.12;

5. An authorization [under the general permit for habitat creation, restoration, enhancement, and living shoreline activities, N.J.A.C. 7:7-7.24; or] **pursuant to the following general permits:**

i. General permit 17 for shoreline stabilization using coir logs/suitable vegetation at N.J.A.C. 7:7-6.17;

ii. General permit 24 for nonstructural or hybrid nature-based solution activities, including habitat creation, restoration, enhancement, and living shoreline activities at N.J.A.C. 7:7-6.24; and

iii. General permit 33 for nature-based solutions research at N.J.A.C. 7:7-6.33; and

6. (No change.)

(c) – (g) (No change.)

Table A

APPLICATION FEES

Determination of exemption

	Fee
Request for a written determination of exemption from CAFRA pursuant to N.J.A.C. 7:7-2.2(f)	$500.00
Request for a written determination of exemption from the Waterfront Development Law pursuant to N.J.A.C. 7:7-2.4(h)	$500.00

Application [under] **pursuant to** general permit-by certification 1A for the installation of an elevated timer dune walkover pursuant to N.J.A.C. 7:7-5.3	No fee
Authorization [under any other general permit by certification] **pursuant to**	$1,000

Authorization [under any other general permit by certification $1,000] **pursuant to permit-by-certification pursuant to N.J.A.C. 7:7-5**

	Fee
General permits-by-certification at N.J.A.C. 7:7-5.3, 5.4, 5.11, and 5.12	**No fee**
Any other general permit-by-certification	**$1,000**

Authorization [under] **pursuant to** a general permit pursuant to N.J.A.C. 7:7-6

	Fee
General permit**s** for habitat creation, restoration, enhancement, and living shoreline activities[, N.J.A.C. 7:7-6.24] **at N.J.A.C. 7:7-6.17, 6.24, and 6.33**	No fee
Any other general permit	$1,000

CAFRA individual permit

	Fee
CAFRA individual permit for the development of one [single family] **single-family** home or duplex and/or accessory development, which is not being constructed as part of a residential subdivision or multi-unit development	$2,000
CAFRA individual permit for any other residential development	$3,000 per unit
CAFRA individual permit for a commercial, industrial, or public development	$3,000 per acre of the site (or fraction thereof)

Coastal wetlands individual permit

	Fee
Coastal wetlands individual permit for the development of one single family home or duplex and/or accessory development, which is not being constructed as part of a residential subdivision or multi-unit development	$2,000
Coastal wetlands individual permit for any other development	$3,000 per acre of wetlands to be disturbed (or fraction thereof)

Waterfront development individual permit

	Fee

Waterfront development individual permit for the development of one single-family home or duplex and/or accessory development located landward of the mean high water line, where the development is not being constructed as part of a residential subdivision or multi-unit development	$2,000
Waterfront development individual permit for any other residential development located landward of the mean high water line	$3,000 per unit
Waterfront development individual permit for a commercial, industrial, or public development located landward of the mean high water line	$3,000 per acre of the site (or fraction thereof)
Waterfront development individual permit for development located waterward of the mean high water line, such as a dock or bulkhead, at a single-family or duplex lot, where the development is not being constructed as part of a residential subdivision or multi-unit development	$2,000
Waterfront development individual permit for any other development located waterward of the mean high water line	$3,000 per acre of water area impacted by the development (or fraction thereof)

Request for a modification of a waterfront development, coastal wetlands, or CAFRA individual permit **or a general permit** pursuant to N.J.A.C. 7:7-27.5

	Fee

Administrative modification	No fee
Minor technical modification of a waterfront development, coastal wetlands, or CAFRA general permit authorization or individual permit	$500.00
Major technical modification of a waterfront development, coastal wetlands, or CAFRA general permit authorization or individual permit	30 percent of the original application fee or $500.00, whichever is greater

Request to extend a general permit authorization or an individual permit pursuant to N.J.A.C. 7:7-27.3

	Fee
Request to extend a general permit authorization	$240.00
Request to extend a waterfront development individual permit for activities located waterward of the mean high water line*	25 percent of the total original permit application fee up to a maximum of $3,000

Additional application fee for stormwater review if a project is a "major development" pursuant to the Stormwater Management Rules (see N.J.A.C. 7:8-1.2)

	Fee[1]
Base fee for any major development	$3,000

Additional fee for review of groundwater recharge calculations (see N.J.A.C. 7:8-5.4)	$250.00 per acre of land disturbed by the project (or fraction thereof)
Additional fee for review of runoff quantity calculations (see N.J.A.C. 7:8-5.4)	$250.00 per acre of land disturbed by the project (or fraction thereof)
Additional fee for review of water quality calculations (see N.J.A.C. 7:8-5.5)	$250.00 per acre of impervious surface subject to water quality review (or fraction thereof)
Modification of previously reviewed stormwater calculations	Thirty percent of the original stormwater fee

[1]The additional application fee for stormwater review set forth in this table shall not exceed $20,000.

SUBCHAPTER 27. PERMIT CONDITIONS; EXTENSION, MODIFICATION, TRANSFER, SUSPENSION, AND TERMINATION OF AUTHORIZATIONS AND PERMITS

7:7-27.2 Conditions that apply to all coastal permits

(a) The Department places conditions on a coastal permit to ensure that the approved project complies with this chapter. The conditions that apply to all coastal permits are set forth [in] **at** (c) below, and the additional conditions that apply to all coastal permits except [permits-by-rule] **permits-by-registration** are set forth [in] **at** (d) below.

(b) (No change.)

(c) The following conditions apply to all coastal permits:

1. – 6. (No change.)

7. The permittee shall immediately inform the Department by telephone at (877) 927-6337 ([Warn] **WARN** DEP Hotline) of any noncompliance that may endanger the public health, safety, and welfare, or the environment. The permittee shall inform the Division of Land [Use Regulation] **Resource Protection** by telephone at (609) 292-0060 of any other noncompliance within two working days of the time the permittee becomes aware of the noncompliance, and**,** in writing**,** within five working days of the time the permittee becomes aware of the noncompliance. Such notice shall not, however, serve as a defense to enforcement action if the project is found to be in violation of this chapter. The written notice shall include:

i. – iv. (No change.)

8. – 13. (No change.)

(d) In addition to the conditions at (c) above, the following conditions apply to all coastal permits except [permits-by-rule] **permits-by-registration, which are addressed at N.J.A.C. 7:7-3.5**:

1. – 2. (No change.)

3. The permittee shall record the permit, including all conditions listed therein, with the Office of the County Clerk (the Registrar of Deeds and Mortgages, if applicable) of each county in which the site is located. The permit shall be recorded within 30 calendar days of receipt by the permittee, unless the permit authorizes activities within two or more counties, in which case the permit shall be recorded within 90 calendar days of receipt. Upon completion of all recording, a copy of the recorded permit shall be forwarded to the Division of Land [Use Regulation] **Resource Protection** at the address set forth at N.J.A.C. 7:7-1.6;

4. – 12. (No change.)

13. Where the permittee becomes aware that it failed to submit any relevant facts in an application, or submitted incorrect information in an application or in any report to the Department, it shall promptly submit such facts or information; [and]

[14. The permittee shall submit written notification to the Bureau of Coastal and Land Use Compliance and Enforcement, 401 East State Street, 4th Floor, P.O. Box 420, Mail Code 401-04C, Trenton, NJ 08625, at least three working days prior to the commencement of site preparation or of regulated activities, whichever comes first.]

14. No more than 14 calendar days prior to undertaking an activity authorized pursuant to a general permit-by-certification, general permit, or individual permit, the permittee (or a consultant, engineer, or architect that is designated by the permittee to register on their behalf) shall electronically register the activity through the Department's online system at https://www.nj.gov/dep/online, which requires the registrant to identify or provide the following:

i. The Department's file number for the authorization or permit;

ii. The anticipated date that authorized activities will begin;

iii. Contact information for the registrant, including name, street address, telephone number, email address, organization, and organization type; and

iv. The following certification using the PIN that was issued to the registrant upon registering with the Department's online system:

"I certify under penalty of law that the information submitted herein is true, accurate, and complete, that I am the permittee or that the permittee has provided me with written consent to register for this authorization. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment"; and

15. Where the authorization or permit authorizes the construction, repair, reconstruction, rehabilitation, addition placement, or other improvement of any habitable building, roadway, or railroad within a flood hazard area, permitted activities shall commence within 180 days of the date of issuance of the authorization or permit.

i. Where the construction, repair, reconstruction, rehabilitation, addition placement, or

other improvement of the habitable building, roadway, or railroad within a flood hazard area has not commenced within 180 days of issuance, said activities may not commence unless and until the permittee takes one of the following actions:

(1) Registers at https://www.nj.gov/dep/online and certifies that the climate-adjusted flood elevation, floodway limits, and flood zone designation for the site have not been amended by the Department or FEMA since the date of the initial authorization;

(2) Demonstrates that the amended climate-adjusted flood elevation, floodway limits, and/or flood zone designation for the site does not alter compliance with this chapter as applied in the issued authorization or permit; and

(3) Demonstrates that the project has been revised, where necessary, to comply with the amended climate-adjusted flood elevation, floodway limits, and/or flood zone designation for the site.

ii. For the purposes of this paragraph, commencement of authorized activities for a habitable building means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not intended for human occupancy or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

iii. For the purposes of this paragraph, commencement of authorized activities for a roadway or railroad means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, the placement of subsurface improvements for a roadway, or any work beyond the stage of excavation. Permanent construction does not include land preparation, such as clearing, grading, and filling.

iv. Permittees seeking to demonstrate that either (d)15ii or iii above apply to an authorization or permit shall provide the Department with all necessary information supporting the permittee's assertion. Commencement of authorized activities shall not occur unless and until the Department concurs with the permittee in writing.

v. A registrant may request an adjudicatory hearing to contest the re-registration requirement of this paragraph, in accordance with the procedures set forth at N.J.A.C. 7:7-28.

16. Upon completion of authorized activities, the permittee (or a consultant, engineer, or architect that is designated by the permittee to register on their behalf) shall electronically provide through the Department's online system at https://www.nj.gov/dep/online, the following:

i. Contact information for the registrant;

ii. The Department's file number for the authorization or permit; and

iii. The completion date of the authorized activities.

7:7-27.5 Modification of an authorization [under] **pursuant to** a general permit or an individual permit

(a) An authorization [under] **pursuant to** a general permit that is valid as described in the provisions regarding duration of general permit authorizations at N.J.A.C. 7:7-[3.6 or] 3.7, [as applicable,] or an individual permit that is valid as described in the provisions regarding duration of individual permits at N.J.A.C. 7:7-8.2, may be modified in accordance with this section through an

administrative modification, a minor technical modification, or a major technical modification. An authorization [under] **pursuant to** a general permit-by-certification shall not be modified.

(b) – (f) (No change.)

(g) The permittee shall record the modified permit, including all conditions listed therein, with the Office of the County Clerk (the Registrar of Deeds and Mortgages, if applicable) of each county in which the site is located. The modified permit shall be recorded within 30 calendar days of receipt by the permittee, unless the permit authorizes activities within two or more counties, in which case the modified permit shall be recorded within 90 calendar days of receipt. Upon completion of all recording, a copy of the recorded permit shall be forwarded to the Division of Land [Use Regulation] **Resource Protection** at the address set forth at N.J.A.C. 7:7-1.6.

7:7-27.9 Deed notice requirement for an authorization pursuant to a general permit-by-certification, general permit, or an individual permit

(a) Except as provided at (b) below, the recipient of an authorization pursuant to a general permit-by-certification or general permit, or an individual permit, shall submit, in a form approved by the Department, the following information to the Office of the County Clerk or the registrar of deeds and mortgages in which the site is located, pursuant to (b) below, and shall send proof to the Department, pursuant to (c) below, that this information is recorded on the deed of each lot referenced in the approval:

1. The Department file number for the authorization or permit;

2. The approval and expiration dates of the authorization or permit;

3. The climate-adjusted flood elevation(s) at the site, if identified in the approval(s);

4. For any authorized or permitted activity located in a flood hazard area, an explanation that the activity is likely to be subject to periodic inundation and associated flood damage, as well as the expected depth of inundation resulting from flooding to the climate-adjusted flood elevation;

5. For any authorized or permitted activity located in an inundation risk zone, an explanation that the activity is likely to be subject to permanent inundation during the anticipated lifetime of any structure being constructed, reconstructed, or modified, as well as the depth of inundation expected due to sea level rise through the year 2100;

6. For any habitable building pursuant to N.J.A.C. 7:13-12.5:

i. The anticipated depth of flooding at the building;

ii. The approximate frequency at which the building is anticipated to be impacted by floodwaters;

iii. A prohibition on habitation of any enclosure situated below the lowest floor of any building and an explanation that converting the enclosure into a habitable area may subject the property owner to enforcement pursuant to this chapter; and

7. For any private roadway or parking area proposed to be constructed or raised to less than one foot above the climate-adjusted flood elevation, the deed for each lot on which the private roadway or parking area is constructed, as well as any lot served by the private roadway or parking area, and each lease or rental agreement for a unit within a multi-residence building served by a private roadway or parking area that lies below the climate-adjusted flood elevation, shall be modified to:

i. Explain that the private roadway or parking area is likely to be inundated by floodwaters, which may result in damage and/or inconvenience; and

ii. Disclose the climate-adjusted flood elevation and associated depth of flooding, as well as the approximate frequency at which the private roadway or parking area is anticipated to be impacted by floodwaters.

(b) Deed notice is not required for:

1. A project within a State right-of-way or easement;

2. A permit or authorization to undertake regulated activities on public land by a State agency; or

3. A permit or authorization to undertake sediment and debris removal activities.

(c) Proof that the requirements at (a) above have been satisfied shall be provided to the Department in accordance with (d) below prior to the sooner of either:

1. The start of any site disturbance (including installation of silt fencing, pre-construction earth movement, removal of vegetation or structures, or construction of the project); or

2. The date that is 90 calendar days after the issuance of the authorization or permit.

(d) Proof that the information at (a) above has been recorded on the deed of each lot referenced in the approval shall be in the form of either a copy of the complete recorded document or a receipt from the clerk or other proof of recordation provided by the recording office. However, if the initial proof provided to the Department is not a copy of the complete recorded document, a copy of the complete recorded document shall be provided to the Department within 180 calendar days of the date of the authorization or permit.

SUBCHAPTER 28. REQUESTS FOR ADJUDICATORY HEARINGS

7:7-28.1 Procedure to request an adjudicatory hearing; decision on the request

(a) – (c) (No change.)

(d) A person requesting an adjudicatory hearing shall:

1. (No change.)

2. Submit a copy of the hearing request to the Director of the Division of Land [Use Regulation] **Resource Protection**, at the address set forth at N.J.A.C. 7:7-1.6.

(e) – (g) (No change.)

SUBCHAPTER 29. ENFORCEMENT

7:7-29.5 Civil administrative penalties for failure to obtain a permit prior to conducting regulated activities

(a) – (e) (No change.)

(f) The Department shall sum the total points assigned according to the two factors [in] **at** (e) above, and shall determine the base penalty amount per day using the following table:

Table 29.5A

Base Penalty Points Table

Points	Base Penalty
[1-3] **1-2**	$500
[4-6] **3-4**	$1,000
[7-8] **5**	$2,000
[9-10] **6**	[$3,000] **$4,000**
7	**$5,000**
[11-12] **8**	$6,000
[13-14] **9**	$8,000
10	**$9,000**

[15-16] **11-12**	$10,000
[17-19] **13-14**	$15,000
[20-22 points] **15-16**	$20,000
[23] **17** or more	$25,000

(g) – (i) (No change.)

APPENDIX [I] **H**

CAFRA CENTERS

This non-regulatory appendix contains the list of CAFRA centers, CAFRA cores, [and] CAFRA nodes, **and CAFRA critical environmental sites,** the boundaries of which have been accepted by the Department pursuant to N.J.A.C. 7:7-13.16(b), and which are incorporated into**,** and shown on**,** the CAFRA Planning Map. **The CAFRA centers which include a CAFRA critical environmental site are denoted with an asterisk.** As required at N.J.A.C. 7:7-13.17(b), an applicant shall refer to the CAFRA Planning Map in order to determine the location of a site for the purposes of determining the applicable impervious cover limits [under] **pursuant to** this chapter.

The Department will update the list of CAFRA centers, CAFRA cores, and CAFRA nodes in this [Appendix] **appendix** by notice of administrative change as part of the New Jersey Register notice required at N.J.A.C. 7:7-13.16(b). The appendix is organized as follows: Counties are listed alphabetically. Within each county, the municipalities are listed alphabetically. Within each municipality, the CAFRA centers, CAFRA cores, and CAFRA nodes are listed alphabetically.

I. Atlantic County CAFRA Centers and CAFRA Cores

A. (No change.)

B. Galloway Township CAFRA **Centers and** CAFRA [cores[**Cores**

1.-3. (No change.)

4. Smithville CAFRA town

5. Wrangleboro CAFRA town

II.-VII (No change.)

CHAPTER 7A

FRESHWATER WETLANDS PROTECTION ACT RULES

SUBCHAPTER 1. GENERAL PROVISIONS

7:7A-1.1 Purpose and scope

(a) This chapter constitutes the rules governing the implementation of the Freshwater Wetlands Protection Act, N.J.S.A. 13:9B-1 et seq., and the New Jersey Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq. Certain violations of the New Jersey Water Pollution Control Act are also subject to enforcement provisions at N.J.A.C. 7:14. **Also, this chapter implements and is used in reviewing applications for permits pursuant to the Coastal Area Facility Review Act, N.J.S.A. 13:19-1 et seq., the Wetlands Act of 1970, N.J.S.A. 13:9A-1 et seq., the Waterfront Development Law, N.J.S.A. 12:5-3, the Highlands Water Protection and Planning Act, N.J.S.A. 13:20-1 et seq., and Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq., in addition to relevant aspects of the Environmental Justice Act, N.J.S.A. 13:1D-157 et seq., New Jersey Water Pollution**

Control Act, N.J.S.A. 58:10A-1 et seq., Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq., Dam Safety Act, N.J.S.A. 58:4-1 et seq., the Endangered and Nongame Species Conservation Act, N.J.S.A. 23:2A et seq., the Municipal Land Use Law, N.J.S.A. 40:55D-1 et seq., and N.J.S.A. 13:1D-1 et seq.

(b) - (f) (No change)

7:7A-1.3 Definitions

The following words and terms, when used in this chapter, shall have the following meanings unless the context clearly indicates otherwise. Additional definitions specifically applicable to N.J.A.C. 7:7A-11, Mitigation, are set forth at N.J.A.C. 7:7A-11.1.

…

"Compelling public need" means that based on specific facts, the proposed regulated activity**: (1)** will serve an essential health or safety need of the municipality in which the proposed regulated activity is located[,]**; (2)** that the public health and safety benefit from the proposed use and that the proposed use is required to serve existing needs of the residents of the State[,]**;** and **(3)** that there is no other means available to meet the established public need.

…

"NAVD 88" means the national geodetic vertical datum of 1988, which is the reference datum for all surveying, topography, and elevations described in this chapter.

…

7:7A-1.4 Forms, checklists, and information; Department address and website

(a) Forms, checklists, and other information related to this chapter can be obtained from the Division of Land [Use Regulation] **Resource Protection** at the address [in] **at** (b) below, by telephone at (609) 984-0162, or through the Division's website at [https://www.nj.gov/dep/landuse] **https://dep.nj.gov/wlm/**. Further information about the Department can be accessed at https://www.nj.gov/dep.

(b) Applications and other correspondence shall be submitted to the following addresses:

1. (No change.)

2. For correspondence or the submittal of an application for an exemption, letter of interpretation, or an extension, transfer, or modification of a permit:

i. For regular mail:

New Jersey Department of Environmental Protection

Division of Land [Use Regulation] **Resource Protection**

Mail Code 501-02A

PO Box 420

Trenton, NJ 08625; and

ii. For hand delivery, courier service, and overnight mail:

New Jersey Department of Environmental Protection

Division of Land [Use Regulation] **Resource Protection**

501 East State Street

5 Station Plaza, Second Floor

Trenton, New Jersey 08609.

(c) Questions regarding the requirements of this chapter or about the status of a particular application can be directed to the Division of Land [Use Regulation] **Resource Protection** Technical Support Center at (609) 777-0454, [via] **through** email at LURTechSupport@dep.nj.gov, or by using an

online contact form at [https://www.nj.gov/dep/landuse/contact.html] **https://dep.nj.gov/wlm/contact-us/**.

(d) – (e) (No change.)

SUBCHAPTER 2. APPLICABILITY AND ACTIVITIES FOR WHICH A PERMIT IS REQUIRED

7:7A-2.7 Stormwater management

(a) If a project requires [an individual] **a** permit [under] **or transition area waiver pursuant to** this chapter and the project in its entirety (that means the whole project, not just the portions within wetlands or transition area) meets the definition of "major development" at N.J.A.C. 7:8-1.2, then the project [shall comply] in its entirety **shall comply** with the Stormwater Management Rules at N.J.A.C. 7:8. [If an activity requires a general permit under this chapter and the regulated activity meets the definition of "major development" at N.J.A.C. 7:8-1.2, then the project of which the regulated activity is a part shall comply in its entirety with the Stormwater Management Rules at N.J.A.C. 7:8.]

(b) In accordance with N.J.A.C. 7:7A-1.1(c), the Pinelands Commission may require equal or more stringent stormwater management regulation of activities in and around freshwater wetland areas within its jurisdiction.

SUBCHAPTER 4. LETTERS OF INTERPRETATION

7:7A-4.7 Conditions that apply to an issued letter of interpretation delineation or verification

(a) Within 90 calendar days after the Department issues a delineation or verification letter of interpretation on a privately owned lot, or on a publicly owned lot other than a right-of-way, the recipient of the delineation or verification shall submit the following information to the Office of the County Clerk or the registrar of deeds and mortgages in which the site is located, and shall send proof to the Department

in accordance with (b) below that this information is recorded on the deed of each lot referenced in the delineation or verification letter of interpretation:

1. – 4. (No change.)

5. The following statement "The State of New Jersey has determined that all or a portion of this lot lies in a freshwater wetland**, State open water,** and/or transition area. Certain activities in wetlands**, State open waters,** and transition areas are regulated by the New Jersey Department of Environmental Protection and some activities may be prohibited on this site or may first require a freshwater wetland permit. Contact the Division of Land [Use Regulation] **Resource Protection** at 609-777-0454 or [https://www.nj.gov/dep/landuse] **https://dep.nj.gov/wlm/** for more information prior to any construction onsite."

(b) (No change.)

SUBCHAPTER 5. GENERAL PROVISIONS FOR GENERAL PERMITS-BY-CERTIFICATION AND GENERAL PERMITS

7:7A-5.4 Use of more than one general permit or general permit-by-certification on a single site

(a) A person may undertake more than one regulated activity on a single site. The activities may be authorized [under] **pursuant to** one or more general permits-by-certification and/or general permits, provided:

1.-2. (No change.)

3. The Department shall not authorize disturbance [under] **pursuant to** both general permit 10A and general permit 10B for the same site; [and]

4**.** The Department shall not authorize multiple crossings of the same wetland or State open water unless:

i. (No change.)

ii. Shared driveways are used to the maximum extent possible to access multiple lots[.]**; and**

5. If the total combined area of wetlands, State open waters, and transition areas disturbed or modified on the site pursuant to general permits 2, 6, 6A, 7, 8, 10A, 10B, 11, 12, 13, 14, 17, 17A, 18, 19, 21, 23, 24, and 25 exceeds 0.1 acre (excluding transition areas that are required for access to a general permit activity and transition areas that are part of an averaging plan) then mitigation in accordance with N.J.A.C. 7:7A-11 is required for all impacts authorized.

(b)-(d) (No change.)

7:7A-5.7 Conditions applicable to an authorization pursuant to a general permit-by-certification or a general permit

(a) (No change.)

(b) The following conditions apply to all activities conducted [under] **pursuant to** the authority of a general permit-by-certification or general permit:

1. Activities performed [under] **pursuant to** a general permit-by-certification or general permit shall be associated with a proposed project. The Department shall not authorize activities [under] **pursuant to** a general permit-by-certification or general permit for the purpose of eliminating a natural resource in order to avoid regulation**; any activity authorized pursuant to either permit shall be necessary for the conduct of the proposed project**. For the purposes of this subsection, **proposed** project shall mean the use and configuration of all buildings, pavements, roadways, storage areas**,** and structures, and all associated activities**. For the purposes of this subsection, necessary for the conduct of the proposed project shall mean that there is no other practicable onsite configuration for the proposed project that would avoid or reduce the impacts to wetlands or State open waters**;

2. – 8. (No change.)

9. If [activities under the general permit] **the proposed general permit-by-certification or general permit activities are part of a project and the project in its entirety (that means the whole project, not just the portions within wetlands or transition area),** meet**s** the definition of "major development" at N.J.A.C. 7:8-1.2, then the project [of which the activities are a part shall comply] in its entirety **shall comply** with the Stormwater Management Rules**,** [at] N.J.A.C. 7:8[.]**;**

10.- 13. (No change.)

14. The timing requirements at (c) below shall be met; [and]

15. Activities authorized [under] **pursuant to** a general permit-by-certification or general permit shall not take place in a vernal habitat, or in a transition area adjacent to a vernal habitat, with the exception of activities associated with general permits 1, 6, 6A, and 16, which shall be reviewed on a case-by-case basis in accordance with N.J.A.C. 7:7A-5.3(e)[.]**; and**

16. Mitigation for all temporary disturbances to freshwater wetlands, State open waters, and transition areas shall be provided in accordance with N.J.A.C. 7:7A-11.8.

(c) In order to protect the fishery resources and/or the spawning of the fish population, any activity which may introduce sediment into a stream or cause a stream to become turbid shall not be performed during the time periods listed [in] **at** Table 5.7 below:

Table 5.7[1]

RESTRICTED TIME PERIODS FOR WATER WITH FISHERY RESOURCES

Water and classification	Time period (inclusive) during which activities are prohibited
1. Trout Waters	

• [All trout] **Trout** production waters [except rainbow trout] **where only Brook and/or Brown Trout are present**	September 15 through March 15
• **Trout production waters where only** Rainbow [trout] **Trout** are present [production waters]	February 1 through April 30
• **Trout production waters where Brook and/or Brown Trout in addition to Rainbow Trout are present**	**September 15 through April 30**
• Trout stocked waters • Trout maintenance waters • All regulated waters located within 1 mile upstream of a trout stocked or a trout maintenance water	March 15 through June 15
2. Non-Trout Waters	
• Regulated waters that support [general game fish] **warm water species** located north of Interstate 195	May 1 through July 31
• Regulated waters that support [general game fish] **warm water species** located south of Interstate 195	[May] **April** 1 through June 30
• Regulated waters **located north of Interstate 195** that support pickerel	[Ice] **March 15 or ice** out **(whichever occurs first)** through April 30

• **Regulated waters located south of Interstate 195 that support pickerel**	**March 1 through April 30**
• [Regulated waters that support walleye	March 1 through May 30]
3. Anadromous Waters	
• All [unimpeded tidal regulated waters open to the Atlantic Ocean or any coastal bay • All regulated waters identified as anadromous migratory pathways] **anadromous waters**	[April] **March** 1 through June 30
• [Delaware River upstream of U.S. Route 1	April 1 through June 30 and September 1 through November 30
• Delaware River between U.S. Route 1 and Interstate 295 (Delaware Memorial Bridge) • Tidal portions of Raccoon Creek, Rancocas Creek, Crosswicks Creek, and Cooper River	March 1 through June 30 and September 1 through November 30
• All unimpeded tidal regulated waters open to the Delaware River downstream of Interstate 295 (Delaware Memorial Bridge) • Tidal portions of the Maurice River, Cohansey River, and Salem River	March 1 through June 30 and October 1 through November 30]

[1] Note that the Delaware River Basin Commission (DRBC) imposes additional timing restrictions on certain activities in waters under DRBC jurisdiction. Contact the U.S. Fish and Wildlife Service's River Basin Coordinator through the DRBC at (609) 883-9500 for information on these additional timing restrictions.

(d) – (f) (No change.)

SUBCHAPTER 6. GENERAL PERMITS-BY-CERTIFICATION

7:7A-6.1 General permit-by-certification [8-Construction of an addition to] **8-Expansion of** a lawfully existing residential dwelling

(a) General permit-by-certification 8 authorizes [construction of an addition to] **expansion of the footprint of** a lawfully existing residential dwelling in freshwater wetlands and/or transition areas, provided the conditions at N.J.A.C. 7:7A-5.7 are met and:

1. (No change)

2. The proposed [addition] **expansion** is attached to or an [extension] **expansion** of the residential dwelling;

3. (No change)

4. The total area of [disturbance] **expansion**, including freshwater wetlands, transition areas, and non-regulated areas, is no more than 750 square feet; and

5. The footprint of the existing building has not increased by more than 750 square feet, cumulatively, since July 1, 1988, and the [addition] **current expansion** will not exceed a cumulative 750-square-foot increase in combination with previous [additions] **expansions**.

(b) This general permit-by-certification does not authorize the construction of appurtenant structures including, but not limited to, sheds, swimming pools, and driveways.

SUBCHAPTER 7. GENERAL PERMITS

7:7A-7.1 General permit – Maintenance and repair of existing features

(a) General permit 1 authorizes activities in freshwater wetlands and State open waters required to carry out the repair, rehabilitation, replacement, maintenance, or reconstruction of a previously

authorized, currently serviceable structure, fill, roadway, utility line, active irrigation, or drainage ditch, or stormwater management facility lawfully existing prior to July 1, 1988, or permitted [under] **pursuant to** this chapter, provided all applicable requirements at N.J.A.C. 7:7A-5.7 and 20.3 are met and:

1. – 2. (No change.)

(b) If the activity is the ongoing maintenance of an off-stream stormwater management facility created in uplands, including a wetland constructed in uplands for stormwater management purposes after September 4, 2001, the following shall apply:

1.-2. (No change.)

3. For the purposes of this subsection, maintenance [includes removal of sediment and debris and mowing of vegetation as necessary to ensure that the stormwater management facility will function as it was originally designed and/or permitted. Maintenance does not include enlargement of a stormwater management structure, excavation below the original bottom of a structure, or any other change in its design] **includes activities that satisfy the following:**

i. All work occurs within, and is necessary for the continued functioning of, the stormwater management structure or conveyance;

ii. The existing stormwater management system is not expanded, enlarged, or otherwise modified to receive additional sources of stormwater runoff or include additional discharge points;

iii. The activities are limited to the removal of accumulated sediment, debris, or nuisance vegetation, or the stabilization of an eroded structure;

iv. No wetland or transition area vegetation is cleared, cut, and/or removed outside the structure or conveyance feature, unless such disturbance is unavoidable and necessary to gain access to the structure or conveyance feature and is minimized; and

v. No trees are cleared, cut, and/or removed in a wetland or transition area outside the structure or conveyance feature.

7:7A-7.2 General permit 2— Underground utility lines

(a) General permit 2 authorizes activities in freshwater wetlands, transition areas, and/or State open waters necessary for the construction and/or maintenance of an underground utility line, provided all applicable requirements at N.J.A.C. 7:7A-5.7 and 20.3 are met and:

1. - 4. (No change.)

5. The activities shall not cause any change in preconstruction elevation of a freshwater wetland, transition area, or State open water; [and]

6. Manholes and siphons for sewer lines are placed outside of wetlands, unless the Department's Municipal Finance and Construction Element determines [under] **pursuant to** N.J.A.C. 7:22 and/or 7:14A-23 that there is no feasible alternative to placement in wetlands[.]**; and**

7. Where the utility line is proposed to be installed through horizontal directional drilling beneath freshwater wetlands, transition areas, or State open waters, the applicant demonstrates that the activity will not adversely impact or result in a discharge into these regulated areas.

(b) If a utility line is jacked [or directionally drilled] underground, so that there is no surface disturbance of any freshwater wetlands, transition areas, or State open waters and there is no draining or dewatering of freshwater wetlands, no Department approval is required [under] **pursuant to** this chapter. Jacking [or directional drilling] is regulated [under] **pursuant to** this chapter if any disturbance occurs to the ground surface in the freshwater wetlands, transition area, or State open water; for example, if the drilling is conducted from a pit located in a freshwater wetland or transition area.

(c) In order to minimize environmental impact, a permittee shall:

1.-3. (No change.)

4. Stabilize the disturbed area in accordance with the requirements of the appropriate Soil Conservation District; [and]

5. Ensure that the activities do not interfere with the natural hydraulic characteristics of the wetland, such as the flow characteristics of groundwater on the site[.]**;**

6. Use potable water in the drilling and/or utility line installation;

7. Use NSF 60/61 certified drilling fluids and additives to conduct drilling operations;

8. Submit a contingency plan for drilling operations, including preparedness procedures to minimize environmental impact from inadvertent returns; and

9. Fill any abandoned boreholes in accordance with the following:

i. Any borehole that penetrates 25 or more vertical feet below land surface shall be decommissioned in accordance with N.J.A.C. 7:9D et seq., using Department-approved grouts, as listed at N.J.A.C. 7:9D (Well Construction and Maintenance; Sealing of Abandoned Wells Rules). The upper 25 vertical feet plus final borehole diameter of any open borehole, annular space between the borehole, and any pipe or casing remaining in the borehole, and inside the pipe or casing must be grouted in accordance with N.J.A.C. 7:9D. The grout shall be placed through either a drill rod or tremie extended down the borehole from the entry point until it reaches a vertical depth of 25 feet plus the hole diameter below the land surface. Any borehole shallower than 25 vertical feet below land surface shall be decommissioned using a Department-approved grout, clean fill, or cuttings from the borehole; and

ii. The top five vertical feet of all entry and exit points shall be grouted with cement or concrete.

(d) Any pipes [laid] **installed** through wetlands, transition areas, or State open waters shall be:

1.-3. (No change.)

(e) Mitigation shall be performed for all permanent loss and/or disturbance of 0.1 acres or greater of freshwater wetlands or State open waters. Mitigation shall be performed for all permanent loss and/or disturbance of less than 0.1 acres of freshwater wetlands or State open waters unless the applicant

demonstrates to the Department that all activities have been designed to avoid and minimize impacts to wetlands. For purposes of this subsection, "minimize" means that the project is configured so that most or all of it is contained in the uplands on the site, and that the wetlands are avoided to the greatest extent possible. An applicant is not required to reduce the scope of the project or to consider offsite alternatives to comply with this requirement. **Mitigation, in the form of restoration for all temporary disturbances to freshwater wetlands, State open waters, and transition areas shall be provided in accordance with N.J.A.C. 7:7A-11.8.**

1. (No change.)

7:7A-7.4 General permit 4— Hazardous site investigation and cleanup

(a) General permit 4 authorizes activities in freshwater wetlands, transition areas, and State open waters that are undertaken by the Department or by a licensed site remediation professional pursuant to the Administrative Requirements for the Remediation of Contaminated Sites, N.J.A.C. 7:26C, for the investigation, cleanup, removal, or remediation of hazardous substances as defined by or pursuant to the Department's rules governing hazardous substances at N.J.A.C. 7:1E[,] Appendix A**,** or pollutants as defined by or pursuant to the New Jersey Pollutant Discharge Elimination System (NJPDES) rules at N.J.A.C. 7:14A, provided all applicable requirements at N.J.A.C. 7:7A-5.7 and 20.3 are met and:

1. (No change.)

2. The applicant provides mitigation, in accordance with N.J.A.C. 7:7A-11[, for] **and with (a)2i, ii, and iii below. Mitigation is not required to compensate for disturbance of wetlands or State open waters that have formed as a direct result of the remediation activities. Mitigation is required:**

i. For the total area of freshwater wetlands and/or State open waters **permanently** disturbed[, except that mitigation is not required to compensate for disturbance of wetlands or State open waters that have formed as a direct result of the remediation activities.]**;**

ii. For the permanent disturbance of 0.1 acres or greater of forested transition area, if there is no disturbance to freshwater wetlands and/or State open waters; and

iii. In the form of restoration for all temporary disturbances to freshwater wetlands, State open waters, and transition areas in accordance with N.J.A.C. 7:7A-11.8.

(b) (No change.)

7:7A-7.5 General permit 5— Landfill closures

(a) (No change.)

(b) There is no acreage limit on activities [under] **pursuant to** general permit 5. However, mitigation **meeting the procedural and substantive requirements at N.J.A.C. 7:7A-11** shall be performed [to compensate for disturbance of freshwater wetlands, and/or State open waters, authorized under general permit 5, except that mitigation] **in accordance with (b)1, 2, and 3 below**. **Mitigation** is not required for disturbance of wetlands located on top of the landfill, or on the intermediate or permanent cover of the landfill. [The mitigation shall meet the procedural and substantive requirements at N.J.A.C. 7:7A-11.] **Mitigation is required:**

1. For the total area of freshwater wetlands, and/or State open waters permanently disturbed;

2. If there is no disturbance to freshwater wetlands and/or State open waters, for the total area of transition areas permanently disturbed, if the permanent disturbance is 0.1 acres or greater and the transition area is forested; and

3. In the form of restoration for all temporary disturbances to freshwater wetlands, State open waters, and transition areas in accordance with N.J.A.C. 7:7A-11.8.

(c)-(d) (No change.)

7:7A-7.6 General permit 6— Non-tributary wetlands

(a) General permit 6 authorizes regulated activities in freshwater wetlands and/or State open waters, if the freshwater wetlands and/or State open waters are not part of a surface water tributary system discharging into an inland lake or pond, or a river or stream, provided all applicable requirements at N.J.A.C. 7:7A-5.7 and 20.3 are met and:

1. The activities disturb no more than one acre of a freshwater wetland and/or State open water that is not a water of the United States; [and]

2. The activities disturb no more than one-half acre of a freshwater wetland and/or State open water that is a water of the United States. Mitigation shall be performed for all permanent loss and/or disturbance to wetlands and/or State open water that are waters of the United States in accordance with (b) below[.]**;**

3. The activities do not take place in any of the following:

i.-iii. (No change.)

iv. A State open water that is larger than one acre[.]**; and**

4. If the wetland for which the permit is requested is found to contain obligate or facultative vernal habitat species (see N.J.A.C. 7:7 Appendix 1: Obligate and facultative fauna species found in vernal habitats), and filling activities would extirpate a local population of such species, the applicant shall demonstrate that the proposed configuration will minimize the impacts to the species that could not be addressed with a different project design that still meets the project purposes.

(b) Mitigation shall be performed for all permanent loss and/or disturbance of 0.1 acres or greater of freshwater wetlands or State open waters that are also waters of the United States. Mitigation shall be performed for permanent loss and/or disturbance of less than 0.1 acres of freshwater wetlands or State open waters that are also waters of the United States unless the applicant demonstrates to the Department

that all activities have been designed to avoid and minimize impacts to wetlands. For purposes of this subsection, "minimize" means that the project is configured so that most or all of it is contained in the uplands on the site, and that the wetlands are avoided to the greatest extent possible. An applicant is not required to reduce the scope of the project or to consider offsite alternatives to comply with this requirement. **For all temporary impacts to freshwater wetlands, State open waters, and transition areas, a restoration plan is required in accordance with N.J.A.C. 7:7A-11.8.**

1. (No change.)

7:7A-7.10A General permit 10A—Very minor road crossings

(a) General permit 10A authorizes the following activities in freshwater wetlands, transition areas, and/or State open waters:

1. Construction of one or more new **linear access** road crossings, including attendant features such as shoulders, sidewalks**,** and embankments;

2. – 3. (No change.)

(b)-(e) (No change.)

(f) Mitigation shall be performed for all permanent loss and/or disturbance of 0.1 acres or greater of freshwater wetlands or State open waters. Mitigation shall be performed for **all** permanent loss and/or disturbance of less than 0.1 acres of freshwater wetlands or State open waters unless the applicant demonstrates to the Department that all activities have been designed to avoid and minimize impacts to wetlands. For purposes of this subsection, "minimize" means that the project is configured so that most or all of it is contained in the uplands on the site, and that the wetlands are avoided to the greatest extent possible. An applicant is not required to reduce the scope of the project or to consider offsite alternatives to comply with this requirement. **Mitigation for all temporary disturbances to freshwater wetlands, State open waters, and transition areas shall be provided in accordance with N.J.A.C. 7:7A-11.8.**

1. (No change.)

7:7A-7.10B General permit 10B—Minor road crossings

(a) General permit 10B authorizes the following activities in freshwater wetlands, transition areas, and/or State open waters:

1. Construction of one or more new **linear access** road crossings necessary to gain access to an otherwise inaccessible, developable, upland site, including attendant**,** such as shoulders, sidewalks**,** and embankments;

2. – 3. (No change.)

(b)-(d) (No change.)

(e) Mitigation shall be performed for all permanent loss and/or disturbance of 0.1 acres or greater of freshwater wetlands or State open waters. Mitigation shall be performed for **all** permanent loss and/or disturbance of less than 0.1 acres of freshwater wetlands or State open waters unless the applicant demonstrates to the Department that all activities have been designed to avoid and minimize impacts to wetlands. For purposes of this subsection, "minimize" means that the project is configured so that most or all of it is contained in the uplands on the site, and that the wetlands are avoided to the greatest extent possible. An applicant is not required to reduce the scope of the project or to consider offsite alternatives to comply with this requirement. **Mitigation for all temporary disturbances to freshwater wetlands, State open waters, and transition areas shall be provided in accordance with N.J.A.C. 7:7A-11.8.**

1. (No change.)

7:7A-7.11 General permit 11—Outfalls and intake structures

(a)-(b) (No change.)

(c) The Department shall issue [a] **an authorization pursuant to** general permit 11 only if all applicable requirements at N.J.A.C. 7:7A-5.7 and 20.3 are met and:

1. – 3. (No change.)

(d) (No change.)

(e) All activities [under] **pursuant to** general permit 11 shall comply with the specifications and requirements in the [Standards for Soil Erosion and Sediment Control in New Jersey] **State Soil Conservation Committee Standards** at N.J.A.C. 2:90, including activities which are exempted from or not regulated by those [Standards] **standards**.

(f) - (h) (No change.)

(i) Mitigation shall be performed for all permanent loss and/or disturbance of 0.1 acres or greater of freshwater wetlands or State open waters. Mitigation shall be performed for **all** permanent loss and/or disturbance of less than 0.1 acres of freshwater wetlands or State open waters unless the applicant demonstrates to the Department that all activities have been designed to avoid and minimize impacts to wetlands. For purposes of this subsection, "minimize" means that the project is configured so that most or all of it is contained in the uplands on the site, and that the wetlands are avoided to the greatest extent possible. An applicant is not required to reduce the scope of the project or to consider offsite alternatives to comply with this requirement. **Mitigation for all temporary disturbances to freshwater wetlands, State open waters, and transition areas shall be provided in accordance with N.J.A.C. 7:7A-11.8.**

1. (No change.)

7:7A-7.13 General permit 13—Lake dredging

(a)-(e) (No change.)

(f) The permittee shall dispose of dredged material in accordance with the requirements at N.J.A.C. 7:7A-5.7, Conditions applicable to an authorization pursuant to a general permit-by-certification

or a general permit. The Department may require testing of dredged material if there is reason to suspect that the material is contaminated. **Factors that the Department will consider in making such a determination are: the volume of sediment to be removed; the proximity of combined sewer overflow points and other surface and stormwater outfalls; and the potential for human/ecological exposure of the proposed end use for sediments.**

7:7A-7.14 General permit 14—Water monitoring devices

(a) (No change.)

(b) If an applicant cannot determine at the time of application how many monitoring wells will be needed, the Department may issue a "blanket" authorization [under] **pursuant to** general permit 14 for drilling of monitoring wells, such as those used in cleanups of contaminated groundwater. A "blanket" authorization allows the placement of multiple monitoring wells on a site over the term of the permit authorization, provided that the permittee reports the number and location of all wells to the Department when all of the wells have been drilled. To be eligible for a "blanket" authorization, the monitoring wells must be approved by the Department's Division of Remediation Management [and Response]**, by a licensed site remediation professional pursuant to the Administrative Requirements for the Remediation of Contaminated Sites, N.J.A.C. 7:26C,** or by the U.S. Environmental Protection Agency.

(c) (No change.)

7:7A-7.15 General permit 15—Mosquito control activities

(a) (No change.)

(b) The agency shall submit an individual, site-specific project proposal to the State Office of Mosquito Control Coordination. If the State Office of Mosquito Control Coordination [determines] **provides certification** that the project is necessary to control a documented mosquito problem affecting

existing residents, the agency shall submit an application to the Department for authorization to act [under] **pursuant to** general permit 15.

(c) In conducting activities [under] **pursuant to** general permit 15, an agency shall:

1. Comply with ["Best Management Practices for Mosquito Management," issued by the State Mosquito Control Commission, and available from the Department at PO Box 400, Trenton, N.J., 08625] **the Best Management Practices for Mosquito Control and Freshwater Wetlands Management, dated July 1997, which is available at http://www.nj.gov/dep/mosquito/bmps.htm**;

2. (No change.)

3. Minimize disturbance of vegetation; [and]

4. Use only light equipment[.]**; and**

5. Comply with the timing restrictions set forth at N.J.A.C. 7:7A-5.7(c).

(d) The agency shall remove excavated or dredged material **and it shall be placed outside any regulated area and in accordance with all applicable Federal, State, and local requirements**. [Alternatively, if the agency demonstrates that the material will not alter the character of the wetlands, the agency may spread it evenly in a shallow layer no more than three inches deep.]

(e)-(g) (No change.)

7:7A-7.16 General permit 16—Creation, restoration, and enhancement of habitat and water quality functions and values

(a) General permit 16 authorizes regulated activities in freshwater wetlands, transition areas, and State open waters necessary to implement a plan for the creation, restoration, or enhancement of habitat and water quality functions and values of wetlands. Activities authorized [under] **pursuant to** this general permit include, but are not limited to:

1. – 3. (No change.)

4. Regrading to provide proper elevation or topography for wetlands restoration, creation, or enhancement; [and]

5. Removing, planting, cutting, burning, or otherwise managing vegetation in order to increase habitat diversity or control invasive flora[.]**; and**

6. Fencing, for habitat connectivity projects or barriers to prevent wildlife mortality and vehicle damage, either on its own or used in conjunction with a proposed or existing culvert or bridge.

(b) Creation, restoration, and enhancement activities are eligible for authorization [under] **pursuant to** this general permit, provided the conditions at N.J.A.C. 7:7A-5.7 and 20.3 are met [and:]**.**

[1.The plan is:

i. Approved by one of the following agencies:

(1) The Department's Division of Fish and Wildlife;

(2) The Department's Office of Natural Resource Restoration;

(3) The USFWS;

(4) The USDA Natural Resources Conservation Service;

(5) A government resource protection agency, such as a parks commission; or

(6) A charitable conservancy; or

ii. Required by or approved by a government agency, such as the Department and/or USACE, under a mitigation plan.

(1) Pursuant to N.J.A.C. 7:7A-11, a mitigation plan submitted to the Department to satisfy the requirements and/or conditions of a permit does not require the submittal of a separate application for an authorization or permit;]

Recodify existing 2. - 4. as **1.-3.** (No change in text.)

[5. The activities disturb the minimum amount of freshwater wetlands, transition areas, and/or

State open waters necessary to successfully implement the project plan; and]

[6.] **4.** The activities do not decrease the total combined area of freshwater wetlands, State open waters, and/or transition areas on a site **or trade one environmental benefit for another**. However, the Department may approve such a decrease, if the Department determines that the activities causing the decrease are sufficiently environmentally beneficial to outweigh the negative environmental effects of the decrease. In addition, the Department may approve conversion of wetlands to State open waters or transition areas, conversion of State open waters to wetlands or transition areas, or the conversion of transition areas to freshwater wetlands or State open waters, if the Department determines that such conversion is environmentally beneficial.

(c)-(e) (No change.)

(f) If an activity is exempt [under] **pursuant to** this chapter, it shall not require authorization under general permit 16 [solely by virtue of being conducted as part of a program included in (b) above]. For example, if a farmer proposes a habitat enhancement project that is eligible for authorization [under] **pursuant to** general permit 16, and some of the activities involved in the project meet the requirements for the farming exemption [under] **pursuant to** N.J.A.C. 7:7A-2.4(c), those activities do not lose their exempt status merely by virtue of being part of a project authorized [under] **pursuant to** general permit 16.

7:7A-7.20 General permit 20—Bank stabilization

(a) General permit 20 authorizes activities in freshwater wetlands, transition areas, and/or State open waters necessary to stabilize the bank of a [water body in order] **waterbody** to [reduce or prevent] **correct existing** erosion. General permit 20 does not authorize the channelization of a [stream] **waterbody** or the stabilization of the bottom of the [stream] **waterbody**. Bank stabilization projects are

eligible for authorization [under] **pursuant to** this general permit provided the applicable requirements at N.J.A.C. 7:7A-5.7 and 20.3 are met [and:]**.**

[1. Vegetative or bioengineering stabilization methods are used to stabilize the eroded bank, unless the applicant demonstrates that, based on the velocity and configuration of the channel or other factors, the Standards for Soil Erosion and Sediment Control in New Jersey at N.J.A.C. 2:90 require other methods;]

(b) The Department shall authorize a general permit for bank stabilization only if the following requirements are satisfied:

1. The applicant provides:

i. A complete written description of the existing erosion, instability, or ecological degradation including:

(1) A history of erosion on the site and in the watershed, where available;

(2) An explanation of any previous attempts to stabilize or restore the bank or channel; and

(3) The likely causes of any erosion, instability, or ecological degradation proposed to be remedied;

ii. A demonstration of why the selected stabilization or restoration methods (as described at (c) below) are the most suitable for the site. At a minimum, this demonstration shall include information on and an analysis of the following:

(1) The location of any headcut in the channel, if present. A headcut is a sudden change in elevation in the stream bed, which usually occurs at the leading edge of a forming gully, and is indicative of erosive forces that are likely to continue to wash away the natural channel;

(2) Any upstream or downstream stressors that may have contributed to and/or exacerbated any erosion, instability, or ecological degradation, which should be addressed as part of the project;

(3) How future development in the watershed could impact the bank and/or channel and the proposed stabilization and/or restoration; and

(4) The anticipated lifetime of the proposed stabilization or restoration;

iii. A maintenance and monitoring plan to ensure the success of the proposed stabilization or restoration, which includes:

(1) An action plan in case of future failure of the project; and

(2) A plan to reduce the likelihood of future erosion, instability, and ecological degradation onsite; and

2. The project is designed by an individual with experience in fluvial geomorphology (and soil bioengineering if used on site), as evidenced by documentation supplied with the individual permit application.

(c) The Department shall issue a general permit to restore to a stable condition a bank or channel which has become eroded, unstable, and/or ecologically degraded, only if the project is accomplished, as follows:

1. Where feasible, a localized eroded bank or destabilized channel shall be restored solely by cutting back the bank to a stable slope and planting with native, non-invasive plant species suitable for stabilization. Generally, a slope of no greater than 50 percent (a ratio of two horizontal to one vertical) is recommended to stabilize an eroded bank;

2. Where the applicant demonstrates that cutting the bank and planting vegetation as described at (c)1 above cannot adequately restore the channel and/or fully prevent erosion due to excessive channel velocity, or is otherwise inappropriate, soil bioengineering set forth at, and performed in accordance with, 650.1601(d)(2) in Chapter 16 of the NRCS Engineering Field Handbook, published December 1996, incorporated herein by reference, as amended and supplemented, shall be used to stabilize the eroded bank and/or restore the channel. In designing

soil bioengineering installations, the existing soil characteristics, the bank and/or channel's physical structure, and the hydrologic conditions on site shall be considered; and

3. Where the applicant demonstrates that, given the velocity and configuration of the adjacent channel and/or other conditions of the site, vegetation pursuant to (c)1 above and/or soil bioengineering pursuant to (c)2 above alone are not adequate to stabilize the bank and/or restore the channel, the use of revetments, retaining walls, or other armoring to stabilize the bank or channel is conditionally acceptable, provided that vegetation and soil bioengineering methods are used to the greatest extent possible.

[2.] **4.** The total cumulative length of [water body] **waterbody** bank affected by the bank stabilization activities meets the applicable length limit below in this paragraph. These limits apply to the total linear footage of stream bank affected, regardless of which side of the stream it is on, or whether the activities are contiguous. For example, a bank stabilization using only rip-rap could disturb one bank of a stream for a distance of 150 feet, or both banks for 75 feet. The applicable length limits are as follows:

i. (No change.)

ii. For the following bank stabilization activities, no more than 300 feet of stream bank:

(1) Soil bioengineering systems for stream bank stabilization set forth at, and performed in accordance with, 650.1601(d)(2) in Chapter 16 of the NRCS Engineering Field Handbook, published December 1996, incorporated herein by reference**,** as amended and supplemented; and

(2) Soil bioengineering systems not included [in (a)2ii(1)] **at (c)2** above but approved by the Department**,** in writing, which are appropriate to the site and which provide environmental benefits similar to those provided by the measures [in (a)2ii(1)] **at (c)1** above. Examples of such measures are the placement of coconut fiber rolls or sand filled textile containers, parallel to the shoreline of a stream bank; and

iii. – iv. (No change.)

[3.] **5.** The bank stabilization activities described [in (a)2] **at (c)4** above may be used in combination. For example, a bank stabilization project might involve 100 feet of rip-rap authorized [under (a)2i] **pursuant to (c)4i** above, 300 feet of soil bioengineering authorized [under [(a)2ii] **pursuant to (c)4ii** above, and 400 feet of vegetative planting measures authorized [under (a)2iv] **pursuant to (c)4iv** above; and

[4.] **6.** Environmental impacts are minimized as follows:

i. -ii. (No change.)

iii. The Department shall allow replacement of previously eroded material as part of the bank stabilization only if the applicant demonstrates that such replacement would be environmentally beneficial **and will not cause, redirect, or exacerbate flooding**;

iv. -vi. (No change.)

7:7A-7.21 General permit 21—Above ground utility lines

(a)-(d) (No change.)

(e) Mitigation shall be performed for all permanent loss and/or disturbance of 0.1 acres or greater of freshwater wetlands or State open waters. Mitigation shall be performed for permanent loss and/or disturbance of less than 0.1 acres of freshwater wetlands or State open waters unless the applicant demonstrates to the Department that all activities have been designed to avoid and minimize impacts to wetlands. For purposes of this subsection, "minimize" means that the project is configured so that most or all of it is contained in the uplands on the site, and that the wetlands are avoided to the greatest extent possible. An applicant is not required to reduce the scope of the project or to consider offsite alternatives to comply with this requirement. **Mitigation for all temporary disturbances to freshwater wetlands, State open waters, and transition areas shall be provided in accordance with N.J.A.C. 7:7A-11.8.**

1. (No change.)

7:7A-7.25 General permit 25— Minor channel or stream cleaning for [local] government agencies

(a) General permit 25 authorizes a county, municipality, or a designated agency thereof to conduct activities **pursuant to the Stream Cleaning Act, at N.J.S.A. 58:16A-67, or by a State agency or public transportation entity, as defined at N.J.A.C. 7:13-1.2,** in freshwater wetlands and transition areas within their jurisdiction, necessary to desnag a channel or stream and/or remove accumulated sediment, debris, and garbage, which are obstructing flow in a channel or stream, provided all applicable requirements at N.J.A.C. 7:7A-5.7 and 20.3 are met and:

1. – 5. (No change.)

6. If the project involves sediment removal from a channel with a natural bed, the following requirements are satisfied:

i.-iii. (No change.)

iv. The stream is not classified as a Pinelands water or category one water [under] **pursuant to** the Department's Surface Water Quality Standards at N.J.A.C. 7:9B; [and]

v. The stream is not located in an area that has a threatened or endangered species**, as defined at N.J.A.C. 7:7A-1.4,** associated with its wetlands[.]**; and**

vi. The timing restrictions set forth at N.J.A.C. 7:7A-5.7(c) are observed.

(b)-(f) (No change.)

7:7A-7.26 General permit 26 – Redevelopment of previously disturbed areas

(a) General permit 26 authorizes the disturbance of certain degraded freshwater wetlands, transition areas, and/or State open waters necessary for redevelopment of an area previously significantly disturbed by industrial or commercial activities, provided all applicable requirements at N.J.A.C. 7:7A-5.7 and 20.3 are met and:

1-4. (No change.)

[5. The activities disturb no more than one acre of a freshwater wetlands and/or State open water, which is a not a water of the United States;]

5. The activities disturb no more than one-half acre of a freshwater wetland and/or State open water; and

6. The activities disturb no more than one acre of a transition area[; and]**.**

[7. The activities disturb no more than one-half acre of a freshwater wetland and/or State open water, which is a water of the United States.]

(b) Mitigation shall be performed for all permanent loss and/or disturbance of 0.1 acres or greater of freshwater wetlands or State open waters. Mitigation shall be performed for permanent loss and/or disturbance of less than 0.1 acres of freshwater wetlands or State open waters unless the applicant demonstrates to the Department that all activities have been designed to avoid and minimize impacts to wetlands. For purposes of this subsection, "minimize" means that the project is configured so that most or all of it is contained in the uplands on the site, and that the wetlands are avoided to the greatest extent possible. An applicant is not required to reduce the scope of the project or to consider offsite alternatives to comply with this requirement. **Mitigation for all temporary disturbances to freshwater wetlands, State open waters, and transition areas shall be provided in accordance with N.J.A.C. 7:7A-11.8.**

1. (No change.)

(c) (No change.)

SUBCHAPTER 8. TRANSITION AREA WAIVERS

7:7A-8.1 General provisions for transition area waivers

(a) (No change.)

(b) If necessary, the Department shall include in a transition area waiver additional conditions to ensure that an activity does not result in a substantial impact on the adjacent wetlands, and does not impair the purposes and functions of transition areas as set forth [in] **at** N.J.A.C. 7:7A-3.3. Such conditions may include, but are not limited to, the following:

1. - 3. (No change.)

4. The permittee shall execute and record a conservation restriction, in accordance with the procedures at N.J.A.C. 7:7A-12, which prohibits any regulated activities in the remaining transition area as appropriate[.]**; and**

5. Except as provided at (b)5i, ii, or iii below, all existing onsite impervious surface located within 25 feet of the freshwater wetland boundary is removed and the transition area is replanted with native vegetation beneficial to the wetland and protected from future development by a conservation restriction that meets the requirements at N.J.A.C. 7:7A-12. Removal of all existing onsite impervious surface within 25 feet of the freshwater wetland boundary and replanting of this area shall not be required if:

i. The applicant demonstrates that removing and replanting all, or a portion of, the existing impervious surface pursuant to this paragraph would likely exacerbate flooding or erosion, expose hazardous substances or solid waste, or otherwise threaten public health, safety, welfare, and/or the environment. In such a case, impervious surface shall be removed from all other portions of the transition area within 25 feet of the freshwater wetland boundary, to the extent feasible and protective of public health, safety, and welfare, and the environment, and shall be replanted with plants that are beneficial to the wetland and protected from future development by a conservation restriction that meets the requirements at N.J.A.C. 7:7A-12;

ii. The applicant demonstrates that removing and replanting all, or a portion of, the existing impervious surface pursuant to this paragraph would prevent reasonable use or access to the site

and/or cause an unreasonable burden upon the applicant. For example, lawfully existing pavement around a building, which is located within 25 feet of a freshwater wetland, may provide essential access to, and around, the building and the removal of such impervious surface would result in noncompliance with local building or fire codes and/or disrupt normal access to and throughout the facility. In such a case, impervious surface shall be removed from all other portions of the transition area within 25 feet of the freshwater wetland boundary shall, to the extent feasible, be replanted with native plants that are beneficial to the wetland and protected from future development by a conservation restriction that meets the requirements at N.J.A.C. 7:7A-12; or

iii. The impervious surface located within 25 feet of the freshwater wetlands boundary is associated with a lawfully existing railroad or public roadway and the public transportation entity, as defined at N.J.A.C. 7:13-1.2, having authority over the structure indicates that removing and replanting all, or a portion of, the existing impervious surface pursuant to this paragraph is impracticable or would result in an unsafe condition.

(c) - (i) (No change.)

(j) If the project, of which the transition area waiver activities are a part, meets the definition of "major development" at N.J.A.C. 7:8-1.2, then the project in its entirety shall comply with the Stormwater Management Rules, N.J.A.C. 7:8.

7:7A-8.2 Transition area averaging plan waiver

(a) - (b) (No change.)

(c) In addition to the presumptions at (b) above, the Department shall also presume that, for a transition area adjacent to an intermediate resource value wetland, the following will result in a substantial impact on the adjacent freshwater wetlands, and the Department shall not issue a transition

area averaging plan waiver unless the applicant demonstrates otherwise [under] **pursuant to** N.J.A.C. 7:7A-8.1(d):

1. A structure, impervious surface, or stormwater management facility will be placed within [20] **25** feet of freshwater wetlands; or

2. The transition area averaging plan proposes to:

i. Reduce any portion of the transition area to less than [10] **25** feet wide[:]**; or**

[ii. Reduce a transition area to less than 25 feet wide in an area containing critical habitat for fauna or flora;

iii. Reduce a transition area to 10 feet wide for a continuous distance of 100 linear feet or more along the freshwater wetlands boundary;

iv. Reduce a transition area to less than 25 feet wide within the watershed of a current or proposed National Wildlife Refuge;]

[v.] **ii.** Compensate for a decrease in a transition area by increasing the width of any portion of the transition area to more than 75 feet[; or]**.**

[vi. Result in an average transition area width that is less than 25 feet.]

(d) - (e) (No change.)

(f) All transition area averaging plan waivers shall be conditioned on the recording of a Department-approved conservation restriction in accordance with the requirements at N.J.A.C. 7:7A-12 restricting future activities in the [averaging compensation] **entire transition** area.

SUBCHAPTER 11. MITIGATION

7:7A-11.2 General mitigation requirements

(a) Mitigation shall be in-kind and shall fully compensate for any ecological loss. The Department will consider proposals for out-of-kind mitigation, provided the mitigator demonstrates to the

Department that the mitigation meets the goals and objectives of this subchapter and would result in equal ecological functions and values as compared to the ecological functions and values of the resource(s) prior to loss or impact. In order to demonstrate equal ecological functions and values, the mitigator shall provide [current]**:**

1. Current scientific literature concerning wetlands, aquatic resources, and mitigation; [as well as]

2. A survey **of** the conditions on the site of disturbance and on the proposed mitigation area and provide written documentation regarding [the]**:**

i. The existing and proposed soil conditions, type and density of vegetation[, any]**;**

ii. Any existing contamination or other degradation, sediment**,** and pollution removal ability and flood storage capacity of the wetland resources[, all]**;**

iii. All proposed soil erosion protection measures[, and]**;**

iv. All existing[, as well as] **and** any anticipated, wildlife habitat conditions[.]**; and**

v. [The documentation shall also detail] **Detailed documentation describing** how the mitigation proposal will replace the ecological values of the wetland resource lost or disturbed.

(b) – (o) (No change.)

7:7A-11.4 Property suitable for mitigation

(a)-(j) (No change.)

(k) The Department shall require an assessment relating to predicted future conditions on the site due to climate change to determine if an area is suitable for the type of mitigation being proposed. An assessment shall be performed in accordance with N.J.A.C. 7:7A-11.6(h)15.

7:7A-11.6 Basic requirements for mitigation proposals

(a) - (g) (No change.)

(h) The mitigation proposal checklists identified at (e) above require the following information:

1. - 14. (No change)

15. A discussion of the projected impact of climate change on the site in the future and any special considerations that may be necessary as part of the current mitigation project (for example, proposed site elevations and the type of plants selected for the site) to promote the immediate and long-term sustainability of the site. The discussion shall include all assessments applicable to the site under consideration, such as: an assessment of the site anticipating the effects of climate change and sea level rise by 2100, including five feet of sea level rise above the mean higher high water elevation as it exists on (the effective date of this rulemaking); an assessment of potential changes to precipitation, including an increase in the intensity and amount of precipitation, and a potential increase in summertime drought; and if proposing forested wetland mitigation, an assessment of the vigor of reference forested systems;

Recodify existing 15. – 19. as **16. – 20.** (No change in text.)

(i) (No change.)

7:7A-11.8 Mitigation for a temporary disturbance

(a) Mitigation for a temporary disturbance shall be performed as follows:

1. For a disturbance of non-forested freshwater wetlands or of State open waters, restoration of the area temporarily disturbed; [or]

2. For a disturbance of forested freshwater wetlands, either:

i. (No change.)

ii. Restoration of the area temporarily disturbed to a non-forested wetland, and in addition, one acre of mitigation in accordance with this subchapter for each acre of disturbance[.]**; or**

3. For a disturbance to transition areas, restoration of the area temporarily disturbed to a forested or non-forested transition area, as applicable.

(b) Mitigation for a temporary disturbance requires the submission of the following:

1. A planting plan specifying the number, type, and quantity of each species to be planted;

2. A list identifying the components of any seed mixes proposed to be used;

3. A narrative description of the restoration plan; and

4. An invasive species control plan.

[(b)] **(c)** (No change in text.)

SUBCHAPTER 12. CONSERVATION RESTRICTIONS

7:7A-12.2 Property owners' reservation of rights

(a) (No change.)

(b) The property owner or grantor may reserve the right to abandon the project[. At any time prior to]**, relinquish the permit, and to remove the conservation restriction. The reserved right to abandon the permit shall only exist prior to the effective date of the conservation restriction. The effective date of the conservation restriction is and shall be** the start of any site disturbance, including pre-construction earth movement, removal of vegetation or structures, or construction **on the property or** of the project**. Prior to the effective date,** the property owner or grantor may inform the Department**,** in writing**,** that it is abandoning the project and request that the Department void the permit. Upon confirmation that no site disturbance, including pre-construction earth movement, removal of vegetation or structures, or construction **on the property or** of the project has occurred, the Department shall provide to the permittee or grantor an executed release of the conservation restriction, which the permittee or grantor may then record.

SUBCHAPTER 14. EMERGENCY AUTHORIZATIONS

7:7A-14.3 Issuance of emergency authorization; conditions

(a) The Department shall issue or deny an emergency authorization within 15 calendar days after receiving a request that meets the requirements [of] **at** N.J.A.C. 7:7A-14.2. The Director of the Division of Land [Use Regulation] **Resource Protection**, or the Director's designee, shall provide this decision to the person who requested the emergency authorization verbally and, if the decision is to issue the emergency authorization, shall provide written confirmation within five working days thereafter.

(b) – (l) (No change.)

SUBCHAPTER 16. APPLICATION REQUIREMENTS

7:7A-16.2 General application requirements

(a) The Department provides a checklist for each type of application submitted [under] **pursuant to** this subchapter. The checklist identifies all of the submissions required [under] **pursuant to** the rules to be part of an application, and also the appropriate level of detail and the format of the information to be submitted for each type of application. For example, where the rules require, as part of an application, the submittal of photographs showing certain types of information, the corresponding checklist will indicate, based on the type of development the particular permit covers; the number and orientation of photographs of the location of the proposed development. Where the rules require the submittal of a site plan, the corresponding checklist will indicate, based on the type of development the particular permit covers, the scale and details of the information to be illustrated on the plan. Checklists can be downloaded from the Department's website at [https://www.nj.gov/dep/landuse] **https://www.nj.gov/dep/wlm** or obtained by contacting the Department at the address set forth at N.J.A.C. 7:7A-1.4.

(b) – (c) (No change.)

(d) An application shall be certified as set forth [in (j)] **at (k)** below by the following

individual(s), or by a duly authorized representative, as described at (e) below:

1. – 4. (No change.)

(e) – (f) (No change.)

(g) If an application includes activities within [a] **an existing** right-of-way or easement, the application shall include written consent for the activity from the holder(s) of the right-of-way or easement.

1. (No change.)

2. For any application involving holder(s) of a right-of-way or easement not covered at (g)1 above, written consent shall consist of the following, to be pursued by the applicant in the subsequent, hierarchical order:

i. Documentation that the holder of the right-of-way or easement does not object to the submittal of an application to the Department for activities within the right-of-way or easement, with the understanding that said activities may commence only upon receipt of all necessary approvals; or

ii. Documentation of the following:

(1) A copy of certified mail receipt that the applicant requested documentation pursuant to (g)2i above and the holder of the right-of-way or easement failed to provide said documentation within 30 calendar days; and

(2) A copy of the instrument establishing the right-of-way or easement, which indicates that the proposed activities are permitted as a condition of the right-of-way or easement.

(h) Where the applicant is a State agency endowed with the power of eminent domain, acting as the sovereign, which currently does not own, possess title to, or have a right of access on the land on which the regulated activities are proposed, the Department will not, on that basis alone, consider such an application administratively incomplete, but the Department shall require

the applicant to issue notice compliant with N.J.A.C. 7:7A-17.3(b)6, regardless of whether the project meets the requirements at N.J.A.C. 7:7A-17.3(c). For the purposes of this section, "State agency" does not include a private or quasi-private entity using delegated condemnation authority. Where site access is necessary to complete the Department's technical review of the application, the Department shall require the applicant to obtain a right of access sufficient to provide consent as required at (n) below, prior to the Department declaring the application is complete for review.

Recodify (h) – (m) as **(i) – (n)** (No change in text.)

7:7A-16.6 Additional application requirements for an authorization [under] **pursuant to** a general permit-by-certification

(a) (No change.)

(b) In addition to meeting the requirements at N.J.A.C. 7:7A-16.2, the applicant is required to provide the following in the online application for a general permit-by-certification:

1. The [number (and subject matter)] **title** of the general permit-by-certification [under] **pursuant to** which the application for authorization is being submitted;

2. – 4. (No change.)

5. Contact information for [both] the applicant, [and] the property owner, **the municipal clerk for each municipality in which the project is located, and the county clerk for each county in which the project is located,** including: name, address, telephone number, [e-mail] **email** address, municipality, county, organization, and organization type;

6.- 8. (No change.)

(c) (No change.)

7:7A-16.7 Additional application requirements for an authorization [under] **pursuant to** a general permit, for an individual permit, or for a transition area waiver

(a) (No change.)

(b) In addition to meeting the requirements at N.J.A.C. 7:7A-16.2, the applicant is required to provide the following in the online application for a general permit, individual permit, or transition area waiver:

1.-4. (No change.)

5. Contact information for the applicant, the property owner, any designated agent(s), and the municipal clerk **and county clerk** for each municipality **and county** in which the project is located, including: name, address, telephone number, email address, municipality, county, organization, and organization type;

6. – 7. (No change)

(c)-(d) (No change.)

7:7A-16.10 Additional requirements specific to an application for a transition area waiver

(a) (No change.)

(b) An application for a transition area waiver shall include the following:

1. A line delineation LOI issued [under] **pursuant to** N.J.A.C. 7:7A-4.4, or a line verification LOI issued [under] **pursuant to** N.J.A.C. 7:7A-4.5, if an LOI of either type has been issued. [A] **Except for a transition area waiver for redevelopment, as described at (b)2 below, a** presence/absence LOI issued [under] **pursuant to** N.J.A.C. 7:7A-4.3 is not sufficient. If no LOI has been issued for the site, or if only a presence/absence LOI has been issued, the application shall include all information required for an application for a line delineation LOI or line verification LOI**, including the appropriate fee.**

2. For a redevelopment waiver in accordance with N.J.A.C. 7:7A-8.3(b)3, a line delineation LOI issued pursuant to N.J.A.C. 7:7A-4.4, line verification LOI issued pursuant to N.J.A.C. 7:7A-4.5, or a presence/absence footprint of development LOI issued pursuant to N.J.A.C. 7:7A-4.3(c)2, if an LOI of these types have been issued. If no LOI has been issued for the site, or if only a presence/absence LOI has been issued, the application shall include all information required for an application for a line delineation LOI or line verification LOI including the appropriate fee.

[2.] **3.** (No change in text.)

(c)-(d) (No change.)

SUBCHAPTER 20. PERMIT AND WAIVER CONDITIONS; EXTENSION, MODIFICATION, TRANSFER, SUSPENSION, AND TERMINATION OF AUTHORIZATIONS AND PERMITS

7:7A-20.2 Conditions that apply to all permits

(a) – (b) (No change.)

(c) The following conditions apply to all permits, including all waivers and general permit authorizations:

1. – 6. (No change.)

7. The permittee shall immediately inform the Department by telephone at (877) 927-6337 (WARN DEP hotline) of any noncompliance that may endanger public health, safety, and welfare, or the environment. The permittee shall inform the Division of Land [Use Regulation] **Resource Protection** by telephone at (609) 292-0060 of any other noncompliance within two working days of the time the permittee becomes aware of the noncompliance, and**,** in writing**,** within five working days of the time the permittee becomes aware of the noncompliance. Such notice shall not, however, serve as a defense to enforcement action if the project is found to be in violation of this chapter. The written notice shall include:

i. – iv. (No change.)

8. – 16. (No change.)

17. The permittee shall record the permit, including all conditions listed therein, with the Office of the County Clerk (the Registrar of Deeds and Mortgages, if applicable) of each county in which the site is located. The permit shall be recorded within 30 calendar days of receipt by the permittee, unless the permit authorizes activities within two or more counties, in which case the permit shall be recorded within 90 calendar days of receipt. Upon completion of all recording, a copy of the recorded permit shall be forwarded to the Division of Land [Use Regulation] **Resource Protection** at the address set forth at N.J.A.C. 7:7A-1.4;

18. – 25. (No change.)

26. Where the permittee becomes aware that it failed to submit any relevant facts in an application, or submitted incorrect information in an application or in any report to the Department, it shall promptly submit such facts or information; [and]

[27. The permittee shall submit written notification to the Bureau of Coastal and Land Use Compliance and Enforcement, 401 East State Street, 4th Floor, PO Box 420, Mail Code 401-04C, Trenton, NJ 08625, at least three working days prior to the commencement of regulated activities.]

27. No more than 14 calendar days prior to undertaking an activity authorized pursuant to a general permit-by-certification, general permit, or individual permit, the permittee (or a consultant, engineer, or architect that is designated by the permittee to register on their behalf) shall electronically register the activity through the Department's online system at https://www.nj.gov/dep/online, which requires the registrant to identify or provide the following:

i. The Department's file number for the authorization or permit;

ii. The anticipated date that authorized activities will begin;

iii. Contact information for the registrant, including name, street address, telephone

number, email address, organization, and organization type; and

iv. The following certification using the PIN that was issued to the registrant upon registering with the Department's online system:

"I certify under penalty of law that the information submitted herein is true, accurate, and complete, that I am the permittee or that the permittee has provided me with written consent to register for this authorization. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment."; and

28. Upon completion of authorized activities, the permittee (or a consultant, engineer, or architect that is designated by the permittee to register on their behalf) shall electronically provide through the Department's online system at https://www.nj.gov/dep/online the following:

i. Contact information for the registrant;

ii. The Department's file number for the authorization or permit; and

iii. The completion date of the authorized activities.

7:7A-20.6 Modification of an authorization [under] **pursuant to** a general permit, a transition area waiver, or an individual permit

(a) – (f) (No change.)

(g) The modified transition area waiver, modified authorization [under] **pursuant to** a general permit, or modified individual permit, including all conditions listed therein, shall be recorded within 30 calendar days of receipt by the person requesting such modification, with the Office of the County Clerk (the Registrar of Deeds and Mortgages, if applicable) of each county in which the site is located. Where the site subject to the modified waiver, modified authorization [under] **pursuant to** a general permit, or modified individual permit is located within two or more counties, the modified waiver, authorization, or permit shall be recorded within 90 calendar days of receipt. Upon completion of all recording, a copy of

the recorded modified verification, authorization, or permit shall be forwarded to the Division of Land [Use Regulation] **Resource Protection** at the address set forth at N.J.A.C. 7:7A-1.4.

(h) - (i) (No change.)

SUBCHAPTER 21. REQUESTS FOR ADJUDICATORY HEARINGS

7:7A-21.1 Procedure to request an adjudicatory hearing; decision on the request

(a) – (c) (No change.)

(d) A person requesting an adjudicatory hearing shall:

1. (No change.)

2. Submit a copy of the hearing request to the Director of the Division of Land [Use Regulation] **Resource Protection** at the address set forth at N.J.A.C. 7:7A-1.4.

(e) - (h) (No change.)

CHAPTER 8

STORMWATER MANAGEMENT

SUBCHAPTER 1. GENERAL PROVISIONS

7:8-1.2 Definitions

The following words and terms, when used in this chapter, shall have the following meanings unless the context clearly indicates otherwise.

...

"County review agency" means an agency designated by the [County Board of Chosen Freeholders] **Board of County Commissioners** to review municipal stormwater management plans and implementing ordinance(s). The county review agency may either be:

1. (No change.)

2. A county water resources association created [under] **pursuant to** N.J.S.A. 58:16A-55.5, if the ordinance or resolution delegates authority to approve, conditionally approve, or disapprove municipal stormwater management plans and implementing ordinances.

...

"Disturbance" means the placement or reconstruction of impervious surface or motor vehicle surface, or exposure and/or movement of soil or bedrock or clearing, cutting, or removing of vegetation. [Milling and repaving is] **The following maintenance activities are** not considered disturbance for the purposes of this [definition.] **chapter:**

1. Milling, repaving, or resurfacing pavement; patching broken pavement; sealing or filling roadway cracks or joints; repairing damaged concrete pavement joints; driveway repair; bridge or pipe/culvert patching; and bridge deck overlays;

2. Repair or replacement of: median barriers; sidewalks (including installation of ramps pursuant to Americans with Disabilities Act on existing impervious surface); concrete curbs; inlets, manholes and catch basins; conduit outlet protection; and guiderail systems, including rails, posts, impact attenuators, and non-vegetated treatment surfaces consisting solely of permeable material;

3. Repair or replacement of traffic, utility, and ITS structures on poles including sign structures, such as traffic signs, dynamic variable message signs, cameras, radios, traffic signal equipment, and their supporting cabinets;

4. Repair or replacement of rail ties or sleepers; regrading track bed; resurfacing or re-installing rail; repairing or replacing lineside signaling systems; and staging maintenance-of-way equipment on or adjacent to track;

5. Geotechnical and archeological investigation activities; installation of one or more monitoring wells; construction of a gauge, weir, or similar device; and

6. Removal of accumulated sediment and debris from a channel.

...

"Independent State authority" means a public authority, board, commission, corporation, or other agency or instrumentality of the State allocated in, but not of, a principal department of State government pursuant to Article V, Section IV, paragraph 1 of the New Jersey Constitution, or which is not subject to supervision or control by the department in which it is allocated, and a regional authority, but shall not include a college or university.

...

"Major development" means an individual "development," as well as multiple developments that individually or collectively result in:

1.-2. (No change.)

3. The creation of one-quarter acre or more of "regulated motor vehicle surface" since March 2, 2021; [or]

4. The reconstruction of one-quarter acre or more of "regulated motor vehicle surface" or "regulated impervious surface" since (the effective date of this rulemaking); or

[4.] **5.** A combination of 2**,** [and] 3**, and 4** above that totals an area of one-quarter acre or more. The same surface shall not be counted twice when determining if the combination area equals one-quarter acre or more.

Major development includes all developments that are part of a common plan of development or sale (for example, phased residential development) that collectively or individually meet any one or more of paragraphs 1, 2, 3, [or] 4**, or 5** above. Projects undertaken by any government agency that otherwise meet the definition of "major development" but which do not require approval [under] **pursuant to** the Municipal Land Use Law, N.J.S.A. 40:55D-1 et seq., are also considered "major development."

...

"New public roadway or railroad" means the construction of a new public roadway or

railroad where none currently or previously existed, such as a new bypass. This definition excludes the relocation or reinstating of a public roadway or railroad at a location where one previously existed within a right-of-way and excludes the construction of any widening, improvements, and attendant features to an existing public roadway or railroad, such as new ramps, additional lanes/dualization, connection of gaps in existing mainlines, or connection of movements within an existing interchange.

...

"Public roadway or railroad project limits" means the segment of public roadway or railroad that is proposed to be constructed or improved, and including the right-of-way associated with that segment of public roadway or railroad.

"Public transportation entity" means a Federal, State, **interstate,** county, or municipal government, an independent State authority, or a statutorily authorized public-private partnership program pursuant to P.L. 2018, c. 90 (N.J.S.A. 40A:11-52 et seq.), that performs a public roadway or railroad project that includes new construction, expansion, reconstruction, or improvement of a public roadway or railroad.

...

"Reconstruction" means the replacement, rebuilding, or restoration of a lawfully existing structure.

...

"Retention" means retaining the stormwater runoff generated from development by infiltration, evapotranspiration, or reuse of stormwater runoff without the discharge of the stormwater runoff directly or indirectly to surface waters or to a treatment works.

...

7:8-1.3 Program information

Questions or submissions regarding this chapter should be directed to the **New Jersey Department of Environmental Protection's** Division of [Water Quality, New Jersey Department of Environmental Protection, Mail Code 401-02B, PO Box 420, Trenton, New Jersey 08625-0420] **Watershed Protection and Restoration through email to stormwatermanagementrules@dep.nj.gov**.

7:8-1.6 Applicability to major development

[(a) Except as provided in (b) below, all major development shall comply with the requirements of this chapter.

(b) Major development shall be subject to the stormwater management requirements in effect prior to July 17, 2023, as follows:

1. Major development that does not require any of the Department permits listed at (c) below and for which a complete application has been submitted prior to July 17, 2023, shall be subject to the stormwater management requirements in effect pursuant to (b)2 or 3 below, provided that the application includes both the application form and all accompanying documents required by ordinance for one of the following approvals pursuant to the Municipal Land Use Law (N.J.S.A. 40:55D-1 et seq.):

i. Preliminary or final site plan approval;

ii. Final municipal building or construction permit;

iii. Minor subdivision approval where no subsequent site plan approval is required;

iv. Final subdivision approval where no subsequent site plan approval is required; or

v. Preliminary subdivision approval where no subsequent site plan approval is required;

2. An application required by ordinance for approval pursuant to (b)1 above that has been submitted prior to March 2, 2021, shall be subject to the stormwater management requirements in effect on March 1, 2021;

3. An application required by ordinance for approval pursuant to (b)1 above that has been submitted on or after March 2, 2021, but prior to July 17, 2023, shall be subject to the stormwater management requirements in effect on March 2, 2021; and]

[4.] **(a)** Major development **applications subject to Department review** for which a technically complete application was submitted to the Department for one of the approvals listed at [(c)] **(a)1 through 5** below prior to [July 17, 2023,] **(the effective date of this rulemaking)** shall be subject to the stormwater management requirements [as follows,] **in effect on the date the complete application is submitted to the Department,** provided that the application included a stormwater management review component[:]**. For the purposes of this section, the term "permit" shall include transition area waivers pursuant to the Freshwater Wetlands Protection Act.**

[i. A technically complete application submitted to the Department for any of these approvals prior to March 2, 2021, shall be subject to the stormwater management requirements in effect on March 1, 2021; and

ii. A technically complete application submitted to the Department for any of these approvals on or after March 2, 2021, and prior to (the effective date of this rulemaking) shall be subject to the stormwater management requirements in effect on March 2, 2021.

(c) For the purposes of this section, the term "permit" shall include transition area waivers pursuant to the Freshwater Wetlands Protection Act. In order to qualify pursuant to (b)2 above, a technically complete permit application must have been submitted to the Department for the major development under the following statutes, provided that the permit included a stormwater management review component, prior to the applicable date listed at (b)4i and ii above:]

1. – 5. (No change.)

[(d)] **(b)** An exemption [provided by (b)] **from meeting the requirements in effect on (the effective date of this rulemaking) as provided pursuant to (a)** above shall expire with the expiration,

termination**,** or other loss of duration or effect of [either of the qualifying local approval or] **the** Department permit[, whichever comes first. The expiration of local approvals under (b)1 above shall be governed by local ordinance]. In the event there are multiple qualifying Department permits [under (c)] **pursuant to (a)2** above, the expiration date is governed by that permit which expires last**,** provided that the permit is still in effect. Once the exemption expires, the major development shall be subject to all requirements of this chapter upon reapplication for that permit and all subsequent permits [or local approval(s) under the Municipal Land Use Law].

[(e)] **(c)** An exemption [under (b)] **from meeting the requirements in effect on (the effective date of this rulemaking) as provided at (a)** above is limited to the land area and the scope of the project addressed by the qualifying applications or subsequent approval(s). Exemptions [under] **pursuant to** this section shall be deemed void if revisions are made to the qualifying application [in (b)] **at (a)** above or its subsequent approval, [including applications or approvals under the Municipal Land Use Law,] unless, the [review agency] **Department** determines that each revision would have a [de minimis] ***de minimis*** impact on water resources. In making this determination, the Department shall consider the extent of any impacts on water resources resulting from the revision, including, but not limited to:

1. – 7 (No change.)

[(f)] **(d)** Notwithstanding **(e) below or** any rule to the contrary, [a] major development **applications subject to Department review** for any public roadway or railroad project conducted by a public transportation entity that has determined a preferred alternative or reached an equivalent milestone [before July 17, 2023,] shall be subject to the [stormwater management requirements in effect prior to July 17, 2023.] **requirements of this chapter as follows:**

1. A major development that reached a preferred alternative or equivalent milestone prior to March 2, 2021, is subject to the requirements of this chapter in effect on March 1, 2021; and

2. A major development that reached a preferred alternative or equivalent milestone on or after March 2, 2021, is subject to the requirements of this chapter in effect on the date the preferred alternative or equivalent milestone is reached.

(e) Should a public transportation entity initiate a substantial change to a major development that had previously reached a preferred alternative or equivalent milestone, the major development shall instead be subject to the requirements of this chapter in effect when the amended milestone is reached.

SUBCHAPTER 3. REGIONAL STORMWATER MANAGEMENT PLANNING

7:8-3.4 Characterization and assessment of the regional stormwater management planning area

(a) The regional stormwater management plan shall include a characterization and assessment that addresses the following components, unless the committee determines that a component is not appropriate for the regional stormwater management planning area and provides a rationale for not including the component:

1.-4. (No change.)

5. An identification and evaluation of existing municipal, county, State, Federal, and other stormwater-related groundwater recharge, water quality, and water quantity [regulations] **rules** and programs shall be conducted, including, where applicable, programs to develop total maximum daily loads (TMDLs) in accordance with N.J.A.C. 7:15-5; [and]

6. A summary of information that has been identified as useful for purposes of stormwater management planning but that is not available for technical, financial, or other reasons[.]**; and**

7. A climate change resilience strategy providing the following information:

i. An evaluation of the impact of climate change on stormwater management, including a consideration of impacts created by sea level rise, increased flooding frequency and extent, and increased rainfall depth and intensity;

ii. An identification of areas and infrastructure vulnerable to flooding and/or sea level rise; and

iii. Measures, such as green infrastructure, that will be implemented to reduce the impacts and maintain the capacity of stormwater conveyance systems.

(b) - (e) (No change.)

SUBCHAPTER 4. MUNICIPAL STORMWATER MANAGEMENT PLANNING

7:8-4.2 Municipal stormwater management plan and elements

(a) A municipal stormwater management plan shall address stormwater-related water quality, groundwater recharge**,** and water quantity impacts of major development and may also address stormwater-related water quality, water quantity, and groundwater recharge impacts of existing land uses. [For purposes of this subchapter, major development is limited to projects that ultimately disturb one or more acres of land.]

(b) (No change.)

(c) A municipal stormwater management plan shall, at a minimum:

1.-12. (No change.)

13. The municipal stormwater management plan may also include a stream corridor protection plan to address protection of areas adjacent to waterbodies; [and]

14. If a municipality that includes an area served by a combined sewer system or a separate storm sewer system that is hydraulically connected to a combined sewer system seeks to establish a community basin(s), include a demonstration, through hydrologic and hydraulic analysis, that the community basin(s)

would alleviate existing or prevent potential flood damage or combined sewer overflow. A municipality may allow developments to use the community basin to meet the stormwater runoff quantity control standards at N.J.A.C. 7:8-5.6, provided the following minimum requirements are met:

i. – v. (No change.)

vi. The municipality adopts ordinances to regulate the conditions and limitations of the inflow contributing to the community basin to ensure the continued function of the community basin[.]**; and**

15. Include a climate change resilience strategy providing the following information:

i. An evaluation of the impact of climate change on stormwater management, including a consideration of impacts created by sea level rise, increased flooding frequency and extent, and increased rainfall depth and intensity;

ii. An identification of areas and infrastructure vulnerable to flooding and/or sea level rise; and

iii. Measures, such as green infrastructure, that will be implemented to reduce the impacts and maintain the capacity of stormwater conveyance systems.

SUBCHAPTER 5. DESIGN AND PERFORMANCE STANDARDS FOR STORMWATER MANAGEMENT MEASURES

7:8-5.2 Stormwater management measures for major development

(a) - (c) (No change.)

(d) The following [linear] development projects are exempt from the groundwater recharge, stormwater runoff [quantity] **quality**, and stormwater runoff [quality] **quantity** requirements at N.J.A.C. 7:8-5.4 [and]**,** 5.5**, and 5.6, respectively, provided that any vegetated areas temporarily disturbed to conduct the project are, to the maximum extent practicable, revegetated with native, noninvasive vegetation upon completion of the project**:

1. The construction**, reconstruction, or repair** of an underground utility line [provided that the disturbed areas are revegetated upon completion] **or cable, or its supporting infrastructure, such as conduit, junction boxes, and manholes**;

2. The construction**, reconstruction, or repair** of an aboveground utility line [provided that the existing conditions are maintained to the maximum extent practicable] **or cable, or its supporting infrastructure, such as poles and towers**; [and]

3. The construction**, reconstruction, or repair** of a public pedestrian access, such as a sidewalk or trail with a maximum width of 14 feet, provided that the access is made of permeable material[.]**;**

4. The maintenance of a dam; and

5. Public safety improvements undertaken by a public transportation entity as set forth in this paragraph:

i. Installation of guiderail systems, such as rails, posts, impact attenuators, and non-vegetated treatment surfaces, provided that any pavement utilized consists solely of permeable material;

ii. Installation of traffic, utility, and ITS structures on poles including sign structures, such as traffic signs, dynamic variable message signs, cameras, radios, traffic signal equipment, and their supporting cabinets;

iii. Installation of railroad lineside signaling systems; and

iv. Rockfall mitigation activities that do not result in a net increase of regulated motor vehicle surface or impervious surface.

(e) A waiver from strict compliance from the green infrastructure, groundwater recharge, stormwater runoff quantity, and stormwater runoff quality requirements at N.J.A.C. 7:8- 5.3, 5.4, 5.5, and 5.6 may be obtained for the enlargement of an existing public roadway or railroad, or the construction or enlargement of a public pedestrian access, provided that the [following] conditions **at (e)1, 2, 3, and 4**

below are met[:]**. The construction of a new public roadway or railroad is not eligible for a waiver pursuant to this subsection.**

1. – 4. (No change.)

(f) – (h) (No change.)

(i) Design standards for stormwater management measures are as follows:

1.-4. (No change.)

[5. The size of the orifice at the intake to the outlet from the stormwater management basin shall be a minimum of two and one-half inches in diameter.]

5. Any flow control device, such as an orifice, weir, grate, or perforated pipe, at the outlet of the stormwater management measures shall be designed to prevent the clogging of the flow control device while achieving the design and performance standards at N.J.A.C. 7:8-5.4, 5.5, and 5.6.

(j)-(n) (No change.)

7:8-5.3 Green infrastructure standards

(a) (No change.)

(b) [To] **Except as provided at (f) through (j) below, to** satisfy the groundwater recharge and stormwater runoff quality standards at N.J.A.C. 7:8-5.4 and 5.5, the design engineer shall utilize green infrastructure BMPs identified in Table 5-1 at N.J.A.C. 7:8-5.2(f) and/or an alternative stormwater management measure approved in accordance with N.J.A.C. 7:8-5.2(g). The following green infrastructure BMPs are subject to the following maximum contributory drainage area limitations:

Best Management Practice	Maximum Contributory Drainage Area
1. Dry Well	1 acre
2. Manufactured Treatment Device	2.5 acres
3. Pervious Paving Systems	Area of additional inflow cannot exceed three times the area occupied by the BMP

4. Small-scale Bioretention Systems	2.5 acres
5. Small-scale Infiltration Basin	2.5 acres
6. Small-scale Sand Filter	2.5 acres

(c) [To] **Except as provided at (f), (g)1, (g)3, (h), (i), and(j) below, to** satisfy the stormwater runoff quantity standards at N.J.A.C. 7:8-5.6, the design engineer shall utilize BMPs from Table 5-1 or from Table 5-2 and/or an alternative stormwater management measure approved in accordance with N.J.A.C. 7:8-5.2(g).

(d) - (e) (No change.)

(f) A public transportation entity proposing a public roadway or railroad project shall demonstrate compliance with the minimum design and performance standards for groundwater recharge, stormwater runoff quality, and stormwater runoff quantity at N.J.A.C. 7:8-5.4, 5.5, and 5.6, respectively, by utilizing green infrastructure BMPs from Tables 5-1 or 5-2 within the public roadway or railroad project limits, unless green infrastructure BMPs from Tables 5-1 or 5-2 cannot be utilized due to unsuitable hydrologic, hydraulic, or physical conditions. If green infrastructure BMPs from Tables 5-1 or 5-2 cannot be utilized within the public roadway or railroad project limits due to unsuitable hydrologic, hydraulic, or physical conditions, (g) below shall apply.

(g) Where a public transportation entity demonstrates that it cannot achieve compliance with the minimum design and performance standards for groundwater recharge, stormwater runoff quality, and stormwater runoff quantity within the public roadway or railroad project limits in accordance with (f) above, the following requirements shall apply:

1. The public transportation entity shall demonstrate compliance with the minimum design and performance standards for groundwater recharge, stormwater runoff quality, and stormwater runoff quantity at N.J.A.C. 7:8-5.4, 5.5, and 5.6, respectively, by utilizing green infrastructure

BMPs from Tables 5-1 or 5-2 in disturbed lands immediately adjacent to the public roadway or railroad project limits.

i. All disturbed lands adjacent to the public roadway or railroad project limits shall be investigated for achieving compliance with this paragraph regardless of whether the disturbed land is owned or controlled by the public transportation entity. For the purpose of this subparagraph, disturbed land includes lawn, farmland, or other disturbed areas, but excludes preserved farmland and wooded areas.

ii. The public transportation entity's investigation shall include lands held for recreation and conservation purposes. However, such lands are not required to be utilized if the proposed green infrastructure solution would violate State or Federal law or be inconsistent with or require a release or modification of any recorded restrictions on the property.

iii. Compliance with the minimum design and performance standards for groundwater recharge, stormwater runoff quality, and stormwater runoff quantity shall be achieved within the disturbed lands immediately adjacent to the public roadway or railroad project limits, unless the public transportation entity demonstrates that compliance within this area cannot be achieved due to unsuitable hydrologic, hydraulic, or physical conditions.

2. If the public transportation entity has demonstrated that compliance with (g)1 above cannot be achieved due to unsuitable hydrologic, hydraulic, or physical conditions, the public transportation entity shall demonstrate compliance with the minimum design and performance standards for groundwater recharge and stormwater runoff quality at N.J.A.C. 7:8-5.4 and 5.5, respectively, by utilizing green infrastructure BMPs from Tables 5-1 or 5-2 in the land owned or controlled by the public transportation entity, and the disturbed areas immediately adjacent thereto, located upstream of the project and within the same HUC-14 as the project.

3. If the public transportation entity has demonstrated that compliance with groundwater recharge and stormwater runoff quality standards pursuant to both (g)1 and 2 above and/or stormwater runoff quantity standards pursuant to (g)1 above cannot be achieved due to unsuitable hydrologic, hydraulic, or physical conditions, the public transportation entity may utilize stormwater BMPs from Table 5-3 to comply with the unmet standards that have been demonstrated to be not achieved pursuant to (g)1 and 2 above, as applicable, without the need to request a waiver from strict compliance pursuant to N.J.A.C. 7:8-5.2(e).

(h) If the public transportation entity seeking to enlarge an existing public roadway or railroad demonstrates that compliance with the design and performance standards for stormwater runoff quality, groundwater recharge, or stormwater runoff quantity cannot be achieved in accordance with (f) and (g) above, it shall request a waiver from strict compliance pursuant to N.J.A.C. 7:8-5.2(e). The construction of new public roadways or railroads are not eligible for the waiver from strict compliance at N.J.A.C. 7:8-5.2(e).

(i) For the purposes of (f) and (g) above, unsuitable hydrologic, hydraulic, or physical conditions means any physical, hydrologic, or hydraulic impediment that prevents the installation of a functioning BMP on a particular area of land such as, but not limited to, high seasonal high water table elevation, slope steeper than the maximum slope allowable for a BMP, karst topography, shallow depth to bedrock, unavoidable adverse impact resulting from groundwater mounding, or physical impedances caused by existing structures. Additionally, an inability to retain safe pedestrian passage shall be considered an unsuitable physical condition. Demonstration of unsuitable hydrologic or hydraulic conditions shall be supported by appropriate documentation that complies with the requirements set forth in the applicable laws, rules, ordinances, and construction codes, such as soil testing reports, site plans, survey maps, geological investigation reports, geotechnical reports, and/or photos. The documents shall be submitted to the Department,

along with the certification required at (j) below. Further, the public transportation entity shall retain copies of the documents. Installation of a stormwater BMP within the area of a sidewalk, whether within or outside the public roadway or railroad project limits, shall provide sufficient pedestrian passage in the remaining sidewalk.

(j) If a public transportation entity has demonstrated compliance with the groundwater recharge, stormwater runoff quantity, and stormwater runoff quality requirements of the rules in accordance with (g) and (h) above, the public transportation entity shall submit to the Department a certification stating that the public transportation entity has conducted its analysis in conformance with (f) through (h) above. The certification shall:

1. Be signed and sealed by one or more design engineers;

2. Be endorsed by the chief executive officer of the public transportation entity; a senior executive officer having responsibility for the overall operations of a principal geographic unit of the public transportation entity (for example, Regional Administrator); or a duly authorized representative by the chief executive officer of the public transportation entity;

3. Include the description of project, location, name and title of the individual with direct knowledge of the review and analysis, the description of the investigation performed, rationale for the decision, and the documentation described at (i) above must be attached to the certification;

4. Be submitted to the Department at the email address listed at N.J.A.C. 7:8-1.3 as part of the application for any permit listed at N.J.A.C. 7:8-1.6(a)2i through v; and

5. Be included in the annual report that is required to be submitted to the Department pursuant to the public transportation entity's Municipal Separate Storm Sewer System permit, pursuant to N.J.A.C. 7:14A.

(k) Notwithstanding the requirements in this section, any public roadway or railroad project that has determined a preferred alternative or equivalent milestone by March 2, 2021, shall

not be subject to (b), (c), and (d) above, provided that the public transportation entity submits to the Department at the email address listed at N.J.A.C. 7:8-1.3, by (60 days of the effective date of this rulemaking), a list of projects that have selected a preferred alternative or equivalent milestone by March 2, 2021, and that the public transportation entity does not make a significant change to the design of the project on or after March 2, 2021.

7:8-5.5 Stormwater runoff quality standards

(a) This section [contains] **sets forth** the minimum design and performance standards to control stormwater runoff quality impacts of major development. Stormwater runoff quality standards are applicable when the major development results in an increase **or reconstruction** of one-quarter acre or more of regulated motor vehicle surface.

(b) Stormwater management measures shall be designed to reduce the post-construction load of total suspended solids (TSS) in stormwater runoff generated from the water quality design storm **from all new and reconstructed motor vehicle surface** as follows:

1. Ninety-five percent TSS removal of the anticipated load, expressed as an annual average, shall be achieved for stormwater runoff from any new or reconstructed motor vehicle surface that is proposed to be:

i. Discharged within a 300-foot riparian zone (as established by the Flood Hazard Area Control Act Rules at N.J.A.C. 7:13-4.1(c)1); or

ii. Discharged into an existing or proposed stormwater conveyance system that ultimately discharges within a 300-foot riparian zone located within the same HUC14 as the major development.

[1.] **2.** Eighty percent TSS removal of the anticipated load, expressed as an annual average**,** shall be achieved for the stormwater runoff from [the net increase of] **any new or reconstructed** motor vehicle surface **not covered at (b)1 above, except as follows:**

i. Where a public transportation entity demonstrates that achieving 80 percent TSS removal pursuant to (b)2 above for a public roadway project would require acquisition of developed or otherwise encumbered land outside of the entity's existing right-of-way along the section of roadway being improved or constructed, the public transportation entity shall instead provide water quality treatment to the maximum extent practicable, with a minimum water quality treatment of 50 percent TSS removal for all new and reconstructed motor vehicle surface.

[2.] **3.** If the surface is considered regulated motor vehicle surface because the water quality treatment for an area of motor vehicle surface that is currently receiving water quality treatment either by vegetation or soil, by an existing stormwater management measure, or by treatment at a wastewater treatment plant is to be modified or removed, the project shall maintain or increase the existing TSS removal of the anticipated load expressed as an annual average**, unless (b)1 or 2 above require a higher level of TSS removal**.

(c) - (h) (No change.)

[(i) Pursuant to the Flood Hazard Area Control Act Rules at N.J.A.C. 7:13-11.2(j)4, runoff from the water quality design storm that is discharged within a 300-foot riparian zone shall be treated in accordance with this section to reduce the post-construction load of total suspended solids by 95 percent of the anticipated load from the developed site, expressed as an annual average.]

[(j)] **(i)** (No change in text.)

(j) Stormwater management measures shall be designed to incorporate any additional measures specified in a TMDL(s) approved or established by the EPA, unless otherwise required pursuant to N.J.A.C. 7:14A-25.6(e).

7:8-5.6 Stormwater runoff quantity standards

(a) (No change.)

(b) In order to control stormwater runoff quantity impacts, the design engineer shall, using the assumptions and factors for stormwater runoff calculations at N.J.A.C. 7:8-5.7, complete one of the following:

1. (No change.)

2. Demonstrate through hydrologic and hydraulic analysis that there is no increase, as compared to the pre-construction condition, in the peak runoff rates of stormwater leaving the site for the current and projected two-, 10-, and 100-year storm events, as defined and determined pursuant to N.J.A.C. 7:8-5.7(c) and (d), respectively, and that the increased volume or change in timing of stormwater runoff will not increase flood damage at or downstream of the site. This analysis shall include the analysis of impacts of existing land uses and projected land uses assuming full development [under] **pursuant to** existing zoning and land use ordinances in the drainage area[;]**.**

i. If the analysis demonstrates that there is no increase in the volume or peak runoff rates of stormwater leaving the site, and the change in timing is solely a result of the proposed installation of BMPs to comply with N.J.A.C. 7:8-5.5 or (d) below, then no analysis of downstream flooding impacts shall be required, unless the review agency determines that the project will result in increased flood damages downstream of the site;

3. - 4. (No change.)

(c) (No change.)

(d) Except as provided at (d)3 below, the design engineer shall demonstrate that the major development meets the minimum volumetric reduction standard in accordance with (d)1 and/or 2 below.

1. Stormwater management measures shall be designed to achieve retention of the water quality design storm by incorporating green infrastructure BMPs from Table 5-1 and Table 5-2 unless (d)1i below applies:

i. Where an applicant demonstrates that compliance with this paragraph is technically impracticable as set forth at N.J.A.C. 7:8-4.6(a)1, or the type of stormwater is subject to N.J.A.C. 7:8-5.4(b)3, a major development site shall instead meet the hydrograph requirements at (d)1i(1) and (2) below:

(1) The runoff peak flow rate of the water quality design storm from the site shall be less than the runoff peak flow rate of the water quality design storm from a drainage area equivalent to the size of the disturbed area of the major development, with a woods cover type, in good hydrologic condition and on Hydrologic Soil Group D soil; and

(2) The runoff hydrograph duration of the water quality design storm from the site shall be greater than the runoff hydrograph duration of the water quality design storm from a drainage area equivalent to the size of disturbed areas of the major development, with a woods cover type, in good hydrologic condition, and on Hydrologic Soil Group D soil. For the purposes of this sub-subparagraph, "runoff hydrograph duration" means the duration between the time that the runoff flow rate starts to be greater than zero to the time that the runoff flow rate becomes zero.

2. In the alternative of (d)1 above, the applicant may address all or a portion of the volumetric reduction standard, as follows:

i. The applicant shall undertake one or both of the following:

(1) Removal of existing impervious surface totaling an area equal to or greater than the impervious surface within the disturbed portions of the major development site; and/or

(2) Retention of an equivalent or greater volume of stormwater runoff generated by the water quality design storm required pursuant to (d)1 above at an offsite location. Runoff retained

from storms other than the water quality design storm shall not be counted toward compliance with this requirement.

ii. Volumetric reduction pursuant to (d)2i above shall occur within the same HUC-14 as the major development, except where the applicant is a public transportation entity that demonstrates providing volumetric reduction within the same HUC-14 is technically impracticable as set forth at N.J.A.C. 7:8-4.6(a)1, in which case the applicant shall provide volumetric reduction within the same Watershed Management Area as the major development, and as close as practicable to the major development.

iii. Any application for a major development that utilizes offsite impervious surface removal or retention to comply with the volumetric reduction standard must be accompanied by sufficient information and property owner permission to fully review and approve the offsite portion of the project along with the major development itself. Applications utilizing offsite impervious surface removal or retention without this information shall not be considered complete. Further, any offsite portions of the project must be construction prior to, or concurrent with, the major development.

3. The volumetric reduction standards of this subsection shall not be applicable to projects that are undertaken by a public transportation entity in cases where the project meets the definition of major development solely because the project results in increased capacity of an existing stormwater conveyance system.

7:8-5.7 Calculation of stormwater runoff and groundwater recharge

(a) Stormwater runoff shall be calculated in accordance with the following:

1. The design engineer shall calculate runoff using the USDA Natural Resources Conservation Service (NRCS) methodology, including the NRCS Runoff Equation and Dimensionless Unit Hydrograph, as described in Chapters 7, 9, 10, 15, and 16, Part 630, Hydrology National Engineering

Handbook, incorporated herein by reference, as amended and supplemented. This methodology is additionally described in Technical Release 55--Urban Hydrology for Small Watersheds (TR-55), dated June 1986, incorporated herein by reference, as amended and supplemented. Information regarding the methodology is available from the Natural Resources Conservation Service website at [http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1044171.pdf or at United States Department of Agriculture Natural Resources Conservation Service, 220 Davison Avenue, Somerset, New Jersey 08873] **https://directives.sc.egov.usda.gov/viewerFS.aspx?hid=21422**.

2.-5. (No change.)

(b)-(d) (No change.)

7:8-5.10 Departmental variance from the design and performance standards for stormwater management measures

(a) The Department may grant a variance from the design and performance standards at N.J.A.C. 7:8-5.3, 5.4, 5.5, and 5.6; provided the following conditions are met:

1. The applicant provides a written report, prepared by each MS4 permittee with post-construction stormwater management review obligations for the project, which demonstrates how the requirements at N.J.A.C. 7:8-4.6(a)1, 2, and 3 and the Minimum Standards for Post Construction Stormwater Management in New Development and Redevelopment of the applicable MS4 permit(s) are met. At a minimum, this demonstration shall include an explanation as to why it is impracticable to accomplish the onsite stormwater management requirements of this chapter, and how the proposed offsite mitigation will ensure that the requirements at N.J.A.C. 7:8-5.3, 5.4, 5.5, and 5.6 are met.

i. Where a project is not subject to municipal approval, the requirement at N.J.A.C. 7:8-4.6(a) referencing municipal approval or compliance with a municipal mitigation plan shall not apply;

ii. If the variance that resulted in the mitigation project being required is from the green infrastructure standards at N.J.A.C. 7:8-5.3, then, notwithstanding the requirement at N.J.A.C. 7:8-4.6(a)3vi regarding the use of green infrastructure BMPs at Table 5-1, the mitigation project may use green infrastructure BMPs listed at either Table 5-1 or Table 5-2, provided the applicant is a public transportation entity proposing a public roadway or railroad project and all other requirements of this section are met;

2. Except where a project is not subject to municipal approval, the applicant provides a preliminary or final site plan approval from the municipality, which includes a variance from the design and performance standards set forth in its municipal stormwater management plan and stormwater control ordinance(s);

3. Except where a project is not subject to municipal approval, there is no deviation in the project design and performance standards as those approved in the municipal variance; and

4. The Department determines the written report is prepared pursuant to (a)1, 2, and 3 above and demonstrates that:

i. The requirements at N.J.A.C. 7:8-4.6(a)1, 2, and 3, as appropriate, are satisfied; and

ii. There will be no adverse impacts to surrounding properties as a result of granting the variance pursuant to the standards in this subsection.

(b) Within 30 calendar days of completion of the required stormwater mitigation project(s), the permittee shall provide documentation to the Department that the mitigation was accomplished.

CHAPTER 9A

STANDARDS FOR INDIVIDUAL SUBSURFACE SEWAGE DISPOSAL SYSTEMS

SUBCHAPTER 2. DEFINITIONS

7:9A-2.1 DEFINITIONS

The following words and terms, when used in this chapter, shall have the following meanings unless the context clearly indicates otherwise:

…

[“Delineated stream” or “delineated floodplain” means a stream or flood plain for which the flood hazard areas have been officially specified by the State of New Jersey.]

…

["Encroachment line" means a line encompassing the channel of a natural stream and portions of the 100-year flood plain adjoining the channel which are reasonably required to carry and discharge the flood water or flood flow of any natural stream approximately equal to the floodway line along delineated streams.]

…

"Flood hazard area" means the floodway and the flood fringe area of a [delineated stream. See also] **regulated water, as defined at** N.J.A.C. 7:13.

…

["One hundred year flood plain" means the area inundated by the 100-year flood. A 100-year flood is estimated to have a one percent chance, or one chance in 100, of being equalled or exceeded in any one year. See also N.J.A.C. 7:13.]

...

SUBCHAPTER 3. ADMINISTRATION

7:9A-3.18 Requirements for certification of sewerage facilities serving subdivisions involving 50 or more realty improvements

(a) – (b) (No change.)

(c) Applications for 50 or more realty improvement certifications must include the following in addition to the information required [by] **pursuant to** N.J.A.C. 7:9A-3.5(b). This additional information shall be provided on a general site plan of the subdivision, signed and sealed by a licensed land surveyor:

1. – 7. (No change.)

8. Location of all [stream encroachment boundaries and 100-year flood plain boundaries] **floodways and flood hazard areas,** which fall within the boundaries of the subdivision;

9. – 11. (No change.)

(d) – (i) (No change.)

SUBCHAPTER 4. SITE EVALUATION AND SYSTEM LOCATION

7:9A-4.3 Distances

The minimum separation distance between the various components of the system and the other features listed shall conform to and be maintained in accordance with Table 4.3 below. The location of a new well must be in conformance with the requirements [of] **at** N.J.A.C. 7:9D. No permit or waiver issued outside of this chapter by any local, State**,** or Federal entity shall be construed to permit deviation from or a waiver of the separation distances requirements listed [in the] **at** Table 4.3 below.

Table 4.3 Minimum Required Separation Distances (feet)

(No change.)

(1) This distance may be increased as determined by a local, State**,** or Federal entity having authority for establishing separation distances, including, but not limited to, wetlands protection, [stream encroachment and riparian corridor] **flood hazard areas, and riparian zones**.

(2) – (15) (No change.)

7:9A-4.6 Surface flooding

(a) – (b) (No change.)

(c) Development within a flood hazard area is subject to the restrictions and requirements of the Flood Hazard Area Control Act Rules**,** N.J.A.C. 7:13. N.J.A.C. 7:13 **limits or** prohibits the construction of an individual subsurface disposal system [within the floodway of a regulated water, as defined at N.J.A.C. 7:13-2.2,] **in certain locations** and [may] require**s** a flood hazard area permit **or authorization** for the construction of a system within a regulated area, as defined at N.J.A.C. 7:13-2.3.

(d) (No change.)

CHAPTER 9D

WELL CONSTRUCTION AND MAINTENANCE; SEALING OF ABANDONED WELLS

SUBCHAPTER 2. REQUIREMENTS AND PROCEDURES FOR THE CONSTRUCTION, INSTALLATION, OPERATION, AND MAINTENANCE OF WELLS

7:9D-2.3 Specific requirements for the construction and maintenance of Category 1 and Category 2 wells

(a) (No change.)

(b) In addition to the well permitting requirements [in] **at** N.J.A.C. 7:9D-1 and the well construction standards [in] **at** N.J.A.C. 7:9D-2.2, the following requirements shall also apply to all Category 1 and 2 wells:

1. (No change.)

2. All well casings shall extend a minimum of 12 inches above grade and shall be equipped with pitless adapters or pitless well units. The pitless adapter or pitless well unit requirement does not apply to wells equipped with a turbine pump or to irrigation wells.

i. (No change.)

ii. All wells shall be equipped with a down-facing casing vent, screened to prevent the entry of insects and located at least 12 inches above the grade, except for:

(1) Wells located within the [100-year flood elevation] **flood hazard area, as defined at N.J.A.C. 7:13**, which shall be: installed with a watertight cap, where feasible; or equipped with a down-facing vent, screened to prevent the entry of insects and located at least 12 inches above the [100-year] **climate-adjusted** flood elevation; and

(2) (No change.)

3. – 6. (No change.)

(c) – (g) (No change.)

CHAPTER 10

SAFE DRINKING WATER ACT RULES

SUBCHAPTER 11. STANDARDS FOR THE CONSTRUCTION OF PUBLIC COMMUNITY WATER SYSTEMS

7:10-11.5 Permit requirement; application contents

(a) – (h) (No change.)

(i) The engineering design plans shall meet the following requirements:

1. – 7. (No change.)

8. Plans for wells shall include site plans, schematic drawings**,** and detail drawings as follows:

i. Site plans for wells shall show:

(1) – (2) (No change.)

(3) The elevation of each well head above a common datum plane and the [100-year] **climate-adjusted** flood elevation.

ii. – iii. (No change.)

9. (No change.)

(j) – (n) (No change.)

7:10-11.6 General requirements for source, treatment, storage**,** and distribution components

(a) – (f) (No change.)

(g) [Regulations] **Rules** for building construction, safety, and security are as follows:

1. (No change.)

2. Buildings shall be constructed so that surface water will not enter or lie against the building. Normally, the ground floor shall be at least six inches above the surrounding ground. Buildings shall be protected against flooding by locating them above the [100 year flood plain] **climate-adjusted flood elevation** or providing waterproof doors or covers for all openings below that level.

3. – 10. (No change.)

(h) – (j) (No change.)

7:10-11.7 Standards for the construction and development of ground water sources

(a) – (h) (No change.)

(i) [Regulations] **Rules** for protection of well heads are set forth at N.J.A.C. 7:9D-2. Additional requirements for the protection of well heads for public community water supplies are as follows:

1. – 2. (No change.)

3. The pump house floor shall be sloped away from the well head and the floor shall be above the [100 year] **climate-adjusted** flood elevation.

4. (No change.)

(j) – (m) (No change.)

7:10-11.8 Standards for the construction and development of surface water sources and ground water sources under the direct influence of surface water

(a) – (b) (No change.)

(c) [Regulations] **Rules** for surface water intake are as follows:

1. – 6. (No change.)

7. All mechanical equipment shall be protected against **flooding to** the [100 year flood] **climate-adjusted flood elevation**.

(d) – (e) (No change.)

7:10-11.9 Standards for the construction of pumping stations

(a) (No change.)

(b) [Regulations] **Rules** for pumping station location and protection are as follows:

1. Pumping stations shall not be located within the [100 year] flood hazard area. Where a location outside the [100 year] flood hazard area is not feasible, the pumping station shall be protected against flooding. All treated water pumping stations shall have a floor elevation at least one foot above the [highest recorded] **climate-adjusted** flood elevation.

2. (No change.)

(c) – (g) (No change.)

CHAPTER 13

FLOOD HAZARD AREA CONTROL ACT RULES

SUBCHAPTER 1. GENERAL PROVISIONS

7:13-1.1 Purpose and scope

(a) (No change.)

(b) This chapter [implements] **constitutes the rules governing the implementation of** the Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq.[; and, in addition, relevant aspects of the New Jersey Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq.; the Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq.;] **This chapter additionally implements, and is used in reviewing applications for permits pursuant to the Coastal Area Facility Review Act, N.J.S.A. 13:19-1 et seq., the Wetlands Act of 1970, N.J.S.A. 13:9A-1 et seq., the Waterfront Development Law, N.J.S.A. 12:5-3, Freshwater Wetlands Protection Act, N.J.S.A. 13:9B-1 et seq.**, **and** the Highlands Water Protection and Planning Act, N.J.S.A. 13:20-1 et seq.**, in addition to relevant aspects of the Public Access Act, N.J.S.A 13:1D-150 et seq., Environmental Justice Act, N.J.S.A. 13:1D-157 et seq., New Jersey Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq., Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq., Dam Safety Act, N.J.S.A. 58:4-1 et seq., the Endangered and Nongame Species Conservation Act, N.J.S.A. 23:2A-1 et seq., and the Municipal Land Use Law, N.J.S.A. 40:55D-1 et seq.**, the Ninety-Day Construction Permits Law, N.J.S.A. 13:1D-29 et seq.; and N.J.S.A. 13:1D-1 et seq.

(c) The purpose of this chapter is to minimize damage to life and property from **periodic** flooding caused by **precipitation and storm surge, and exacerbated by climate change, sea level rise, and** development [within flood hazard areas], to preserve the quality of surface waters, and to protect the wildlife and vegetation that exist within and depend upon [such] **flood hazard** areas for sustenance and habitat.

1. Flooding presents a significant risk to public health, safety, and welfare, and the environment due to loss of life, injury, property damage, and ecological degradation. Unless properly controlled, development within flood hazard areas obstructs and displaces floodwaters and exacerbates the

frequency, intensity, duration, and extent of flooding. The adverse socioeconomic and environmental impacts of more frequent and intensifying flooding are well documented and are further exacerbated by the effects of climate change **and sea level rise**, which expands the area of the State subject to flooding **and permanent inundation each year** and warrants appropriate measures be taken to plan for both present and future flood conditions. Loss of life, injury, and property damage also result from collapsed structures, unsecured materials, and other debris carried by floodwaters. Furthermore, improperly built structures are subject to severe and repetitive flood damage, resulting in the displacement of residents, loss, damage, or interruption of essential public and private services and infrastructure, and prolonged economic disruption or loss.

2. (No change.)

(d) (No change.)

7:13-1.2 Definitions

The following words and terms, when used in this chapter, shall have the following meanings unless the context clearly indicates otherwise. Additional definitions specifically applicable to N.J.A.C. 7:13-13, Mitigation, are set forth at N.J.A.C. 7:13-13.1.

…

"Anadromous water" means a regulated water that supports anadromous fish, as identified by the Department's Division of Fish and Wildlife. Anadromous fish travel between salt water and fresh water or upstream to spawn, and N.J.A.C. 7:13-[11.5(b)]**11.6(b)** indicates how to determine which waters support anadromous fishery resources.

…

"Applicability determination" means the Department's official written statement of the applicability of this chapter to a [water,] proposed activity[,] and/or project described at N.J.A.C. 7:13-

[2.5]**2.6**.

…

[“Barrier island complex” means the landforms surrounded by both bay and ocean, including barrier islands, spits, and peninsulas, which are situated along New Jersey’s Atlantic coastline, and which extend from the northern tip of Sandy Hook, in Monmouth County, to the southern tip of Cape May County. The barrier island complex includes the barrier island corridor, as defined in the Department’s Coastal Zone Management Rules at N.J.A.C. 7:7-9.20, as well as any associated wetland complex adjacent to the corridor. A barrier island is a long, narrow island that generally lies parallel to the mainland and serves to protect the coast from erosion. A spit is a long, narrow depositional landform projecting outward from the shoreline associated with a barrier island corridor. A peninsula is a narrow expanse of land surrounded by both bay and ocean waters, which is connected to the mainland. The barrier island complex does not include the entire Cape May peninsula, but the Cape May peninsula does include barrier islands, spits and peninsulas along its Atlantic coastline. The barrier island complex does not include bay islands, which are islands or filled areas surrounded by tidal waters, wetlands, beaches, or dunes, lying between the mainland and barrier islands, but which may be connected to the mainland or barrier islands by elevated or fill-supported roads.]

…

"Channel" means a linear topographic depression that continuously or intermittently confines and/or conducts surface water, not including transient erosional gullies and other ephemeral features that temporarily form after heavy rainfall. A channel can be naturally occurring or can be of human origin through excavation or construction, in which case it is referred to as ["manmade."] **“human created.”** A channel includes both bed and banks.

"Climate-adjusted flood elevation" means the regulatory flood hazard elevation that is anticipated to occur as a result of climate change and sea level rise. The methods for determining the climate-adjusted flood elevation are provided at N.J.A.C. 7:13-3.2.

…

"Compelling public need" means that, based on specific facts, the proposed regulated activity: (1) will serve an essential health or safety need of the municipality in which the proposed regulated activity is located; (2) that the public health and safety benefit from the proposed use and that the proposed use is required to serve existing needs of the residents of the State; and (3) that there is no other means available to meet the established public need.

…

["Critical building" means a building that:

1. Is essential to maintaining continuity of vital government operations and/or supporting emergency response, sheltering, and medical care functions before, during, and after a flood, such as a hospital, medical clinic, police station, fire station, emergency response center, or public shelter; or

2. Serves large numbers of people who may be unable to leave the facility through their own efforts, thereby hindering or preventing safe evacuation of the building during a flood event, such as a school, college, dormitory, jail or detention facility, day care center, assisted living facility, or nursing home.]

"Critical building" means a building that, based on its use and occupancy, is designated by the American Society of Engineers in their publication, "Flood Resistant Design and Construction (ASCE/SEI 24-14)," as being:

1. Flood Design Class 3, which describes buildings and structures that pose a high risk to the public or significant disruption to the community should they be damaged, be unable to perform their intended functions after flooding, or fail due to flooding, and includes: (1) buildings

and structures in which a large number of persons may assemble in one place, such as theaters, lecture halls, concert halls, and religious institutions with large areas used for worship; (2) museums; (3) community centers and other recreational facilities; (4) athletic facilities with seating for spectators; (5) elementary schools, secondary schools, and buildings with college or adult education classrooms; (6) jails, correctional facilities, and detention facilities; (7) healthcare facilities not having surgery or emergency treatment capabilities; (8) care facilities where residents have limited mobility or ability, including nursing homes, but not including care facilities for five or fewer persons; (9) preschool and child care facilities not located in one- and two-family dwellings; (10) buildings and structures associated with power generating stations, water and sewage treatment plants, telecommunication facilities, and other utilities that, if their operations were interrupted by a flood, would cause significant disruption in day-to-day life or significant economic losses in a community; and (11) buildings and other structures not included in Flood Design Class 4 (including, but not limited to, facilities that manufacture, process, handle, store, use, or dispose of such substances as hazardous fuels, hazardous chemicals, hazardous waste, or explosives) containing toxic or explosive substances where the quantity of the material exceeds a threshold quantity established by the authority having jurisdiction and is sufficient to pose a threat to the public if released; or

2. Flood Design Class 4, which describes buildings and structures that contain essential facilities and services necessary for emergency response and recovery, or that pose a substantial risk to the community at large in the event of failure, disruption of function, or damage by flooding, and includes: (1) hospitals and health care facilities having surgery or emergency treatment facilities; (2) fire, rescue, ambulance, and police stations and emergency vehicle garages; (3) designated emergency shelters; (4) designated emergency preparedness, communication, and operation centers and other facilities required for emergency response; (5) power generating

stations and other public utility facilities required in emergencies; (6) critical aviation facilities, such as control towers, air traffic control centers, and hangars for aircraft used in emergency response; (7) ancillary structures, such as communication towers, electrical substations, fuel or water storage tanks, or other structures necessary to allow continued functioning of a Flood Design Class 4 facility during and after an emergency; and (8) buildings and other structures (including, but not limited to, facilities that manufacture, process, handle, store, use, or dispose of such substances as hazardous fuels, hazardous chemicals, or hazardous waste) containing sufficient quantities of highly toxic substances where the quantity of the material exceeds a threshold quantity established by the authority having jurisdiction and is sufficient to pose a threat to the public if released.

…

"Excavation" means removal or recovery of soil, minerals, mineral substances**,** or organic substances [other than vegetation,] from the land surface or beneath the land surface, whether the land surface is exposed or submerged. Excavation does not include the movement of material due to erosion.

"Exempt activity" means an activity that is not subject to the requirements of this chapter, as described at N.J.A.C. 7:13-2.5. Exempt activities do not require authorization pursuant to a permit-by-registration pursuant to N.J.A.C. 7:13-6 and 7, a general permit-by-certification pursuant to N.J.A.C. 7:13-6 and 8, a general permit pursuant to N.J.A.C. 7:13-6 and 9, an individual permit pursuant to N.J.A.C. 7:13-10, 11, and 12, or an emergency authorization pursuant to N.J.A.C. 7:13-16.

...

"FEMA flood mapping" means information published or publicly released by FEMA regarding the frequency, location, and/or extent of flooding in a community, such as flood elevations, flood profiles, flow rates, and floodway limits, and including FEMA 100-year flood elevation as defined above. For the

purposes of this chapter, such information shall include only that information adopted as part of the most recent effective FEMA Flood Insurance Study, dated on or after January 31, 1980, or **the most recent of** any [more recent] advisory [or proposed (preliminary)]**, preliminary, or pending** flood mapping, **that may have been issued by FEMA after the date of the effective flood mapping,** if the [more] **most** recent advisory [or proposed (preliminary)]**, preliminary, or pending flood** mapping results in higher flood elevations, wider floodway limits, or greater flow rates, than depicted in the most recent effective FEMA Flood Insurance Study, or indicates a change from an [A] **AE** zone to a [V] **VE** zone or coastal A zone. **If a regulated water is depicted on FEMA flood mapping, but lacks a flood profile or other identifying flood information in the Flood Insurance Study, the FEMA flood mapping cannot be used pursuant to this chapter to determine flood elevations or floodway limits for that regulated water.** Effective [and proposed (preliminary)]**, preliminary, and pending** FEMA flood mapping can be viewed at https://msc.fema.gov and advisory flood mapping for coastal areas, where available, can be viewed at [http://www.region2coastal.com] **https://r2-coastal-fema.hub.arcgis.com/**. Questions regarding the availability, use, derivation, or modification of FEMA flood mapping should be directed to FEMA at (800) 358-9616.

…

"Flood hazard area" means land, and the space above that land, which lies below the [flood hazard area design] **climate-adjusted** flood elevation. Structures, fill**,** and vegetation that are situated on land that lies below the [flood hazard area design] **climate-adjusted** flood elevation are described as being "in" or "within" the flood hazard area. The inner portion of the flood hazard area is called the floodway and the outer portion of the flood hazard area is called the flood fringe. Figures A [and]**,** B**, C, and D** at N.J.A.C. 7:13-2.3 illustrate these areas as well as the riparian zone along a typical water. The flood hazard area on a particular site is determined using the methods set forth at N.J.A.C. 7:13-3. There are two types of flood hazard areas:

1. Tidal flood hazard area, in which the [flood hazard area design] **climate-adjusted** flood elevation is governed by tidal flooding from the Atlantic Ocean. Flooding in a tidal flood hazard area may be contributed to or influenced by stormwater runoff from inland areas, but the **maximum** depth of flooding generated by the tidal rise and fall of the Atlantic Ocean is greater than flooding from any fluvial sources[; and]**. Land within a tidal flood hazard area may additionally be subject to fluvial flooding, as depicted in Figure 2.3D at N.J.A.C. 7:13-2.3. Tidal flood hazard areas include the inundation risk zone. Further, except for the Atlantic Ocean and other non-linear tidal waters, such as bays and inlets, tidal flood hazard areas include a floodway; and**

2. Fluvial flood hazard area, in which the [flood hazard area design] **climate-adjusted** flood elevation is governed by stormwater runoff. Flooding in a fluvial flood hazard area may be contributed to or influenced by elevated water levels generated by the tidal rise and fall of the Atlantic Ocean, but the **maximum** depth of flooding generated by stormwater runoff is greater than flooding from the Atlantic Ocean. **Fluvial flood hazard areas include a floodway.**

["Flood hazard area design flood" means a flood equal to the 100-year flood plus an additional amount of water in fluvial areas to account for possible future increases in flows due to development**,** climate change and other factors. This additional amount of water also provides a factor of safety in cases when the 100-year flood is exceeded. N.J.A.C. 7:13-3 describes the various methods of determining the flood hazard area design flood for a particular water as well as the additional amount of water to be added in various situations.

"Flood hazard area design flood elevation" means the peak water surface elevation that will occur in a water during the flood hazard area design flood.]

…

"Habitable building" means a building that is intended for regular human occupation and/or residence. Examples of a habitable building include a single-family home, duplex, multi-residence

building, or critical building; a commercial building such as a retail store, restaurant, office building, or gymnasium; an accessory structure that is regularly occupied, such as a garage, barn, or workshop; mobile and manufactured homes, and trailers intended for human residence, which are set on a foundation and/or connected to utilities, such as in a mobile home park ([not] including campers and recreational vehicles) **that remain on site for more than 180 days**; and any other building that is regularly occupied, such as a house of worship, community center, or meeting hall, or animal shelter that includes regular human access and occupation. Examples of a non-habitable building include a bus stop shelter, utility building, storage shed, self-storage unit, construction trailer, or an individual shelter for animals such as a doghouse or outdoor kennel.

…

"Inundation risk zone" means the portion of a tidal flood hazard area that has been determined to be at significant risk for future permanent or daily inundation by 2100, based on Rutgers University's findings of the New Jersey Science and Technical Advisory Panel (STAP) report and which, therefore, represents a high level of hazard for existing and proposed development and habitation. The limits of the inundation risk zone on a particular site are determined using the methods set forth at N.J.A.C. 7:13-3.4(c).

…

"Jacking" means the placement of an underground utility line beneath a [channel] **regulated area** by means of horizontally pushing[, drilling] or otherwise forcing **the utility** through the earth below the [channel] **regulated area** in such a way that the [channel] **ground above** is not disturbed. **"Jacking" does not include horizontal directional drilling.**

…

"Low-flow aquatic passage" means the ability of aquatic species to travel upstream and downstream in a waterway without impediment during low-flow conditions in a channel. Natural channel

beds often possess small rivulets that serve to provide aquatic passage in this way during low-flow conditions, which can occur during dry periods of the year. Bridges, culverts**,** and other [manmade] **human-created** structures may also be designed to provide low-flow aquatic passage by inclusion of a linear depression throughout the bottom of the structure in the direction of flow, which collects water during low-flow conditions and allows aquatic species to pass through the structure without impediment.

…

"Mean higher high water" means the arithmetic average of the elevations of the higher high waters of a mixed tide over a specific 19-year period (National Tidal Datum Epoch). For shorter periods of observation, corrections are applied to eliminate known variations and reduce the result to the equivalent of a mean 19-year interval. For the purposes of this chapter, "higher high water" refers to the higher of the two high waters of a tidal day where the tide is of the semidiurnal or mixed type. The single high water occurring daily during periods when the tide is diurnal is considered to be higher high water.

["Method 1" or the "Department delineation method" means the method of determining the flood hazard area design flood elevation and floodway limit from State adopted delineations, as described at N.J.A.C. 7:13-3.3.

"Method 2" or the "FEMA tidal method" means the method of determining the tidal flood hazard area design flood elevation and floodway limit from FEMA flood mapping, as described at N.J.A.C. 7:13-3.4(d).

"Method 3" or the "FEMA fluvial method" means the method of determining the fluvial flood hazard area design flood elevation and floodway limit from FEMA flood mapping, as described at N.J.A.C. 7:13-3.4(e).

"Method 4" or the "FEMA hydraulic method" means the method of determining the flood hazard area design flood elevation and floodway limit by calculation using flow rate data from FEMA flood

mapping, as described at N.J.A.C. 7:13-3.4(f).

"Method 5" or the "approximation method" means the method of determining the flood hazard area design flood elevation from the charts in chapter Appendix 1, incorporated herein by reference, as described at N.J.A.C. 7:13-3.5.

"Method 6" or the "calculation method" means the method of determining the flood hazard area design flood elevation and floodway limit by calculation using flow rates provided by an applicant for a verification under this chapter, as described at N.J.A.C. 7:13-3.6.]

…

"Modification" means a document issued by the Department to revise a valid, previously issued verification, authorization [under] **pursuant to** a general permit, or individual permit as described at N.J.A.C. 7:13-[22.5 and 6] **22.6 and 22.7**.

…

["NGVD" means the national geodetic vertical datum of 1929, which is the reference datum for all surveying, topography and elevations described in this chapter.]

"NAVD 88" means the North American Vertical Datum of 1988, which is the vertical datum for orthometric heights established for vertical control surveying in the United States based upon the General Adjustment of the North American Datum of 1988. NAVD 88 is the reference datum for all surveying, topography, and elevations described in this chapter. Flood mapping and other topographic information that is based on the National Geodetic Survey of 1929 (NGVD) or other reference data shall be converted to or reference NAVD 88 for the purposes of establishing jurisdictional boundaries and determining compliance with the requirements of this chapter. Information related to this datum and others are provided by the National Oceanic and Atmospheric Administration's National Geodetic Survey at https://geodesy.noaa.gov/datums/vertical/north-american-vertical-datum-1988.shtml.

…

"100-year flood" in fluvial areas means a flood that has a one percent probability of being equaled or exceeded within a one-year period for a given geographic location and/or watershed. In tidal areas, a "100-year flood" means a flood caused by a tidal surge in the Atlantic Ocean, which has a one percent probability of being equaled or exceeded within a one-year period. **FEMA Flood Insurance Studies commonly refer to this flood as the "1% annual chance flood."**

["100-year flow rate" means the peak rate at which floodwaters would flow in a given water during a 100-year flood.]

…

"Public transportation entity" means a Federal, State, **interstate,** county, or municipal government, an independent State authority, or a statutorily authorized public-private partnership program pursuant to P.L. 2018, c. 90 (N.J.S.A. 40A:11-52 et seq.), that performs a public roadway or railroad project that includes new construction, expansion, reconstruction, or improvement of a public roadway**,** or railroad.

…

"Regulated activity" or "activity" means an activity that is regulated [under] **pursuant to** this chapter as described at N.J.A.C. 7:13-2.4. Some regulated activities, when performed in a certain manner or to a specified degree, are [permitted-by-rule] **permitted-by-registration** at N.J.A.C. 7:13-6 and 7. All regulated activities that are not [permitted-by-rule] **permitted-by-registration** require a general permit-by-certification [under] **pursuant to** N.J.A.C. 7:13-6 and 8, a general permit [under] **pursuant to** N.J.A.C. 7:13-6 and 9, an individual permit [under] **pursuant to** N.J.A.C. 7:13-10, 11, and 12, an emergency authorization [under] **pursuant to** N.J.A.C. 7:13-16, or a coastal permit [under] **pursuant to** N.J.A.C. 7:7**,** prior to commencement.

…

"Substantial damage" means damage of any origin sustained by a structure whereby the cost of restoring the structure to its condition before damage**, including the cumulative cost of all improvements made to the structure after (the effective date of this rulemaking),** would equal or exceed 50 percent of the market value of the structure before the damage occurred. Restoration of a substantially damaged structure shall constitute a substantial improvement as defined in this section.

"Substantial improvement" means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which**, including the cumulative cost of all improvements made to the structure after (the effective date of this rulemaking),** equals or exceeds 50 percent of the market value of the structure as determined before the start of construction of the improvement. This term includes structures that have sustained substantial damage regardless of the actual repair work performed. Substantial improvement does not include:

1. -2. (No change.)

…

"Verification" means a document issued by the Department [under] **pursuant to** N.J.A.C. 7:13-5.1, which establishes the [flood hazard area design] **climate-adjusted** flood elevation, flood hazard area limit, floodway limit, **inundation risk zone,** and/or riparian zone limit on a site or any portion of a site.

"Water" means a collection of water on the surface of the ground, including, but not limited to, a bay, brook, creek, ditch, lake, pond, reservoir, river, or stream. A water also includes the path or depression through which the water flows or is confined. A water can be either [naturally-occurring] **naturally occurring** or resulting from human activity, in which case it is referred to as ["manmade."] **"human created."** A [naturally-occurring] **naturally occurring** water that is piped, relocated, or otherwise modified remains a [naturally-occurring] **naturally occurring** water for the purposes of this chapter. An underground pipe or culvert that conveys stormwater runoff is not a water unless the pipe or culvert was constructed to enclose, replace, or divert a previously existing, [naturally-occurring]

naturally occurring water. (Note: Not all waters are regulated.)

"Water control structure" means a structure within or adjacent to a water, which intentionally or coincidentally alters the hydraulic capacity, [design] **climate-adjusted** flood elevation, flood hazard area limit**,** and/or floodway limit of the water. Examples of a water control structure include a bridge, culvert, dam, embankment, ford (if above grade), retaining wall**,** and weir.

"Water surface elevation" means the elevation of the surface of a water, measured in feet [NGVD] **NAVD 88**, and determined either by special calculation or gauge. For the purposes of determining compliance with a requirement of this chapter, a water surface elevation is rounded to the nearest 0.1 feet.

7:13-1.3 Forms, checklists, information, technical manual; Department address and website

(a)-(b) (No change.)

(c) Applications and other correspondence shall be submitted to the following addresses:

1. For submittal of an application for authorization [under] **pursuant to** a general permit-by-certification, or general permit, for an individual permit, or for a verification in accordance with N.J.A.C. 7:13-18.5(a), **as well as to register commencement of activities pursuant to a permit-by-registration and to document the commencement and/or completion of authorized activities,** the Department's website at https://www.nj.gov/dep/online; and

2. For correspondence or the submittal of an application for an applicability determination, a revision of a Department delineation, a verification in accordance with N.J.A.C. 7:13-18.5(b), or an extension, transfer, or modification of a permit:

i. For regular mail:

New Jersey Department of Environmental Protection

Division of Land [Use Regulation] **Resource Protection**

Mail Code 501-02A[, P.O.]

PO Box 420

Trenton, NJ 08625; and

ii. For hand delivery, courier service, and overnight delivery:

New Jersey Department of Environmental Protection

Division of Land [Use Regulation] **Resource Protection**

501 East State Street

5 Station Plaza, Second Floor

Trenton, NJ 08609.

(d) Questions regarding the requirements of this chapter or about the status of a particular application can be directed to the Division of Land [Use Regulation Technical Support Center] **Resource Protection** at (609) 777-0454, [via] **through** email at LURTechSupport@dep.nj.gov, or by using an online contact form at [https://www.nj.gov/dep/landuse/contact.html] **https://dep.nj.gov/wlm/contact-us/**.

(e) - (f) (No change.)

SUBCHAPTER 2. APPLICABILITY AND ACTIVITIES FOR WHICH A PERMIT OR AUTHORIZATION IS REQUIRED

7:13-2.1 When a permit or authorization is required

(a) No person shall engage in a regulated activity in a regulated area without a flood hazard area permit as required by this chapter, or a coastal permit as required [by] **pursuant to** N.J.A.C. 7:7, [as set forth at] **in accordance with** (b) [and (c)] below**, except as provided at (c) below or exempted pursuant to N.J.A.C. 7:13-2.5**. Initiation of a regulated activity in a regulated area without a flood

hazard area permit or a coastal permit as set forth at (b) below (except as provided at (c) below **or N.J.A.C. 7:13-2.5**) shall be considered a violation of this chapter and shall subject the party or parties responsible for the regulated activity to enforcement action, as set forth at N.J.A.C. 7:13-24. Regulated areas are set forth at N.J.A.C. 7:13-2.3 and regulated activities are set forth at N.J.A.C. 7:13-2.4. **Regulated activities that are exempt from the requirement to obtain an approval in accordance with (b) below are listed at N.J.A.C. 7:13-2.5.**

(b) Except as provided [in] **at** (c) or (e) below, a person undertaking any regulated activity in a regulated area**, that is not exempt pursuant to N.J.A.C. 7:13-2.5,** shall do so only in accordance with one **or more** of the following:

1. A [permit-by- rule] **permit-by-registration**, pursuant to N.J.A.C. 7:13-6 and 7;

2.– 5. (No change.)

6. A coastal permit, pursuant to N.J.A.C. 7:7[, provided:]**.**

[i. The application for the coastal permit was declared by the Department as complete for final review on or after November 5, 2007; and

ii. If activities are proposed in a fluvial flood hazard area, the applicant meets one of the four conditions at N.J.A.C. 7:13-5.5(a) regarding the need for a verification of the flood hazard area and/or floodway onsite.]

(c) Undertaking a regulated activity in a regulated area does not require an approval listed at (b) above in the cases listed [in] **at** (c)1, 2, **and** 3[, or 4] below. For the purpose of this subsection, each distinct construction activity in a project, such as each building, road, or utility crossing, is considered a distinct regulated activity.

1. The regulated activity is part of a project **in a fluvial flood hazard area,** for which all elements that were subject to [the Flood Hazard Area Control rules] **this chapter** in effect prior to July 17, 2023, have been approved [under] **pursuant to** a permit issued pursuant to those rules[,]**;** provided:

i. – iii. (No change.)

2. The regulated activity is part of a project **in a tidal flood hazard area,** for which all elements [in a tidal flood hazard area] that were subject to **this chapter or** N.J.A.C. 7:7 [and 7:7E] in effect prior to [November 5, 2007] **(the effective date of this rulemaking),** have been approved [under] **pursuant to** a valid CAFRA**,** [or] waterfront development permit, **or flood hazard area permit;** provided:

i. The regulated activity is specifically approved [under] **pursuant to** the permit, or was [not] subject to **neither** the requirements of **this chapter, nor** N.J.A.C. 7:7**,** [and 7:7E] prior to [November 5, 2007] **(the effective date of this rulemaking)**;

ii. The application for the permit was received by the Department and was declared complete for final review prior to [November 5, 2007] **(the effective date of this rulemaking)**; and

iii. The permit is valid when the regulated activity is undertaken; **or**

[3. The regulated activity is part of a project that was subject to neither the requirements of this chapter, nor N.J.A.C. 7:7, prior to November 5, 2007, and both of the following apply:

i. The regulated activity is located within the Meadowlands District; and

ii. The regulated activity is authorized under a valid zoning certificate issued by the New Jersey Meadowlands Commission (predecessor to the New Jersey Sports and Exposition Authority) prior to November 5, 2007, pursuant to N.J.A.C. 19:4-4.2; or]

[4.] **3.** The regulated activity is part of a project **in a fluvial flood hazard area** that was subject to neither the requirements of this chapter, nor N.J.A.C. 7:7 and 7:7E, prior to July 17, 2023, [and] **or was part of a project in a tidal flood hazard area that was subject to neither the requirements of this chapter, nor N.J.A.C. 7:7, prior to (the effective date of this rulemaking); provided** one of the following applies:

i. The regulated activity is authorized under one or more of the following approvals pursuant to the Municipal Land Use Law (N.J.S.A. 40:55D-1 et seq.), prior to [July 17, 2023] **the appropriate date listed at (c)3 above**:

(1) – (5) (No change.)

ii. The regulated activity does not require an approval identified [in (c)4i] **at (c)3i** above, and [has] **had** commenced prior to [July 17, 2023] **the appropriate date listed at (c)3 above**.

(1) – (3) (No change.)

(d) If a regulated activity [is approved under a qualifying approval listed at (c)] **that satisfies the requirements at (c)1, 2, or 3** above[, and the regulated activity] is subsequently revised, the [original approval] **regulated activity** continues to satisfy the requirements [of] **at** (c) above**;** provided **all qualifying approvals remain valid and** the Department determines that the revision will not result in one or more of the following:

1. – 4. (No change.)

(e) (No change.)

7:13-2.2 Regulated waters

(a) All waters in New Jersey are regulated [under] **pursuant to** this chapter except those described at (a)1 through [4] **5** below. Every regulated water possesses a flood hazard area and/or a riparian zone as set forth at N.J.A.C. 7:13-2.3[:]**. Further, every regulated tidal water possesses an inundation risk zone as set forth at N.J.A.C. 7:13-3.4.**

[1. Any manmade canal;]

1. The Delaware and Raritan Canal;

2. (No change.)

3. Any segment of water that has a drainage area of less than 50 acres[, provided one or more of

the following applies:

i. The water has no] **and does not possess a** discernible channel;

[ii.] **4.** [The] **Any segment of** water **that has a drainage area of less than 50 acres and** is confined within a lawfully existing, [manmade] **human-created** conveyance structure or drainage feature, such as a pipe, culvert, ditch, channel, **artificial pond,** or basin**.** [(not including] **This exemption does not apply to** any **segment of** water that historically possessed a [naturally-occurring] **naturally occurring**, discernible channel, which has been piped, culverted, ditched, or similarly modified **through human activity**[)]; [and/or] **and**

[iii. The water is not connected to a regulated water by a channel or pipe, such as an isolated pond or depression that has no outlet; and]

[4.] **5.** (No change in text.)

7:13-2.3 Regulated areas

(a) (No change.)

(b) A flood hazard area exists along every regulated water that has a drainage area of 50 acres or greater. If a regulated water has a drainage area of less than 50 acres, the water does not possess a flood hazard area that is regulated [under] **pursuant to** this chapter.

1. The flood hazard area is comprised of a flood fringe and a floodway, except for the Atlantic Ocean and other non-linear tidal waters such as bays and inlets, which do not have a floodway. Therefore, the entire flood hazard area along these tidal waters is considered to be a flood fringe for the purposes of this chapter. **Further, every tidal water possesses an inundation risk zone.**

2. The methods for determining the limits of the flood fringe**,** [and] floodway**, and inundation risk zone** are described at N.J.A.C. 7:13-3.

(c) A riparian zone exists along both sides of every regulated water **regardless of the drainage**

area and includes the regulated water itself, except as provided [in] **at** (c)1 below.

1. There is no riparian zone within or along the following:

i. (No change.)

[ii. New Jersey's barrier island complex;]

[iii.] **ii.** Any lawfully existing [manmade] **human-created** lagoon;

[iv.] **iii.** Any lawfully existing stormwater management basin or wastewater treatment pond; **and**

[v.] **iv.** Any segment of a regulated water enclosed within a lawfully existing pipe, culvert, or bridge[; and]**.**

[vi. Any lawfully existing, manmade open channel that was created to convey stormwater, provided the channel is fully lined with manmade impervious material, such as a concrete low-flow channel within a stormwater basin or a ditch completely lined with concrete or asphalt.]

2. (No change.)

(d) The flood hazard area and riparian zone described at (b) and (c) above generally overlap. Figures 2.3A**,** [and] 2.3B**, 2.3C, and 2.3D** below (not drawn to scale) illustrate [a typical regulated water,] **the** flood hazard area, **floodway, inundation risk zone, channel,** and riparian zone **of a typical regulated water in both fluvial and tidal areas**. This chapter sets forth the specific requirements applicable to activities in each of these regulated areas.

(Agency Note: Figures 2.3A, 2.3B, 2.3,C, and 2.3D below are intended to replace existing Figures 2.3A and 2.3B, without symbolism indicating the changes.)

FIGURE 2.3A
CROSS-SECTION OF A FLUVIAL FLOOD HAZARD AREA
NOTE: DRAWING NOT TO SCALE

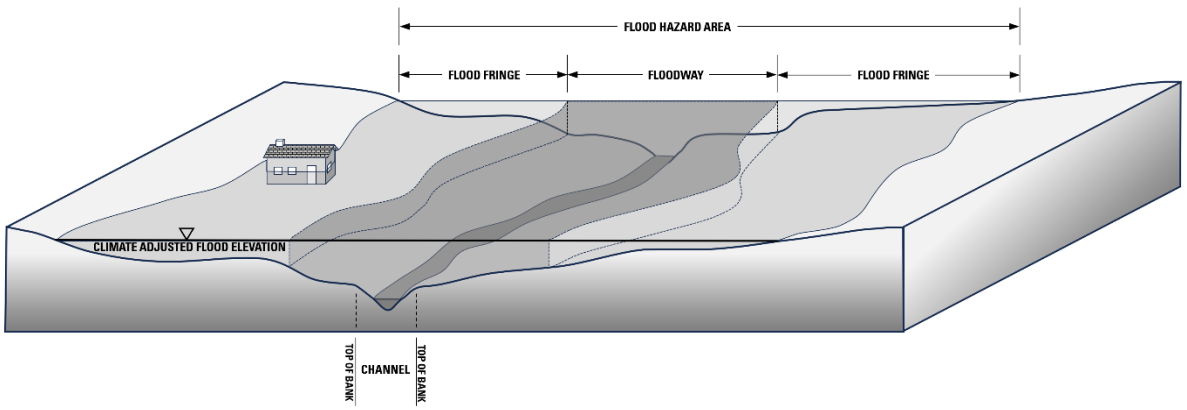
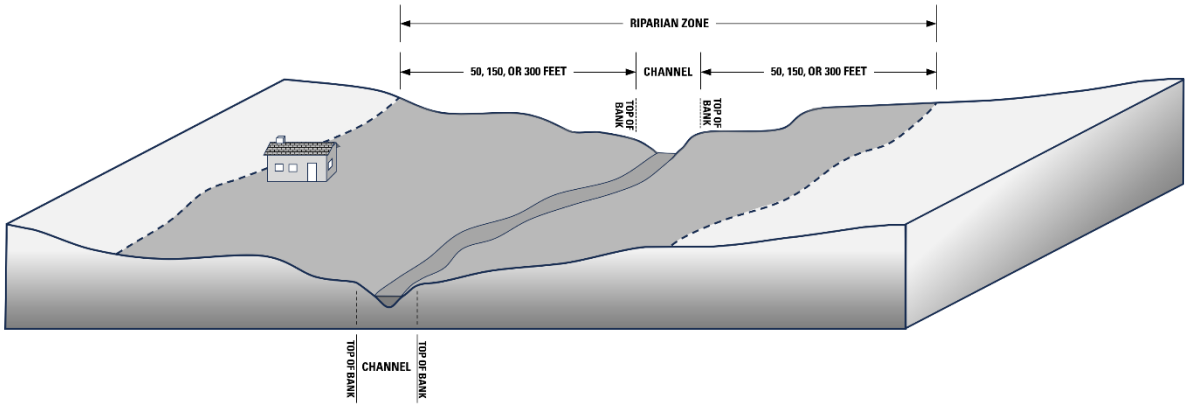
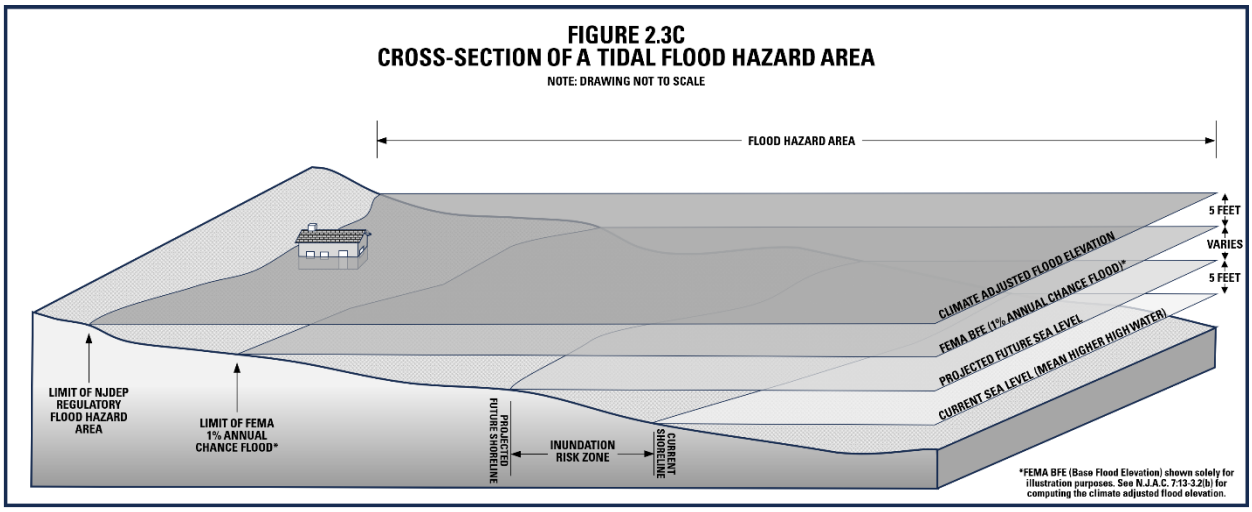
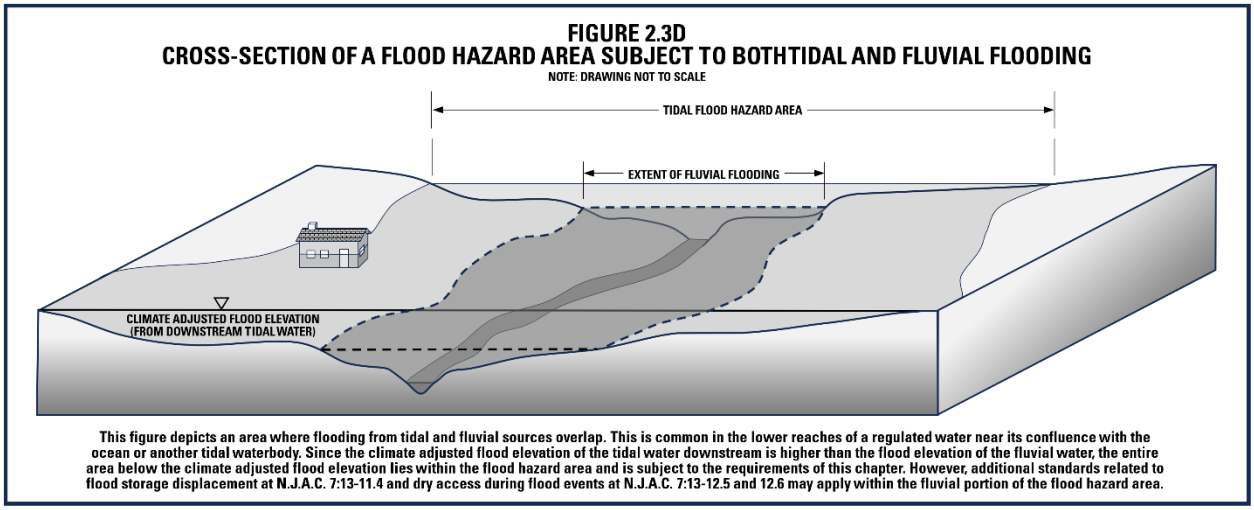


FIGURE 2.3B
CROSS-SECTION OF A RIPARIAN ZONE
NOTE: DRAWING NOT TO SCALE







7:13-2.4 Regulated activities

(a) [Any] **Except where exempted from this chapter pursuant to N.J.A.C. 7:13-2.5, any** action that includes or results in one or more of the following constitutes a regulated activity [under] **pursuant to** this chapter if undertaken in a regulated area, as described at N.J.A.C. 7:13-2.3:

1. – 6. (No change.)

(b) (No change.)

7:13-2.5 Exempt activities

(a) The following activities are exempt activities that do not require authorization through this chapter pursuant to N.J.A.C. 7:13-2.1(b), even if the activity is undertaken within a flood hazard area or riparian zone, provided the specific requirements for the exempt activity listed below are met:

1. Normal property maintenance, including the clearing, cutting, and/or removal of riparian zone vegetation, which is necessary to service, maintain, or ensure the continued safe use of a lawfully existing structure, easement, right-of-way, field, lawn, park, and/or garden.

i. For the purposes of this exemption, normal property maintenance means:

(1) Pruning;

(2) Selective tree cutting, such as removing a dead, fallen, or unsafe tree;

(3) Planting native, non-invasive plant species;

(4) Periodic clearing, cutting, and/or removal of vegetation within an actively disturbed area, such as mowing and clearing nuisance vegetation;

(5) Removing trash, debris, and dead vegetation by hand;

(6) Removing accumulated sediment, debris, or nuisance vegetation from stormwater management structures and associated conveyances; and

(7) Placement within an actively disturbed area of no more than five cubic yards of landscaping material, such as stone, topsoil, or wood chips;

ii. This exemption does not authorize:

(1) Burning or applying herbicide to riparian zone vegetation;

(2) Grading and other changes in topography;

(3) Construction of structures, or placement of fill or impervious surfaces, except as provided at (a)1i(7) above; or

(4) Removal of riparian zone vegetation resulting from activities not listed at (a)1i above, such as removal of vegetation to accommodate an ongoing or proposed regulated activity or to create new open or landscaped areas.

2. Repair of a lawfully existing structure, provided the conditions at (b) below are met and:

i. The timing restrictions set forth at N.J.A.C. 7:13-11.6(d) are observed;

ii. No riparian zone vegetation is cleared, cut, and/or removed, except for vegetation within 20 feet of the structure, where such disturbance is necessary to facilitate its repair; and

iii. No more than one-quarter acre of riparian zone vegetation is cleared, cut, and/or removed.

3. Removal of accumulated sediment and debris from a regulated water by hand, provided the conditions at (b) below are met and:

i. No machinery is used within the regulated water except for handheld equipment, such as hoses and hydraulic pumps;

ii. The sediment and debris removal is necessary to maintain positive flow through a lawfully existing structure and/or a regulated water;

iii. The material removed consists solely of accumulated sediment and debris and does not alter the natural bed and banks of the regulated water;

iv. Where work is proposed along a trout production or maintenance water, the appropriate timing restrictions set forth at N.J.A.C. 7:13-11.6(d) are observed;

v. No riparian zone vegetation is cleared, cut, and/or removed, unless such disturbance is unavoidable, necessary to gain access to the regulated water, and minimized;

vi. No trees are cleared, cut, and/or removed in a riparian zone;

vii. All material removed from the regulated water is disposed of outside of any regulated area and in accordance with all applicable Federal, State, and local requirements;

viii. For removal of sediment and debris adjacent to bridges, culverts, and outfall structures owned or controlled by a public entity, work is limited to within 100 feet upstream or downstream of the structure; and

ix. All work is performed with the full consent of the owner of any property upon which the project is undertaken.

4. Removal of a major obstruction from a regulated water with machinery, such as a fallen tree, abandoned vehicle, furniture, and other large debris, provided the conditions at (b) below are met and:

i. It is not practicable to remove the obstruction solely by hand;

ii. All machinery is situated outside the regulated water except for handheld equipment, such as chainsaws. Heavy machinery, such as backhoes, may be used to reach into the regulated water to remove material but cannot be driven or otherwise placed in the regulated water;

iii. No fill material or accumulated sediment is removed from the regulated water;

iv. No riparian zone vegetation is cleared, cut, and/or removed, unless such disturbance is unavoidable, necessary to gain access to the regulated water, and minimized;

v. All material removed from the regulated water is disposed of outside of any regulated area and in accordance with all applicable Federal, State, and local laws; and

vi. The activity is conducted from only one bank and the existing tree canopy on the more southerly or westerly bank is preserved in order to shade the regulated water.

5. Exploratory site investigation, including general land surveying, the installation of monitoring wells, and geotechnical and archeological investigation, such as undertaking soil borings or excavation for the purpose of obtaining information on subsurface conditions, determining the presence or extent of groundwater or contamination in subsurface, or obtaining seismic information, provided the conditions at (b) below are met and:

i. General land surveying is accomplished using hand-held equipment;

ii. Each geotechnical or archeological investigation is no more than three feet in diameter;

iii. No grading or changes in topography occur in a flood hazard area;

iv. Where a pathway through riparian zone vegetation is necessary to accomplish the activities, it is limited to no greater than 10 feet in width; and

v. No trees are cleared, cut, and/or removed in a riparian zone, except for cutting branches or clearing damaged, dying, or dead trees, where such disturbance is necessary to provide access pursuant to this paragraph.

6. Storage of unsecured material, provided the conditions at (b) below are met and:

i. The unsecured material is of an amount and nature typical for the existing use of the site;

ii. No hazardous substances are stored unless they are:

(1) Essential to the operation of a building or facility;

(2) Isolated from potential contact with floodwaters; and

(3) Stored in accordance with all Federal, State, and local requirements;

iii. No storage is located within a floodway or within 25 feet of any top of bank, unless the material was lawfully situated there prior to November 5, 2007;

iv. Storage is limited to actively disturbed areas;

v. Except as provided at (a)6vi below, the peak volume of material stored in the flood hazard area has not increased since November 5, 2007; and

vi. Where storage is associated with an authorized construction activity, all material is removed from the site and all disturbed areas are restored to pre-storage topography within six months of the placement of the material.

7. Placement, storage, or processing of hazardous waste and/or substances, solid waste, or recyclable materials, at a lawfully existing facility, provided the conditions at (b) below are met

and:

i. The facility was established prior to November 5, 2007;

ii. The facility has been in continuous operation since November 5, 2007;

iii. The facility is operating in compliance with all Federal, State, and local requirements;

iv. The size of the facility and the peak volume of material placed, stored, or processed within the flood hazard area have not increased since November 5, 2007;

v. The footprint of the area in which the material is placed, stored, or processed within the riparian zone has not increased; and

vi. No trees are cleared, cut, and/or removed in a riparian zone.

8. Continuation of lawfully existing agricultural activities, such as grazing, harvesting, horticulture, irrigation, planting, tilling, viticulture, and watering on land that is actively farmed, and/or the commencement of new agricultural activities on land that is not actively farmed, provided the conditions at (b) below are met and:

i. The existing ground elevation is not raised within a flood hazard area;

ii. Activities within a riparian zone are limited to actively disturbed areas; and

iii. No aboveground structure is erected.

9. Repair, maintenance, and/or dredging of the channel and/or embankments of the Delaware and Raritan Canal; provided the conditions at (b) below are met and:

i. The Delaware and Raritan Canal Commission and/or New Jersey Water Supply Authority determines that the proposed repair, maintenance, and/or dredging complies with the applicable requirements at N.J.A.C. 7:45 and is necessary for proper operation of the canal;

ii. No fill is placed in the floodway or fluvial flood hazard area of any water regulated pursuant to this chapter and N.J.A.C. 7:13-2.3, except where necessary to restore a failed embankment to its pre-failure condition;

iii. No dredged material is placed in a flood hazard area; and

iv. No trees are cleared, cut, and/or removed in a riparian zone outside the canal and its embankment.

10. Placement of one or more utility poles, such as telephone and electric poles, or structures on poles intended to facilitate travel safety along a public roadway or railroad, such as overhead signs, variable message signs, streetlights, and traffic signal equipment, provided the conditions at (b) below are met and:

i. No disturbance is located within 25 feet of any top of bank, except where the pole or structure replaces an existing pole or structure that cannot feasibly be relocated outside this area; and

ii. No trees are cleared, cut, and/or removed in a riparian zone.

11. Milling, repaving, repair, and/or resurfacing of lawfully existing pavement, provided the conditions at (b) below are met and:

i. The elevation of the surface of the pavement is not raised in a floodway;

ii. The elevation of the surface of the pavement is not raised more than three inches in a flood fringe. Multiple milling, repaving, and/or resurfacing is permissible provided the cumulative impact of the activity does not result in raising the pavement by a total of more than three inches; and

iii. The footprint of the existing pavement is not expanded.

12. The construction, replacement, repair, or removal of any dam that does not serve as a component of a stormwater management basin, as well as any regulated activity performed in association with the removal of a dam that does not serve as a component of a stormwater management basin, provided the conditions at (b) below and all applicable requirements of the Dam Safety Standards at N.J.A.C. 7:20 are met.

13. The placement or underground jacking of one or more underground utility lines, provided the conditions at (b) below are met and:

i. The utility line is not installed using horizontal directional drilling;

ii. No excavation, open trench cutting, or other disturbance to land and vegetation occurs within any regulated water or within 25 feet of any top of bank;

iii. Disturbance to riparian zone vegetation is limited to actively disturbed areas;

iv. All disturbed areas in the flood hazard area are restored to pre-construction topography upon completion of the regulated activity;

v. Where the utility line is jacked beneath a bridge or culvert, all work is accomplished without displacing or damaging the bridge or culvert;

vi. Where the utility line is jacked beneath an open channel, the top of the line is placed at least four feet below the channel invert and remains nominally horizontal at this depth at least 10 feet beyond the top of each bank;

vii. The utility line is sealed to ensure that there will be no leakage or discharge in a regulated area;

viii. No manhole is constructed within 25 feet of any top of bank; and

ix. The top of any manhole in a flood hazard area is flush with the ground and has a watertight cover.

14. The removal of any lawfully existing fill or structure; provided the conditions at (b) below are met and:

1. The fill or structure is not located within a floodway;

2. Disturbance to riparian zone vegetation is limited to actively disturbed areas; and

3. The fill or structure is disposed of outside of any regulated area and in accordance with all applicable Federal, State, and local requirements.

(b) The following conditions are incorporated by reference in each exempt activity listed at (a) above:

1. Any new, reconstructed, enlarged, or elevated structure within a flood hazard area:

i. Shall be secured to resist flotation, collapse, and displacement due to hydrostatic and hydrodynamic forces from floodwaters; and

ii. Shall comply with the applicable design and construction standards of the following:

(1) The Uniform Construction Code, N.J.A.C. 5:23; and

(2) The Federal flood reduction standards, 44 CFR Part 60;

2. The exempt activity shall not adversely affect low-flow aquatic passage in any regulated water;

3. The exempt activity shall not expose unset or raw cement to flowing water within any channel or regulated water during construction;

4. The exempt activity shall not destroy, jeopardize, or adversely modify a present or documented habitat for threatened or endangered species, and shall not jeopardize the continued existence of any local population of a threatened or endangered species; and

5. Except for normal property maintenance conducted in accordance with the exemption at (a)1 above, all riparian zone vegetation that is cleared, cut, and/or removed to conduct an exempt activity, access an area where exempt activities will be conducted, or otherwise accommodate an exempt activity shall be replanted immediately after completion of the activity, unless prevented by seasonal weather, in which case the vegetation shall be replanted as soon as conditions permit. Portions of the riparian zone occupied by an exempt structure need not be replanted.

i. Except as provided at (b)5ii below, the replanted vegetation shall:

(1) Consist of vegetation of equal or greater ecological function and value as the vegetation that was cleared, cut, or removed. For example, herbaceous vegetation may be replaced with the

same type of vegetation or with trees, but the trees in forested areas must be replaced with trees of equal or greater density, and ecological function and value; and

(2) Consist of native, non-invasive vegetation, except in an actively disturbed area. In an actively disturbed area, the vegetation may be replaced with the same type of vegetation that was cleared, cut, or removed, or with another kind of vegetation typical of an actively disturbed area. For example, lawn grass may be replaced with garden plants or agricultural crops.

ii. In cases where replanting in accordance with (b)5i above would interfere with continued access to or maintenance of a structure that is required by Federal, State, or local law, the vegetation replanted shall meet the requirements at (b)5i above, to the extent feasible.

7:13-[2.5]**2.6** Applicability determination

(a) A person may request an applicability determination from the Department to determine the applicability of this chapter to [a segment of water or to] one or more proposed activities[, subject to the limitations in (b) below]. An applicability determination is optional, but the Department encourages persons to request one if there is uncertainty about whether a particular [water or] activity is regulated, since conducting unauthorized activities may result in enforcement action. **Where the Department determines that a review of engineering calculations is necessary to make a determination pursuant to this section, or where the applicant's intent is for the Department to determine whether a water is regulated and/or to confirm one or more jurisdictional boundaries applicable to this chapter, the applicant shall apply for a flood hazard area verification pursuant to N.J.A.C. 7:13-5.**

[(b) The Department will not undertake a site inspection or review engineering calculations in the context of an applicability determination.]

[(c)] **(b)** A person requesting an applicability determination shall submit to the Department, at the address set forth at N.J.A.C. 7:13-1.3, the following:

1. A completed application form as described at N.J.A.C. 7:13-[22.3(c)1]**22.4(c)1** and available from the Department at the address set forth at N.J.A.C. 7:13-1.3;

2. A copy of a USGS quad map with [the segment of water in question indicated and/or] the site in question clearly outlined to scale; [and]

3. A copy of any available Department delineation and FEMA flood mapping, with [the segment of water in question indicated and/or] the site in question clearly outlined to scale[.]**;**

[(d) In addition to the information listed at (c) above, a request for an applicability determination to determine if a water is regulated shall include a copy of the best available topographic mapping for the drainage area of the water in question, with the limits of the drainage area depicted.

(e) In addition to the information listed at (c) above, a request for an applicability determination to determine if one or more proposed activities is regulated shall include the following:]

Recodify existing 1.-2. as **4.-5.** (No change in text.)

[3.] **6.** Site plans, signed and sealed by an engineer, land surveyor, or architect, detailing the proposed activities. If fill or grading is proposed, the site plans shall depict both existing and proposed topography unless the Department determines that topography is not necessary to determine applicability. All topography shall reference [NGVD] **NAVD 88**, or include the appropriate conversion factor to [NGVD] **NAVD 88**, unless the person requesting the applicability determination demonstrates that such reference is not necessary.

[(f)] **(c)** After reviewing a request for an applicability determination, the Department shall:

1. Notify the person requesting the applicability determination that the request did not include all applicable material required at [(c), (d), and/or (e)] **(b)** above and request the missing material. Upon receipt of the requested material, the Department shall take one of the actions set forth at [(f)2] **(c)2** below. The Department may cancel the request for an applicability determination if the missing material is not provided within 60 calendar days of the date of the Department's request; or

2. Issue an applicability determination**,** in writing, stating that, as of the date of issuance:

i. The Department has determined that [this chapter does not apply to the water in question and/or] the proposed activities **are exempt pursuant to N.J.A.C. 7:13-2.4(b) and/or 2.5** and no flood hazard area **authorization or** permit is required;

ii. The Department has determined that [this chapter applies to the water in question and/or] **the** proposed activities **are not exempt pursuant to N.J.A.C. 7:13-2.4(b) and 2.5**, and the recipient of the applicability determination is advised to [submit an application] **apply** for a **flood hazard area authorization or** permit [unless] **or, if applicable, that** the proposed activities meet the requirements of a [permit-by-rule] **permit-by-registration pursuant to N.J.A.C. 7:13-7**; or

iii. The Department is not able to determine whether [this chapter applies to the water in question and/or] the proposed activities **are regulated pursuant to this chapter** without reviewing calculations [or inspecting the site], **which is outside the scope of an applicability determination,** and the recipient of the applicability determination is advised to [submit an application] **apply** for a verification **pursuant to N.J.A.C. 7:13-5**.

[(g)] **(d)** [The] **An** applicability determination issued [under (f)2] **pursuant to (c)2** above shall be based on the rules in effect and the information provided in the application regarding the site conditions and the proposed activities as of the date of issuance. The recipient of the applicability determination is on notice that subsequent amendments to this chapter, changes in site conditions, changes to the limits of the flood hazard area, floodway, or riparian zone, and/or changes to proposed activities may result in the [water in question or] proposed activities becoming regulated. The recipient remains solely responsible for determining whether any such changes have occurred and remains liable for any violation of this chapter resulting from activities conducted in reliance on the applicability determination where such changes have occurred and the determination is no longer accurate.

SUBCHAPTER 3. DETERMINING THE FLOOD HAZARD AREA**,** [AND] FLOODWAY**, AND INUNDATION RISK ZONE**

7:13-3.1 General provisions for determining the flood hazard area, floodway, and inundation risk zone along a regulated water

(a) This subchapter sets forth the procedure for determining the flood hazard area and floodway along a regulated water based on:

1. A Department delineation, pursuant to N.J.A.C. 7:13-3.5;

2. FEMA flood mapping, pursuant to N.J.A.C. 7:13-3.6;

3. Approximation, pursuant to N.J.A.C. 7:13-3.7; or

4. Calculation, pursuant to N.J.A.C. 7:13-3.8.

(b) This subchapter additionally sets forth the procedure for determining the inundation risk zone, pursuant to N.J.A.C. 7:13-3.4.

(c) The flood hazard area, floodway, and inundation risk zone described in this subchapter may differ from areas identified by other persons or entities as a "flood hazard area," "flood zone," "floodplain," "floodway," drainage easement," or "inundation risk zone." The methods listed at (a) and (b) above are specifically designed and intended for determining compliance with the construction standards and requirements of this chapter.

(d) The selection of a method for determining the flood hazard area, floodway, and inundation risk zone is influenced by various factors, such as the existence of a Department delineation or FEMA flood mapping, whether the applicant prefers to calculate the regulatory limits in this subchapter, and what activity or type of project is proposed. Furthermore, each method has certain limitations on its usefulness and availability as described in this subchapter. Applicants are encouraged to carefully review the entire subchapter before selecting a method.

7:13-3.2 Determining the flood hazard area along a regulated water

(a) The limit of the flood hazard area shall be established using the climate-adjusted flood elevation(s) determined in accordance with (b) below, along a tidal regulated water, or in accordance with (c) below along a fluvial regulated water. The flood hazard area is comprised of any land, and the space above that land, on a site that lies below the climate-adjusted flood elevation.

(b) The climate-adjusted flood elevation along a tidal regulated water shall be determined as follows:

1. Except as provided at (b)2 below, where a Department delineation and/or FEMA flood mapping is available, the climate-adjusted flood elevation is equal to the higher of (b)1i or ii below, unless subsequent to (the effective date of this rulemaking), the Department revises or adopts a new flood profile in accordance with N.J.A.C. 7:13-3.10 that accounts for changes in flood elevations due to anticipated increases in sea level rise, in which case the climate-adjusted flood elevation is that which is shown on the revised or new Department delineation:

i. Five feet above the 100-year flood elevation depicted on a Department delineation, in accordance with N.J.A.C. 7:13-3.5; or

ii. Five feet above the 100-year flood elevation depicted by FEMA flood mapping (using the higher of either the most recent effective map or any newer advisory, preliminary, or pending map, whichever is most recent), in accordance with N.J.A.C. 7:13-3.6; and

2. Irrespective of the availability of flood mapping, the climate-adjusted flood elevation may instead be determined by calculation, in accordance with N.J.A.C. 7:13-3.8, provided the resulting climate-adjusted flood elevation is not less protective than minimum NFIP standards as established by rule or floodplain ordinance for the participating community in which the site is located. Where the applicant is a State agency, compliance with this chapter shall constitute

compliance with minimum NFIP standards for the purposes of this paragraph.

(c) The climate-adjusted flood elevation along a fluvial regulated water shall be determined based on available flood mapping pursuant to (c)1 below, by approximation where no flood mapping is available pursuant to (c)2 below, or by calculation irrespective of the availability of flood mapping pursuant to (c)3 below:

1. Except as provided at (c)3 below, where a Department delineation and/or FEMA flood mapping is available, the climate-adjusted flood elevation is equal to the higher of the following, unless subsequent to July 17, 2023, the Department revises or adopts a new flood profile in accordance with N.J.A.C. 7:13-3.10 that accounts for changes in flood elevations due to anticipated increases in precipitation, in which case the climate-adjusted flood elevation is that which is shown on the revised or new Department delineation:

i. Two feet above the flood hazard area design flood elevation depicted on a Department delineation, in accordance with N.J.A.C. 7:13-3.5(b)1; or

ii. Three feet above the 100-year flood elevation depicted by FEMA flood mapping (using the higher of either the most recent effective map or any newer advisory, preliminary, or pending map, whichever is most recent), in accordance with N.J.A.C. 7:13-3.6.

2. Where neither a Department delineation nor FEMA flood mapping exists for a regulated water, the climate-adjusted flood elevation can be approximated in accordance with N.J.A.C. 7:13-3.7.

3. Irrespective of the availability of flood mapping, the climate-adjusted flood elevation may be determined by calculation, in accordance with N.J.A.C. 7:13-3.8, provided the resulting climate-adjusted flood elevation is not less protective than minimum NFIP standards as established by rule or floodplain ordinance for the participating community in which the site is located. Where the applicant is a State agency, compliance with this chapter shall constitute compliance with

minimum NFIP standards for the purposes of this paragraph.

7:13-3.3 Determining the floodway along a regulated water

(a) The limit of the floodway shall be determined in accordance with (b) below along a tidal regulated water or in accordance with (c) below along a fluvial regulated water.

(b) The floodway limit along a tidal regulated water shall be determined based on available flood mapping pursuant to (b)1 below or by calculation pursuant to (b)2 below:

1. Except as provided at (b)1i and ii below, where a Department delineation and/or FEMA flood mapping is available, the floodway limit is equal to the floodway line that is depicted by the Department delineation or FEMA map (FEMA effective map, or the more recent of any newer advisory, preliminary, or pending FEMA map) that shows the floodway line farther outward from the channel at any given point along the regulated water.

i. The Atlantic Ocean and other non-linear tidal waters, such as bays and inlets do not possess a floodway, pursuant to N.J.A.C. 7:13-2.3(b)1.

ii. Where no floodway line is depicted on either map referenced at (b)1 above, the floodway limit can be assumed to coincide with the top of bank along the regulated water unless the Department determines that the resultant floodway would not be suitably protective of public health, safety, and welfare. In such a case, the floodway shall be determined by calculation in accordance with (b)2 below.

2. Irrespective of the availability of flood mapping, the floodway limit may instead be determined by calculation, in accordance with N.J.A.C. 7:13-3.8, provided the resulting floodway limit is not located within the channel (that is, inside the top of bank on either side of a channel) and is not less protective than minimum NFIP standards as established by rule or floodplain ordinance for the participating community in which the site is located. Where the applicant is a State agency,

compliance with this chapter shall constitute compliance with minimum NFIP standards for the purposes of this paragraph.

(c) The floodway limit along a fluvial regulated water shall be determined based on available flood mapping pursuant to (c)1 below or by calculation pursuant to (c)2 below:

1. Where a Department delineation and/or FEMA flood mapping is available, the floodway limit is equal to the floodway line that is depicted by the Department delineation or FEMA map (FEMA effective map, or the more recent of any newer advisory, preliminary, or pending FEMA map) that shows the floodway line farther outward from the channel at any given point along the regulated water. Where no floodway line is depicted on any Department delineation or FEMA map, and the floodway limit must be known for the Department to determine compliance with a proposed regulated activity, the floodway limit shall be determined by calculation in accordance with (c)2 below.

2. Irrespective of the availability of flood mapping, the floodway limit may be determined by calculation, in accordance with N.J.A.C. 7:13-3.8, provided the resulting floodway limit is not located within the channel (that is, inside the top of bank on either side of a channel) and is not less protective than minimum NFIP standards as established by rule or floodplain ordinance for the participating community in which the site is located. Where the applicant is a State agency, compliance with this chapter shall constitute compliance with minimum NFIP standards for the purposes of this paragraph.

7:13-3.4 Determining the inundation risk zone along a regulated water

(a) The limits of the inundation risk zone shall be based on inundation mapping pursuant to (b) below or site specific survey information pursuant to (c) below.

(b) Except as provided at (c) below, the inundation risk zone on a site shall be determined

using an interactive inundation mapping tool, available from the Department at https://dep.nj.gov/inland-flood-protection-rule/flood-tool/rule/flood-tool/.

(c) Where an applicant asserts that the method for determining the inundation risk zone pursuant to (b) above results in an incorrect location for the inundation risk zone on a given site, the limits of the inundation risk zone can alternately be determined as follows:

1. A land surveyor shall determine the elevation of the ground at the mean higher high water line along the tidal waterway(s) in proximity to the site in question to the nearest 0.1 foot. Where multiple elevations determined in this manner are within proximity of the site, the highest ground elevation shall be selected.

2. Utilizing the mean higher high water line determined in accordance with (c)1 above, the land surveyor shall plot the inundation risk zone for the site. The inundation risk zone encompasses any land on the site in question that lies five feet above the elevation of the mean higher high water line determined pursuant to (c)1 above. For example, if the elevation of the mean higher high water line is 2.3 feet NAVD 88, then any portion of the site that lies below 7.3 feet NAVD 88 is situated within the inundation risk zone.

7:13-[3.3]**3.5** [Flood] **Determining the flood** hazard area and floodway [based on] **from** a Department delineation [(Method 1)]

(a) This section sets forth the procedure for determining a flood hazard area design flood elevation and floodway limit from a Department delineation. **N.J.A.C. 7:13-3.2 establishes the procedure for determining the climate-adjusted flood elevation from a Department delineation or FEMA flood mapping and N.J.A.C. 7:13-3.3 establishes the procedure for determining the floodway from mapped floodway limits. N.J.A.C. 7:13** Appendix 2 [of this chapter] lists the Department delineated waters of New Jersey. Requests for copies of a Department delineation, including

flood profiles and maps, as well as any questions regarding the use, derivation**,** or modification of these delineations, should be directed to [the Department's Office of Floodplain Management at] the following address:

State of New Jersey

Department of Environmental Protection

Bureau of [Dam Safety and Flood Control] **Flood Engineering**

Mail Code 501-01A

501 East State Street

[P.O.] **PO** Box [419] **420**

Trenton, New Jersey [08625-0419] **08625-0420**

Telephone: (609) [984-0859] **292-9236**

(b) [Under Method 1] **For the purposes of this chapter, a Department delineation shall be interpreted as follows**:

1. The flood hazard area design flood elevation shall be equal to [two feet above] the design flood elevation shown on the flood profile adopted as part of the Department delineation[, unless subsequent to July 17, 2023, the Department revises a flood profile in accordance with N.J.A.C. 7:13-3.8 to account for changes in flood elevations due to increased precipitation, in which case the flood hazard area design flood elevation is that which is shown on the revised flood profile] **and shall be used to determine the climate-adjusted flood elevation pursuant to N.J.A.C. 7:13-3.2(b)1i and (c)1i**; and

2. The floodway limit is that which is shown on the flood maps adopted as part of the Department delineation **and shall be used to determine the floodway limits pursuant to N.J.A.C. 7:13-3.3(b)1 and (c)1**.

(c) (No change.)

(d) An applicant seeking to modify a Department delineation shall submit an application for a

revision as provided at N.J.A.C. 7:13-[3.7]**3.9**.

(e) (No change.)

7:13-3.6 Determining the flood hazard area and floodway from FEMA flood mapping

(a) This section sets forth the procedure for determining the 100-year flood elevation and the floodway limit from FEMA flood mapping. N.J.A.C. 7:13-3.2(b)1 and (c)1 establish the procedure for determining the climate-adjusted flood elevation from FEMA's 100-year flood elevation and N.J.A.C. 7:13-3.3(b)1 and (c)1 establish the procedure for determining the floodway from mapped floodway limits.

(b) For the purposes of this subchapter, FEMA flood mapping shall be interpreted as follows:

1. The 100-year flood elevation is that which is shown on the flood profile adopted as part of the FEMA flood study for the community in question and shall be used to determine the climate-adjusted flood elevation pursuant to N.J.A.C. 7:13-3.2(b)1 and (c)1. Where no flood profile exists for the regulated water, the 100-year flood elevation or depth depicted on the Flood Insurance Rate Map for the site shall be utilized; and

2. The floodway limit is that which is shown on the flood maps adopted as part of the FEMA flood study for the community in question and shall be used to determine the floodway limits pursuant to N.J.A.C. 7:13-3.3(b)1 and (c)1.

(c) FEMA flood mapping that does not provide a flood elevation or flood depth cannot be used for the purposes of this chapter.

(d) Applicants asserting that FEMA flood mapping is incorrect on a given site shall contact FEMA and seek a revision to said mapping under an appropriate letter of map change instrument.

7:13-[3.5]**3.7** [Flood] **Determining the flood** hazard area [determined] by approximation [(Method 5)]

(a) This section sets forth the procedure for approximating [a flood hazard area design] **the climate-adjusted** flood elevation using the method described [in chapter] **at N.J.A.C. 7:13** Appendix 1. This method does not provide a floodway limit. Therefore, the Department shall issue an authorization [under] **pursuant to** a general permit or an individual permit for a regulated activity within an approximated flood hazard area only if the project meets the requirements at (f) below.

(b) The [flood hazard area design] **climate-adjusted** flood elevation for a regulated water can be approximated [under Method 5,]**;** provided the following requirements are satisfied:

[1. Method 1 (Department delineation method) set forth at N.J.A.C. 7:13-3.3 cannot be used because no Department delineation exists for the section of regulated water in question;

2. Methods 2 through 4 (FEMA fluvial, FEMA tidal, and FEMA hydraulic methods) set forth at N.J.A.C. 7:13-3.4 cannot be used because no qualifying FEMA flood mapping exists for the section of regulated water in question; and]

1. No Department delineation or FEMA flood mapping exists for the regulated water in question; and

[3.] **2.** (No change in text.)

(c) An applicant may elect to establish the approximate flood hazard area limit at an elevation higher than that which is provided [by Method 5] **pursuant to N.J.A.C. 7:13 Appendix 1** in order to match an existing topographic feature onsite, such as the top of an embankment, or to run concurrent with a verified freshwater wetland or transition area line.

(d) [Method 5] **The method set forth at N.J.A.C. 7:13 Appendix 1 for approximating the climate-adjusted flood elevation** is intended to be conservative and may in some cases overestimate the actual limits of flooding onsite to ensure that public health, safety, and welfare is adequately protected in absence of a Department delineation or FEMA flood mapping.

(e) If the Department determines that [using Method 5 to approximate a flood hazard area will] **the method set forth at N.J.A.C. 7:13 Appendix 1 for approximating the climate-adjusted flood elevation is likely to** significantly underestimate the depth of flooding on a particular site due to an unusual hydrologic or hydraulic condition within the drainage area, or due to a unique feature on or near the site, the Department shall not approve a general permit authorization or an individual permit for any regulated activity in the approximated flood hazard area if such approval is determined to constitute a threat to public safety. Should the applicant choose to apply for a permit in such a case, the flood hazard area limit shall first be calculated [according to Method 6, as described at] **pursuant to** N.J.A.C. 7:13-[3.6]**3.8**.

(f) The Department shall issue an authorization [under] **pursuant to** a general permit or an individual permit for a regulated activity in a flood hazard area approximated [under Method 5] **pursuant to the method set forth at N.J.A.C. 7:13 Appendix 1** only if the flood hazard area is verified [under] **pursuant to** N.J.A.C. 7:13-5 and the Department determines, based on a visual inspection of submitted site plans and without a review of calculations, that one of the following requirements is satisfied:

1.-2. (No change.)

7:13-[3.6]**3.8** [Flood] **Determining the flood** hazard area and floodway determined by calculation [(Method 6)]

(a) This section sets forth the procedure for determining [a flood hazard area design] **the climate-adjusted** flood elevation and floodway limit [via] **along a regulated water through** hydrologic and hydraulic calculations.

(b) If the following conditions exist, [Method 6] **the procedure set forth in this section** is the only method by which an applicant may determine the flood hazard area and floodway along a regulated water:

[1. Method 1 (Department delineation method) set forth at N.J.A.C. 7:13-3.3 cannot be used because no Department delineation exists for the section of regulated water in question;

2. Methods 2 through 4 (FEMA fluvial, FEMA tidal, and FEMA hydraulic methods) set forth at N.J.A.C. 7:13-3.4 cannot be used because no qualifying FEMA flood mapping exists for the section of regulated water in question; and]

1. No Department delineation or FEMA flood mapping exists for the regulated water in question; and

[3.] **2.** [Method 5 (approximation method) set forth at N.J.A.C. 7:13-3.5] **The climate-adjusted flood elevation** cannot be [used] **approximated pursuant to N.J.A.C. 7:13-3.7** for one **or more** of the following reasons:

i. The requirements for using the approximate method at N.J.A.C. 7:13-[3.5(b)]**3.7(b)** are not satisfied;

ii. The Department determines that the approximate method will significantly underestimate the depth of flooding on the site in question, pursuant to N.J.A.C. 7:13-[3.5(e)]**3.7(e)**; and/or

iii. (No change.)

(c) [Under Method 6:] **The flood hazard area and floodway limits shall be calculated as follows:**

1. For a regulated water in a fluvial flood hazard area:

i. Except as provided at (c)1ii below, the [flood hazard area design] **climate-adjusted** flood elevation shall be determined as follows:

(1) A hydrologic analysis shall be performed to determine the peak flow rate for the anticipated future 100-year flood for the regulated water using the adjustment factors listed at Table 3.6B below in accordance with [(c)6] **(d)6** below. The hydrologic analysis shall assume existing land use coverage in the drainage area, as of the date of the verification application to the Department; and

(2) A hydraulic analysis, such as a standard step backwater analysis, shall be performed to determine the [flood hazard area design] **climate-adjusted** flood elevation using 125 percent of the anticipated future 100-year peak flow rate determined pursuant to (c)1i(1) above;

ii. The use of calculations not described at (c)1i above to determine the [flood hazard area design] **climate-adjusted** flood elevation is conditionally acceptable provided:

(1) (No change.)

(2) The [flood hazard area design] **climate-adjusted** flood elevation is determined using a flood that is no less than 125 percent of the peak flow and volume of the anticipated future 100-year flood determined pursuant to (c)1i(1) above; and

iii. The floodway limits shall be determined[,] as follows:

(1) A hydrologic analysis shall be performed to determine the peak flow rate for the current 100-year flood for the regulated water using the adjustment factors listed at Table 3.6A below in accordance with [(c)5] **(d)5** below. The hydrologic analysis shall assume existing land use coverage in the drainage area, as of the date of the verification application to the Department; and

(2) (No change.)

(A) - (B) (No change.)

2. For a regulated water in a tidal flood hazard area:

i. A flood hazard area analysis shall be developed, which is based on the data and methodologies utilized by FEMA to determine its most recent 100-year flood elevation, but which includes new topographic or other relevant data for the region and/or site being analyzed, in order to determine [the flood hazard area design] **a revised 100-year** flood elevation**. The climate-adjusted flood elevation is five feet above the 100-year flood elevation calculated in this manner**; and

ii. The floodway limits along a linear tidal water shall be determined as set forth [in] **at** (c)1iii above. Non-linear tidal waters do not possess a floodway, pursuant to N.J.A.C. 7:13-2.3(b)1[;]**.**

(d) The following considerations and parameters shall be applied to the calculations described at (c) above:

1. Where hydrologic calculations are based on the Natural Resources Conservation Service's (NRCS) Technical Release 55 (TR-55), "Urban Hydrology for Small Watersheds," the standard unit hydrograph shall be used to calculate peak flows, except where the watershed being analyzed is located within the coastal plain, in which case, the Delmarva unit hydrograph may be used, provided the methodology is applied in accordance with NRCS guidelines. A complete description of the NRCS methodology can be found in the NRCS National Engineering Handbook, "Part 630- Hydrology" at https://directives.sc.egov.usda.gov/viewerFS.aspx?hid=21422:

2. Hydrologic calculations shall not be based on the Rational Method or Modified Rational Method.

3. In cases where both fluvial and tidal flooding occurs, such as along a linear regulated water which is inundated by tidal backwater during the 100-year flood but is fluvial for more frequent flood events, compliance with the offsite impact limitations [of] **at** N.J.A.C. 7:13-12.1(f)[, 12.1(g),] **and (g)** and/or 12.7 may necessitate undertaking a fluvial analysis [under] **pursuant to** (c)1 above in addition to relying upon and/or recalculating FEMA tidal flood elevations [under] **pursuant to** (c)2 above[; and]**.**

4. (No change.)

5. Table 3.6A below sets forth the adjustment factors necessary to determine the current 100-year precipitation depths for use in this chapter. The precipitation depth of the current 100-year storm event shall be determined by multiplying the values determined in accordance with [(c)5i] **(d)5i** and ii below:

i. - ii. (No change.)

Table 3.6A: Current Precipitation Adjustment Factors

County	Current Precipitation Adjustment Factors
Atlantic	1.03
Bergen	1.06

County	Current Precipitation Adjustment Factors
Burlington	1.04
Camden	1.05
Cape May	1.04
Cumberland	1.01
Essex	1.06
Gloucester	1.06
Hudson	1.09
Hunterdon	1.13
Mercer	1.04
Middlesex	1.03
Monmouth	1.02
Morris	1.06
Ocean	1.03
Passaic	1.05
Salem	1.03
Somerset	1.09
Sussex	1.07
Union	1.06
Warren	1.15

6. Table 3.6B below sets forth the change factors to be used in determining the projected 100-year storm event for use in this chapter, which are organized alphabetically by county. The precipitation depth of the projected 100-year storm event of a site shall be determined by multiplying the precipitation depth of the 100-year storm event determined from the National Weather Service's Atlas 14 Point Precipitation Frequency Estimates pursuant to [(c)5i] **(d)5i** above, by the change factor [in] **at** Table 3.6B below, in accordance with the county or counties where the drainage area(s) of the site is located. Where the project and/or its drainage area lies in more than one county, the precipitation values shall be adjusted according to the percentage of the drainage area in each county. Alternately, separate rainfall totals can be developed for each county using the values in the table below.

Table 3.6B: Future Precipitation Change Factors

County	Future Precipitation Change Factors
Atlantic	1.39
Bergen	1.37
Burlington	1.32

County	Future Precipitation Change Factors
Camden	1.39
Cape May	1.32
Cumberland	1.39
Essex	1.33
Gloucester	1.41
Hudson	1.23
Hunterdon	1.42
Mercer	1.36
Middlesex	1.33
Monmouth	1.26
Morris	1.46
Ocean	1.24
Passaic	1.50
Salem	1.32
Somerset	1.48
Sussex	1.50
Union	1.35
Warren	1.37

7:13-[3.7]**3.9** Revision of a Department delineation by application

(a) This section applies to the revision of a flood hazard area design flood elevation, flood hazard area limit, floodway limit, and/or other related feature on a flood hazard area delineation that has been promulgated by the Department, in response to an application made to the Department by any person**, except as provided at (b) below**. **N.J.A.C. 7:13** Appendix 2 [of this chapter] lists the Department delineated waters of New Jersey.

(b) The procedure established in this section shall not apply to a revision of a Department delineation that is depicted on FEMA flood mapping as described at N.J.A.C. 7:13-3.5(c). Applicants asserting that FEMA flood mapping is incorrect on a given site shall contact FEMA and seek a revision to said mapping pursuant to an appropriate letter of map change instrument.

Recodify existing (b) - (c) as **(c) - (d)** (No change in text.)

[(d)] **(e)** An application for a minor revision of a [Department–delineation] **Department delineation** shall include the following:

1. (No change.)

2. A completed application form as described at N.J.A.C. 7:13-[22.3(c)1]**22.4(c)1** and available from the Department at the address set forth at N.J.A.C. 7:13-1.3;

3.-5. (No change.)

Recodify existing (e) - (j) as **(f) - (k)** (No change in text.)

7:13-[3.8]**3.10** Revision or suspension of a Department delineation by the Department

(a) - (b) (No change.)

(c) During the suspended period described [in] **at** (b)2 above, any application made [under] **pursuant to** this chapter shall not reference the flood hazard area and/or floodway of the suspended delineation. Applicants must instead rely on another delineation method to determine the extent of the flood hazard area and/or floodway as provided at N.J.A.C. 7:13-3. Furthermore, the Department shall review all valid verifications, general permits**,** and individual permits issued for the flood hazard area of the suspended delineation and will suspend or terminate such approvals where necessary to protect public safety, in accordance with N.J.A.C. 7:13-[22.7 and] 22.8 **and 22.9**.

(d) - (e) (No change.)

SUBCHAPTER 4. DETERMINING THE RIPARIAN ZONE

7:13-4.1 The riparian zone

(a)-(b) (No change.)

(c) The width of the riparian zone is as follows:

1. (No change.)

2. Except for the regulated waters listed at (c)1 above, the width of the riparian zone along the following regulated waters is 150 feet:

i.-ii. (No change.)

iii. Any segment of a water flowing through [an] **a flood hazard** area that contains a threatened or endangered species, **which is critically dependent on the regulated water for survival,** and/or present or documented habitat for those species, [which is critically dependent on the regulated water for survival,] and all upstream waters (including tributaries) located within one mile of such habitat (measured along the length of the regulated water).

(1) For the purposes of this subparagraph, a critically dependent species means an endangered or threatened fauna or flora species that breeds, rests, or feeds within a regulated water or its associated flood hazard area and that is dependent on the maintenance of specific stream flows, water quality, and/or hydrologic and flooding regimes for their continued existence and propagation. A list of critically dependent species is available from the Department at the website set forth at N.J.A.C. 7:13-1.3; and

3. (No change.)

(d) – (i) (No change.)

SUBCHAPTER 5. VERIFICATIONS

7:13-5.2 General provisions

(a) A verification provides the Department's official determination of one or more of the following and can be issued for either an entire site or portion of a site:

1. The [flood hazard area design] **climate-adjusted** flood elevation;

2. (No change.)

3. The floodway limits, or a determination that the entire verified area lies within a floodway; [and/or]

4. The riparian zone limits, or a determination that the entire verified area lies within a riparian

zone[.]**; and/or**

5. The inundation risk zone limits, or a determination that the entire verified area lies within the inundation risk zone.

(b) (No change.)

[(c) The flood hazard area design flood elevation, flood hazard area, and floodway limits on a site shall be determined in accordance with N.J.A.C. 7:13-3. The riparian zone limits on a site shall be determined in accordance with N.J.A.C. 7:13-4.]

(c) The climate-adjusted flood elevation and resulting flood hazard area on a site shall be determined in accordance with N.J.A.C. 7:13-3.2. The floodway limits on a site shall be determined in accordance with N.J.A.C. 7:13-3.3. The inundation risk zone limits on a site shall be determined in accordance with N.J.A.C. 7:13-3.4. The riparian zone limits on a site shall be determined in accordance with N.J.A.C. 7:13-4.

7:13-5.3 Duration of a verification

(a)-(c) (No change.)

(d) A verification can be extended one time for five years pursuant to N.J.A.C. 7:13-[22.3(c),]**22.4(c);** provided that it was not previously reissued [under] **pursuant to** N.J.A.C. 7:13-5.4 or issued concurrently with a 10-year individual permit as described [in] **at** (b) above.

(e) A person who is issued a verification pursuant to this subchapter shall be entitled to rely on the determination of the Department, concerning the presence, absence, or extent of flood hazard areas, riparian zones, [or] floodways**, or inundation risk zones** for the term specified at (a) [through]**, (b), (c), or** (d) above, unless the Department determines that the verification is based on inaccurate**,** [or] incomplete**, or outdated** information, in which case the Department may void the original verification and issue a new verification reflecting the actual conditions on the site. For example, the verification may

be revised to reflect additional **riparian zones based on new or revised topography available to the Department, or additional** flood hazard areas [or riparian zoned] **due to a revised Department delineation or amended or newly adopted FEMA flood mapping upon which the flood hazard area limits are based that are** identified after verification issuance, **therefore, creating an outdated and inaccurate verification**; or if a threatened or endangered species habitat is disclosed or discovered after the verification was issued, the Department may correct the width of the riparian zone.

7:13-5.4 Reissuance of a verification

(a) If the Department issues a verification that is valid for five years and subsequently approves an authorization [under] **pursuant to** a general permit or an individual permit for a regulated activity that references or relies upon the verification, the Department shall automatically reissue the verification upon approval of the authorization or permit to align the expiration date of the verification with the expiration date of the authorization or permit, provided:

1. (No change.)

2. The reissued verification reflects any alterations to the [flood hazard area design] **climate-adjusted** flood elevation, flood hazard area limit, **inundation risk zone,** and/or floodway limit that **have occurred since its initial approval and/or which** will result from the authorization or permit; and

3. All pre- and post-construction flood hazard area elevations, floodway limits, **inundation risk zone,** and riparian zone limits, as applicable, are delineated on site plans approved [under] **pursuant to** the reissued verification.

(b) (No change.)

7:13-5.5 When a verification is required for issuance of an authorization [under] **pursuant to** a general permit or an individual permit

(a) Except as provided at (b) [and (c)] below, the [flood hazard area design] **climate-adjusted** flood elevation, **riparian zone, inundation risk zone,** and floodway limit, where present, must be known and verified within the project area pursuant to N.J.A.C. 7:13-5.2 in order for the Department to determine compliance with the requirements of this chapter and issue an authorization [under] **pursuant to** a general permit [or] **pursuant to N.J.A.C. 7:13-9,** an individual permit **pursuant to N.J.A.C. 7:13-10, or any coastal general or individual permit issued pursuant to N.J.A.C. 7:7**. An applicant for an authorization [under] **pursuant to** a general permit or an individual permit shall therefore demonstrate that:

1. The applicant possesses a valid verification of the [flood hazard area design] **climate-adjusted** flood elevation, **riparian zone, inundation risk zone,** and [also the] floodway limit**s**, [if] **where** present, for the project area;

2. The applicant has applied for a verification of the [flood hazard area design] **climate-adjusted** flood elevation, **riparian zone, inundation risk zone,** and [also the] floodway limit**s**, where present, for the project area, and the Department subsequently approves the verification either prior to or concurrent with the issuance of the authorization [under] **pursuant to** a general permit or individual permit; **or**

3. The project meets the conditions [of] **at** (b)1, 2, or 3 below, in which case no verification is required in order to obtain an authorization [under] **pursuant to** a general permit or an individual permit[; or]**.**

[4. The project meets the conditions of (c) below, in which case a verification of only the flood hazard area design flood elevation is required either prior to or concurrent with the issuance of an authorization under a general permit or an individual permit.]

(b) Obtaining a verification is not required prior to the issuance of an authorization [under] **pursuant to** a general permit or an individual permit, provided the Department determines, based on a visual inspection of submitted site plans and without a review of calculations, that one or more of the

following requirements is satisfied:

1.-2. (No change.)

3. All of the following are true:

i. No habitable building, railroad, roadway, or parking area is proposed, which requires knowledge of the [flood hazard area design] **climate-adjusted** flood elevation to determine compliance with this chapter;

ii. Any proposed fill and/or aboveground structure is located outside [a] **any** floodway **and inundation risk zone**; and

iii. (No change.)

[(c) Obtaining a verification of only the flood hazard area design flood elevation and not the floodway limit is required prior to the issuance of an authorization under a general permit or an individual permit, provided the Department determines, based on a visual inspection of submitted site plans and without a review of calculations, that the following requirements are satisfied:

1. No fill or aboveground structure is proposed within a floodway; and

2. Compliance with the flood storage displacement requirements of N.J.A.C. 7:13-11.4 does not require knowledge of the location of the floodway.]

7:13-5.6 Conditions that apply to an issued or reissued verification

(a) Within 90 calendar days after the Department issues or reissues a verification on a privately owned lot, or on a publicly owned lot other than a right-of-way, the recipient of the verification shall submit the following information to the Office of the County Clerk or the registrar of deeds and mortgages in which the site is located, and shall send proof to the Department in accordance with (b) below, that this information is recorded on the deed of each lot referenced in the verification:

1.-3. (No change.)

4. The [flood hazard area design] **climate-adjusted** flood elevation, or range of elevations if variable, approved [under] **pursuant to** the verification;

5. The width and location of the any riparian zone approved [under] **pursuant to** the verification; [and]

6. The location of any inundation risk zone approved pursuant to the verification; and

[6.] **7.** The following statement: "The State of New Jersey has determined that all or a portion of this lot lies in a flood hazard area**, floodway, inundation risk zone,** and/or riparian zone. Certain activities in [flood hazard areas and riparian zones] **these areas** are regulated by the New Jersey Department of Environmental Protection and some activities may be prohibited on this site or may first require a flood hazard area permit **or coastal permit**. Contact the Division of Land [Use Regulation] **Resource Protection** at (609) 292-0060 or [https://www.nj.gov/dep/landuse] **https://dep.nj.gov/wlm/** for more information prior to any construction onsite."

(b) (No change.)

SUBCHAPTER 6. GENERAL PROVISIONS FOR [PERMITS-BY-RULE] **PERMITS-BY-REGISTRATION**, GENERAL PERMITS-BY-CERTIFICATION, AND GENERAL PERMITS

7:13-6.1 Purpose and scope

This subchapter sets forth the standards for the Department to issue, by rulemaking, [permits-by-rule] **permits-by-registration**, general permits-by-certification, and general permits; the use of these permits to conduct authorized activities; the standards governing the use of more than one of these permits on a single site; the duration of authorizations under these permits; and the conditions that apply to these permits.

7:13-6.2 Standards for issuance, by rulemaking, of [permits-by-rule] **permits-by-registration**, general

permits-by-certification, and general permits

(a) The Department will, in accordance with the rulemaking provisions of the New Jersey Administrative Procedure Act, N.J.S.A. 52:14B-1 et seq.**,** promulgate each [permit-by-rule] **permit-by-registration**, general permit-by-certification, or general permit after publication of a notice of rule proposal in the New Jersey Register and consideration of public comment.

(b) The Department will promulgate a [permit-by-rule] **permit-by-registration**, general permit-by-certification, or general permit only if:

1. The Department determines that the regulated activity will cause only minimal adverse impacts on flooding and the environment when performed separately, [and] will have only minimal cumulative adverse impacts on flooding and the environment**, and meets the minimum standards set forth pursuant to the National Flood Insurance Program pursuant to 44 CFR 60.3**; and

2. The Department has provided public notice and an opportunity for public comment with respect to the proposed [permit-by-rule] **permit-by-registration**, general permit-by-certification, or general permit. After a general permit-by-certification or general permit has been promulgated pursuant to this subchapter, the Department will not hold public hearings on individual applications for authorization [under] **pursuant to** a general permit-by-certification or general permit.

(c) Each [permit-by-rule] **permit-by-registration**, general permit-by-certification, or general permit shall contain a specific description of the type(s) of regulated activity(s) which are authorized, including limitations for any single operation, to ensure that the conditions [of] **at** (b)1 above are satisfied. At a minimum, these limitations shall include:

1. (No change.)

2. A precise description of the geographic area to which the [permit-by-rule] **permit-by-registration**, general permit-by-certification, or general permit applies.

(d) The Department will include in each [permit-by-rule] **permit-by-registration**, general

permit-by-certification, or general permit promulgated pursuant to this subchapter appropriate conditions applicable to particular types of sites or development [which] **that** must be met in order for a proposed development or activity to qualify for authorization [under] **pursuant to** the [permit-by-rule] **permit-by-registration**, general permit-by-certification, or general permit.

(e) The Department may, by undertaking rulemaking in accordance with (a) above, repeal a [permit-by-rule] **permit-by-registration**, general permit-by-certification, or general permit, and thereafter require individual permits for development previously covered by the [permit-by-rule] **permit-by-registration**, general permit-by-certification, or general permit, if it finds that the [permit-by-rule] **permit-by-registration**, general permit-by-certification, or general permit no longer meets the conditions [of] **at** (b)1 above.

7:13-6.3 Use of a [permit-by-rule] **permit-by-registration**, or an authorization pursuant to a general permit-by-certification**,** or a general permit to conduct regulated activities

(a) An activity that meets the requirements of a [permit-by-rule] **permit-by-registration** may be conducted [without prior Department approval] **after online registration with the Department in accordance with N.J.A.C. 7:13-6.5**.

(b) An activity that meets the requirements of a general permit-by-certification may be conducted **only** when **an architect or engineer, as appropriate, on behalf of** the person proposing to conduct the activity**,** receives the automatic authorization resulting from completion of the application submission through the Department's electronic system in accordance with N.J.A.C. 7:13-18.3.

(c) (No change.)

(d) [A] **Registering for activities pursuant to a** [permit-by-rule] **permit-by-registration** or **receiving** an authorization [under] **pursuant to** a general permit-by-certification or general permit does not relieve the person conducting the authorized regulated activities from the obligation to obtain any

other applicable permits or approvals required by law.

7:13-6.4 Use of more than one permit on a single site

(a) A person may undertake a regulated activity more than once on a single site. The activity may be authorized each time under a single [permit-by-rule] **permit-by-registration**, general permit-by-certification, or general permit, provided the individual limits and conditions of the permit are not exceeded, either individually or cumulatively. For example, if a particular activity may be conducted [under] **pursuant to** a [permit-by-rule] **permit-by-registration** with a disturbance limit of 750 square feet and the same activity may be authorized [under] **pursuant to** a general permit with a disturbance limit of 1,500 square feet, a person who has disturbed 750 square feet of riparian zone vegetation [under] **pursuant to** a [permit-by-rule] **permit-by-registration** may apply for a general permit to increase the area of disturbance but would only be allowed a maximum of an additional 750 square feet so as not to exceed the 1,500 square feet total disturbance limitation applicable to the general permit.

(b) A person may undertake more than one regulated activity on a single site. The activities may be authorized [under] **pursuant to** one or more [permit-by-rule] **permit-by-registration**, general permit-by-certification, and/or general permit, provided the individual limits and conditions of each permit are not exceeded.

(c) Once the limits and conditions of a [permit-by-rule] **permit-by-registration**, general permit-by-certification, and/or general permit have been reached on a single site:

1.-2. (No change.)

(d) On a single site, one or more [permits-by-rule] **permits-by-registration**, general permits-by-certification, and/or general permits may be used in combination with an individual permit, provided the individual limits and conditions of each permit are not exceeded, either individually or cumulatively.

7:13-6.5 Procedure for registering to undertake an activity authorized pursuant to a permit-by-registration

(a) This section sets forth the procedure by which a person shall register to undertake one or more activities authorized pursuant to a permit-by-registration. The permits-by-registration procedures promulgated pursuant to this chapter are set forth at N.J.A.C. 7:13-7. Undertaking an activity authorized pursuant to a permit-by-registration is not subject to the application requirements at N.J.A.C. 7:13-18, the public notice requirements at N.J.A.C. 7:13-19, or application fees at N.J.A.C. 7:13-20.

(b) Prior to undertaking an activity authorized pursuant to a permit-by-registration, the owner of the site on which the activity would take place, or a consultant, engineer, or architect that is designated by the owner to register on their behalf, shall electronically register the activity through the Department's online system at https://www.nj.gov/dep/online, which requires the registrant to identify or provide the following:

1. The permit-by-registration pursuant to which the registration is being submitted;

2. The name of or other identifier for the proposed development or project;

3. A brief description of the proposed activity including anticipated start and completion dates;

4. The location of the proposed activity, including street address, municipality, lot, and block;

5. Contact information for both the property owner and registrant, including name, street address, telephone number, email address, organization, and organization type;

6. The following certification:

"I certify under penalty of law that the information submitted herein is true, accurate, and complete, that the activities herein registered comply with the requirements and limitations of the

permit-by-registration, that the site identified in the registration is the actual location of the project, and that I am the owner of the site in question or that the owner has provided me with written consent to register for this authorization. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment."; and

7. To accomplish the certification at (b)6 above, the PIN that was issued to the registrant upon registering with the Department's online permitting system.

(c) Once the online registration process is successfully completed, documentation of the registration will be accessible to the applicant through the Department's online system at (b) above. Upon completion of registration, except where the registrant is the State and/or a public transportation entity, the registrant shall provide a copy of the documentation provided by the Department to both the construction official and floodplain administrator for each municipality in which the authorized activity will occur.

(d) Within 180 days of the date of registration at (b) above, the registrant shall certify at https://www.nj.gov/dep/online that the registered activities have commenced. If the required certification is not provided within 180 days of registration, activities pursuant to the permit-by-registration may commence only if the owner of the site or a person suitably designated by the owner registers anew in accordance with (b) above.

(e) Upon completion of activities authorized pursuant to a permit-by-registration, the registrant shall indicate said completion at https://www.nj.gov/dep/online.

(f) A registrant may request an adjudicatory hearing to contest the re-registration requirement at (d) above, in accordance with the procedures at N.J.A.C. 7:13-23.

7:13-6.6 Duration of an authorization [under] **pursuant to** a **general permit-by-certification or** general permit

(a) Except as provided [in] **at** (b) below, an authorization [under] **pursuant to** a **general permit-by-certification or** general permit is valid for five years from the date of issuance of the authorization**.**

(b) The five-year term of an authorization [under] **pursuant to** a general permit may be extended one time for five years pursuant to N.J.A.C. 7:13-[22.3]**22.4**. **The five-year term of an authorization pursuant to a general permit-by-certification shall not be extended.**

(c) All regulated activities being conducted pursuant to an authorization [under] **pursuant to** a **general permit-by-certification or** general permit shall immediately cease if the authorization expires, including any extension thereof [under] **at** N.J.A.C. 7:13-[22.3]**22.4**.

(d) If an authorization [under] **pursuant to** a **general permit-by-certification or** general permit expires and the person intends to commence or continue the regulated activities, the person shall obtain a new authorization or permit [under] **pursuant to** this chapter authorizing the regulated activities.

1. If no regulated activities have occurred prior to the expiration of the authorization, the Department shall issue a new authorization [under] **pursuant to** the **general permit-by-certification or** general permit only if the project is revised**,** where necessary**,** to comply with the requirements of this chapter in effect when the **request for authorization pursuant to general permit-by-certification is received or an** application for [the] **a** new authorization **pursuant to a general permit** is declared complete for review.

2. If any regulated activities have occurred prior to the expiration of the authorization, the Department shall issue a new authorization [under the general permit] only if the project is revised where feasible to comply with the requirements of this chapter in effect when the **request for authorization pursuant to general permit-by-certification is received or an** application for [the] **a** new authorization **pursuant to a general permit** is declared complete for review. In determining the feasibility of compliance with the requirements in effect at the time the application is **received or** declared complete for review as applicable, the Department shall consider the amount of construction that has been

completed prior to the expiration of the original authorization, the amount of reasonable financial investment that has been made in the original design consistent with the requirements applicable [under] **pursuant to** the original authorization, and whether continuing construction as approved [under] **pursuant to** the original authorization would have an adverse impact on flooding or the environment.

7:13-6.7 Conditions applicable to a [permit-by-rule] **permit-by-registration** or to an authorization pursuant to a general permit-by-certification or a general permit

(a) A person conducting regulated activities pursuant to a [permit-by-rule] **permit-by-registration** or pursuant to an authorization [under] **pursuant to** a general permit-by-certification or general permit shall comply with:

1. The specific conditions set forth in the [permit-by-rule] **permit-by-registration**, general permit-by-certification, or general permit itself, including the conditions incorporated by reference into each of those permits set forth at (b) below; and

2. (No change.)

(b) The following conditions are incorporated by reference in each [permit-by-rule] **permit-by-registration**, general permit-by-certification, or general permit:

1 - 4. (No change.)

5. Except for [normal property maintenance conducted in accordance with permit-by-rule 1 at N.J.A.C. 7:13-7.1 and] forest management activities [under permit-by-rule 26] **pursuant to the permit-by-registration** at N.J.A.C. 7:13-[7.26]**7.18**, all riparian zone vegetation that is cleared, cut, and/or removed to conduct a regulated activity, access an area where regulated activities will be conducted, or otherwise accommodate a regulated activity shall be replanted immediately after completion of the regulated activity, unless prevented by seasonal weather, in which case the vegetation shall be replanted as soon as conditions permit. Portions of the riparian zone occupied by an authorized structure need not

be replanted.

i. -ii. (No change.)

(c) Except for [normal property maintenance conducted under permit-by-rule 1 at N.J.A.C. 7:13-7.1 and] forest management activities [under permit-by-rule 26] **pursuant to the permit-by-registration** at N.J.A.C. 7:13-[7.26]**7.18 and creation, restoration, and enhancement of habitat and water quality values and functions pursuant to the general permit at N.J.A.C. 7:13-9.4**, regulated activities authorized [under a permit-by-rule] **pursuant to a permit-by-registration**, a general permit-by-certification, or a general permit, in combination with all proposed activities, shall not constitute a major development, as defined in the Stormwater Management rules at N.J.A.C. 7:8-1.2.

(d) The person undertaking a regulated activity [under a permit-by-rule,] **pursuant to a permit-by-registration** or seeking authorization [under] **pursuant to** a general permit-by-certification, is responsible for ensuring that each condition of the [permit-by-rule] **permit-by-registration** or general permit-by-certification applicable [under] **pursuant to** (a) above is met. The Department will not entertain a request to review engineering calculations, in the context of an applicability determination or otherwise, for the purpose of determining that a proposed activity will meet any condition of a [permit-by-rule] **permit-by-registration** or general permit-by-certification.

(e) (No change.)

7:13-6.8 Obligations pursuant to the National Flood Insurance Program

(a) This section sets forth requirements that must be satisfied prior to commencing activities located within a FEMA-adopted regulatory floodway, or within a FEMA-adopted special flood hazard area with no regulatory floodway, in order to meet the requirements of FEMA's National Flood Insurance Program, pursuant to 44 CFR 60.3.

(b) Prior to undertaking an activity authorized pursuant to a permit-by-registration, and

prior to the Department issuing an authorization pursuant to a general permit-by-certification or general permit, the applicant shall do one of the following:

1. Where activities are proposed within a FEMA-adopted regulatory floodway, and the proposed activities would result in no net increase (0.00 feet) to the 100-year flood elevation as depicted on FEMA flood mapping, the applicant shall provide an engineering certification to the local floodplain administrator having jurisdiction over the site confirming that the project will meet FEMA's no rise criteria;

2. Where activities are proposed within a FEMA-adopted regulatory floodway, and the proposed activities would result in a net increase (greater than 0.00 feet) to the 100-year flood elevation as depicted on FEMA flood mapping, the applicant shall apply for and obtain a Conditional Letter of Map Revision (CLOMR) from FEMA; or

3. Where activities are proposed within a FEMA-adopted special flood hazard area with no designated regulatory floodway, and the proposed activities would, when combined with all other existing and anticipated development within the flood hazard area, result in a cumulative increase of greater than 0.20 feet in the 100-year flood elevation depicted on FEMA flood mapping, the applicant shall apply for and obtain a Conditional Letter of Map Revision (CLOMR) from FEMA.

(c) For the purposes of this section, hydraulic calculations shall be rounded to the nearest one-hundredth of a foot. For example, a change in the water surface profile of 0.005 feet or more would round up to 0.01 feet and, therefore, would trigger the requirement to obtain a CLOMR for activities within a floodway pursuant to (b)2 above. Conversely, a change in the water surface profile of 0.004 feet would round down to 0.00 feet and, therefore, would meet the no net increase standard at (b)1 above.

(d) Prior to the Department's approval of the authorization, a copy of the no rise certification or approved CLOMR required at (b) above shall be uploaded to the Department's

online portal at https://www.nj.gov/dep/online.

(e) Nothing in this section shall be construed to contradict or obviate the requirements of the National Flood Insurance Program.

SUBCHAPTER 7. **[**PERMITS-BY-RULE] **PERMITS-BY-REGISTRATION**

7:13-[7.3]**7.1** [Permit-by-rule 3] **Permit-by-registration 1** --in-kind replacement of a lawfully existing structure

(a) [Permit-by-rule 3] **This permit-by-registration** authorizes the in-kind replacement of a lawfully existing structure, provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1.-4. (No change.)

7:13-[7.8]**7.2** [Permit-by-rule 8] **Permit-by-registration 2** --construction at or below grade in a fluvial flood hazard area

(a) [Permit-by-rule 8] **This permit-by-registration** authorizes construction at or below grade construction in a fluvial flood hazard area, provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. -2. (No change.)

3. No disturbance is located within 25 feet of any top of bank[, unless the project lies adjacent to a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water];

4.-5. (No change.)

7:13-[7.9]**7.3** [Permit-by-rule 9] **Permit-by-registration 3** --general construction activities in a tidal flood hazard area

(a) [Permit-by-rule 9] **This permit-by-registration** authorizes general construction activities in a tidal flood hazard area, provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. –3. (No change.)

4. No non-habitable building intended to house livestock is constructed;

[4.] **5.** No disturbance is located within 25 feet of any top of bank[, unless the project lies adjacent to a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water];

Recodify existing 5.-6. as **6.-7.** (No change in text.)

7:13-[7.10]**7.4** [Permit-by-rule 10] **Permit-by-registration 4** --general construction activities located outside a flood hazard area in a riparian zone

(a) [Permit-by-rule 10] **This permit-by-registration** authorizes general construction activities located outside a flood hazard area in a riparian zone, provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. (No change.)

2. No disturbance is located within 25 feet of any top of bank[, unless the project lies adjacent to a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water];

3. – 4. (No change.)

7:13-[7.13]**7.5** [Permit-by-rule 13] **Permit-by-registration 5** --construction of a non-habitable building(s)

(a) [Permit-by-rule 13] **This permit-by-registration** authorizes the construction of one or more non-habitable buildings, such as a shed[,] **or** animal shelter[, or storage area,]**;** provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1.-2. (No change.)

3. No disturbance is located within 25 feet of any top of bank[, unless the project lies adjacent to

a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water]; and

4. (No change.)

7:13-[7.14]**7.6** [Permit-by-rule 14] **Permit-by-registration 6** --construction of a partially-open structure(s)

(a) [Permit-by-rule 14] **This permit-by-registration** authorizes the construction of one or more partially-open structures with a roof, such as a car port, covered patio, or pole barn[,]**;** provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. (No change.)

2. The structure is not enclosed with walls on any side; below the [flood hazard area design] **climate-adjusted** flood elevation;

3. (No change.)

4. The footprint of all structures constructed [under] **pursuant to** this [permit-by-rule] **permit-by-registration** does not exceed 5,000 square feet, cumulatively, since November 5, 2007;

5.-6. (No change.)

7. No disturbance is located within 25 feet of any top of bank[, unless the project lies adjacent to a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water].

7:13-[7.15]**7.7** [Permit-by-rule 15] **Permit-by-registration 7** --construction of barrier-free access to a building

(a) [Permit-by-rule 15] **This permit-by-registration** authorizes the construction of barrier-free access to a building, such as stairs, ramps, or fire-escapes[,]**;** provided the conditions at N.J.A.C. 7:13-6.7 are met and the access is:

1. (No change.)

2. Constructed in accordance with the Americans with Disabilities Act of 1990, 42 §§ 12101 et seq.; **and**

3. Constructed outside any channel[; and] **or floodway.**

[4. Constructed outside a floodway, unless location in the floodway is unavoidable. Where the access is unavoidably located in a floodway, it shall be oriented to minimize obstruction to flow and shall be constructed of material that will remain open to the passage of floodwaters, such as stairs and ramps that are open underneath and not placed on fill material.]

7:13-[7.16]**7.8** [Permit-by-rule 16] **Permit-by-registration 8** --construction of a deck

(a) [Permit-by-rule 16] **This permit-by-registration** authorizes the construction of a deck that is connected to a lawfully existing building[,]**;** provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. The deck, if located in a flood hazard area, is not enclosed with walls either above or below its floor, except for protective or decorative **open** fencing, banisters, or latticework**,** that allow floodwaters to pass freely. **Openings in the fencing, between banisters, and in the latticework shall be no less than six inches**;

2. The space between the steps of any stairway that connects the deck to ground level is open in order to allow floodwaters to pass freely;

3. Any rails or banisters used in the stairway have openings no less than six inches apart;

[2.] **4.** No disturbance is located within 25 feet of any top of bank[, unless the project lies adjacent to a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water]; and

[3.] **5.** (No change in text.)

7:13-[7.18]**7.9** [Permit-by-rule 18] **Permit-by-registration 9** --construction of a boat launching ramp

(a) [Permit-by-rule 18] **This permit-by-registration** authorizes the construction of a boat launching ramp[,]**;** provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1.-2. (No change.)

3. The timing restrictions set forth at N.J.A.C. 7:13-[11.5(d)]**11.6(d)** are observed; and

4. (No change.)

7:13-[7.19] **7.10** [Permit-by-rule 19] **Permit-by-registration 10** --replacement, renovation, or reconstruction of certain water dependent structures

(a) [Permit-by-rule 19] **This permit-by-registration** authorizes the replacement, renovation, or reconstruction of one or more of the following water dependent structures[,]**;** provided the conditions at N.J.A.C. 7:13-6.7 are met, the timing restrictions set forth at N.J.A.C. 7:13-[11.5(d)]**11.6(d)** are observed, and the structure is not a habitable building:

1. - 2. (No change.)

7:13-[7.20]**7.11** [Permit-by-rule 20] **Permit-by-registration 11** --construction of a fence

(a) [Permit-by-rule 20] **This permit-by-registration** authorizes the construction of a fence[,]**;** provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. No disturbance is located within 25 feet of any top of bank[, unless the fence lies adjacent to a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water];

2. (No change.)

3. Any fence located in a floodway has [sufficiently large] openings **of no less than six inches,** so as not to catch debris during a flood and thereby obstruct floodwaters, such as a barbed-wire, split-rail, or strand fence. A fence with little or no open area, such as a chain link, lattice, or picket fence, does not

meet this requirement.

7:13-[7.21]**7.12** [Permit-by-rule 21] **Permit-by-registration 12** --construction of [a] **an in-ground** swimming pool associated with residential use

(a) [Permit-by-rule 21] **This permit-by-registration** authorizes the construction of [a] **an in-ground** swimming pool associated with residential use[,]**;** provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. (No change.)

[2. No aboveground pool is constructed in a floodway;]

[3.] **2.** For a pool within a fluvial flood hazard area:

[i. Any aboveground pool does not displace more than 100 cubic yards of flood storage volume (see N.J.A.C. 7:13-11.4);]

[ii.] **i.** [Any in-ground] **The** pool lies at or below existing grade, except for incidental grading necessary for installation and portions of the pool structure itself that lie aboveground, such as railings and diving boards; and

[iii.] **ii.** (No change in text.)

[4.] **3.** No disturbance is located within 25 feet of any top of bank[, unless the pool lies adjacent to a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water];

Recodify exiting 5.-6. as **4.-5.** (No change in text.)

7:13-[7.22]**7.13** [Permit-by-rule 22] **Permit-by-registration 13** --construction of a trail and/or boardwalk

(a) [Permit-by-rule 22] **This permit-by-registration** authorizes the creation of a trail and/or boardwalk[,]**;** provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1.-2. (No change.)

3. No disturbance is located within 25 feet of any top of bank, except[:

i. Where] **where** necessary to access a footbridge, dock, or pier connected to the trail and/or boardwalk; [or]

[ii. When the trail and/or boardwalk is located adjacent to a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water;]

4.-5. (No change.)

7:13-[7.23] **7.14** [Permit-by-rule 23] **Permit-by-registration 14** --construction of a footbridge

(a) [Permit-by-rule 23] **This permit-by-registration** authorizes the construction of a footbridge across a regulated water[,]**;** provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1.-3. (No change.)

4. Handrails have openings of no less than six inches so as not to catch debris during a flood and thereby obstruct floodwaters;

Recodify existing 4.-5. as **5.-6.** (No change in text.)

7:13-[7.24]**7.15** [Permit-by-rule 24] **Permit-by-registration 15** — [construction] **installation** of [a] **an underground** tank **in a regulated area or an aboveground tank outside the flood hazard area but within a riparian zone**

(a) [Permit-by-rule 24] **This permit-by-registration** authorizes the [construction] **installation** of [a] **an underground** tank in a regulated area or an aboveground tank outside of the flood hazard area but within a riparian zone[, either above or below ground,]**;** provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. Any tank located in a flood hazard area is designed to remain watertight **and resist buoyancy**

during a flood;

[2. For any tank situated aboveground:

i. The tank is not located within a floodway;

ii. The tank is located within or adjacent to a lawfully existing building; and

iii. The capacity of the tank does not exceed 2,000 gallons;]

[3.] **2.** No disturbance is located within 25 feet of any top of bank[, unless the project lies adjacent to a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water];

[4.] **3.** (No change in text.)

[5.] **4.** The cumulative footprint of all tanks, **either above or below ground,** which have been constructed [under] **pursuant to** any permit [under] **pursuant to** this chapter, does not exceed 5,000 square feet since November 5, 2007.

7:13-[7.25]**7.16** [Permit-by-rule 25] **Permit-by-registration 16** --construction of an aboveground athletic and/or recreational structure

(a) [Permit-by-rule 25] **This permit-by-registration** authorizes the construction of one or more aboveground athletic and/or recreational structures, such as a backstop, bleacher, picnic table, or playground equipment[,]**;** provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. (No change.)

2. Any structure placed in a floodway is constructed [of material that] **such that it** will remain open to the passage of floodwaters;

3.- 5. (No change.)

6. No disturbance is located within 25 feet of any top of bank[, unless the project lies adjacent to a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water].

7:13-[7.26]**7.17** [Permit-by-rule 26] **Permit-by-registration 17** --forest management activities

(a) [Permit-by-rule 26] **This permit-by-registration** authorizes the forest management activities identified at (b) below[,]**;** provided they are conducted in accordance with a forest management plan that has been approved by the New Jersey State Forester**,** or designee**,** before the activities are undertaken. Information and guidance related to forest management activities in flood hazard areas and riparian zones are provided in the document entitled, "New Jersey Forestry and Wetlands Best Management Practices Manual," dated October 1995, which is available at https://www.nj.gov/dep/parksandforests/forest/nj_bmp_manual1995.pdf.

(b) This [permit-by-rule] **permit-by-registration** authorizes the following forest management activities[,]**;** provided the conditions at N.J.A.C. 7:13-6.7 are met:

1.-2. (No change.)

3. Construction and maintenance of a fence to exclude deer and/or control other unwanted intrusions[,]**;** provided:

i. (No change.)

ii. Any fence located in a floodway has [sufficiently large] openings **of no less than six inches,** so as not to catch debris during a flood and thereby obstruct floodwaters, such as a barbed-wire, split-rail, or strand fence. A fence with little or no open area, such as a chain link, lattice, or picket fence, does not meet this requirement; and

4. (No change.)

(c) The removal of tree stumps is not authorized [under] **pursuant to** this [permit-by-rule] **permit-by-registration**.

(d) (No change.)

7:13-[7.30]**7.18** [Permit-by-rule 30] **Permit-by-registration 18** --placement of solar panels and associated equipment

(a) [Permit-by-rule 30] **This permit-by-registration** authorizes the placement of solar panels and associated equipment[,]**;** provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1.-2. (No change.)

3. Except for vertical support poles, all panels, cross-bracing, and other structural components, and all associated equipment are elevated to at least one foot above the [flood hazard area design] **climate-adjusted** flood elevation. This [permit-by-rule] **permit-by-registration** does not authorize the placement of solar panels that rely on ballast systems or concrete foundations for support;

4. No disturbance is located within 25 feet of any top of bank[, unless the project lies adjacent to a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water]; and

5. (No change.)

(b) This permit-by-registration does not authorize work ancillary to placement of the panels, such as construction of roadways to provide access to or facilitate maintenance of the panels.

7:13-[7.31]**7.19 [**Permit-by-rule 31] **Permit-by-registration 19** —placement of a floating aerator in an impounded water

[Permit-by-rule 31] **This permit-by-registration** authorizes the placement of a floating aerator in an impounded water or naturally occurring lake, pond, or reservoir[,]**;** provided the conditions at N.J.A.C. 7:13-6.7 are met and no trees are cleared, cut, and/or removed in a riparian zone.

7:13-[7.34]**7.20** [Permit-by-rule 34] **Permit-by-registration 20** - placement of one or more utility open-

frame towers

(a) [Permit-by-rule 34] **This permit-by-registration** authorizes the placement of one or more open-frame towers to provide cellular telephone service or to support a utility line[,]**;** provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. (No change.)

2. No disturbance is located within 25 feet of any top of bank[, unless the project lies adjacent to a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water];

3. (No change.)

4. All wires and cables supported by the towers are situated at least one foot above the [flood hazard area design] **climate-adjusted** flood elevation; and

5. (No change.)

7:13-[7.41]**7.21** [Permit-by-rule 41] **Permit-by-registration 21** -placement of a guiderail along a lawfully existing public roadway

(a) [Permit-by-rule 41] **This permit-by-registration** authorizes the placement of a guiderail adjacent to a lawfully existing public roadway[,]**;** provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1.-2. (No change.)

3. No trees are cleared, cut, and/or removed in a riparian zone within 25 feet of any top of bank[, unless the project lies adjacent to a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water].

7:13-[7.56]**7.22 [**Permit-by-rule 56] **Permit-by-registration 22** --continuation or commencement of

natural resource conservation practices associated with agricultural activities

(a) [Permit-by-rule 56] **This permit-by-registration** authorizes the continuation or commencement of natural resource conservation practices associated with agricultural activities, **such as agricultural bank stabilization and bank restoration activities along a regulated water on land that is actively farmed;** provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1.- 2. (No change.)

3. The activities do not result in the displacement of flood storage volume or the construction of an aboveground structure within a flood hazard area; [and]

4. No more than [2,000] **5,000** square feet of riparian zone vegetation is cleared, cut, and/or removed outside of an actively disturbed area[.]**; and**

5. The timing restrictions set forth at N.J.A.C. 7:13-11.6(d) are observed.

7:13-[7.57]**7.23** [Permit-by-rule 57] **Permit-by-registration 23** --construction of a non-habitable building for agricultural purposes

(a) [Permit-by-rule 57] **This permit-by-registration** authorizes the construction of a non-habitable building for agricultural purposes[,]**;** provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1.-2. (No change.)

3. Any building intended to house livestock is located outside any flood hazard area;

[3.] **4.** No disturbance is located within 25 feet of any top of bank[, unless the project lies adjacent to a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water]; and

[4.] **5.** (No change in text.)

7:13-[7.58]**7.24 [**Permit-by-rule 58] **Permit-by-registration 24** --filling or modification of a [manmade]

human-created regulated water for freshwater wetlands restoration

(a) [Permit-by-rule 58] **This permit-by-registration** authorizes the filling or modification of a [manmade] **human-created** regulated water for the purpose of freshwater wetlands restoration[,]**;** provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1.-3. (No change.)

7:13-[7.59]**7.25** [Permit-by-rule 59] **Permit-by-registration 25** --creation of a ford across a regulated water to manage livestock

(a) [Permit-by-rule 59] **This permit-by-registration** authorizes the creation of a ford across a regulated water to manage livestock on actively farmed land[,]**;** provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1.-5. (No change.)

6. The timing restrictions set forth at N.J.A.C. 7:13-[11.5(d)]**11.6(d)** are observed; and

7. (No change.)

7:13-[7.60]**7.26** [Permit-by-rule 60] **Permit-by-registration 26** --construction of a fence along and/or across a regulated water to manage livestock

(a) [Permit-by-rule 60] **This permit-by-registration** authorizes the construction of a fence along and/or across a regulated water on actively farmed land, in order to limit or manage livestock access to a regulated water and/or to prevent livestock or other animals from accessing certain areas[,]**;** provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. (No change.)

2. Any fence crossing or situated within a regulated water, or located in a floodway, has [sufficiently large] openings **of no less than six inches,** so as not to catch debris during a flood and

thereby obstruct floodwaters, such as a barbed-wire, split-rail, or strand fence. A fence with little or no open area, such as a chain link, lattice, or picket fence, does not meet this requirement;

3.-5. (No change.)

7:13-[7.61]**7.27** [Permit-by-rule 61] **Permit-by-registration 27** --construction of a pump and/or water intake structure in or along a regulated water for livestock

(a) [Permit-by-rule 61] **This permit-by-registration** authorizes the construction of a pump and/or water intake structure in or along a regulated water on actively farmed land, in order to provide water for livestock outside the regulated water (and thereby limit livestock access to the regulated water)[,]**;** provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1.-4. (No change.)

7:13-[7.62]**7.28** [Permit-by-rule 62] **Permit-by-registration 28** --construction of a manure management structure for livestock or horses

(a) [Permit-by-rule 62] **This permit-by-registration** authorizes the construction of a manure management structure for livestock or horses[,]**;** provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. (No change.)

2. The footprint of the structure is no more than [1,000] **400** square feet;

3. (No change.)

[4. Where it is not feasible to locate the structure outside a floodway, the structure is oriented to minimize obstruction to flow;]

4. The structure is located outside any floodway;

5. No disturbance is located within 25 feet of any top of bank[, unless the project lies adjacent to a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water];

and

6. (No change.)

7:13-[7.63]**7.29** [Permit-by-rule 63] **Permit-by-registration 29** --application of herbicide within riparian zones to control invasive plant species

(a) [Permit-by-rule 63] **This permit-by-registration** authorizes the application of herbicide within riparian zones to control invasive plant species[,]**;** provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. (No change.)

2. The activities are conducted pursuant to an aquatic pesticide permit issued by the Department's Bureau of Licensing and Pesticide Operations[; and]**.**

[3. No herbicide is applied within a 300-foot riparian zone.]

7:13-7.30 Permit-by-registration 30 --maintenance of existing human-created stormwater management structures and conveyances

(a) This permit-by-registration authorizes the maintenance of one or more lawfully existing human-created stormwater management structures and conveyances, such as a pipe or basin, not including natural channels that were previously modified; provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. All work occurs within and is necessary for the maintenance of the stormwater management structure or conveyance;

2. The existing stormwater management system is not expanded, enlarged, or otherwise modified to receive additional sources of stormwater runoff or include additional discharge points, or increase the capacity of the existing stormwater conveyance system;

3. The activities are limited to the stabilization of an eroded structure or the repair and/or in-kind replacement of stormwater management structures and conveyances, such as a stormwater basin, pipe, manhole, inlet, catch basin, headwall, discharge structure, or associated conduit outlet protection, and/or the replacement of filter media. The removal of accumulated sediment, debris, or nuisance vegetation from stormwater management structures and conveyances is exempt pursuant to N.J.A.C. 7:13-2.5(a)1;

4. No riparian zone vegetation is cleared, cut, and/or removed outside the structure or conveyance feature, unless such disturbance is unavoidable, necessary to gain access to the structure or conveyance feature, and minimized; and

5. No trees are cleared, cut, and/or removed in a riparian zone outside the structure or conveyance feature.

SUBCHAPTER 8. GENERAL PERMITS-BY-CERTIFICATION

7:13-[8.5]**8.1** General permit-by-certification [5] **1** --reconstruction, relocation, expansion, and/or elevation of a building outside a floodway **and an inundation risk zone**

(a) [General] **This general** permit-by-certification [5] authorizes the reconstruction, relocation, expansion, and/or elevation of a lawfully existing building located outside a floodway[,] **and an inundation risk zone;** provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. The [flood hazard area] **applicant has received a verification of the climate-adjusted flood elevation pursuant to N.J.A.C. 7:13-5 or an engineer has determined the climate-adjusted flood** elevation for the site [has been determined by] **pursuant to N.J.A.C. 7:13-3.2 using** a Department delineation **pursuant to N.J.A.C. 7:13-3.5** or FEMA flood mapping **pursuant to N.J.A.C. 7:13-3.6**[, under Methods 1, 2, or 3 (at N.J.A.C. 7:13-3.3, 3.4(d), and 3.4(e), respectively)];

2. The building is not located [in] **within, expanded within, or relocated into** a floodway **or**

inundation risk zone;

[3. The applicant obtains an engineering certification confirming that the building is not being expanded within or relocated into a floodway;]

[4.] **3.** The footprint of the building [has] **is** not increased by more than 750 square feet, cumulatively, since November 5, 2007;

[5.] **4.** The [applicant obtains an engineering certification confirming that the] lowest floor of **any portion of** the building [is] being reconstructed**, relocated, expanded,** or elevated [to] **is constructed** at least one foot above the [flood hazard area design] **climate-adjusted** flood elevation and no lower than the elevation required [under] **pursuant to** the Uniform Construction Code, N.J.A.C. 5:23**, except as follows:**

i. Where proposed improvements consist solely of repair and maintenance activities that do not alter the building's height, footprint area, or habitable area, the lowest floor of the building is required to be elevated only as necessary to meet minimum NFIP standards as established by rule or floodplain ordinance for the participating community in which the building is located;

[6.] **5.** Any new enclosure below the lowest floor of the building is not used for habitation, remains open to floodwaters, and is constructed in accordance with N.J.A.C. 7:13-12.5[(p)]**(r)**;

[7.] **6.** Any existing enclosure below the lowest floor of the building, which does not conform to the requirements [of] **at** N.J.A.C. 7:13-12.5[(p)]**(r)**, such as a basement having a floor that is below grade along all adjoining exterior walls, is abandoned, filled-in, and/or otherwise modified to conform with the requirements [of] **at** N.J.A.C. 7:13-12.5;

[8.] **7.** No disturbance is located within 25 feet of any top of bank[, unless the project lies adjacent to a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water];

Recodify existing 9.-10. as **8.-9.** (No change in text.)

(b) There is no fee associated with this general permit-by-certification for the reconstruction, relocation, expansion, and/or elevation of a lawfully existing building located outside a floodway and an inundation risk zone.

7:13-[8.8]**8.2** General permit-by-certification [8] **2** --construction of an addition to a lawfully existing building

(a) [General] **This general** permit-by-certification [8] authorizes the construction of [an addition to] **one or more additions above or adjoining** a lawfully existing building[,]**;** provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. [The applicant obtains an engineering certification confirming that the addition is not being] **No portion of the existing building or addition is** located within a floodway **or inundation risk zone**;

2. The footprint of the existing building [has] **is** not increased by more than 750 square feet, cumulatively, since November 5, 2007;

3. The [applicant obtains an engineering certification confirming that the] lowest floor of the addition is constructed at least one foot above the [flood hazard area design] **climate-adjusted** flood elevation and no lower than the elevation required [under] **pursuant to** the Uniform Construction Code, N.J.A.C. 5:23;

4. (No change.)

5. Any enclosure below the lowest floor of the addition is not used for habitation, remains open to floodwaters, and is constructed in accordance with N.J.A.C. 7:13-12.5[(p)]**(r)**;

6. No disturbance is located within 25 feet of any top of bank[, unless the project lies adjacent to a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water]; and

7. (No change.)

(b) There is no fee associated with this general permit-by-certification for the construction of an addition to a lawfully existing building.

7:13-[8.15]**8.3** General permit-by-certification [15] **3** --in-kind replacement of public infrastructure

(a) [General] **This general** permit-by-certification [15] authorizes the in-kind replacement of public infrastructure, which has been damaged by flooding or other severe weather event that resulted in the Governor of New Jersey declaring a State of Emergency or FEMA declaring a major disaster in New Jersey and applies only to those counties and municipalities included in such a declaration. This general permit-by-certification authorizes the in-kind replacement of public infrastructure where a public entity has determined that immediate action is warranted to protect public health, safety, welfare, or the environment, **and where as-built drawings or other records that can verify dimensions and location of the existing structure are available**. For the purposes of this general permit-by-certification, public infrastructure means any roadway, railroad, bridge, culvert, storm sewer system, utility, and associated structure that are maintained by a public entity.

(b) In addition to satisfying the requirements applicable to all general permits-by-certification at N.J.A.C. 7:13-6.7, [the applicant shall obtain an engineering certification confirming that any in-kind replacement of public infrastructure complies] **activities pursuant to this general permit-by-certification shall comply** with all applicable design and construction standards [of] **at** N.J.A.C. 7:13-10, 11, and 12, except for timing restrictions pursuant to N.J.A.C. 7:13-[11.5(d)]**11.6(d)**.

(c) All regulated activities authorized [under] **pursuant to** this general permit-by-certification shall:

1. (No change.)

2. Be completed within 180 calendar days of the date that the permittee submitted the required certifications resulting in authorization [under] **pursuant to this** general permit-by-certification [15].

(d) Within 30 calendar days of the completion of regulated activities authorized [under] **pursuant to** this general permit-by-certification, the permittee shall provide to the Department a written statement that includes:

1.-2. (No change.)

3. Site plans, **as-built drawings, or other records that can verify dimensions and location of the existing structure,** photographs, mapping, or other information necessary to demonstrate that the regulated activity complies with the requirements of this general permit-by-certification.

7:13-[8.16]**8.4** General permit-by-certification [16] **4** - construction of a footbridge

(a) [General] **This general** permit-by-certification [16] authorizes the construction of a footbridge for use by pedestrians only, across a regulated water[,]**;** provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. The footbridge is no more than [four] **10** feet wide;

2. (No change.)

3. In order to ensure that the footbridge will not increase flooding offsite, the topographic elevation at any property boundaries located within 500 feet upstream of the footbridge and within 500 feet on either side of the footbridge is equal to or higher than the elevation of the top of the deck plus the thickness of the footbridge [under] **pursuant to** (a)2 above. For example, if the elevation of the top of the deck is 100 feet [NGVD] **NAVD 88** and the thickness of the footbridge is 12 inches, then the topographic elevation at the adjacent property boundaries must be at least 101 feet [NGVD] **NAVD 88**;

4. (No change.)

5. The areas above and below the footbridge remain open to the passage of floodwaters. Handrails shall have large openings, **more than six inches,** so as not to catch debris during a flood and thereby obstruct floodwaters;

6.-7. (No change.)

7:13-8.5 General permit-by-certification 5 --construction of a dock, pier, or boathouse

(a) This general permit-by-certification authorizes the construction of a fixed or floating dock, pier, or boathouse in tidal regulated waters and certain impounded fluvial regulated waters; provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. Where the dock, pier, or boathouse is situated along a fluvial regulated water, the following requirements are satisfied;

i. The dock, pier, or boathouse is constructed within an impounded regulated water, such as a lake, pond, or reservoir, which has a surface area of five acres or more:

ii. The dock, pier, or boathouse covers no more than 2,000 square feet, including all decking and pilings; and

iii. The dock, pier, or boathouse does not extend more than 20 percent across the width of the regulated water;

2. Any boathouse shall be used solely for the storage of boats and boating accessories, and shall not be used for habitation;

3. Any fixed dock, pier, or boathouse is built on pilings and remains open underneath to allow floodwaters to pass freely;

4. Any stairs or other structures necessary for access to the dock, pier, or boathouse:

i. Remain open underneath to allow floodwaters to pass freely;

ii. Do not require the existing ground elevation to be raised in a fluvial flood hazard area; and

iii. Are oriented to minimize obstruction to flow, such as by being set into the bank; and

5. No riparian zone vegetation is cleared, cut, and/or removed, except for vegetation within

10 feet of the dock, pier, or boathouse where such disturbance is necessary to facilitate its construction.

7:13-8.6 General permit-by-certification 6 --construction of an aboveground swimming pool associated with residential use

(a) This general permit-by-certification authorizes the construction of an aboveground swimming pool associated with residential use, provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. No portion of the pool is constructed in a floodway;

2. The existing ground elevation is not raised in a floodway;

3. The pool and any associated grading does not cumulatively displace more than 50 cubic yards of flood storage volume in a fluvial flood hazard area;

4. No disturbance is located within 25 feet of any top of bank; and

5. Any clearing, cutting, and/or removal of riparian zone vegetation is limited to actively disturbed areas.

(b) There is no fee associated with this general permit-by-certification for the construction of an aboveground swimming pool associated with residential use.

7:13-8.7 General permit-by-certification 7 --filling of an abandoned raceway

(a) This general permit-by-certification authorizes the filling of an abandoned raceway adjacent to a regulated water; provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. For the purposes of this general permit-by-certification, a raceway is a conveyance structure that was created to divert water from a channel for the purpose of providing hydrology or hydraulic power before returning the water to the channel;

2. The raceway is blocked at one or both ends so that water from the channel is not able to flow through the raceway under normal flow conditions;

3. The raceway does not supply hydrology to an otherwise isolated freshwater wetlands complex; and

4. The raceway is filled up to, but not above, the surrounding topography and the entire disturbed area is properly graded so as not to interfere with overland drainage.

7:13-8.8 General permit-by-certification 8 --placement of one to three wind turbines

(a) This general permit-by-certification authorizes the placement of one to three wind turbines, provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. Each wind turbine is less than 200 feet tall, measured from the ground surface to the tip of the blade at its highest position;

2. The rotor swept area of each wind turbine does not exceed a cumulative area of 2,000 square feet. Rotor swept area means the area of the circle delineated by the tips of the blades of the wind turbine for a horizontal axis wind turbine, and the area determined by multiplying the rotor radius times the rotor height times 3.14 for a vertical axis wind turbine;

3. No wind turbine tower or site disturbance is located in a floodway;

4. No portion of any wind turbine, including blades, tower, and site disturbance, is located within an area mapped as threatened or endangered species habitat on the Department's Landscape Maps of Habitat for Endangered, Threatened and Other Priority Wildlife (Landscape Maps) except as provided at (a)4i and ii below. Landscape Maps are available from the Department's Division of Fish and Wildlife, Endangered and Nongame Species Program at https://www.nj.gov/dep/fgw/ensp/landscape/index.htm;

i. The wind turbine is located within 120 feet of an existing building on an actively

maintained lawn or area of land that has been manipulated by contouring of the soil and/or by intentional planting of flowers, grasses, shrubs, trees, or other ornamental vegetation, which is maintained in such a condition by regular and frequent (at least one time per year) cutting, mowing, pruning, planting, weeding, or mulching; or

ii. The wind turbine is located on a lawfully existing building or on a lawfully existing impervious surface;

5. Where the wind turbine is more than 120 feet tall, measured from the ground surface to the tip of the blade at its highest position, the tower is a freestanding monopole;

6. No lighting is placed on or directed at the wind turbine except for lighting required by the Federal Aviation Administration. Shielded ground level security lighting may be used. Lighting is shielded when it is covered in a way that light rays are not emitted above the horizontal plane of the light;

7. Development pursuant to this general permit-by-certification does not result in construction of more than three wind turbines on a site, either solely, or in conjunction with a previous wind turbine development;

8. No disturbance is located within 25 feet of any top of bank;

9. Any clearing, cutting, and/or removal of riparian zone vegetation is limited to actively disturbed areas; and

10. With the exception of guy wires on turbines 120 feet tall or less, all wires or cables that connect the wind turbine to an existing transmission line, are located underground.

7:13-8.9 General permit-by-certification 9 --construction of an aquatic habitat enhancement device

(a) This general permit-by-certification authorizes the construction of an aquatic habitat enhancement device, provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. The device is approved by the USDA Natural Resource Conservation Service, U.S. Fish and Wildlife Service, and/or the Department's Division of Fish and Wildlife;

2. The device will not cause erosion in the regulated water;

3. The device will not cause any rise in the climate-adjusted flood elevation outside the regulated water;

4. The device will not cause any existing building to be subject to increased flooding during any flood event described at N.J.A.C. 7:13-12.1(i);

5. No more than 2,000 square feet of riparian zone vegetation is cleared, cut, and/or removed; and

6. The timing restrictions set forth at N.J.A.C. 7:13-11.6(d) are observed.

(b) There is no fee associated with this general permit-by-certification for the construction of an aquatic habitat enhancement device.

7:13-8.10 General permit-by-certification 10 -- placement of one or more utility monopole towers

(a) This general permit-by-certification authorizes the placement of one or more monopole towers to provide cellular service or to support a utility line, provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. No tower and associated equipment is located within a floodway;

2. No disturbance is located within 25 feet of any top of bank;

3. The diameter of each monopole tower within a fluvial flood hazard area is no greater than five feet;

4. All wires and cables supported by the towers are situated at least one foot above the climate-adjusted flood elevation; and

5. No trees are cleared, cut, and/or removed in a riparian zone.

7:13-8.11 General permit-by-certification 11 --construction of barrier-free access to a building in a floodway

(a) This general permit-by-certification authorizes the construction of barrier-free access to a building in a floodway, such as stairs, ramps, or fire-escapes, provided the conditions at N.J.A.C. 7:13-6.7 are met and the access is:

1. Required by a public entity;

2. Constructed in accordance with the Americans with Disabilities Act of 1990, 42 U.S.C. §§ 12101 et seq.;

3. Constructed outside any channel;

4. Open underneath the floor to allow for the passing of flood waters; and

5. Constructed utilizing only handrails that are open with spacing between balusters of no less than six inches.

(b) There is no fee associated with this general permit-by-certification for the construction of barrier-free access to a building in a floodway.

7:13-8.12 General permit-by-certification 12 --attachment of a utility line to a lawfully existing roadway or railroad that crosses a regulated water

(a) This general permit-by-certification authorizes the attachment of a utility line to a lawfully existing roadway or railroad that crosses a regulated water, provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. The regulated water is not disturbed;

2. No more than 1,000 square feet of riparian zone vegetation is cleared, cut, and/or removed, and all such vegetation lies within an existing right-of-way that is periodically mowed

and/or cleared;

3. All disturbed areas in the flood hazard area are restored to pre-construction topography upon completion of the regulated activity;

4. No part of the utility line, its encasement, or any attachment device extends above the profile of the roadway or railroad or across the opening of any bridge or culvert;

5. The portion of the utility line attached to the roadway or railroad is situated at least one foot above the climate-adjusted flood elevation, where feasible;

6. Where a predominant direction of flow in the regulated water is discernible, the utility line is attached to the downstream face of the roadway or railroad crossing;

7. All work is accomplished without displacing or damaging any bridge or culvert under the roadway or railroad;

8. The utility line is sealed to ensure that there will be no leakage or discharge in a regulated area;

9. Where practicable, no manhole is constructed within 25 feet of any top of bank;

10. The top of any manhole in a floodway is flush with the ground;

11. The top of any manhole in a flood fringe is flush with the ground, where feasible; and

12. Any manhole in a flood hazard area has a watertight cover.

7:13-8.13 General permit-by-certification 13 --reconstruction of all or part of a lawfully existing bridge superstructure

(a) This general permit-by-certification authorizes the reconstruction of all or part of a lawfully existing bridge superstructure over a regulated water, provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. Any portion of the superstructure to be reconstructed that lies below the climate-

adjusted flood elevation is replaced in-kind;

2. No riparian zone vegetation is cleared, cut, and/or removed, except for vegetation within 20 feet of the structure, where such disturbance is necessary to facilitate its reconstruction; and

3. The timing restrictions set forth at N.J.A.C. 7:13-11.6(d) are observed for any in-water work.

7:13-8.14 General permit-by-certification 14 --construction of a gauge, weir, flume, monitoring well, or a similar device

(a) This general permit-by-certification authorizes the construction of a gauge, weir, flume, monitoring well, or other similar device to measure the depth, velocity, rate of flow, monitor, and test water quality in a regulated water, provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. The device is approved by the United States Geological Survey, New Jersey Water Supply Authority, and/or New Jersey Geological Survey;

2. The device will not cause erosion in the regulated water;

3. The device will not cause any rise in the climate-adjusted flood elevation;

4. The device will not cause any existing building to be subject to increased flooding during any flood event described at N.J.A.C. 7:13-12.1(i);

5. No more than 2,000 square feet of riparian zone vegetation is cleared, cut, and/or removed and, where possible, is limited to actively disturbed areas;

6. The timing restrictions set forth at N.J.A.C. 7:13-11.6(d) are observed;

7. The devices will not significantly disrupt the movement of aquatic species native to the regulated water, or of species which normally migrate through the area;

8. Where a pathway through riparian zone vegetation is necessary to accomplish the activities, it is limited to:

i. No greater than five feet in width, if work is performed by hand; and

ii. No greater than 10 feet in width, if necessary to accommodate machinery in cases where the device cannot feasibly be constructed by hand;

9. Any utility shelter that is necessary to house and protect the equipment associated with the gauge, weir, flume, monitoring well, or similar device is:

i. Constructed outside the channel and inundation risk zone;

ii. Constructed outside the floodway, where possible;

iii. Oriented to minimize obstruction to flow;

iv. Designed to withstand hydrostatic and hydrodynamic loads and the effects of buoyancy resulting from flooding to at least one foot above the climate-adjusted flood elevation;

v. Designed so that equipment inside the building is stored at least one foot above the climate-adjusted flood elevation, and/or is designed to operate during submerged conditions; and

vi. No larger than 100 square feet in area.

(b) There is no fee associated with this general permit-by-certification for the construction of a gauge, weir, flume, monitoring well, or a similar device.

7:13-8.15 General permit-by-certification 15 —lining a bridge or culvert

(a) This general permit-by-certification authorizes the lining of a lawfully existing bridge or culvert with grout or similar material, in order to repair or restore the structure to a stable condition, provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. Lining the bridge or culvert will not result in increased flooding outside the right-of-way associated with the structure during any flood event described at N.J.A.C. 7:13-12.1(i);

2. No riparian zone vegetation is cleared, cut, and/or removed outside the structure or conveyance feature, unless such disturbance is unavoidable, necessary to gain access to the

structure or conveyance feature and minimized; and

3. The timing restrictions set forth at N.J.A.C. 7:13-11.5(d) are observed.

SUBCHAPTER 9. GENERAL PERMITS

7:13-9.1 General permit 1 -- removal of accumulated sediment and debris from a regulated water

(a) This general permit authorizes activities necessary for the removal of accumulated sediment and debris from a regulated water. This general permit does not authorize the straightening or realignment of a channel. Straightening or realignment constitutes channel modification and requires an individual permit pursuant to N.J.A.C. 7:13-11.1(c). The activities authorized pursuant to this general permit include:

1. The desnagging of a channel and/or removal of accumulated sediment, debris, and garbage by a county, municipality, or a designated agency thereof pursuant to the Stream Cleaning Act, N.J.S.A. 58:16A-67, or by a State agency or public transportation entity, pursuant to (c) below;

2. The removal of accumulated sediment and debris from a regulated water on land that is actively farmed, pursuant to (d) below; and

3. The removal of accumulated sediment and debris from an engineered channel. For the purposes of this general permit, an engineered channel is a channel that is fully lined with concrete or other armoring and/or which has been constructed, altered, or otherwise manipulated as part of a flood control project, pursuant to (e) below.

(b) The activities described at (a) above are acceptable; provided the conditions at N.J.A.C. 7:13-6.7, and (c), (d), (e), and (f) below, as applicable, are met and:

1. The timing restrictions set forth at N.J.A.C. 7:13-11.6(d) are observed;

2. No riparian zone vegetation is cleared, cut, and/or removed, unless such disturbance is unavoidable, necessary to gain access to the regulated water, and minimized;

3. No trees are cleared, cut, and/or removed in a riparian zone;

4. The project is conducted from only one bank, and the existing tree canopy on the more southerly or westerly bank is preserved in order to shade the regulated water;

5. The material to be removed consists solely of accumulated sediment and/or debris; and

6. All material removed from a regulated water is disposed of outside of any regulated area, except as described at (c) below, and in accordance with all applicable Federal, State, and local requirements.

(c) The desnagging of a channel and/or the removal of accumulated sediment, debris, and garbage by a county, municipality, or a designated agency thereof pursuant to the Stream Cleaning Act, N.J.S.A. 58:16A-67, or by a State agency or public transportation entity, shall be authorized pursuant to this general permit only if the requirements at (b) above and the following requirements are satisfied:

1. The project's sole purpose is to remove obstructions to flow or desnag a channel;

2. The project is necessary and in the public interest;

3. The project consists solely of either:

i. The removal of accumulated silt, sediment, debris, and/or garbage from a channel with a natural bed and does not alter the natural bed or banks of the channel; or

ii. The removal of any accumulated material from a channel previously lined with concrete or similar artificial material;

4. The project does not disturb the channel bank;

5. The use of heavy equipment in the channel is avoided; and

6. If the project involves sediment removal from a channel with a natural bed, the following requirements are satisfied:

i. If the project is undertaken by a municipality, or a designated agency thereof, it is

located wholly within the jurisdiction of that municipality;

ii. If the project is undertaken by a county, or designated agency thereof, it is located wholly within the jurisdictional boundaries of one municipality, or less than 500 feet in length of channel reach if located within more than one municipality;

iii. The average width of the channel bed does not exceed 30 feet;

iv. The channel is not classified as a Pinelands water or Category One water; and

v. The channel is not a present or documented habitat for threatened or endangered species; and

7. All materials, including dredged material, removed from a channel shall be placed outside any regulated area and also any freshwater wetlands, transition areas, and State open waters, as those terms are defined in the Freshwater Wetlands Protection Act Rules, N.J.A.C. 7:7A-1.4, unless it is demonstrated that this would cause more environmental harm or flooding risk than the placement of the material in these areas. For example, if the removal of dredged material requires construction of a long temporary roadway through a wetland with a very high water table to enable trucks to transport the dredged material offsite, this may cause more environmental harm than spreading the dredged material thinly over a large area.

(d) The removal of accumulated sediment and debris from a regulated water on land that is actively farmed shall be authorized pursuant to this general permit only if the requirements at (b) above and the following requirements are satisfied:

1. The activities are intended solely for agricultural purposes;

2. The activities are approved by and performed under the supervision of the USDA Natural Resource Conservation Service and/or local Soil Conservation District;

3. All machinery is situated outside the regulated water, except for handheld equipment, such as hydraulic pumps. Heavy machinery, such as backhoes, may be used to reach into the

regulated water to remove material, but cannot be driven into or otherwise operated within the regulated water; and

4. Removing the accumulated sediment and debris does not alter the natural bed and banks of the regulated water.

(e) The removal of accumulated sediment and debris from an engineered channel shall be authorized pursuant to this general permit only if the requirements at (b) above are satisfied.

(f) Activities conducted pursuant to this general permit are subject to the application requirements at N.J.A.C. 7:13-18, except for those activities conducted by a county, municipality, or designated agency thereof pursuant to the Stream Cleaning Act, N.J.S.A. 58:16A-67, pursuant to (c) above, for which the following shall apply:

1. All requirements at N.J.A.C. 7:13-18.2;

2. An application for authorization shall be submitted to the Department electronically through the Department's online system at https://nj.gov/dep/online and shall include the following:

i. All of the information listed at N.J.A.C. 7:13-18.4(b); and

ii. The following digital documents, which must be uploaded to the online service in the format specified in the application checklist:

(1) A completed Property Owner Certification form(s) signed by the applicant and all individuals required to certify to the application in accordance with N.J.A.C. 7:13-18.2(d). The Property Owner Certification form is available from the Department at the address set forth at N.J.A.C. 7:13-1.3;

(2) Site plans prepared by an engineer, which clearly depict the segments of the channel or stream to be cleaned;

(3) The location of the affected portion of the channel or stream, including the county and

municipality, and the block(s) and lot(s);

(4) A USGS quad map showing the affected portion of the channel or stream;

(5) Color photographs and a brief narrative description of the affected portion of the channel or stream, including the access points where workers and equipment will be brought to the channel or stream;

(6) A compliance statement that includes the following:

(A) The classification, pursuant to the Department's Surface Water Quality Standards, N.J.A.C. 7:9B, for the affected portion of the channel or stream;

(B) A description of the nature of the project;

(C) A description of the proposed methods that will be used to remove material from the channel or stream and the location where the dredged material will be placed; and

(D) A certification, signed by the county or municipal engineer, or an engineer employed by the local Soil Conservation District, that lists each requirement at (b) and (c) above that applies to the project, and states how the requirement has been, or will be, satisfied; and

(7) A copy of all conservation restrictions that impact any portion of the site that is the subject of the application;

3. The application review procedures for authorization pursuant to this general permit are set forth at N.J.A.C. 7:13-21. No application fee or public notice of the application are required for activities authorized pursuant to (a)1 above; and

4. Within 15 calendar days after the completion of a project pursuant to (a)1 above that involves the removal of sediment, the permittee shall submit to the Department:

i. A written notice that the project has been completed; and

ii. A certification, signed by the county or municipal engineer, or an engineer employed by the local Soil Conservation District, that lists each requirement at (b) and (c) above that applies to

the project, and states how the requirement has been satisfied.

(g) There is no fee associate with this general permit for the removal of accumulated sediment and debris from a regulated water.

7:13-9.2 General permit 2 -- mosquito control water management activities

(a) [General] **This general** permit [2] authorizes activities in flood hazard areas and riparian zones necessary for mosquito control water management activities conducted by a county mosquito control agency or a Federal agency on Federal land. Mosquito control water management activities authorized [under] **pursuant to** this general permit include:

1. Removal of accumulated silt, sediment, and debris from any **regulated** water;

2. – 3. (No change.)

(b) Mosquito control water management activities described at (a) above are acceptable provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. (No change.)

2. The activities are undertaken in accordance with the document entitled, Best Management Practices for Mosquito Control and Freshwater Wetlands Management, dated July 1997, which is available at http://www.nj.gov/dep/mosquito/bmps.htm;

[2.] **3.** (No change in text.)

[3.] **4.** In order to minimize the downstream transport of sediment during [dredging] **the removal of accumulated silt and sediment from the regulated water**, all areas [to be dredged must be] **from which accumulated silt and sediment are to be removed are** isolated from flowing water, where possible, through:

i. Erecting temporary berms or sheet-piles around the areas [to be dredged] **from which silt and**

sediment are to be removed and pumping the flow within the regulated water around the work area; or

ii. If flow is low, by blocking off sections of the regulated water [being dredged] **from which accumulated silt and sediment are to be removed** and allowing the sediment to settle;

[4. All material removed from the regulated water is placed in accordance with the following:

i. Sediment removed can be placed in a regulated area provided the requirements at N.J.A.C. 7:13-12.15(f) are satisfied; and]

[ii.] **5.** All **sediment, silt,** trash**,** and debris removed [must] **from a regulated area shall** be placed outside any [flood hazard area or riparian zone] **regulated area** and in accordance with all applicable Federal, State, and local requirements;

[5.] **6.** The timing restrictions set forth at N.J.A.C. 7:13-[11.5(d)]**11.6(d)** are observed;

Recodify existing 6.-9. as **7.-10.** (No change in text.)

(c) (No change.)

(d) An applicant for authorization pursuant to this general permit shall provide a certification from the State Office of Mosquito Control Coordination, containing approval of the site-specific project proposal.

7:13-9.3 General permit 3 -- scour protection activities at bridges and culverts

(a) [General] **This general** permit [3] authorizes scour protection activities at one or more existing bridges or culverts **along the same roadway**, provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. The **applicant demonstrates that the** activities are necessary for the maintenance and/or protection of an existing bridge or culvert;

2. The activities are intended to remedy a **potential or existing** scour problem within or adjacent to a bridge or culvert and not to remedy large sections of severely eroded or unstable channel;

3. The applicant provides an engineering certification confirming that:

i. The amount of stabilizing material to be placed in the channel is no greater than necessary to protect the structure from failure or collapse due to undermining of abutments or piers. In general, the channel velocity used to determine the necessary amount of stabilizing material shall be based on bank full flow, **as measured upstream of the bridge or culvert,** unless otherwise required by the U.S. Federal Highway Administration; and

ii. The stabilizing material does not obstruct flow in the channel or floodway or cause flooding outside the channel to increase **during any flood event specified at N.J.A.C. 7:13-12.1(i)**;

7. The timing restrictions set forth at N.J.A.C. 7:13-[11.5(d)]**11.6(d)** are observed.

7:13-9.4 General permit 4 -- creation, restoration, and enhancement of habitat and water quality values and functions

(a) [General] **This general** permit [4] authorizes regulated activities necessary to implement a plan for the creation, restoration, [or] **and/or** enhancement of habitat and water quality functions and values in a regulated area. Activities authorized [under] **pursuant to** this general permit include, but are not limited to:

1. Altering hydrology to create, restore, or enhance wetlands, such as by blocking, removing, or disabling a [manmade] **human-created** drainage ditch or other drainage structure such as a tile, culvert, or pipe;

2. (No change.)

3. Placing habitat improvement structures such as:

i. (No change.)

ii. Fencing to contain, or to prevent intrusion by, livestock or other animals; [and] **provided that any such fencing in a fluvial floodway has openings of no less than six inches;**

iii. Fencing, for habitat connectivity projects or barriers to prevent wildlife mortality and vehicle damage, either on its own or used in conjunction with a proposed or existing culvert or bridge; provided any such fencing in a flood hazard area is designed to minimize obstruction to floodwaters; and

[iii.] **iv.** (No change in text.)

4.- 5. (No change.)

(b) Creation, restoration, and enhancement activities are eligible for authorization [under] **pursuant to** this general permit, provided the conditions at N.J.A.C. 7:13-6.7 are met and:

[1. The plan is:

i. Approved by one of the following agencies:

(1) The Department's Division of Fish and Wildlife;

(2) The Department's Office of Natural Resource Restoration;

(3) The U.S. Fish and Wildlife Service;

(4) The USDA Natural Resources Conservation Service;

(5) A government resource protection agency such as a parks commission; or

(6) A charitable conservancy; or

ii. Required by or approved by a government agency, such as the Department and/or U.S. Army Corps of Engineers, under a mitigation plan.

(1) Pursuant to N.J.A.C. 7:13-13, a riparian zone mitigation plan submitted to the Department to satisfy the requirements and/or conditions of an individual permit does not require the submittal of a separate application for an authorization or permit;]

Recodify existing 2.-4. as **1.-3.** (No change in text.)

[5.] **4.** The timing restrictions set forth at N.J.A.C. 7:13-[11.5(d)]**11.6(d)** are observed;

Recodify existing 6.-8. as **5.-7.** (No change in text.)

(c) (No change.)

(d) There is no fee associated with this general permit for the creation, restoration, and enhancement of habitat and water quality values and functions.

7:13-9.5 General permit 5 -- reconstruction and/or elevation of a building in a floodway

(a) [General] **This general** permit [5] authorizes the reconstruction and/or elevation of a lawfully existing building in a floodway, provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. The lowest floor of the building is reconstructed and/or elevated to at least one foot above the [flood hazard area design] **climate-adjusted** flood elevation and no lower than the elevation required [under] **pursuant to** the Uniform Construction Code, N.J.A.C. 5:23;

2.-4. (No change.)

5. The applicant provides an engineering certification confirming that:

i.-ii. (No change.)

iii. The building is modified wherever necessary to withstand hydrostatic**,** [and] hydrodynamic**, and impact** loads**,** and the effects of buoyancy resulting from flooding to at least one foot above the [flood hazard area design] **climate-adjusted** flood elevation;

6. No disturbance is located within 25 feet of any top of bank[, unless the project lies adjacent to a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water]; and

7. (No change.)

(b) There is no fee associated with this general permit for the reconstruction and/or elevation of a building in a floodway.

7:13-9.6 General permit 6 -- construction of one single-family home or duplex, and one associated driveway that does not cross a regulated water

(a) [General] **This general** permit [6] authorizes the construction of one single-family home or duplex, and one associated driveway that does not cross a regulated water, provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. No fill or structures are located within a floodway **or inundation risk zone**;

2.-3. (No change.)

4. The lowest floor of the single-family home or duplex is constructed at least one foot above the [flood hazard area design] **climate-adjusted** flood elevation and no lower than the elevation required [under] **pursuant to** the Uniform Construction Code, N.J.A.C. 5:23;

5. (No change.)

6. No disturbance is located within 25 feet of any top of bank[, unless the project lies adjacent to a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water];

7. – 11. (No change.)

7:13-[9.8]**9.7** General permit [8] **7** -- placement of storage tanks

(a) [General] **This general** permit [8] authorizes the placement of one or more storage tanks and associated support structures, provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. The tank cannot feasibly be located outside a regulated area;

2. Any new tank is located outside the inundation risk zone;

Recodify existing 2.-3. as **3.-4.** (No change in text.)

[4.] **5.** The bottom of the tank is situated above the [flood hazard area design] **climate-adjusted** flood elevation, where feasible**. If it is not feasible to place the bottom of the tank above the climate-**

adjusted flood elevation, then the tank shall be isolated from floodwaters by a berm or other structure sufficient to withstand the hydrostatic, hydrodynamic, and impact loads associated with flooding up to the climate-adjusted flood elevation;

[5. Where an aboveground tank is intended for the storage of hazardous substances and has a volume of greater than 2,000 gallons, the tank is isolated from floodwaters by berms, or is located in a specially designed containment area onsite, so that in the event of a flood, the hazardous substances will not be transported offsite by floodwaters;]

6. (No change.)

7. No disturbance is located within 25 feet of any top of bank[, unless the project lies adjacent to a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water];

8.-10. (No change.)

7:13-[9.12]**9.8** General permit [12] **8** -- construction of **a** footbridge[s]

(a) [General] **This general** permit [12] authorizes the construction of [one or more] **a** footbridge[s] across a regulated water, or across another feature such as a [manmade] **human-created** canal or roadway that lies within the flood hazard area or riparian zone of a regulated water[,]**;** provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1.-2. (No change.)

3. Where the footbridge is designed solely for pedestrian use, the width of the footbridge is no more than [six] **10** feet[, unless it is demonstrated that a wider width is necessary in order to comply with all applicable State and Federal barrier-free access requirements. In no case shall the width of the footbridge exceed 10 feet];

[4. Where the footbridge is designed as part of a multiple-use path for bicycles, skate boards, rollerblades, and other methods of transport:

i. The width of the footbridge is no more than 10 feet; and]

[ii.] **4.** (No change in text.)

5. Where the footbridge provides access to a critical [building] **facility**, its travel surface is constructed at least one foot above the [flood hazard area design] **climate-adjusted** flood elevation, or as close to that elevation as feasible;

6.-8. (No change.)

9. The footbridge is designed to pass floodwaters by either:

i. Setting the low chord of the footbridge above the [flood hazard area design] **climate-adjusted** flood elevation; or

ii. Using handrails instead of a parapet, [with sufficiently large] **which have** openings **of no less than six inches,** so as not to catch debris during a flood and thereby obstruct floodwaters, and setting the vertical distance between the low chord and the top of the footbridge deck, including any curbing, at no more than eight inches;

10. The timing restrictions set forth at N.J.A.C. 7:13-[11.5(d)]**11.6(d)** are observed; and

11. (No change.)

7:13-[9.13]**9.9** General permit [13] **9** -- construction of trails and boardwalks

(a) [General] **This general** permit [13] authorizes the construction of a trail and/or boardwalk, provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. (No change.)

2. [Where the trail or boardwalk is designed solely for pedestrian use, the] **The** width of the trail or boardwalk is no more than [six] **10** feet[, unless it is demonstrated that a wider width is necessary in order to comply with all applicable State and Federal barrier-free access requirements. In no case shall the width of the trail or boardwalk exceed 10 feet];

3. The existing ground elevation is not raised in any floodway or fluvial flood hazard area. A boardwalk constructed in a flood hazard area shall be constructed at or below the existing ground elevation or elevated **at least six inches,** so that the area underneath the boardwalk remains open to the passage of floodwaters;

4. The setbacks at (a)4i [though]**, ii, and** iii below are met, except in the immediate vicinity of a footbridge or a dock or pier connected to the trail or boardwalk[, unless the project lies adjacent to a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water]:

i.-iii. (No change.)

5.-7. (No change.)

8. Any public trail or boardwalk incorporates features designed to educate the user on the importance of riparian zones, **inundation risk zones,** flood hazard areas, and stream corridors. Such features may include signs identifying plants and animals or explaining hydrology, ecology, or other significant environmental features.

(b) There is no fee associated with this general permit for the construction of trails and boardwalks.

7:13-[9.14]**9.10** General permit [14] **10** -- application of herbicide within riparian zones to control invasive plant species

(a) [General] **This general** permit [14] authorizes the application of herbicide within a riparian zone to control invasive plant species, provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1.-3. (No change.)

7:13-9.11 General permit 11 -- placement of solar panels

(a) This general permit authorizes the placement of solar panels and associated equipment, including poles, support structures, inverter pads, and electrical apparatus, provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. The applicant provides an engineering certification confirming that:

i. No panels or associated equipment are being placed in a regulated water or floodway;

ii. The existing ground elevation is not being raised in any floodway or fluvial flood hazard area; and

iii. The flood storage displacement limitations at N.J.A.C. 7:13-11.4 are met;

2. Any panels placed in a flood fringe are elevated to at least one foot above the climate-adjusted flood elevation. Associated equipment is permitted below this elevation, where it is demonstrated that elevating the equipment is not feasible;

3. The applicant has obtained, or has concurrently applied for, a verification of any climate-adjusted flood elevation, floodway limits, inundation risk zone, and riparian zone limits onsite, pursuant to N.J.A.C. 7:13-5;

4. No solar panels or associated equipment is located within 25 feet of any top of bank;

5. Within a 150-foot riparian zone, no disturbance to riparian zone vegetation is located within 75 feet of any top of bank;

6. Within a 300-foot riparian zone, no disturbance to riparian zone vegetation is located within 150 feet of any top of bank;

7. No trees are cleared, cut, and/or removed in a riparian zone, unless they are completely surrounded by actively disturbed areas and growing in a hedgerow or confined within landscape islands, or similar structures, within a parking area; and

8. No more than one-quarter of an acre of riparian zone vegetation is cleared, cut, and/or removed.

7:13-9.12 General permit 12 -- placement of one or more underground utility lines using horizontal directional drilling or underground jacking

(a) This general permit authorizes the placement of one or more underground utility lines within a regulated area through horizontal directional drilling, or through underground jacking that does not qualify for the exemption at N.J.A.C. 7:13-2.5(a)13; provided the conditions at N.J.A.C. 7:13-6.7 are met and:

1. The regulated water is not disturbed in any way except for temporary disturbance associated with soil borings necessary to ensure that the project is viable;

2. No trees are cleared, cut, and/or removed in a riparian zone;

3. All disturbed areas in the flood hazard area are restored to their original topography upon completion of the regulated activity;

4. Where the utility line is drilled or jacked beneath a bridge or culvert, all work is accomplished without displacing or damaging the bridge or culvert;

5. Where the utility line is drilled or jacked beneath an open channel, the top of the line is placed at least four feet below the channel invert and remains nominally horizontal at this depth at least 10 feet beyond the top of each bank;

6. The utility line is sealed to ensure that there will be no leakage or discharge in a regulated area;

7. Receiving pits shall be located outside of the floodway and riparian zone;

8. Where practicable, no manhole is constructed within 25 feet of any top of bank;

9. The top of any manhole in a flood hazard area is flush with the ground and has a watertight cover;

10. Potable water is used in the drilling and/or utility line installation;

11. NSF 60/61 certified drilling fluids and additives are used to conduct drilling operations;

12. A contingency plan for drilling operations, including preparedness procedures to minimize environmental impact from inadvertent returns is submitted; and

13. Any abandoned boreholes are filled in accordance with the following:

i. Any borehole that penetrates 25 or more vertical feet below land surface shall be decommissioned in accordance with N.J.A.C. 7:9D, using Department-approved grouts, as listed at N.J.A.C. 7:9D. (Well Construction and Maintenance; Sealing of Abandoned Wells Rules). The upper 25 vertical feet plus final borehole diameter of any open borehole, annular space between the borehole and any pipe or casing remaining in the borehole, and inside the pipe or casing must be grouted in accordance with N.J.A.C. 7:9D. The grout shall be placed through either a drill rod or tremie extended down the borehole from the entry point until it reaches a vertical depth of 25 feet plus the hole diameter below the land surface. Any borehole shallower than 25 vertical feet below land surface shall be decommissioned using a Department-approved grout, clean fill, or cuttings from the borehole; and

ii. The top five vertical feet of all entry and exit points shall be grouted with cement or concrete.

SUBCHAPTER 10. INDIVIDUAL PERMITS

7:13-10.1 Requirement to obtain an individual permit

(a) A person shall obtain an individual permit [under] **pursuant to** this subchapter in order to undertake any activity that does not meet the requirements of **an exemption pursuant to N.J.A.C. 7:13-2.5,** a [permit-by-rule] **permit-by-registration** pursuant to N.J.A.C. 7:13-7, an authorization [under] **pursuant to** a general permit-by-certification pursuant to N.J.A.C. 7:13-8, an authorization [under] **pursuant to** a general permit pursuant to N.J.A.C. 7:13-9, or a coastal permit [under] **pursuant to** the

circumstances set forth at N.J.A.C. 7:13-2.1(b)6.

(b) (No change.)

7:13-10.2 Duration of an individual permit

(a) An individual permit for any regulated activity other than those identified at (b) below is valid for five years from the date of issuance, and may be extended one time for five years pursuant to N.J.A.C. 7:13-[22.3]**22.4**.

(b) (No change.)

(c) All regulated activities authorized by an individual permit shall immediately cease if the permit expires, including any extension thereof [under] **pursuant to** N.J.A.C. 7:13-[22.3]**22.4**. If a person intends to commence or continue regulated activities that had been authorized [under] **pursuant to** an individual permit that has expired, the person shall obtain a new individual permit [under] **pursuant to** this chapter authorizing the regulated activities.

1. – 2. (No change.)

7:13-10.4 Obligations pursuant to the National Flood Insurance Program

(a) This section sets forth requirements that must be satisfied prior to commencing activities located within a FEMA-adopted regulatory floodway, or within a FEMA-adopted special flood hazard area with no regulatory floodway, in order to meet the requirements of FEMA's National Flood Insurance Program, pursuant to 44 CFR 60.3.

(b) The Department shall issue an individual permit for a regulated activity or project within the areas identified at (a) above only if the applicant does one of the following, as appropriate:

1. Where activities are proposed within a FEMA-adopted regulatory floodway, and the

proposed activities would result in no net increase (0.00 feet) to the 100-year flood elevation as depicted on FEMA flood mapping, the applicant shall provide an engineering certification to the local floodplain administrator having jurisdiction over the site confirming that the project will meet FEMA's no rise criteria;

2. Where activities are proposed within a FEMA-adopted regulatory floodway, and the proposed activities would result in a net increase (greater than 0.00 feet) to the 100-year flood elevation as depicted on FEMA flood mapping, the applicant shall apply for and obtain a Conditional Letter of Map Revision (CLOMR) from FEMA; or

3. Where activities are proposed within a FEMA-adopted special flood hazard area with no designated regulatory floodway, and the proposed activities would, when combined with all other existing and anticipated development within the flood hazard area, result in a cumulative increase of greater than 0.20 feet in the 100-year flood elevation depicted on FEMA flood mapping, the applicant shall apply for and obtain a Conditional Letter of Map Revision (CLOMR) from FEMA.

(c) For the purposes of this section, hydraulic calculations shall be rounded to the nearest one-hundredth of a foot. For example, a change in the water surface profile of 0.005 feet, or more, would round up to 0.01 feet and, therefore, trigger the requirement to obtain a CLOMR for activities within a floodway pursuant to (b)2 above. Conversely, a change in the water surface profile of 0.004 feet would round down to 0.00 feet and, therefore, meet the no net increase standard at (b)1 above.

(d) Prior to the Department's approval of the individual permit, a copy of the no rise certification or approved CLOMR required at (b) above shall be uploaded to the Department's online portal at https://www.nj.gov/dep/online.

(e) Nothing in this section shall be construed to contradict or obviate the requirements of the National Flood Insurance Program.

SUBCHAPTER 11. AREA-SPECIFIC REQUIREMENTS FOR INDIVIDUAL PERMITS

7:13-11.2 Requirements for a regulated activity in a riparian zone

(a) (No change.)

(b) The Department shall issue an individual permit for any regulated activity or project [that results in clearing, cutting, and/or removal of vegetation] in a riparian zone only if:

1. (No change.)

2. Clearing, cutting, and/or removal of riparian zone vegetation is minimized through methods including:

i. (No change.)

ii. Limiting construction **to the maximum extent practicable** to actively disturbed areas and/or areas wherein the benefits and functions of a riparian zone are considerably deteriorated and impaired as a result of previous development, such as:

(1) – (5) (No change.)

3. All existing onsite impervious surface located within 25 feet of the top of bank is removed and the riparian zone is replanted with vegetation in accordance with (z) below, except in the following cases:

[i. The regulated activity lies within an actively disturbed area adjacent to a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water;]

[ii.] **i.** The applicant demonstrates that removing and/or preventing the replacement of the existing impervious surface [under] **pursuant to** this paragraph would likely exacerbate flooding or erosion, expose hazardous substances or solid waste, or otherwise threaten public health, safety, welfare, and/or the environment. In such a case, all other portions of the riparian zone within 25 feet of the top of bank shall, to the extent feasible and protective of public health, safety, and welfare, and the environment, be replanted with vegetation in accordance with (z) below; [or]

[iii.] **ii.** The applicant demonstrates that removing and/or preventing the replacement of the existing impervious surface [under] **pursuant to** this paragraph would prevent reasonable use or access to the site and/or cause an unreasonable burden upon the applicant. For example, lawfully existing pavement around a building, which is located within 25 feet of a top of bank, may provide essential access to and around the building and the removal of such impervious surface would result in noncompliance with local building or fire codes and/or disrupt normal access to and throughout the facility. In such a case, all other portions of the riparian zone within 25 feet of the top of bank shall, to the extent feasible, be replanted with vegetation in accordance with (z) below; **or**

iii. The impervious surface located within 25 feet of the top of a bank is associated with a lawfully existing railroad or public roadway and the public transportation entity having authority over the structure indicates that removing and replanting all, or a portion of, the existing impervious surface pursuant to this paragraph is impracticable or would result in an unsafe condition;

4. The requirements for each specific regulated activity described [in] **at** (g) through (y) below are satisfied[, including mitigation in accordance with N.J.A.C. 7:13-13, as applicable];

5. All areas from which riparian zone vegetation is temporarily cleared, cut, or removed are replanted in accordance with (z) below; [and]

6. Except for regulated activities identified at (f) below and/or as provided at N.J.A.C. 7:13-13.4(c), mitigation in accordance with N.J.A.C. 7:13-13 is provided as follows:

i. Where a regulated activity is located within a 300-foot riparian zone, mitigation is required for the total area of vegetation that is cleared, cut, and/or removed pursuant to N.J.A.C. 7:13-13.4(b)1;

ii. Where a regulated activity is located within a 150-foot riparian zone, and permitted activities conducted subsequent to (the effective date of this rulemaking) individually or

cumulatively results in 2,000 square feet or greater of clearing, cutting, and/or removal of vegetation, mitigation is required for the total area of vegetation that is cleared, cut, and/or removed pursuant to N.J.A.C. 7:13-13.4(b)2; and

iii. Where a regulated activity is located within a 50-foot riparian zone, and permitted activities conducted subsequent to (the effective date of this rulemaking) individually or cumulatively results in 0.1 acres or greater of clearing, cutting, and/or removal of vegetation, mitigation is required for the total area of vegetation that is cleared, cut, and/or removed pursuant to N.J.A.C. 7:13-13.4(b)3; and

[6.] **7.** (No change in text.)

(c) The Department shall issue an individual permit for a regulated activity that results in clearing, cutting, and/or removal of vegetation within 25 feet of any top of bank only in the following circumstances:

[1. The regulated activity lies within an actively disturbed area adjacent to a lawfully existing bulkhead, retaining wall, or revetment along a tidal water or impounded fluvial water;]

Recodify existing 2.-4. as **1.-3.** (No change in text.)

(d) (No change.)

(e) Table 11.2 below establishes the maximum allowable area of riparian zone vegetation that can be temporarily or permanently cleared, cut, and/or removed associated with the regulated activities identified at (g) through (y) below [without Department approval based upon additional justification, as set forth in (g)1, (h)1, (i)2, (j)1, (k)1, (q)1, (t), (u)1, (v), or (w)1 below**,** or Department approval of a hardship exception. Where the regulated activity located within a 300-foot riparian zone, is an activity identified at (r), (s), or (y) below, or the total amount of clearing, cutting, and/or removal of riparian zone vegetation exceeds the limits in Table 11.2,]**. Where an applicant seeks authorization to temporarily or permanently clear, cut, and/or remove an area of riparian zone vegetation in excess of that**

which is specified at Table 11.2, the applicant shall provide additional justification for the proposed disturbance, as set forth at (g)1, (h)1, (i)2, (j)1, (k)1, (q)1, (t), (u)1, (v), or (w)1 below or, where these provisions cannot be met, request a hardship exception pursuant to N.J.A.C. 7:13-15.1. Riparian zone vegetation that is temporarily cleared, cut, and/or removed to conduct a regulated activity, access an area where regulated activities will be conducted, or otherwise accommodate a regulated activity shall be replanted in accordance with (z) below. Riparian zone mitigation **for disturbance not covered by (z) below** is required in accordance with N.J.A.C. 7:13-13.4**(b)**. Activities within riparian zones that are not subject to the limits set forth [in] **at** Table 11.2**, and which do not require riparian zone mitigation,** are identified [in] **at** (f) below.

1. – 3. (No change.)

(f) The following regulated activities are not subject to the limits set forth [in] **at** Table 11.2 below, and shall not be included when calculating the total area of vegetation to be cleared, cut, and/or removed [under] **pursuant to** (e)1 above **or the total area of riparian zone mitigation that is required pursuant to N.J.A.C. 7:13-13.4**:

1.-4. (No change.)

5. Any disturbance to riparian zone vegetation that is completely submerged during normal flow conditions in a regulated water; **and**

6. Any regulated activity along a lawfully existing public roadway that results in a net loss of less than one acre of riparian zone vegetation, provided the activity is:

i.-iv. (No change.)

v. Situated on a lawfully existing roadway embankment, or within an area adjacent to a lawfully existing roadway, which was disturbed for the initial construction of the roadway[; and]**.**

[7. Any clearing, cutting, and/or removal of riparian zone vegetation within a truncated portion of a riparian zone. For the purposes of this paragraph, an area is considered to be a truncated portion of a

riparian zone if:

i. The area is separated from a regulated water by a lawfully existing railroad or public roadway;

ii. The area does not slope toward the regulated water; and

iii. Stormwater runoff from the area does not drain into the regulated water.]

Table 11.2

(No change.)

(g)-(y) (No change.)

(z) All riparian zone vegetation that is **temporarily** cleared, cut, and/or removed to conduct a regulated activity, access an area where regulated activities will be conducted, or otherwise accommodate a regulated activity shall be replanted immediately after completion of the regulated activity, unless prevented by seasonal weather, in which case the vegetation shall be replanted as soon as conditions permit. Portions of the riparian zone occupied by an authorized structure need not be replanted.

1. Except as provided [in] **at** (z)2 below, the [vegetation replanted shall] **applicant shall prepare and submit for review and approval by the Department a restoration plan that includes the following**:

i. [Consist] **A planting plan that consists** of **native** vegetation of equal or greater ecological function and value as the vegetation that was cleared, cut, or removed.

(1) For example, herbaceous vegetation may be replaced with the same type of vegetation or with trees, but the trees in forested areas must be replaced with trees of equal or greater density and ecological function and value[; and]**.**

(2) In an actively disturbed area, the vegetation may be replaced with the same type of vegetation that was cleared, cut, or removed, or with another kind of vegetation typical of an actively disturbed area. For example, lawn grass may be replaced with lawn grass, garden plants, or agricultural crops;

[ii. Consist of native, non-invasive vegetation, except in an actively disturbed area. In an actively disturbed area, the vegetation may be replaced with the same type of vegetation that was cleared, cut, or removed, or with another kind of vegetation typical of an actively disturbed area. For example, lawn grass may be replaced with garden plants or agricultural crops.]

ii. Planting specifications, including proposed seed mixes, and the size, type, and quantity of each species to be planted to restore the area of temporary disturbance;

iii. A brief narrative description of the restoration plan; and

iv. An invasive species control plan.

2. (No change.)

3. The applicant shall provide notice to the Department upon completion of planting that the site is revegetated and stable through the Department's online permitting system at https://www.nj.gov/dep/online.

7:13-11.3 Requirements for a regulated activity in a floodway

(a)-(b) (No change.)

(c) Notwithstanding (b) above, the Department shall issue an individual permit for the following regulated activities in a floodway, provided all other requirements of this chapter are satisfied for each activity:

[1. The construction or conversion of a building on a pier in the Hudson River, provided the requirements of the Coastal Zone Management Rules at N.J.A.C. 7:7-9.46 are satisfied, in accordance with N.J.A.C. 7:13-12.5(e) or (f), as appropriate;]

[2.] **1.** The elevation**,** [or] reconstruction**, or other improvement** of a lawfully existing building, **such as the construction of a horizontal and/or vertical addition,** in accordance with N.J.A.C. 7:13-12.5(g);

[3. The construction of a horizontal and/or vertical addition to a lawfully existing building, in accordance with N.J.A.C. 7:13-12.5(h);]

Recodify existing 4.-9. as **2.-7.** (No change in text.)

[10.] **8.** The placement of fill in a portion of a [manmade] **human-created** impoundment of water, such as a pond or lake, provided:

i.-iv. (No change.)

7:13-11.4 Requirements for a regulated activity in a flood fringe

(a)-(b) (No change.)

(c) The Department shall issue an individual permit for a regulated activity (or combination of regulated activities) in a flood fringe only if one of the following is satisfied:

1. The regulated activity is not subject to the flood storage volume displacement limits of this section, in accordance with (d) below;

2. The regulated activity will displace no flood storage volume onsite, as calculated for [both] the volume between the [flood hazard area design flood] **climate-adjusted flood elevation and the 100-year flood, the volume between the 100-year flood** and the 10-year flood, and the volume between the 10-year flood and the ground, in accordance with (e) below; or

3. The regulated activity will displace no more than 20 percent of the flood storage volume onsite, as calculated for [both] the volume between the [flood hazard area design flood] **climate-adjusted flood elevation and the 100-year flood, the volume between the 100-year flood** and the 10-year flood, and the volume between the 10-year flood and the ground, and all flood storage displacement onsite will be compensated offsite as follows:

i. – iii. (No change.)

(d) The following regulated activities (or combination of regulated activities) are not subject to

the flood storage volume displacement limits of this section, provided the activity is not associated with a major Highlands development:

1. Any activity located in a [tidal] flood hazard area **that is tidally controlled for the 10-year flood, the 100-year flood, and flooding to the climate-adjusted flood elevation. If one or more of these floods is fluvial, then the regulated activity must meet the requirements at (c) above for the fluvial portion of the flood hazard area. For example, if an area is subject to fluvial flooding up to the 100-year flood elevation, but is tidally controlled between the 100-year flood elevation and the climate-adjusted flood elevation, flood storage displacement calculations would be necessary only for that portion of the flood hazard area below the 100-year flood elevation**;

2.-4. (No change.)

5. The construction, reconstruction, relocation, elevation, or enlargement of one single-family home or duplex provided:

i.-ii. (No change.)

iii. Any enclosed area beneath the [flood hazard area design] **climate-adjusted** flood elevation meets the requirements [of] **at** N.J.A.C. 7:13-[12.5(p)]**12.5(r)**; and

iv. (No change.)

6.-11. (No change.)

(e) The following shall apply to any regulated activity that is designed to displace no flood storage volume in accordance with (c)2 above:

1.-2. (No change.)

3. The proposed flood storage volume onsite (V_P) shall be greater than or equal to the existing flood storage volume onsite (V_E), for [both] the volume between the [flood hazard area design flood] **climate-adjusted flood elevation and the 100-year flood elevation, the volume between the 100-year flood elevation** and the 10-year flood **elevation**, and the volume between the 10-year flood **elevation** and

the ground. Certain considerations should be made in calculating both (V_P) and (V_E), as set forth [in] **at** (j) below. Additional flood storage volume can also be created onsite to compensate for proposed flood storage displacement in accordance with (m) below.

(f) Table 11.4 below sets forth the percentage of flood storage volume that a regulated activity (or combination of activities) can lawfully displace in various geographic areas of New Jersey. As described in further detail in this section below, a project cannot displace more than 20 percent of the flood storage volume that originally existed onsite, and all proposed displacement onsite must ultimately be compensated offsite. Table 11.4 indicates the dates from which the original and proposed flood storage volumes should be calculated for different geographic areas. Flood storage calculations shall be performed for [both] the volume between the [flood hazard area design flood] **climate-adjusted flood elevation and the 100-year flood elevation, the volume between the 100-year flood elevation** and the 10-year flood **elevation**, and the volume between the 10-year flood **elevation** and the ground, as described at (j) below, to show that the 20-percent and zero-percent limitations are met for [both] **all** of these areas.

Table 11.4

ALLOWABLE PERCENTAGES OF FLOOD STORAGE VOLUME DISPLACEMENT

[(Which shall be met for both the volume between the flood hazard area design flood and the 10-year flood, and the volume between the 10-year flood and the ground)]

Geographic Area	Maximum onsite percentage of flood storage volume that a project can lawfully displace (P_{ONSITE})	Maximum total percentage of flood storage volume that a project can lawfully displace including all offsite credits (P_{TOTAL})

Central Passaic Basin	20 percent of flood storage that existed onsite on March 25, 1977**, up to the 100-year flood elevation, and on (the effective date of this rulemaking), above the 100-year flood elevation**	0 percent of flood storage that existed onsite on March 25, 1977**, up to the 100-year flood elevation, and on (the effective date of this rulemaking), above the 100-year flood elevation**
Highlands Preservation Area*	20 percent of flood storage that existed onsite on January 31, 1980, **up to the 100-year flood elevation, and on (the effective date of this rulemaking), above the 100-year flood elevation**	0 percent of flood storage that existed onsite on August 10, 2004, **up to the 100-year flood elevation, and on (the effective date of this rulemaking), above the 100-year flood elevation**
Remainder of State	20 percent of flood storage that existed onsite on January 31, 1980, **up to the 100-year flood elevation, and on (the effective date of this rulemaking), above the 100-year flood elevation**	0 percent of flood storage that existed onsite on November 5, 2007, **up to the 100-year flood elevation, and on (the effective date of this rulemaking), above the 100-year flood elevation**

*If associated with major Highlands development, as defined at N.J.A.C. 7:38-1.4.

(g) The following shall apply to any project located within the Central Passaic Basin that does not meet the requirements [of] **at** (d) or (e) above:

1. The onsite percentage of flood storage volume that a project displaces shall be determined as follows:

i. Calculate the base flood storage volume onsite on March 25, 1977 (V_{1977}) **for the volume**

between the 100-year flood elevation and 10-year flood elevation, and the volume between the 10-year flood elevation and ground elevation, and on (the effective date of this rulemaking) ($V_{YEAR\ OF\ ADOPTION}$) for the volume between the climate-adjusted flood elevation and 100-year flood elevation according to (j) and (k) below;

ii. (No change.)

iii. Calculate the percentage of flood storage volume displaced onsite (P_{ONSITE}) as follows:

$P_{ONSITE}=(V_{1977} - V_P)/V_{1977}$ **for volumes below the 100-year flood elevation or ($V_{YEAR\ OF\ ADOPTION} - V_P)/V_{\{YEAR\ OF\ ADOPTION\}}$ for volume between the 100-year flood elevation to the climate-adjusted flood elevation.**

2. The total percentage of flood storage volume that a project displaces, including any offsite compensation, shall be determined as follows:

i. (No change.)

ii. Calculate the total percentage of flood storage volume displaced (P_{TOTAL}) as follows:

$P_{TOTAL} = (V_{1977} - V_P - V_C)/V_{1977}$ **for volumes below the 100-year flood elevation or ($V_{YEAR\ OF\ ADOPTION} - V_P - V_C)/V_{YEAR\ OF\ ADOPTION}$ for volume between the 100-year flood elevation to the climate-adjusted flood elevation.**

(h) The following shall apply to any major Highlands development within the Highlands Preservation Area that does not meet the requirements [of] **at** (d) or (e) above:

1. The onsite percentage of flood storage volume that a project displaces shall be determined as follows:

i. Calculate the base flood storage volume onsite on January 31, 1980 (V_{1980}) **for the volume between the 100-year flood elevation and 10-year flood elevation, and the volume between the 10-year flood elevation and ground elevation, and on (the effective date of this rulemaking) ($V_{YEAR\ OF\ ADOPTION}$) for the volume between the climate-adjusted flood elevation and 100-year flood elevation**

according to (j) and (k) below;

ii. (No change.)

iii. Calculate the percentage of flood storage volume displaced onsite (P_{ONSITE}) as follows:

$P_{ONSITE} = (V_{1980} - V_P)/V_{1980}$ **for volumes below the 100-year flood elevation or ($V_{YEAR\ OF\ ADOPTION} - V_P)/V_{YEAR\ OF\ ADOPTION}$ for volume between the 100-year flood elevation to the climate-adjusted flood elevation.**

2. The total percentage of flood storage volume that a project displaces, including any offsite compensation, shall be determined as follows:

i. Calculate the base flood storage volume onsite on November 5, 2007 (V_{2007}) **for the volume between the 100-year flood elevation and 10-year flood elevation, and the volume between the 10-year flood elevation and ground elevation, and on (the effective date of this rulemaking) ($V_{YEAR\ OF\ ADOPTION}$) for the volume between the climate-adjusted flood elevation and 100-year flood elevation** according to (j) and (k) below;

ii. (No change.)

iii. Calculate the total percentage of flood storage volume displaced (P_{TOTAL}) as follows:

$P_{TOTAL} = (V_{2004} - V_P - V_C)/V_{2004}$ **for volumes below the 100-year flood elevation or ($V_{YEAR\ OF\ ADOPTION} - V_P - V_C)/V_{YEAR\ OF\ ADOPTION}$ for volume between the 100-year flood elevation to the climate-adjusted flood elevation.**

(i) The following shall apply to any project located outside the Central Passaic Basin (except for major Highlands development as described at (h) above) that does not meet the requirements [of] **at** (d) or (e) above:

1. The onsite percentage of flood storage volume that a project displaces shall be determined as follows:

i. Calculate the base flood storage volume onsite on January 31, 1980 (V_{1980}) **for the volume**

between the 100-year flood elevation and 10-year flood elevation, and the volume between the 10-year flood elevation and ground elevation, and on (the effective date of this rulemaking) ($V_{YEAR\ OF\ ADOPTION}$) for the volume between the climate-adjusted flood elevation and 100-year flood according to (j) and (k) below;

ii. (No change.)

iii. Calculate the percentage of flood storage volume displaced onsite (P_{ONSITE}) as follows:

$P_{ONSITE} = (V_{1980} - V_P)/V_{1980}$ **for volumes below the 100-year flood elevation or ($V_{YEAR\ OF\ ADOPTION} - V_P)/V_{YEAR\ OF\ ADOPTION}$ for volume between the 100-year flood elevation to the climate-adjusted flood elevation.**

2. The total percentage of flood storage volume that a project displaces, including any offsite compensation, shall be determined as follows:

i. Calculate the base flood storage volume onsite on November 5, 2007 (V_{2007}) **for the volume between the 100-year flood elevation and 10-year flood elevation, and the volume between the 10-year flood elevation and ground elevation, and on (the effective date of this rulemaking) ($V_{YEAR\ OF\ ADOPTION}$) for the volume between the climate-adjusted flood elevation and 100-year flood elevation** according to (j) and (k) below;

ii. (No change.)

iii. Calculate the total percentage of flood storage volume displaced (P_{TOTAL}) as follows:

$P_{TOTAL} = (V_{2007} - V_P - V_C)/V_{2007}$ **for volumes below the 100-year flood elevation or ($V_{YEAR\ OF\ ADOPTION} - V_P - V_C)/V_{YEAR\ OF\ ADOPTION}$ for volume between the 100-year flood elevation to the climate-adjusted flood elevation.**

(j) The following factors shall be considered when calculating flood storage volumes [under] **pursuant to** this section:

1. (No change.)

2. The flood storage displacement limits in this section apply to [both] the volume between the [flood hazard area design flood] **climate-adjusted flood elevation and the 100-year flood elevation, the volume between the 100-year flood elevation** and the 10-year flood **elevation**, and the volume between the 10-year flood **elevation** and the ground. As such, applicants must demonstrate that a proposed project meets these limits for [both] **all** floods unless [the]**:**

i. The entire project lies above the 10-year flood elevation**, in which case, demonstration that a proposed project meets these limits is only necessary for the volume between the 10-year flood elevation and the 100-year flood elevation and the volume between the 100-year flood elevation and the climate-adjusted flood elevation; or**

ii. The entire project lies above the 100-year flood elevation, in which case, demonstration that a proposed project meets these limits is only necessary for the volume between the 100-year flood elevation and the climate-adjusted flood elevation.

3. Except as provided [in] **at** (j)4 below, flood storage displacement proposed above the [10-year] **100-year** flood elevation onsite must be compensated for by the creation of flood storage above the [10-year] **100-year** flood elevation. Similarly, flood storage displacement proposed **between the 100-year flood elevation and 10-year flood elevation onsite, and flood storage displacement proposed** below the 10-year flood elevation onsite must be compensated for by the creation of flood storage **between the 100-year flood elevation and 10-year flood elevation, and** below the 10-year flood elevation**, respectively**. This applies whether the compensation occurs onsite, as described at (m) below, or offsite, as described at (o) below.

4. In cases where a site lies predominately below the 10-year flood elevation **or predominately below the 100-year flood elevation** and it is demonstrated that it is not possible to compensate onsite for all flood storage displacement proposed above the 10-year flood elevation **and/or above the 100-year flood elevation, respectively**, the applicant shall pursue the following options in the order listed below:

i. The applicant shall create onsite flood storage volume above the 10-year flood elevation **and/or above the 100-year flood elevation, as appropriate**, in accordance with (m) below, to the maximum extent practicable;

ii. If the applicant cannot fully compensate onsite for all flood storage displacement [under] **pursuant to** (j)4i above, offsite flood storage volume shall be created above the 10-year flood elevation **and/or above the 100-year flood elevation, as appropriate,** in accordance with (o) below to the maximum extent practicable; and

iii. If the applicant cannot fully compensate for flood storage displacement [under] **pursuant to** either (j)4i and ii above, flood storage volume shall be created below the 10-year flood elevation **and/or below the 100-year flood elevation, as appropriate**, either onsite or offsite, for all flood storage displacement that is unable to be created in accordance with (j)4i and ii above.

5. In cases where the 10-year flood elevation is not provided on State or Federal flood maps, calculations can instead be performed using a flood depth halfway between the [flood hazard area design] **100-year** flood elevation and the lowest ground elevation within the flood fringe onsite. For example, at a given cross-section through a site, if the [flood hazard area design] **100-year** flood elevation is 90.0 feet [NGVD] **NAVD 88** and the lowest ground elevation within the flood fringe is 80.0 feet [NGVD] **NAVD 88**, flood storage calculations can be performed at that cross-section using a flood elevation of 85.0 feet [NGVD] **NAVD 88** at that location, if the 10-year flood elevation is unknown. Furthermore, this halfway depth must be determined separately for each cross-section in the flood fringe, and at close intervals throughout the site in order to provide an accurate estimate of the upper and lower flood storage volumes.

6.-9. (No change.)

(k) The base flood storage volume onsite (V_{1977}, V_{1980}, V_{2004}, [and/or]**,** V_{2007}, **and/or** $V_{\text{YEAR OF ADOPTION}}$) is the volume of floodwater that was able to occupy the flood fringe onsite on the appropriate date shown [in] **at** Table 11.4 **above** depending on the geographic location of the project. To determine

the base flood storage volume, calculate the volume of space within the flood fringe between the flood elevation and the ground surface as it existed on the appropriate date [in] **at** Table 11.4, and subtract the volume occupied by any structures that lawfully existed on that date.

(l)-(o) (No change.)

(p) Flood storage volume can be created offsite to compensate for regulated activities that displace flood storage as described [in] **at** (o) above**;** provided the offsite compensation:

1. (No change.)

2. Is not separated from the proposed flood storage displacement by a water control structure, such as a bridge, culvert**,** or dam, unless the applicant demonstrates that the water control structure causes no significant change in the [flood hazard area design] **climate-adjusted** flood elevation;

3.-8. (No change.)

(q) For the purposes of (m)1 and (o)1 above, flood storage volume can be created by removing material previously placed within the flood fringe, such as fill or structures, provided:

1. (No change.)

2. The material to be removed is not associated with an activity [permitted-by-rule under] **authorized by a permit-by-registration pursuant to** N.J.A.C. 7:13-[6]**7**;

3. – 5. (No change.)

(r) For the purposes of (m)2 and (o)2 above, flood storage volume can be created by excavating material from below the surface of the ground, provided:

1. (No change.)

2. The excavation is located below the [flood hazard area design] **climate-adjusted** flood elevation;

3.-7. (No change.)

(s)-(w) (No change.)

7:13-11.5 Requirements for a regulated activity in an inundation risk zone

(a) This section sets forth specific design and construction standards that apply to the construction or improvement of the structures described at (a)1 and 2 below within an inundation risk zone. This section does not apply to any non-critical commercial, industrial, hospitality, gaming, or recreational structures.

1. Any residential or critical building, except for repair and maintenance activities that do not alter the building's height, footprint area, or habitable area; and

2. Any infrastructure, excluding buildings, that is critical for emergency response and recovery during and after a flood, or that poses a risk to public health, safety, and welfare should it be damaged or unable to perform its intended functions during or after a flood, except as follows:

i. The construction of drainage improvements and associated stormwater management structures, which are necessary to ameliorate periodic inundation along a lawfully existing roadway;

ii. Safety or state of good repair improvements to a lawfully existing railroad or public roadway, such that there is no reasonable opportunity to meet the requirements at (b) below as part of the project's overall scope and purpose; or

iii. Where the applicant is a public transportation entity, any project that reached a milestone in its development and design, prior to (the effective date of this rulemaking), such that meeting the requirements at (b) below would necessitate reevaluation of the selected preferred alternative or equivalent milestone, a significant redesign, or significant modifications or additions to private land acquisition plans, whether in fee or easement.

(b) The Department shall issue an individual permit pursuant to this section, only if the applicant:

1. Provides the following data with regard to potential permanent or daily inundation expected within the Inundation Risk Zone, as determined in accordance with N.J.A.C. 7:13-3.4(c):

i. The mean higher high-water elevation(s) nearest the site;

ii. The minimum amount(s) of inundation that would cause the lowest portion of the project site to be inundated on a regular basis, such as during daily or seasonal high tides, and the corresponding maximum depth of inundation on the site; and

iii. Where the project involves construction of or improvements to a building that is subject to this section, the minimum amounts of inundation that would cause the lowest portion of the primary roadway(s) providing regular or emergent access to the site to be inundated daily, and the corresponding maximum depth of inundation on the roadway;

2. Prepares and provides an Inundation Risk Assessment that analyzes the potential adverse impacts of inundation on the site of the regulated activity, including the risk of:

i. Injury to, or loss of life of, people inhabiting or relying upon the subject building or infrastructure due to inundation, including the risk that individuals may become isolated from evacuation routes;

ii. Damage to, or loss of use of, the subject building or infrastructure due to inundation, including the potential for disruption of public transportation, government services, or commerce; and

iii. Increases in short- and long-term costs due to inundation, such as potential costs associated with evacuation, storm response, and recovery, including the potential costs of operation, maintenance, repair, replacement, reconstruction, demolition, and removal of structures; and

3. Demonstrates the use of all reasonable measures for accomplishing the basic purpose of the project in a manner that is likely to avoid or substantially reduce the potential for adverse impacts on public health, safety, and welfare, and the environment, including:

i. Alteration of onsite topography that reduce or eliminate inundation of the project;

ii. Alternative onsite configurations that reduce or eliminate inundation of the project, such as onsite configurations that locate as much of the project as practicable outside the inundation risk zone or upon portions of site where less inundation is anticipated; and

iii. For buildings designated as Flood Design Class 4, and infrastructure as described at (a)2 above, the applicant demonstrates that there are no practicable alternative offsite locations to accomplish the purpose of the proposed regulated activity that would meet the requirements of this section.

(c) Any new or substantially improved habitable building that is financed or subsidized by public funds, other than a single-family home or duplex, shall permanently incorporate signage on the property indicating projected sea level elevations in accordance with (c)1 through 5 below. Examples of signage that meet the requirements of this subsection are provided in the Flood Hazard Area Technical Manual pursuant to N.J.A.C. 7:13-1.3.

1. Each building subject to this subsection shall incorporate at least one sign, which is in the inundation risk zone, and prominently displayed as close in proximity to the entrance. The signage shall be affixed to the street facing façade of the building or on a kiosk, placard, or informative display, located on the walkway accessing the building within the line of sight of anyone approaching the entrance;

2. Where a building has multiple entrances, signage shall be located by the primary entrance to the building, provided that the entrance is located within an inundation risk zone. Where only a portion of a building subject to this subsection is located within an inundation risk zone, signage shall be located by any entrance located within the inundation risk zone, or closest to the portion of the building in the inundation risk zone;

3. The signage shall include the year the sign is installed, as well as illustrate the sea level rise data set forth at Table 11.5 below, which provides projections for years 2050, 2070, and 2100 assuming a moderate climate pollutant emissions scenario, and additionally indicates the 17 percent exceedance value as the "high" projection and the 83 percent exceedance value as the "low" projection for sea level rise within the inundation risk zone;

4. The information required pursuant to (c)3 above shall be depicted on each sign using letters and numbers of no less than two inches in height and shall be of a font and color that are readily legible to individuals entering the building; and

5. The signage shall be affixed or constructed to correspond with the elevations set forth at Table 11.5 below. For example, the projection at Table 11.5 indicates that sea levels are likely to rise between 0.9 feet and 2.1 feet by 2050. The bottom of the 2050 sea level rise indicator on the signage shall, therefore, be set 0.9 feet above current sea level and the top of the 2050 sea level rise indicator shall be set 2.1 feet above current sea level. If the ground elevation on which the building is situated lies above one or more projected sea level elevations set forth at Table 11.5, the signage shall indicate only those projections located above the subject ground elevation. Where the entire building is situated on land that has been raised above all projected sea level elevations set forth at Table 11.5, signage pursuant to this subsection is not required.

Table 11.5

PROJECTED SEA LEVEL RISE ELEVATIONS BY YEAR (ABOVE YEAR 2000 BASELINE ELEVATIONS)

Probability that sea level rise will exceed the elevations listed in this table:	2050	2070	2100

Greater than 83 percent	**0.9 feet**	**1.4 feet**	**2.0 feet**
Less than 17 percent	**2.1 feet**	**3.1 feet**	**5.1 feet**

7:13-[11.5]**11.6** Requirements for a regulated activity in or along a regulated water with fishery resources

(a) – (c) (No change.)

(d) Except as provided at (e) below, certain activities are prohibited during times when fish are breeding or are especially sensitive to disturbance. The following activities are prohibited during the restricted periods listed [in] **at** Table [11.5] **11.6** below:

1.-2. (No change.)

Table [11.5] **11.6**

RESTRICTED TIME PERIODS FOR REGULATED WATERS WITH FISHERY RESOURCES

Water and classification	**Time period (inclusive) during which activities are prohibited**
1. Trout Waters	
• [All trout] **Trout** production waters [except rainbow trout] **where only Brook and/or Brown Trout are present**	September 15 through March 15
• **Trout production waters where only** Rainbow [trout] **Trout** are present [production waters]	February 1 through April 30
• **Trout production waters where Brook and/or Brown Trout in addition to Rainbow Trout are present**	**September 15 through April 30**

• Trout stocked waters • Trout maintenance waters • All regulated waters located within one mile upstream of a trout stocked or a trout maintenance water	March 15 through June 15
2. Non-Trout Waters	
• Regulated waters that support [general game fish] **warm water species** located north of Interstate 195	May 1 through July 31
• Regulated waters that support [general game fish] **warm water species** located south of Interstate 195	[May] **April** 1 through June 30
• Regulated waters **located north of Interstate 195** that support pickerel	[Ice] **March 15 or ice** out **(whichever occurs first)** through April 30
• **Regulated waters located south of Interstate 195 that support pickerel**	**March 1 through April 30**
• [Regulated waters that support walleye	March 1 through May 30]
3. Anadromous Waters	
• All [unimpeded tidal regulated waters open to the Atlantic Ocean or any coastal bay • All regulated waters identified as anadromous migratory pathways] **anadromous waters**	[April] **March** 1 through June 30

• [Delaware River upstream of U.S. Route 1	April 1 through June 30 and September 1 through November 30
• Delaware River between U.S. Route 1 and Interstate 295 (Delaware Memorial Bridge) • Tidal portions of Raccoon Creek, Rancocas Creek, Crosswicks Creek, and Cooper River	March 1 through June 30 and September 1 through November 30
• All unimpeded tidal regulated waters open to the Delaware River downstream of Interstate 295 (Delaware Memorial Bridge) • Tidal portions of the Maurice River, Cohansey River, and Salem River	March 1 through June 30 and October 1 through November 30]

(e) The Department shall reduce, extend, or otherwise modify a timing restriction listed [in] **at** Table [11.5] **11.6 above** if it determines that one or more of the following requirements is satisfied:

1. (No change.)

2. A regulated activity is subject to more than one restricted time period, the combined effect of which would limit the regulated activity to fewer than 183 calendar days per year. In such a case, the Department shall [allow the regulated activity to occur for up to 183 calendar days,] **evaluate the type, location, and timing of each proposed activity and provide guidance to the applicant to develop a timeframe for which the project can be undertaken without adverse impacts to protected species;** provided the applicant demonstrates that additional measures shall be taken to reduce potential adverse impacts to fishery resources to a level acceptable to the Department. Note that the [183-calendar-day period] **timeframe** during which the Department determines that activities may occur need not be consecutive. For example, the Department may determine that restricting activities for three months in the

spring and three months in the fall best protects fishery resources in a particular case;

3.-4. (No change.)

(f) The Delaware River Basin Commission (DRBC) may impose timing restrictions in addition to those listed [in] **at** Table [11.5] **11.6** above on certain activities in waters under DRBC jurisdiction. Information related to the DRBC and its requirements can be obtained at https://www.nj.gov/drbc or by calling (609) 883-9500.

7:13-[11.6]**11.7** Requirements for a regulated activity in or affecting a present or documented habitat for threatened or endangered species

(a)-(f) (No change.)

(g) The Department shall restrict a regulated activity during times of year when a threatened or endangered species is especially sensitive to disturbance, such as during mating or migratory periods. [The Department shall not limit the regulated activity to fewer than 183 calendar days per year under this section.] **Where timing restrictions pursuant to this chapter collectively exceed 183 calendar days per year, the Department will evaluate the type, location, and timing of each proposed activity and provide guidance to the applicant to develop a timeframe for which the project can be undertaken without adverse impacts to protected species. For example, whereas a timing restriction for the Indiana Bat may prevent removal of trees during certain times of the year, other activities onsite could possibly occur during the same time period without an impact to that species.** Note that the [183-day period] **timeframe** during which the Department determines that activities may occur need not be consecutive. For example, the Department may determine that restricting activities for three months in the spring and three months in the fall best protects a threatened or endangered species in a particular case.

SUBCHAPTER 12. ACTIVITY-SPECIFIC REQUIREMENTS FOR INDIVIDUAL PERMITS

7:13-12.1 Requirements that apply to all regulated activities

(a)-(h) (No change.)

(i) Where this chapter requires consideration of potential offsite flooding impacts, the following flood events shall be analyzed:

[1. The flood hazard area design flood;]

1. Flooding to the climate-adjusted flood elevation;

2. -6. (No change.)

7:13-12.2 Requirements for stormwater management

(a)-(b) (No change.)

(c) The Department shall issue an individual permit for a stormwater management basin located within or discharging within a flood hazard area only if the following requirements are satisfied:

1. (No change.)

2. The effects of flooding and tailwater conditions on any proposed discharge are accounted for in the stormwater management calculations for the proposed basin. Tailwater conditions refer to situations where the discharge pipe will be submerged during a flood in such a way that floodwaters prevent the basin from draining properly. **Except for analyses based on the climate-adjusted flood elevation where referenced below, current flood conditions shall be used for the purposes of determining compliance with the requirements of this paragraph.** The effects of flooding and tailwater conditions are of particular concern in one or more of the following cases:

i. The basin will be overtopped and flooded [during the flood hazard area design flood] **to the climate-adjusted flood elevation**, because it is not feasible to construct the emergency spillway in accordance with (c)3 below;

ii.-iii. (No change.)

iv. The elevation of the lowest discharge orifice or weir in the basin lies below the [flood hazard area design] **climate-adjusted** flood elevation;

3. If a basin is proposed within the flood hazard area, the emergency spillway shall be constructed above the [flood hazard area design] **climate-adjusted** flood elevation where feasible, in order to prevent floodwaters from overtopping the berm and flooding the basin; and

4. If the elevation of the lowest discharge orifice or weir in the basin lies below the [flood hazard area design] **climate-adjusted** flood elevation, the discharge pipe shall be equipped with mechanical devices**,** where appropriate**,** to prevent floodwater from backing up the pipe into the basin.

7:13-12.4 Requirements for a structure

(a) (No change.)

(b) The Department shall issue an individual permit to construct or reconstruct a structure only if the entire structure is designed and constructed to:

1. Resist impact from water**,** and debris [during the flood hazard area design flood] **up to the climate-adjusted flood elevation**;

2. Resist [uplift, flotation,] **buoyancy,** collapse**,** and displacement due to hydrostatic and hydrodynamic forces resulting from [the flood hazard area design flood] **flooding up to the climate-adjusted flood elevation**;

3. – 4. (No change.)

(c) Any freestanding structure that generates or provides power, such as an electrical equipment cabinet, transformer, or emergency generator shall, where practicable, be anchored to a pedestal or otherwise elevated such that the equipment is situated at least one foot above the climate-adjusted flood elevation.

7:13-12.5 Requirements for a building

(a) This section sets forth specific design and construction standards that apply to any building proposed within[:] **any regulated area. For the purposes of this section, a building proposed to be constructed or modified within an**

[1. A flood hazard area; and

2. An] area that was previously situated in a flood hazard area, but which was filled, raised**,** or otherwise [removed from the flood hazard area after January 31, 1980, whether in accordance with or in violation of this chapter, except in the following cases] **modified to reduce or prevent flooding, such as through the construction of a flood control project, remains subject to the requirements of this section, except as follows**:

1. The area in question was filled, raised, or otherwise removed from the flood hazard area either prior to January 31, 1980, or in accordance with this chapter at the time the activity occurred; and

2. The following map revisions have been effectuated, as appropriate:

i. [A] **Where a** Department delineation is available for the site, [and] the Department approves a revision of its delineation that removes the area [in question] **where the building is located, or is proposed to be located,** from the flood hazard area; [or] **and**

ii. [No Department delineation is available for the site, but] **Where FEMA flood mapping is available for the site,** FEMA issues a Letter of Map Amendment **(LOMA) or a Letter of Map Revision based on fill (LOMR-F)** that removes the area in question from the 100-year flood plain **and the Department determines that the area where the building is located, or is proposed to be located, has been removed from the flood hazard area.**

(b) The Department shall issue an individual permit to construct, elevate, enlarge, or reconstruct a building of any kind, only if the following requirements are met:

[1. The building is designed to resist hydrostatic and hydrodynamic loads and effects of buoyancy resulting from flooding to at least one foot above the flood hazard area design flood elevation; and]

1. The applicant provides a certification from an architect or engineer confirming that the proposed building is designed in accordance with N.J.A.C. 7:13-12.4;

2. All mechanical and electrical equipment for the building is elevated at least one foot above the climate-adjusted flood elevation, unless the following requirements are met:

i. The applicant demonstrates it is not feasible to elevate the equipment one foot above the climate-adjusted flood elevation and instead elevates it as close to this elevation as is feasible; and

ii. The applicant isolates the equipment from coming into contact with floodwaters, unless the applicant certifies that such equipment is designed to operate in submerged conditions;

3. Where a building is proposed to be constructed, reconstructed, or elevated, the applicant demonstrates that every practicable effort has been made to locate the building on portions of the site where higher ground exists within a riparian zone;

4. If the building is located in an inundation risk zone, all applicable requirements set forth at N.J.A.C. 7:13-11.5 are satisfied; and

[2.] **5.** All applicable requirements set forth [in] **at** (c) through (t) below are satisfied.

(c) The Department shall issue an individual permit to reconstruct, elevate, enlarge, or otherwise modify a habitable building that was constructed in violation of this chapter only if the existing building is modified as necessary to meet the applicable requirements of this section.

[(c)] **(d)** The Department shall issue an individual permit to construct, elevate, enlarge, or reconstruct a building only if the following setbacks are satisfied[, unless the building lies adjacent to a

lawfully existing bulkhead, retaining wall, or revetment along a tidal water, in which case the following setbacks do not apply]:

1. Any new building is located at least 25 feet from any top of bank **or any pipe, culvert, or bridge that encloses a regulated water**;

2. If an existing building is to be enlarged, such as through the construction of an addition, the enlarged portion of the building is located at least 25 feet from the top of bank **or any pipe, culvert, or bridge that encloses a regulated water**, unless the applicant meets the requirements [of (d)] **at (e)** below; and

3. If an existing building located less than 25 feet from the top of bank is to be elevated or reconstructed, the building shall be relocated so that it is situated at least 25 feet from the top of bank **or any pipe, culvert, or bridge that encloses a regulated water**, unless the applicant meets the requirements [of (d)] **at (e)** below.

[(d)] **(e)** In cases where [an] compliance with the requirements [of (c)2] **at (d)2** and/or 3 above is not feasible, the applicant shall:

1. Demonstrate in writing the reasons why compliance with [(c)2] **(d)2** and/or 3 above, as appropriate, is not feasible; and

2. Provide an engineering certification confirming that the location of **the** proposed construction is stable and suitable for the proposed building, and not subject to erosion or undermining due to its proximity to the top of bank **without the need to construct or reconstruct a bulkhead or retaining wall or otherwise armor the channel of the adjacent regulated water**.

[(e) The Department shall issue an individual permit for the construction of a new building in a floodway, only if the following requirements are satisfied:

1. The building is located on a pier in the Hudson River;

2. The requirements of the Department's Coastal Zone Management Rules at N.J.A.C. 7:7-9.46 are met; and

3. The applicant provides an engineering certification confirming that the proposed building is designed to resist hydrostatic and hydrodynamic loads and effects of buoyancy resulting from flooding to at least one foot above the flood hazard area design flood elevation.

(f) The Department shall issue an individual permit to convert an existing building located in a floodway into a single-family home, duplex, multi-residence building, or critical building only if the requirements of (e)1, 2, and 3 above are satisfied.]

(f) The Department shall not issue an individual permit for the following regulated activities located either within or above a floodway, or situated waterward of the mean high water line in a Coastal A zone, V zone, or VE zone:

1. The construction of a new building;

2. The substantial improvement of a building that has not been substantially damaged, unless the substantial improvement results from voluntary improvements that result in the elevation of the building at least one foot above the climate-adjusted flood elevation or in the building being flood-proofed one foot above the climate-adjusted flood elevation, in accordance with this section, except as follows:

i. Where proposed improvements consist solely of repair and maintenance activities that do not alter the building's height, footprint area, or habitable area, the lowest floor of the building is required to be elevated only as necessary to meet minimum NFIP standards as established by rule or floodplain ordinance for the participating community in which the building is located; or

3. The conversion of a building into a single-family home, duplex, multi-residence building, or critical building.

(g) The Department shall issue an individual permit to elevate**,** [or] reconstruct**, or otherwise improve** a lawfully existing building in a floodway**, such as the construction of a horizontal and/or vertical addition,** only if the following requirements are satisfied:

1. The regulated activity is not listed at (f) above;

[1.] **2.** The building has been occupied within five years prior to the date of application to the Department to **elevate,** reconstruct**, or improve the building**; **and**

[2.] **3.** [All construction takes place within the same footprint as the original building, unless the] **The** applicant demonstrates that an expanded, reduced, or otherwise revised footprint will not result in any further obstruction to the flow of floodwaters **or exacerbate offsite flooding in any flood event described at N.J.A.C. 7:13-12.1(i)**; and

[3.] **4.** (No change in text.)

[(h) The Department shall issue an individual permit for the construction of a horizontal and/or vertical addition to a lawfully existing building in a floodway only if the following requirements are satisfied:

1. The building has been occupied within five years prior to the date of application to the Department to construct the addition;

2. The applicant demonstrates that the addition does not result in any further obstruction to the flow of floodwaters; and

3. The applicant provides an engineering certification confirming that the existing building, in combination with the proposed addition, is modified to resist hydrostatic and hydrodynamic loads and the effects of buoyancy resulting from flooding to at least one foot above the flood hazard area design flood elevation.]

[(i)] **(h)** The Department shall issue an individual permit to construct a [new habitable building only if the following requirements regarding the lowest floor of the building are satisfied:

1. The lowest floor of a] single-family home or duplex**, or to convert a building to one of these uses, only if the lowest floor of the building** is set at least one foot above the [flood hazard area design] **climate-adjusted** flood elevation and no lower than the elevation required [under] **pursuant to** the Uniform Construction Code, N.J.A.C. 5:23[;]**.**

(i) The Department shall issue an individual permit to construct a critical building, or to convert a building to a critical building, only if

[2. The] **the** lowest floor of [a] **the** critical building is set at least one foot above the [flood hazard area design] **climate-adjusted** flood elevation and no lower than the elevation required [under] **pursuant to** the Uniform Construction Code, N.J.A.C. 5:23[;]**.**

[3.] **(j)** The **Department shall issue an individual permit to construct a multi-residence building, or to convert a building to a multi-residence building, only if the** lowest floor of [a] **the** multi-residence building is set at least one foot above the [flood hazard area design] **climate-adjusted** flood elevation and no lower than the elevation required [under] **pursuant to** the Uniform Construction Code, N.J.A.C. 5:23, unless all of the following are satisfied:

[i.] **1.** (No change in text.)

[ii.] **2.** The lowest floor of any residential portion of the building, including any common area, such as a lobby or other portion of the building that is used for both residential and non-residential purposes, is set at least one foot above the [flood hazard area design] **climate-adjusted** flood elevation **and no lower than the elevation required pursuant to the Uniform Construction Code, N.J.A.C. 5:23**; and

[iii.] **3.** The [applicant demonstrates that it is not feasible to set the lowest floor of any or all of the non-residential portions of the building at least one foot above the flood hazard area design flood elevation] **requirements at (n) below are met for all non-residential portions of the building**.

[iv. The lowest floor of the non-residential portions of the building identified in (i)3iii above is set as close as feasible to one foot above the flood hazard area design flood elevation. In no case shall the lowest floor of the building be set below grade along all adjoining exterior walls;

v. An architect or engineer certifies that the non-residential portions of the building identified in (i)3iii above will be constructed in accordance with the flood-proofing requirements at (q) below;

vi. No portion of the building is located within a V zone; and

vii. No portion of the building is located within a coastal A zone, unless an architect or engineer certifies that the building's foundation is designed in accordance with the Uniform Construction Code, N.J.A.C. 5:23; and]

[4.] **(k)** The [lowest floor of] **Department shall issue an individual permit to construct** any habitable building not identified [in (i)1, 2, or 3] **at (h), (i), or (j)** above, such as a commercial business, house of worship, office complex, or shopping center, **only if the lowest floor the building** is set at least one foot above the [flood hazard area] **climate-adjusted** design flood elevation and no lower than the elevation required [under] **pursuant to** the Uniform Construction Code, N.J.A.C. 5:23, unless [all of the following are satisfied:] **the requirements at (n) below are met.**

(l) In addition to the requirements at (h) above for a single-family home or duplex and (j) above for a multi-residence building, the Department shall issue an individual permit to construct within a fluvial flood hazard area a single-family home or duplex or a multi-residence building, or to convert a building into either of these uses, which is located on a lot that was created or subdivided after November 5, 2007, only if the applicant demonstrates that none of the lots created in the subdivision contains a habitable building or possesses a valid authorization from the Department to construct a habitable building in the flood hazard area. This provision is intended to ensure that no more than one single-family home, duplex, or multi-residence building is constructed or created within a fluvial flood hazard area on a given lot as that lot existed on

November 5, 2007.

(m) In addition to the requirements at (i) above for a critical building and (j) above for a multi-residence building, the Department shall issue an individual permit to construct a critical building or a multi-residence building, the construction of two or more single-family homes or duplexes, or to convert any building into any of these uses, only if the following requirements are met:

1. No portion of any building is located in a V zone or VE zone;

2. The applicant demonstrates that each building is served by at least one existing or proposed roadway, the travel surface of which is constructed at least one foot above the climate-adjusted flood elevation, and which is of adequate size and capacity to accommodate two-way traffic of motor vehicles providing access to and from each building for the duration of the flood, unless the applicant meets the following requirements:

i. The building is located within a tidal flood hazard area that is not additionally subject to fluvial flooding. See Figure 2.3D at N.J.A.C. 7:13-2.3(d) above for an example of an area that is subject to both tidal and fluvial flooding;

ii. The applicant demonstrates that providing such access is not feasible in accordance with N.J.A.C. 7:13-12.6(d)2; and

iii. The applicant discloses within a deed notice in accordance with N.J.A.C. 7:13-22.3, that the maximum depth of floodwaters through which motor vehicles would be required to pass in order to access the site, as determined by the depth of the climate-adjusted flood elevation above the travel surface of private or public roadways accessing the site;

3. The applicant grades the site to satisfy the following requirements:

i. The portion of the site outside of the building envelope meant to be accessible for pedestrian use is elevated to one foot above the climate-adjusted flood elevation, unless the following requirements are met:

(1) The applicant demonstrates it is not feasible to elevate this portion of the site to one foot above the climate-adjusted flood elevation; and

(2) The applicant elevates this portion of the site as close as feasible to one foot above the climate-adjusted flood elevation; and

ii. Proposed site elevations do not result in a higher peak flow rate or higher volume of runoff leaving any portion of the site as compared to the lawfully existing condition, unless the project is a major development as defined in the Stormwater Management Rules at N.J.A.C. 7:8 and the project complies with the requirements in that chapter.

(n) Where an applicant proposes to construct the lowest floor of a non-residential portion of a mixed-use multi-residence building below the elevation required at (j)2 above, or to construct the lowest floor of a non-residential building below the elevation required at (k) above, all of the following requirements shall be met:

[i.] **1.** The applicant demonstrates that it is not feasible to set the lowest floor of any or all **non-residential** portions of the building at least one foot above the [flood hazard area design] **climate-adjusted** flood elevation **and any higher elevation that may be required pursuant to the Uniform Construction Code, N.J.A.C. 5:23**;

[ii.] **2.** The lowest floor of the portions of the building identified [in (i)4i above] **in this section** is set as close as feasible to one foot above the [flood hazard area design] **climate-adjusted** flood elevation **and any higher elevation that may be required pursuant to the Uniform Construction Code, N.J.A.C. 5:23**. In no case shall the lowest floor [of the building] be set below**:**

i. The existing grade **elevation** along all adjoining exterior walls**; and**

ii. That which is required by the minimum NFIP standards as established by rule or floodplain ordinance for the participating community in which the building is located;

[iii.] **3.** An architect or engineer certifies that the portions of the building identified [in (i)4i above] **in this section** will be constructed in accordance with the flood-proofing requirements at [(q)] **(s)** below;

[iv.] **4.** No portion of the building is located within a V zone **or VE zone**; and

[v.] **5.** (No change in text.)

[(j)] **(o)** The Department shall issue an individual permit to undertake the substantial improvement of a lawfully existing habitable building that has been subject to substantial damage as a result of fire, flooding, or other natural disaster only if the following requirements are satisfied:

1. The lowest floor of the entire building is constructed or modified where necessary to meet the **applicable** requirements [of (i)] **at (h), (i), (j), and (k)** above to the extent feasible. In no case shall the lowest floor be set below the [FEMA 100-year flood elevation, except as provided in (i)3 and 4 above] **minimum NFIP standards as established by rule or floodplain ordinance for the participating community in which the building is located**; and

2. Any enclosed area beneath the lowest floor of the entire building is **constructed or** modified as necessary to meet the requirements [of (p)] **at (r)** below.

[(k)] **(p)** The Department shall issue an individual permit to undertake the substantial improvement of a lawfully existing building that has not been subject to substantial damage as a result of fire, flooding, or other natural disaster only if the following requirements are satisfied:

1. The lowest floor of any constructed, elevated, enlarged, or modified portion of the building meets the **applicable** requirements [of (i)] **at (h), (i), (j), and (k)** above**, except as follows:**

i. Where proposed improvements consist solely of repair and maintenance activities that do not alter the building's height, footprint area, or habitable area, the lowest floor of the building is

required to be elevated only as necessary to meet minimum NFIP standards as established by rule or floodplain ordinance for the participating community in which the building is located;

2. The lowest floor of the remainder of the building is modified where necessary to meet the **applicable** requirements [of (i)] **at (h), (i), (j), and (k)** above to the extent feasible. In no case shall the lowest floor of this portion of the building be set below the [FEMA 100-year flood elevation, except as provided in (i)3 and 4 above] **minimum NFIP standards as established by rule or floodplain ordinance for the participating community in which the building is located**; and

3. Any enclosed area beneath the lowest floor of the entire building is **constructed or** modified as necessary to meet the requirements [of (p)] **at (r)** below.

[(l)] **(q)** The Department shall issue an individual permit to elevate, enlarge, or otherwise modify all or a portion of a lawfully existing building, which does not result in a substantial improvement, only if the following requirements are satisfied:

1. The lowest floor of the elevated, enlarged, or modified portion of the building meets the **applicable** requirements [of (i)] **at (h), (i), (j), (k)** above.

i. Where only a portion of a building is elevated, enlarged, or modified, the lowest floor of the remainder of the building is not required to be elevated or otherwise modified to meet the **lowest floor** requirements [of (i)] **at (p)1** above; and

2. Any enclosed area beneath the lowest floor of the elevated, enlarged, or modified portion of the building is **constructed or** modified as necessary to meet the requirements [of (p)] **at (r)** below.

[(m) The Department shall issue an individual permit to reconstruct, elevate, enlarge, or otherwise modify a habitable building that was constructed in violation of this chapter only if the existing building is modified as necessary to meet the requirements of (i) through (l) above, as applicable.

(n) The Department shall issue an individual permit to convert an existing building into a single-family home, duplex, multi-residence building, or critical building only if the lowest floor of the converted building is modified as necessary to meet the requirements of (i) above.

(o) The Department shall issue an individual permit to construct a critical building or multi-residence building, or to convert an existing building to one of these uses, only if the applicant demonstrates that the building is served by at least one existing or proposed roadway, the travel surface of which is constructed at least one foot above the flood hazard area design flood elevation, which is of adequate size and capacity to serve the building, unless:

1. The building is located in a tidal flood hazard area or is a multi-residence building that is part of a redevelopment project; and

2. The applicant demonstrates that such access is not feasible in accordance with N.J.A.C. 7:13-12.6(e).]

[(p)] **(r)** The Department shall issue an individual permit to construct an enclosure that lies below the lowest floor of a habitable building, or to construct an enclosure that lies below the [flood hazard area design] **climate-adjusted** flood elevation**,** [that] **which** is either attached to or detached from a habitable building and is intended to be used as a garage or parking area, only if the following requirements are satisfied:

1. – 3. (No change.)

4. [No] **Where any** portion of the building is located within a **coastal A zone,** V zone, **or VE zone:**

i. The enclosure is constructed of breakaway walls or other similar non-load bearing elements, such as open lattice work or insect screening; and

[5.] **ii.** [No portion of the building is located within a coastal A zone, unless an] **An** architect or engineer certifies that the building's foundation is designed in accordance with the Uniform Construction Code, N.J.A.C. 5:23[; and]**.**

[6. Where the enclosure is greater than six feet in height, the following requirements are satisfied:

i. The deed for the lot on which the enclosure is constructed is modified to:

(1) Explain that the enclosure is likely to be inundated by floodwaters, which may result in damage and/or inconvenience;

(2) Disclose the depth of flooding that the enclosure would experience during the FEMA 100-year flood, if available, and the flood hazard area design flood;

(3) Prohibit habitation of the enclosure; and

(4) Explain that converting the enclosure into a habitable area may subject the property owner to enforcement under this chapter; and

ii. The modified deed is recorded in the Office of the County Clerk or the registrar of deeds and mortgages of the county in which the building is located, and proof that the modified deed has been recorded is provided to the Department prior to the sooner of either:

(1) The start of any site disturbance (including pre-construction earth movement, removal of vegetation or structures, or construction of the project); or

(2) The date that is 90 calendar days after the issuance of the individual permit.

(q) The Department shall issue an individual permit for the construction of a new single-family home or duplex within a fluvial flood hazard area on a lot that was created or subdivided after November 5, 2007, only if the applicant demonstrates that none of the lots created in the subdivision contain a habitable building or possess a valid authorization from the Department to construct a habitable building in the flood hazard area.]

[(r)] **(s)** [Except for an enclosure that meets the requirements of (p) above, the] **The** Department shall issue an individual permit for a building that is flood-proofed only if [one] **all** of the following requirements [is] **are** satisfied**:**

1. The building is flood-proofed in accordance with the requirements of the National Flood Insurance Program, 44 CFR 60.3 and 60.6, and the Uniform Construction Code, N.J.A.C. 5:23;

2. Other than an enclosure below the climate-adjusted flood elevation that meets the requirements at (r) above, the building proposed to be flood-proofed is not a critical building or a building intended for residential use, such as a single-family home, duplex, or any residential portions of a multi-residence building; and

3. One of the following requirements is satisfied:

[1.] **i.** The applicant dry flood-proofs the building in accordance with [(s)] **(t)** below; or

[2.] **ii.** The applicant demonstrates that it is not feasible to dry flood-proof the building in accordance with [(s)] **(t)** below and instead wet flood-proofs the building in accordance with [(t)] **(u)** below**; provided wet flood-proofing is permitted for the type of building pursuant to the National Flood Insurance Program, 44 CFR 60.3 and 60.6, and the Uniform Construction Code, N.J.A.C. 5:23**.

[(s)] **(t)** The Department shall issue an individual permit to dry flood-proof a building [under (r)1] **pursuant to (s)** above only if the **following requirements are satisfied:**

1. The building is designed and constructed with measures to **meet the dry flood-proofing requirements of the Uniform Construction Code, N.J.A.C. 5:23, so as** to prevent floodwaters from entering the building up to a flood depth of at least one foot above the [flood hazard area design] **climate-adjusted** flood elevation[.]**;**

2. The building is not located within a flood hazard area where the flood velocity during the flood producing the climate-adjusted flood elevation is greater than five feet per second or unknown, or in an inundation risk zone, Coastal A zone, V zone, or VE zone;

3. The building is not constructed on soils prone to erosion;

4. The dry flood-proofing measures withstand the forces of floodwaters described at N.J.A.C. 7:13-12.4;

5. The building is constructed with at least one door, window, or opening serving as a primary means of escape and rescue above the 100-year flood elevation and a second one above the climate-adjusted flood elevation;

6. The walls of the building below the climate-adjusted flood elevation are substantially impermeable to the passage of water;

7. Where removable flood shields will be used, the applicant shall:

i. Identify the storage location for the shields;

ii. Specify the method of installation of the shields;

iii. Specify the conditions in which the shields will be installed;

iv. Specify how the shields will be maintained; and

v. Arrange for the periodic practicing of shield installation;

8. The applicant provides documentation providing at least 12 hours of warning time to allow for the implementation of flood-proofing measures requiring human intervention;

9. The applicant posts a flood emergency plan in at least two locations within the building that includes the following:

i. Identification of a chain of command of all persons involved in the installation and maintenance of the dry flood-proofing measures;

ii. Assignment of responsibilities to all persons involved in the installation and maintenance

of the dry flood-proofing measures;

iii. Identification of all locations where flood-proofing measures are installed;

iv. Acknowledgement that installation instructions will be posted at each location that is dry flood-proofed;

v. Evacuation instructions for all occupants of the building;

vi. Acknowledgement that evacuation routes will be posted at each area that is dry flood-proofed; and

vii. A schedule indicating periodic practice of installation of flood-proofing measures; and

10. The applicant submits an inspection and maintenance plan covering each flood-proofing measure.

[(t)] **(u)** The Department shall issue an individual permit to wet flood-proof a building [under (r)2] **pursuant to (s)** above only if the **following requirements are satisfied**:

1. The building meets one of the following descriptions:

i. The building is designated by the American Society of Engineers in their publication, Flood Resistant Design and Construction (ASCE/SEI 24-14), as being Flood Design Class 1;

ii. The building is an agricultural structure that cannot be located outside of the flood hazard area and that is used solely for agricultural purposes; or

iii. The building is functionally dependent on proximity to water;

2. The building is designed and constructed to **meet the wet flood-proofing requirements of the Uniform Construction Code, N.J.A.C. 5:23 and** be flood-resistant [during] **up to** a flood depth of at least one foot above the [flood hazard area design] **climate-adjusted** flood elevation, so that floodwaters can enter the building though permanent openings, while not damaging the structural integrity of the building[.]**; and**

3. The portions of the building below the climate-adjusted flood elevation are designed and

constructed with flood damage-resistant materials. Such materials are those resistant to damage from water containing pollutants, such as sewage, chemicals, and heavy metals or other toxic substances, damage caused by moving water, and will survive wetting and drying and can be cleaned to remove harmful pollutants.

[(u) The Department shall not issue an individual permit under (r) above to flood-proof a single-family home, duplex, or critical building, or any residential portions of a multi-residence building.]

(v) The Department shall not issue an individual permit for any below-ground enclosure beneath a building, including any basement or below-ground parking area, within a flood hazard area. For the purposes of this section, a below-ground enclosure is any portion of a building in which the floor of the enclosure is situated below the adjoining exterior grade along all exterior walls.

7:13-12.6 Requirements for a railroad, roadway, parking area, or airport runway or taxiway

(a) This section sets forth specific design and construction standards that apply to any railroad, roadway, parking area, or airport runway or taxiway proposed to be constructed, reconstructed, expanded, or improved in a flood hazard area.

(b) Except as provided at (c), (d), and (e) below, the Department shall issue an individual permit to construct, reconstruct, expand, or improve a railroad, roadway, parking area, or airport runway or taxiway only if the travel surface is constructed or elevated to at least one foot above the climate-adjusted flood elevation.

(c) The Department shall issue an individual permit to construct, reconstruct, expand, or improve a railroad, roadway, parking area, or airport runway or taxiway where the travel surface is not constructed or elevated to at least one foot above the climate-adjusted flood elevation, only if the requirements at (d) and (e) below are met and only in the following cases:

1. The applicant is a public transportation entity and either of the following applies:

i. The construction of drainage improvements and associated stormwater management structures, which are necessary to ameliorate periodic inundation along a lawfully existing roadway;

ii. The project is limited in scope and consists solely of safety or state of good repair improvements to a lawfully existing structure, such that there is no reasonable opportunity to meet the requirements at (b) above as part of the project's overall scope and purpose; or

iii. Prior to July 17, 2023, in fluvial areas or (the effective date of this rulemaking) in tidal areas, the project reached a milestone in its development and design such that meeting the requirements at (b) above would necessitate reevaluation of the selected preferred alternative or equivalent milestone, a significant redesign, or significant modifications or additions to private land acquisition plans, whether in fee or easement; or

2. The applicant demonstrates that strict compliance with the elevation requirements of this section would result in one or more of the following:

i. Prohibitively high construction costs or construction costs that are disproportionately high compared with any benefit that would be obtained by strict compliance with the requirements at (b) above;

ii. A design that necessitates excessive volumes of fill that exceed the flood storage displacement limits at N.J.A.C. 7:13-11.4, for which flood storage cannot feasibly be created in compensation either onsite or offsite;

iii. A design that does not meet necessary transportation safety, geometric design, or access point requirements, such as those adopted by the American Association of State Highway and Transportation Officials, or the requirements of the Federal Aviation Administration;

iv. A design that causes unavoidable adverse environmental impacts (including, but not limited to, impacts to the channel, riparian zone, or aquatic or terrestrial resources) that cannot be adequately mitigated; or

v. A design that unavoidably exacerbates flooding or causes adverse impacts to existing drainage patterns, presents compelling obstacles to design geometry or access, or necessitates adverse impacts to offsite properties adjacent to the structure.

(d) In addition to meeting the requirements at either (c)1 or 2 above, an applicant seeking authorization for railroad, roadway, parking area, or airport runway or taxiway that does not meet the requirements at (b) above shall:

1. Demonstrate through a certification from a licensed professional engineer and supporting documentation that:

i. Every reasonable effort has been taken to construct or elevate as much of the structure as close as practicable to one foot above the climate-adjusted flood elevation given the scope of the project. Access to railroads or roadways that are lower than the elevation requirements of this section will be considered in the evaluation of reasonable effort;

ii. The structure is designed to the maximum extent practicable to resist damage, displacement, and loss of service due to anticipated flooding based on the projected rainfall depths used in this chapter; and

iii. No extraordinary risk is posed to any person using each proposed structure that is constructed at an elevation less than one foot above the climate-adjusted flood elevation. This demonstration shall include:

(1) An analysis of the depth and frequency of floodwaters that will inundate the structure;

(2) The number of people that will be adversely impacted when the structure is inundated; and

(3) Measures being proposed to ameliorate the anticipated adverse impacts described at (d)iii(1) and (2) above, such as the establishment of evacuation plans for individuals that would be trapped during a flood, provisions for emergency electrical service during an outage, and flood-proofing measures; and

2. Provide an adequate number of permanent signs posted in prominent locations along any new, reconstructed, or expanded section of roadway and parking area that does not meet the requirements of (b) above, as outlined by the Federal Highway Administration in its Manual on Uniform Traffic Control Devices, and which alerts the public to the likelihood of inundation as follows:

i. If the roadway or parking area is expected to be overtopped or inundated during the two-year flood, the signage shall indicate that the roadway has a significant flooding risk and frequently may not be passable;

ii. If the roadway or parking area is expected to be overtopped or inundated during the 10-year flood, the signage shall indicate that the roadway is subject to frequent flooding that may prevent passage; and

iii. If the roadway or parking area is expected to be overtopped or inundated during the 100-year flood, the signage shall indicate that the roadway is subject to periodic flooding.

(e) In no case shall the travel surface of a private roadway or parking area in an area subject to fluvial flooding, which serves a critical building, multi-residence building, or residential subdivision of two or more single-family homes or duplexes, be constructed below the 100-year flood elevation unless the applicant demonstrates that each building is served by at least one existing or proposed roadway, the travel surface of which is constructed at least one foot above the climate-adjusted flood elevation, and which is of adequate size and capacity to accommodate two-way traffic of motor vehicles providing access to and from each building for the duration of the

flood. Note that this standard applies both to fluvial flood hazard areas, as well as to areas that are subject to both tidal and fluvial flooding. See Figure 2.3D at N.J.A.C. 7:13-2.3(d) for an example of an area that is subject to both tidal and fluvial flooding.

7:13-12.7 Requirements for a bridge or culvert

(a) This section sets forth the design and construction standards [under] **pursuant to** which the Department will issue an individual permit for the construction or reconstruction of a bridge or culvert in any regulated area. A footbridge that does not meet the requirements of [permit-by-rule 23] **the permit-by-registration** at N.J.A.C. 7:13-[7.23]**7.14, the general permit by certification at N.J.A.C. 7:13-8.4,** or **the** general permit [12] **8** at N.J.A.C. 7:13-[9.12]**9.8** is subject to the requirements of this section.

(b) (No change.)

(c) The Department shall issue an individual permit to construct a new bridge or culvert or to reconstruct an existing bridge or culvert only if the bridge or culvert and any associated construction, such as embankments, abutments, footings, and travel surfaces, are designed to remain stable, scour resistant, and resistant to displacement and/or damage [during the flood hazard area design flood] **from flooding to the climate-adjusted flood elevation**. At a minimum, a bridge shall have stable abutments, a culvert shall have stable headwalls, and any abutment and headwall shall have footings that extend no less than three feet below the invert of the channel.

(d) (No change.)

(e) In addition to meeting the requirements at (c) above, the Department shall issue an individual permit to reconstruct an existing bridge or culvert only if the following requirements are met:

1. (No change.)

2. It is demonstrated through one or more of the following hydrologic and hydraulic analyses comparing existing and proposed conditions, that the bridge or culvert complies with (e)1 above, unless it is demonstrated that alternate methods would more accurately model existing and/or proposed conditions:

i.-ii. (No change.)

iii. An inlet/outlet control analysis, provided the analysis does not indicate a decrease in water surface elevations upstream of the bridge or culvert during any flood event described at N.J.A.C. 7:13-12.1(i)**, thereby indicating a loss of upstream flood storage and associated increased flow rates downstream of the bridge or culvert, and provided the tolerances specified at (e)1 above are not exceeded**.

3. [Where] **Except as provided at (e)3i below, where** the existing bridge or culvert and/or the railroad or roadway it serves currently causes fragmentation of habitat for terrestrial threatened or endangered species and/or any terrestrial species of special concern, the bridge or culvert incorporates a preserved or restored natural bank of sufficient width to allow the species to pass through the structure. Where a natural bank is not present or feasible to preserve or restore, the applicant shall create an artificial bank or shelf of sufficient width to allow the species to pass through the structure. The applicant shall additionally adopt appropriate measures where necessary to encourage the species to pass through the structure.

i. Providing wildlife passage in accordance with (e)3 above is not required where an applicant demonstrates that doing so would result in unavoidable increases in offsite flood depths that cannot be ameliorated due to the size and/or geometry of the existing bridge or culvert being reconstructed.

(f) The Department shall issue an individual permit to construct a new bridge or culvert or to reconstruct an existing bridge or culvert only if the new or reconstructed structure is a bridge, arch culvert, or three-sided culvert that meets the requirements [of (f)1 through 4] **at (f)1, 2, 3, or 4** below,

unless the applicant demonstrates that a circular, elliptical, or box culvert is acceptable [under] **pursuant to** (g) and (h) below.

1. (No change.)

2. The bridge or culvert is adequately sized to convey [the flood hazard area design flood without a significant increase in the velocity of water in the channel] **flooding up to the climate-adjusted flood elevation without causing a change in velocity that would cause the channel to erode**;

3.-4. (No change.)

(g) The construction or reconstruction of a circular, elliptical, or box culvert is conditionally acceptable where one or more of the conditions listed at (g)1 through 6 below exist and the culvert meets the construction standards at (h) below.

1.-2. (No change.)

3. The channel is [manmade] **human-created** (not including any water that historically possessed a [naturally-occurring] **naturally occurring**, discernible channel, which has been modified by humans);

4. The channel is fully lined with [manmade] **human-created** impervious material**,** such as cement or concrete;

5.-6. (No change.)

(h) (No change.)

7:13-12.8 Requirements for a utility line

(a)-(b) (No change.)

(c) The Department shall issue an individual permit to construct or reconstruct a utility line across or under a channel or **regulated** water only if the following requirements are satisfied, as applicable:

[1. The applicant demonstrates that it is not feasible to directionally drill or "jack" the proposed utility line under the channel or water under permit-by-rule 36 at N.J.A.C. 7:13-7.36;

2. The applicant demonstrates that it is not feasible to construct the utility line within a roadway that already crosses the channel or water under permit-by-rule 37 at N.J.A.C. 7:13-7.37;]

[3.] **1.** The applicant demonstrates that it is not feasible to attach the utility line to a bridge that already crosses the channel or **regulated** water [under permit-by-rule 38] **pursuant to the general permit-by-certification** at N.J.A.C. 7:13-[7.38]**8.12**;

2. The applicant demonstrates that it is not feasible to install the proposed utility line under the channel or regulated water pursuant to the general permit at N.J.A.C. 7:13-9.12;

3. Where the utility line is proposed to be installed through horizontal directional drilling beneath a channel or regulated water, the applicant demonstrates that the activity will not adversely impact or result in a discharge into these regulated areas;

4. – 7. (No change.)

(d) The Department shall issue an individual permit to construct or reconstruct a utility line above a channel or floodway, which is not attached to a roadway or railroad crossing, or which is attached to such a crossing but does not meet [permit-by-rule 38] **the permit-by-certification** at N.J.A.C. 7:13-[7.38]**8.12**, only if the following requirements are satisfied:

1. The applicant demonstrates that it is not feasible to attach the utility line to a bridge that already crosses the channel or water [under permit-by-rule 38] **pursuant to the permit-by-certification at N.J.A.C. 7:13-8.12**;

2.-3. (No change.)

4. [The] **To the extent feasible, the** utility line is placed at least one foot above the [flood hazard area design] **climate-adjusted** flood elevation.

(e) – (g) (No change.)

7:13-12.10 Requirements for a low dam

(a) (No change.)

(b) The Department shall issue an individual permit to construct a new low dam only if all proposed disturbance is located at least 25 feet from any top of bank unless the applicant demonstrates that:

1. (No change.)

2. All disturbance is located outside any channel with fishery resources, as set forth at N.J.A.C. 7:13-[11.5]**11.6**, except where:

i.-ii. (No change.)

(c) (No change.)

7:13-12.11 Requirements for a dam

(a) (No change.)

(b) [The activities at (b)1 and 2 below do not require a flood hazard area approval under this chapter, provided all applicable requirements of the Dam Safety Standards at N.J.A.C. 7:20 are met.] Dams and certain associated activities are subject to the Department's Dam Safety Standards at N.J.A.C. 7:20, administered by the Department's Bureau of Dam Safety and Flood Control. **Certain dams and related activities are exempted from this chapter pursuant to N.J.A.C. 7:13-2.5(a)12 and do not require an approval pursuant to this chapter provided all applicable requirements at N.J.A.C. 7:20 are met.** For additional information concerning the regulation of dams see [https://www.nj.gov/dep/damsafety] **https://dep.nj.gov/wlm/drec/dam-safety/**.

[1. The construction, replacement, repair, or removal of any dam that does not serve as a component of a stormwater management basin; and

2. Any regulated activity performed in association with the removal of a dam that does not serve as a component of a stormwater management basin.]

(c) The Department shall issue an individual permit to construct a new dam only if all proposed disturbance is located at least 25 feet from any top of bank, unless the applicant demonstrates that:

1. (No change.)

2. All disturbance is located outside any channel with fishery resources, as set forth at N.J.A.C. 7:13-[11.5]**11.6**, except where:

i.-ii. (No change.)

(d) (No change.)

7:13-12.12 Requirements for a flood control project

(a) (No change.)

(b) The Department shall issue an individual permit for a flood control project only if the applicant is a public entity, and the applicant provides a detailed analysis of the existing flooding problem that is to be mitigated. At **a** minimum, this analysis shall include the following:

1. – 4. (No change.)

5. If the flood control project is not designed to alleviate flooding for the 100-year flood and/or the [flood hazard area design flood] **flooding to the climate-adjusted flood elevation**, a demonstration as to why this is not feasible and/or possible; and

6. (No change.)

(c) The Department shall issue an individual permit for a flood control project that results in disturbance to a channel**, inundation risk zone,** and/or riparian zone only if the requirements [of] **at** (b) above are satisfied and provided the applicant demonstrates that there is no feasible alternative project located outside the channel**, inundation risk zone,** and riparian zone that would satisfactorily reduce

flooding. At **a** minimum, this analysis shall include the following:

1. -3. (No change.)

(d) (No change.)

7:13-12.13 Requirements for a retaining wall or bulkhead

(a) [Except as provided in (b) below, this] **This** section sets forth specific design and construction standards that apply to any retaining wall or bulkhead [which is located within a regulated water, a floodway, or within 25 feet of any top of bank] **in any regulated area**.

(b) This section does not apply to any retaining wall or bulkhead in a tidal flood hazard area that is authorized [under] **pursuant to** a valid coastal permit[, or is exempt from requiring a coastal permit under N.J.A.C. 7:7-2.4(d)6].

(c) The Department shall issue an individual permit to construct or reconstruct a retaining wall or bulkhead [subject to this section] only if the following requirements are satisfied:

1. The retaining wall or bulkhead is designed with stable footings[. In general, footings shall] **that** extend at least three feet below grade, unless **the applicant demonstrates that** such footings are not possible to construct or necessary for stability;

2. The retaining wall or bulkhead is designed to withstand displacement, overturning, and failure due to undermining and/or pressure from soil, water, and frost; [and]

3. If located within a regulated water or within 25 feet of any top of bank, the retaining wall or bulkhead is designed to be resistant to erosion as well as the possibility of a shifting bed and/or bank over time[.]**; and**

4. Any retaining wall or bulkhead within a tidal flood hazard area is designed in accordance with the Department's Coastal Zone Management rules at N.J.A.C. 7:7-15.11(b).

(d) (No change.)

7:13-12.16 Requirements for the storage of unsecured material

(a) (No change.)

(b) This section governs the storage of unsecured material not addressed by the following:

1. [Permits-by-rule 48 through 53 at N.J.A.C. 7:13-7.48 through 7.53, respectively, which] **Exempt activities at N.J.A.C. 7:13-2.5(a)6 that** cover the storage of unsecured materials for construction activities, and for certain ongoing residential and commercial uses; and

2. (No change.)

(c)-(d) (No change.)

7:13-12.17 Requirements for the investigation, cleanup, or removal of hazardous substances

(a) (No change.)

(b) The Department shall issue an individual permit for the investigation, cleanup, or removal of hazardous substances only if the Department determines, or a licensed site remediation professional pursuant to the Administrative Requirements for the Remediation of Contaminated Sites, N.J.A.C. 7:26C, certifies, that:

1. (No change.)

2. In order to minimize the potential that hazardous substances will be transported offsite by floodwaters during the conduct of site remediation activities, all material necessary to facilitate the investigation, cleanup, or removal of hazardous substances is stored and stockpiled as follows:

i. Outside any floodway **or inundation risk zone**;

ii. - iv. (No change.)

3. In order to minimize the potential that hazardous substances will be transported offsite by floodwaters after the completion of site remediation activities, the following requirements are satisfied:

i.-ii. (No change.)

iii. Any material that does not meet the Residential Direct Contact Soil Remediation Standards at N.J.A.C. 7:26D is stabilized and/or covered with suitable material such that the material will not be eroded, displaced, or transported offsite during [the flood hazard area design flood] **flooding to the climate-adjusted flood elevation**.

7:13-12.18 Requirements for the placement, storage, or processing of hazardous substances

(a) (No change.)

(b) A lawfully existing facility established on or before November 5, 2007, may be eligible to place, store, or process hazardous substances [under permit-by-rule 52] **pursuant to the exempt activity at N.J.A.C. 7:13-2.5(a)7** for the placement, storage, or processing of hazardous substances [at N.J.A.C. 7:13-7.52], provided the size or capacity of the facility is not increased. In addition, the placement of a fuel or storage tank may be authorized in certain circumstances [under permit-by-rule 22] **pursuant to permit-by-registration at N.J.A.C. 7:13-7.15** for the construction of a fuel tank [at N.J.A.C. 7:13-7.22] or **the** general permit [8] **at N.J.A.C. 7:13-9.7** for the placement of storage tanks [at N.J.A.C. 7:13-9.8]. All other placement, storage, or processing of hazardous substances in a regulated area is subject to this section.

(c) The Department shall issue an individual permit for the placement, storage, or processing of hazardous substances in a regulated area only if the following requirements are satisfied:

1. Hazardous substances are not placed, stored, or processed in a floodway **or inundation risk zone**;

2. - 6. (No change.)

7:13-12.19 Requirements for solid waste landfill closure

(a) (No change.)

(b) The Department shall issue an individual permit for regulated activities [under] **pursuant to** (a) above only if the applicant demonstrates that:

1. (No change.)

2. In order to minimize the potential that solid waste will be transported offsite by floodwaters during the conduct of activities [under] **pursuant to** this section, all material necessary to facilitate the regulated activities is stored and stockpiled as follows:

i. Outside any floodway **or inundation risk zone**;

ii. - iii. (No change.)

3. In order to minimize the potential that solid waste will be transported offsite by floodwaters after the completion of the landfill closure or disruption activities, all material permanently placed within a regulated area is stabilized and/or covered with suitable material such that the material will not be eroded, displaced, or transported offsite during [the flood hazard area design flood] **flooding to the climate-adjusted flood elevation**.

7:13-12.20 Requirements for the placement, storage, or processing of solid waste or recyclable materials

(a) (No change.)

(b) A lawfully existing facility established on or before November 5, 2007, may be eligible to continue to place, store, or process solid waste or recyclable materials [under permit-by-rule 53 for the placement storage or processing of solid waste at N.J.A.C. 7:13-7.53, provided the size or capacity of the facility is not increased] **as an exempt activity provided the requirements at N.J.A.C. 7:13-2.5(a)7 are met**. All other placement storage or processing of solid waste or recyclable materials in a regulated area is subject to this section.

(c) The Department shall issue an individual permit for the placement, storage, or processing of

solid waste or recyclable materials in a regulated area only if the following requirements are satisfied:

1. The solid waste and recyclable materials are not placed, stored, or processed in a floodway **or inundation risk zone**;

2. - 6. (No change.)

7:13-12.21 Requirements for the removal of existing fill or an existing structure

(a) (No change.)

(b) The removal of existing fill or an existing structure is subject to the requirements of this section only as follows:

1. (No change.)

2. The fill or structure to be removed lies in a regulated area outside a floodway, but does not qualify for [permit-by-rule 4] **the exemption for removal of any lawfully existing fill or structure** at N.J.A.C. 7:13-[7.4]**2.5(a)14**.

(c) (No change.)

SUBCHAPTER 13. RIPARIAN ZONE MITIGATION

7:13-13.1 Definitions

In addition to the terms defined at N.J.A.C. 7:13-1.2, the following words and terms, when used in this subchapter, shall have the following meanings.

….

"Enhancement" means the improvement of the functions and values of a degraded riparian zone or certain lands outside the riparian zone as described at N.J.A.C. 7:13-[13.11]**13.12**, such as the removal of invasive plant species or the planting of native, non-invasive vegetation.

….

"Restoration" means the reestablishment of the functions and values of a riparian zone or certain lands outside the riparian zone as described at N.J.A.C. 7:13-[13.11]**13.12**, such as the removal of impervious surfaces and planting the area with native, non-invasive vegetation species or restoring a regulated water that has been previously straightened, channelized, or lined with revetments, retaining walls, or other armoring to a natural condition.

….

"Temporary restoration" means upon completion of a regulated activity, replacing vegetation onsite, in place, and with the same vegetation or vegetation of greater ecological function and value (as described at N.J.A.C. 7:13-11.2(z)1i) as the vegetation that was removed to facilitate or provide access to the regulated activity. Temporary restoration is a type of mitigation.

7:13-13.2 General mitigation requirements

(a) – (j) (No change.)

(k) Specific requirements for each type of mitigation project are specified in the following sections of this subchapter:

1. Temporary restoration mitigation - N.J.A.C. 7:13-13.9;

[1.] **2.** Creation mitigation - N.J.A.C. 7:13-[13.10]**13.11**;

[2.] **3.** Restoration mitigation - N.J.A.C. 7:13-[13.11]**13.12**;

[3.] **4.** (No change in text.)

[4.] **5.** Preservation mitigation - N.J.A.C. 7:13-[13.13]**13.14**; and/or

[5.] 6**.** Purchase of credits from a mitigation bank - N.J.A.C. 7:13-[13.14]**13.15**.

7:13-13.4 Amount of mitigation required

(a) This section governs the amount of mitigation required for a regulated activity within a

riparian zone [under] **pursuant to** an individual permit, depending upon the area of riparian zone vegetation cleared, cut, and/or removed, the width of the riparian zone, and the type of regulated activity.

1. Pursuant to N.J.A.C. 7:13-11.2(z), all riparian zone vegetation that is temporarily cleared, cut, and/or removed to conduct a regulated activity, access an area where regulated activities will be conducted, or otherwise accommodate a regulated activity shall be replanted immediately after completion of the regulated activity, unless prevented by seasonal weather, in which case, the vegetation shall be replanted as soon as conditions permit. Portions of the riparian zone occupied by an authorized structure need not be replanted.

(b) Except as provided at (c) below, mitigation for disturbance to riparian zone vegetation not covered at N.J.A.C. 7:13-11.2(z) shall be provided as follows:

[(b)] **1.** Where a regulated activity is located within a 300-foot riparian zone, mitigation is required for the total area of vegetation that is cleared, cut, and/or removed[, except for the following regulated activities provided the limits set forth in Table 11.2 are not exceeded:]**;**

2. Where a regulated activity is located within a 150-foot riparian zone, and permitted activities are conducted subsequent to (the effective date of this rulemaking) and individually or cumulatively result in 2,000 square feet or greater of clearing, cutting, and/or removal of vegetation, mitigation is required for the total area of vegetation that is cleared, cut, and/or removed; and

3. Where a regulated activity is located within a 50-foot riparian zone, and permitted activities are conducted subsequent to (the effective date of this rulemaking) and individually or cumulatively result in 0.1 acres or greater of clearing, cutting, and/or removal of vegetation, mitigation is required for the total area of vegetation that is cleared, cut, and/or removed.

(c) Mitigation pursuant to (b) above is not required for the following regulated activities; provided the limits set forth at Table 11.2 above are not exceeded:

[1. The construction of a new aboveground or underground utility line that meets the requirements of N.J.A.C. 7:13-11.2(k);]

[2.] **1.** The reconstruction, replacement, repair, or maintenance of an existing aboveground or underground utility line that meets the requirements [of] **at** N.J.A.C. 7:13-11.2(l);

[3.] **2.** [Construction] **Regulated activities** associated with **the construction or improvement of** a single-family home or duplex that meets [the] **all applicable** requirements [of] **at** N.J.A.C. 7:13-11.2[(m) or (n)]; [or] **provided the total area of riparian zone vegetation to be cleared, cut, and/or removed onsite does not exceed the following limits, measured cumulatively since November 5, 2007:**

i. Within a 50-foot riparian zone, 3,500 square feet; or

ii. Within a 150- or 300-foot riparian zone, 7,000 square feet; or

[4.] **3.** The construction of a trail or boardwalk that meets the requirements [of] **at** N.J.A.C. 7:13-11.2(t).

[(c) Where a regulated activity is located within a 50- or 150-foot riparian zone, mitigation is required as follows:

1. For the investigation, cleanup, or removal of hazardous substances under N.J.A.C. 7:13-11.2(r), or a solid waste landfill closure and post-closure plan or disruption approval under N.J.A.C. 7:13-11.2(s), mitigation is required for the total area of vegetation that is cleared, cut, and/or removed;

2. For a regulated activity subject to N.J.A.C. 7:13-11.2(y), which results in the clearing, cutting, and/or removal of greater than 2,000 square feet of riparian zone vegetation, mitigation is required for the total area of vegetation that is cleared, cut, and/or removed; and

3. For a regulated activity other than those listed at (c)1 and 2 above, mitigation is required for the area of any riparian zone vegetation that is cleared, cut, and/or removed in excess of any limit set forth in Table 11.2.]

7:13-13.5 Property suitable for mitigation

(a)-(g) (No change.)

(h) The Department shall not approve creation or restoration mitigation in an area where the proposed mitigation poses an ecological risk. For purposes of this section, ecological risk means [that the mitigation may result in the reintroduction of contamination to ecological communities, the exposure of humans to contamination, or the contamination of the mitigation site by subsequent exposure to new areas of contamination requiring remediation] **a quantitative assessment of the actual or potential impacts of contaminants of potential ecological concern on wildlife and plants**. The mitigator shall properly characterize and assess the mitigation area in accordance with the Technical Requirements for Site Remediation at N.J.A.C. 7:26E-1.16 and 4.9 to determine ecological risk.

1.-2. (No change.)

(i) The Department shall require an assessment relating to predicted future conditions on the site due to climate change to determine if an area is suitable for the type of mitigation being proposed. An assessment shall be performed in accordance with N.J.A.C. 7:13-13.7(f)12.

7:13-13.6 Conceptual review of a mitigation area

(a) This section sets forth the requirements for the conceptual review of potential mitigation areas except for mitigation bank sites. The requirements for conceptual review of a mitigation bank site are set forth at N.J.A.C. 7:13-[13.21(a)]**13.22(a)** and (b).

(b) – (d) (No change.)

7:13-13.7 Basic requirements for mitigation proposals

(a)-(e) (No change.)

(f) The following information, which is reflected on the mitigation proposal checklists referenced [in] **at** (d) above, shall be submitted to the Department as part of the request for approval of the mitigation proposal:

1. – 9. (No change.)

10. A certification of truth and accuracy in accordance with N.J.A.C. 7:13-18.2(j); [and]

11. Consent from the owner of the proposed mitigation area allowing the Department to enter the property in a reasonable manner and at reasonable times to inspect the proposed mitigation area[.]**; and**

12. A discussion relating to the future of the site and any special considerations that may be necessary to address the effects of climate change on the site. The discussion shall include all assessments applicable to the site under consideration, such as: an assessment of the site anticipating the effects of climate change and sea level rise by 2100, including five feet of sea level rise above the mean higher high water elevation as it exists on (the effective date of this rulemaking); an assessment of potential changes to precipitation, including an increase in the intensity and amount of precipitation, and a potential increase in summertime drought; and if proposing forested riparian zone mitigation, an assessment of the vigor of referenced forested systems.

(g) (No change.)

7:13-13.9 Mitigation for a temporary disturbance

(a) Mitigation for a temporary disturbance shall be performed as follows:

1. For a disturbance to non-forested riparian zones, restoration of the area temporarily disturbed; or

2. For a disturbance to forested riparian zones:

i. Restoration of the area temporarily disturbed to a forested riparian zone; or

ii. When a forest cannot be restored, for example above a utility line or impermeable environmental cap, restoration of the area temporarily disturbed to a non-forested riparian zone, and in addition, one acre of forested mitigation in accordance with this subchapter for each acre of disturbance.

(b) Mitigation for a temporary disturbance requires the submission of the following:

1. A planting plan specifying the number, type, and quantity of each species to be planted;

2. A specification of the components of any seed mixes proposed to be used;

3. A brief narrative description of the restoration plan; and

4. An invasive species control plan.

7:13-[13.9]**13.10** (No change in text.)

7:13-[13.10]**13.11** Riparian zone creation

(a) (No change.)

(b) If creation is the mitigation alternative, the Department shall require creation at a creation to loss ratio of 1:1. [unless the applicant demonstrates in accordance with (b)1 below that creation at a ratio of less than 1:1 will provide equal ecological functions and values.

1. A mitigator may create riparian zones at a ratio of less than 1:1 if the mitigator demonstrates through the use of productivity models or other similar studies that creating a smaller area of riparian zone will result in replacement riparian zones of equal ecological value to those lost or disturbed. However, in no case shall the Department approve a creation to loss ratio of less than 0.5:1. In order to demonstrate equal ecological value, the mitigator shall survey the conditions on the site of disturbance and on the proposed mitigation area and provide written documentation regarding the proposed type and density of vegetation, the sediment and pollution removal ability of the proposed riparian zone vegetation,

all proposed bank stability and erosion protection measures, and any anticipated wildlife habitat conditions. The documentation shall detail how the mitigation proposal will fully replace the ecological values of the riparian zone lost or disturbed.]

(c) (No change.)

(d) The area of mitigation for which the mitigator receives credit [under] **pursuant to** a riparian zone creation plan shall be calculated as the sum of:

1. (No change.)

2. Any created riparian zone located outside of the tops of bank[,]**;** provided the area is:

i. Restored to a natural condition, free from any gravel, impervious surface, or other structures and [manmade] **human-created** materials, except for soil bioengineering or other structures necessary to support the proposed plan; and

ii. (No change.)

7:13-[13.11]**13.12** Riparian zone restoration and enhancement

(a) (No change.)

(b) If restoration is the mitigation alternative, the Department shall require restoration at a restoration to loss ratio of 2:1[, unless the applicant demonstrates in accordance with (b)1 below that restoration at a ratio of less than 2:1 will provide equal ecological functions and values].

[1. A mitigator may restore riparian zones, or land adjacent to riparian zones in accordance with (d) below, at a ratio of less than 2:1 if the mitigator demonstrates through the use of studies that restoring a smaller area of riparian zone will result in replacement riparian zones of equal ecological value to those lost or disturbed. However, in no case shall the Department approve a restoration ratio of less than 1:1. In order to demonstrate equal ecological value, the mitigator shall survey the conditions on the site of disturbance and on the proposed mitigation area and provide written documentation regarding the existing

and proposed type and density of vegetation, the sediment and pollution removal ability of the existing and proposed riparian zone vegetation, all proposed bank stability and erosion protection measures, and any anticipated wildlife habitat conditions. The documentation shall also detail how the mitigation proposal will replace the ecological values of the riparian zone lost or disturbed.]

(c) If enhancement is the mitigation alternative, the Department shall require enhancement at an enhancement to loss ratio of 3:1[, unless the applicant demonstrates in accordance with (b)1 below that enhancement at a ratio of less than 3:1 will provide equal ecological functions and values].

[1. A mitigator may enhance riparian zones, or land adjacent to riparian zones in accordance with (d) below, at a ratio of less than 3:1 if the mitigator demonstrates through the use of studies that enhancing a smaller area of riparian zone will result in replacement riparian zones of equal ecological value to those lost or disturbed. However, in no case shall the Department approve a ratio of less than 1:1. In order to demonstrate equal ecological value, the mitigator shall survey the conditions on the site of disturbance and on the proposed mitigation area and provide written documentation regarding the existing and proposed type and density of vegetation, the sediment and pollution removal ability of the existing and proposed riparian zone vegetation, all proposed bank stability and erosion protection, and any anticipated wildlife habitat conditions. The documentation shall also detail how the mitigation proposal will replace the ecological values of the riparian zone lost or disturbed.]

(d) The Department shall approve a riparian zone restoration or enhancement plan only if the land intended for restoration or enhancement is:

1. Restored to a natural condition, free from any gravel, impervious surface, or other structures and [manmade] **human-created** materials, except for soil bioengineering or other structures necessary to support the proposed plan;

2.-6. (No change.)

(e) (No change.)

7:13-[13.12]**13.13** (No change in text.)

7:13-[13.13]**13.14** Riparian zone preservation

(a)-(b) (No change.)

(c) If preservation is the mitigation alternative, the area preserved shall be sufficient to ensure that the functions and values resulting from the preservation area will fully compensate for the loss of functions and values caused by the disturbance. At a minimum, the area preserved shall be:

1.-2. (No change.)

3. Significantly larger than the area that would be required for any other mitigation alternative **and, in consideration of the functions and values of the preservation area pursuant to (d) below, generally no less than a preservation to loss ratio of 8:1**.

(d)-(e) (No change.)

7:13-[13.14]**13.15** (No change in text.)

7:13-[13.15]**13.16** Financial assurance for mitigation projects; general provisions

(a)- (c) (No change.)

(d) Financial assurance shall comprise of one or more of the instruments identified at (d)1 through 5 below. A template for each of the types of financial assurance identified at (d)1 [through]**, 2, 3, or** 4 below is available from the Department at the address set forth at N.J.A.C. 7:13-1.3.

1. A fully funded trust fund, in accordance with N.J.A.C. 7:13-[13.16]**13.17**;

2. A line of credit, in accordance with N.J.A.C. 7:13-[13.17]**13.18**;

3. A letter of credit, in accordance with N.J.A.C. 7:13-[13.18]**13.19**;

4. A surety bond, in accordance with N.J.A.C. 7:13-[13.19]**13.20**; and/or

5. (No change.)

(e) –(i) (No change.)

(j) The portion of financial assurance required [under] **pursuant to** (f)2 above shall be released when the Department determines that the mitigation project or bank is successful pursuant to N.J.A.C. 7:13-[13.12(e)]**13.13(e)** (for a riparian zone project) or N.J.A.C. 7:13-[13.20(j)]**13.21(j)** (for a mitigation bank), as applicable.

(k)- (l) (No change.)

7:13-[13.16]**13.17** Financial assurance; fully funded trust fund requirements

(a) A person who chooses to establish a fully funded trust fund as financial assurance pursuant to this subchapter shall submit to the Department the original fully funded trust fund agreement. The trust fund agreement shall:

1.-5. (No change.)

6. Specify that the Department may access the fully funded trust fund to pay for the cost of the mitigation project or bank, pursuant to N.J.A.C. 7:13-[13.15(l)]**13.16(l)**; and

7. (No change.)

(b) (No change.)

7:13-[13.17]**13.18** Financial assurance; line of credit requirements

(a) A person who chooses to establish a line of credit agreement as financial assurance pursuant to this subchapter shall submit to the Department the original line of credit. The line of credit shall:

1.-6. (No change.)

7. Specify that the Department may access the line of credit to pay for the cost of the mitigation

project or bank pursuant to N.J.A.C. 7:13-[13.15(l)]**13.16(l)**.

(b) (No change.)

7:13-[13.18]**13.19** Financial assurance; letter of credit requirements

(a) A person who chooses to provide a letter of credit as financial assurance to guarantee the availability of funds pursuant to this subchapter shall submit to the Department the original letter of credit. The letter of credit shall:

1. -4. (No change.)

5. Specify that the Department may access the letter of credit to pay for the cost of the mitigation project or mitigation bank, pursuant to N.J.A.C. 7:13-[13.15(l)]**13.16(l)**.

7:13-[13.19]**13.20** Financial assurance; surety bond requirements

(a) A person who chooses to provide a surety bond as a financial assurance to guarantee the availability of funds pursuant to this subchapter shall complete and submit to the Department the original surety bond. The surety bond shall:

1. -3. (No change.)

4. Specify that the Department may access the surety bond to pay for the cost of the mitigation project or mitigation bank, pursuant to N.J.A.C. 7:13-[13.15(l)]**13.16(l)**.

7:13-[13.20]**13.21** Mitigation banks

(a) A mitigation bank requires approval by the Department prior to the sale or utilization of any mitigation credits. "Approval" for the purposes of this section means approval in accordance with N.J.A.C. 7:13-[13.21]**13.22**.

(b) –(d) (No change.)

(e) The Department shall include in the banking instrument approving a mitigation bank, a schedule, as set forth [in] **at** (e)1 through 7 below, under which a bank operator may sell credits. The Department shall adjust the amount of credits that can be released [under] **pursuant to** (e)2 through 7 below to reflect the degree of progress the bank has shown toward meeting the goals and performance standards in the approved mitigation proposal:

1. Ten percent of the credits shall be released upon completion of both of the following:

i. (No change.)

ii. Compliance with all pre-release credit sale conditions in the banking instrument approving the bank, including securing all construction permits, posting adequate and effective financial assurance in accordance with N.J.A.C. 7:13-[13.15]**13.16** for a mitigation bank involving creation or restoration mitigation, and filing of the conservation restriction;

2.- 7. (No change.)

(f) – (j) (No change.)

(k) If the Department determines that the mitigation bank operator is in default of any provision of the mitigation banking instrument and the default results in a termination of the banking instrument, the Department shall determine whether the amount of mitigation completed at the bank site is commensurate with the number of credits already sold. If the Department determines that the amount of mitigation completed is less than the number of credits already sold, the Department shall assert its rights to the financial assurance provided [under] **pursuant to** N.J.A.C. 7:13-[13.15(k)]**13.16(k)** and (l).

7:13-[13.21]**13.22** Application for a mitigation bank

(a) –(b) (No change.)

(c) To obtain Department approval of a proposed mitigation bank, an applicant shall submit the information required by the riparian mitigation bank proposal checklist, available from the Department at

the address set forth at N.J.A.C. 7:13-1.3. The checklist shall require the following:

1.-8. (No change.)

9. Performance standards to enable the Department to determine when credits may be released [under] **pursuant to** N.J.A.C. 7:13-[13.20(e)]**13.21(e)**;

10. -12. (No change.)

13. Financial assurance meeting the requirements [of] **at** N.J.A.C. 7:13-[13.15]**13.16**;

14. -18. (No change.)

(d) (No change.)

SUBCHAPTER 15. HARDSHIP EXCEPTION FOR AN INDIVIDUAL PERMIT

7:13-15.1 Hardship exception for an individual permit

(a) (No change.)

(b) A project or regulated activity is eligible for a hardship exception [under] **pursuant to** this section only**,** if one or more of the following apply:

1. (No change.)

2. The Department determines that the cost of compliance with the requirements of this chapter is unreasonably high in relation to the environmental benefits **and/or additional protection to public health, safety, and welfare** that would be achieved by compliance; [or]

3. The Department and applicant agree to one or more alternative requirements that, in the judgment of the Department, provide equal or better protection to public health, safety, and welfare and the environment[.]**; or**

4. The Department determines that there is a compelling public need for the project or regulated activity that cannot be satisfied through compliance with one or more requirements of this chapter.

(c) In addition to meeting at least one of the requirements [in] **at** (b) above, a project or regulated activity is eligible for a hardship exception [under] **pursuant to** this section only if the applicant demonstrates that:

1. Due to an extraordinary situation of the applicant or [site condition] **the presence of extraordinary physical or engineering constraints on the site**, compliance with this chapter would [result]**:**

i. Result in an exceptional and/or undue hardship for the applicant [and/or would]**; or**

ii. Would adversely impact public health, safety, and welfare **or the environment**;

2.-3. (No change.)

(d) (No change.)

(e) To obtain an individual permit based on a hardship exception, the applicant shall submit an application for an individual permit pursuant to N.J.A.C. 7:13-18 [and shall include the following additional information as applicable:]**, which includes a**

[1. A] detailed narrative that:

[i.] **1.** Explains how the project or regulated activity for which the applicant is seeking a hardship exception meets at least one of the requirements at (b) above**,** as well as all of the requirements [of] **at** (c) above; [and]

[ii.] **2.** (No change in text.)

[2.] **3.** [A description of] **Describes** any potential impacts of the proposed project or regulated activity upon **public health, safety, and welfare and** the environment;

[3.] **4.** [If the hardship exception request relates to the requirements for buildings at N.J.A.C. 7:13-12.5,] **Includes** all necessary structural, socio-economic, flood-proofing, and/or other information relevant to support the request;

[4.] **5.** [If the hardship exception request relates to the access requirements of N.J.A.C. 7:13-12.6,]

Identifies proposed access routes to and from the property during a flood **and considers the impact of the project or regulated activity on the ability of the community to recover after a flood event**;

[5.] **6.** [If the hardship exception request relates to any potential impacts from or to flooding,] **Identifies** the projected height, velocity, and duration of the floodwaters expected at the site [during the flood hazard area design flood, as well as evidence that] **from flooding to the climate-adjusted flood elevation and demonstrates that** the project **or regulated activity** will not adversely affect the hydraulic capacity of any water so as to cause or increase flooding upstream and/or downstream of the proposed project;

[6.] **7.** [If] **Includes detailed financial documentation, such as estimates of the cost of compliance with this chapter and/or for undertaking alternatives that have been explored, to support the request in cases where** the hardship exception request is based on economic grounds[, detailed financial documentation to support the request];

[7.] **8.** [A description of] **Describes** the existing development in the area and any potential **adverse** impacts of the proposed project or regulated activities on that development **and the community**; and

9. Demonstrates that the project or regulated activity meets the minimum NFIP standards at 44 CFR 60.3, or provides proof that the applicant has obtained a variance for the proposed project from the local floodplain administrator. Where the applicant is a State agency, this demonstration shall be made to the State floodplain administrator.

[8.] **(f)** [Any] **Prior to or during its review of a hardship exception request pursuant to this subchapter, the Department may require** additional information [that the Department determines is] **as** reasonable and necessary to evaluate whether the hardship exception request meets the requirements of this section.

Recodify existing (f) and (g) as **(g) and (h)** (No change in text.)

SUBCHAPTER 16. EMERGENCY AUTHORIZATIONS

7:13-16.3 Issuance of emergency authorization; conditions

(a) The Department shall issue or deny an emergency authorization within 15 calendar days after receiving a request that meets the requirements [of] **at** N.J.A.C. 7:13-16.2. The Director of the Division of Land [Use Regulation] **Resource Protection**, or the Director's designee, shall provide this decision to the person who requested the emergency authorization verbally and, if the decision is to issue the emergency authorization, shall provide written confirmation within five working days thereafter.

(b) – (k) (No change.)

SUBCHAPTER 17. PRE-APPLICATION CONFERENCES

7:13-17.2 Request for a pre-application conference; scheduling; information required

(a) (No change.)

(b) A request for a pre-application conference for a dredging or dredged material management project shall be directed [to] **by electronic mail to LURTechSupport@dep.nj.gov, or by writing to the address set forth at N.J.A.C. 7:13-1.3 to the attention of** Supervisor, Office of Dredging and Sediment Technology[, Site Remediation Program, NJ Department of Environmental Protection, P.O. Box 420, Mail Code 401-06C, 401 East State Street, 6th Floor, Trenton, NJ 08625 (Telephone: (609) 633-6801)].

(c)-(d) (No change.)

SUBCHAPTER 18. APPLICATION REQUIREMENTS

7:13-18.1 Purpose and scope

(a) This subchapter sets forth the application requirements for:

1.-2. (No change.)

3. An authorization [under] **pursuant to** a general permit, except for **the portion of** general permit 1 **for channel cleaning pursuant to the Stream Cleaning Act** (see N.J.A.C. 7:13-9.1**(a)1, (c), and (f)**); and

4. (No change.)

(b) The application requirements for the following are set forth elsewhere in this chapter:

1. (No change.)

2. For an application for a revision of a Department delineation, see N.J.A.C. 7:13-[3.7]**3.9**;

3. For registration for authorization pursuant to a permit-by-registration, see N.J.A.C. 7:13-6.5;

[3.] **4.** For an application for authorization [under] **pursuant to the portion of** general permit 1 **for channel cleaning pursuant to the Stream Cleaning Act at N.J.A.C. 7:13-9.1(a)1**, see N.J.A.C. 7:13-9.1**(f)**;

Recodify existing 4.-5. as **5.-6.** (No change in text.)

[6.] **7.** For an extension, transfer, or modification of an approval, see N.J.A.C. 7:13-[22.3, 22.4, or 22.5]**22.4, 22.5, or 22.6**, respectively.

7:13-18.2 General application requirements

(a) The Department provides a checklist for each type of application submitted [under] **pursuant to** this subchapter. The checklist identifies all of the submissions required [under] **pursuant to** the rules to be part of an application, and also the appropriate level of detail and the format of the information to be submitted for each type of application. For example, where the rules require, as part of an application, the submittal of photographs showing certain types of information, the corresponding checklist will indicate, based on the type of development the particular permit covers, the number and orientation of photographs of the location of the proposed development. Where the rules require the submittal of a site plan, the

corresponding checklist will indicate, based on the type of development the particular permit covers, the scale and details of the information to be illustrated on the plan. Checklists can be downloaded from the Department's website at [https://www.nj.gov/dep/landuse] **https://dep.nj.gov/wlm/** or obtained by contacting the Department at the address set forth at N.J.A.C. 7:13-1.3.

(b) – (c) (No change.)

(d) An application shall be certified as set forth [in (l)] **at (k)** below by the following individual(s), or by a duly authorized representative, as described at (e) below:

1. – 4. (No change.)

(e) – (f) (No change.)

(g) If an application includes activities within [a] **an existing** right-of-way or easement, the application shall include written consent for the activity from the holder(s) of the right-of-way or easement.

1. (No change.)

2. For any application involving holder(s) of a right-of-way or easement not covered at (g)1 above, written consent shall consist of the following:

i. Documentation that the holder of the right-of-way or easement does not object to the submittal of an application to the Department for activities within the right-of-way or easement, with the understanding that said activities may commence only upon receipt of all necessary approvals; or

ii. Documentation of the following:

(1) A copy of the certified mail receipt that the applicant requested documentation pursuant to (g)2i above and the holder of the right-of-way or easement failed to provide said documentation within 30 calendar days; and

(2) A copy of the instrument establishing the right-of-way or easement, which indicates that

the proposed activities are permitted as a condition of the right-of-way or easement.

(h) Where the applicant is a State agency endowed with the power of eminent domain, acting as the sovereign, which currently does not own, possess title to, or have a right of access on the land on which the regulated activities are proposed, the Department will not, on that basis alone, consider such an application administratively incomplete, but the Department shall require the applicant to issue notice compliant with N.J.A.C. 7:13-19.3(b)6, regardless of whether the project meets the requirements at N.J.A.C. 7:13-19.3(c). For the purposes of this section, "State agency" does not include a private or quasi-private entity using delegated condemnation authority. In addition, where site access is necessary to complete the Department's technical review of the application, the Department shall require the applicant to obtain a right of access sufficient to provide consent as required at (n) below, prior to the Department declaring the application is complete for review.

Recodify existing (h) – (j) as **(i) – (k)** (No change in text.)

[(k)] **(l)** Failure to provide complete and accurate information of which the applicant or its agents are aware, or reasonably should have been aware, may result in denial of an application or termination of the authorization [under] **pursuant to** the general permit-by-certification or general permit, or the individual permit [under] **pursuant to** N.J.A.C. 7:13-[22.8]**22.9**, and may subject the applicant or its agents to enforcement action [under] **pursuant to** N.J.A.C. 7:13-24.

Recodify existing (l) - (m) as **(m) – (n)** (No change in text.)

7:13-18.3 Additional application requirements for an authorization [under] **pursuant to** a general permit-by-certification

(a) An application for authorization [under] **pursuant to** a general permit-by-certification shall be submitted electronically **only by an architect or engineer, as appropriate, on behalf of the person**

proposing to conduct the activity, through the Department's online system at https://www.nj.gov/dep/online.

(b) In addition to meeting the requirements at N.J.A.C. 7:13-18.2, the applicant is required to provide the following in the online application for a general permit-by-certification:

1.-3. (No change.)

4. Information specific to the proposed project related to the requirements of the general permit-by-certification [under] **pursuant to** which the application is being submitted, such as, for example, the [area of proposed disturbance to riparian zone vegetation under] **cumulative increase in the footprint of the building since November 5, 2007, pursuant to the** general permit-by-certification [2 (see N.J.A.C. 7:13-8.2)] **for the reconstruction, relocation, expansion, and/or elevation of a building outside a floodway (see N.J.A.C. 7:13-8.1)**;

5. Contact information for [both] the applicant, [and] the property owner, **the municipal clerk for each municipality in which the project is located, and the county clerk for each county in which the project is located**, including: name, address, telephone number, [e-mail] **email** address, municipality, county, organization, and organization type;

6. A certification, as set forth [in] **at** N.J.A.C. 7:13-18.2(j), as to each of the following:

i.-iii. (No change.)

iv. That conditions specific to the general permit-by-certification [under] **pursuant to** which the application for authorization is being submitted are or will be met. For example, an [applicant] **architect or engineer submitting an application** for authorization [under] **pursuant to the** general permit-by-certification [6] **for the construction of a dock, pier, or boathouse** must certify that [the proposed building being reconstructed is not located within a floodway] **the boathouse shall not be used for habitation**;

7. -8.(No change.)

(c) (No change.)

7:13-18.4 Additional application requirements for an authorization [under] **pursuant to** a general permit or for an individual permit

(a) (No change)

(b) In addition to meeting the requirements at N.J.A.C. 7:13-18.2, the applicant is required to provide the following in the online application for a general permit or individual permit:

1. – 4. (No change.)

5. Contact information for the applicant, the property owner, any designated agent(s), [and] the municipal clerk for each municipality in which the project is located, **and the county clerk for each county in which the project is located,** including: name, address, telephone number, email address, municipality, county, organization, and organization type;

6. – 7. (No change.)

(c) In addition to meeting the requirements at (b) above, an application for an authorization [under] **pursuant to** a general permit or for an individual permit shall include the following digital documents, which must be uploaded to the online service in the format specified in the appropriate application checklist:

1.-3. (No change.)

4. Site plans, certified in accordance with N.J.A.C. 7:13-18.2[(i)]**(j)**, that include the following, both on and adjacent to the site:

i.-ii. (No change.)

iii. Existing and proposed topography where necessary to demonstrate that the proposed delineation, regulated activity, or project meets the requirements of this chapter. All topography shall reference [NGVD] **NAVD 88** or include the appropriate conversion factor to [NGVD] **NAVD 88**;

iv.-viii. (No change.)

5.-6. (No change.)

7. Any information necessary to ensure compliance with State and/or Federal law, and/or to determine whether an application for a verification, for an authorization [under] **pursuant to** a general permit or for an individual permit meets State and/or Federal standards[; and]**.**

i. For applications that propose to improve a lawfully existing building, the applicant shall include a written determination from the local floodplain administrator as to whether the building has been substantially damaged and/or whether the proposed improvements constitute a substantial improvement; and

8. (No change.)

(d)-(e) (No change.)

7:13-18.5 Additional application requirements for a verification

(a) (No change.)

(b) Applications for verifications submitted independently from any of the applications listed at (a) above shall be submitted to the address set forth at N.J.A.C. 7:13-1.3(c)2. In addition to meeting the requirements at N.J.A.C. 7:13-18.2, they shall include the following material, in the number and format specified in the appropriate application checklist:

1. – 3. (No change.)

4. Site plans, certified in accordance with N.J.A.C. 7:13-18.2[(i)]**(j)**, that include the following, both on and adjacent to the site:

i. (No change.)

ii. Existing topography, where necessary, to demonstrate that the proposed delineation meets the requirements of this chapter. All topography shall reference [NGVD] **NAVD 88** or include the

appropriate conversion factor to [NGVD] **NAVD 88**;

iii.-v. (No change.)

5. – 8. (No change.)

7:13-18.7 Engineering report requirement for an application for a verification [based on Methods 4, 5, or 6] or for an individual permit

(a) This section sets forth when an engineering report must be submitted as part of an application for a verification or individual permit.

[(a)] **(b)** In addition to the requirements at N.J.A.C. 7:13-18.2 and 18.4, or 18.5, as applicable, an application for a verification [based on Methods 4, 5, or 6, pursuant to N.J.A.C. 7:13-3.4(f), 3.5, and 3.6, respectively,] or for an individual permit **requiring the Department to review engineering calculations** shall include an engineering report. **Engineering calculations include, but are not limited to, hydrologic, hydraulic, structural, buoyancy, flood storage displacement, and stormwater calculations, as well as computations associated with determining the flood hazard area by approximation pursuant to N.J.A.C. 7:13-3.7.** The engineering report shall include **the following**:

1. (No change.)

2. [The name, address, and telephone number of the engineer, as well as] **Contact information, including telephone number and email, of** any [other] person designated by the [engineer] **applicant or agent** to answer questions about the **engineering** report;

3.-5. (No change.)

6. For an application for a verification [all]**:**

i. All flood maps, **flood profiles,** drainage area maps, and other material used to determine the flood hazard area and/or floodway limits; **and**

ii. Where available, a GIS file, such as a zipped shapefile or a file geodatabase containing a

feature class, delineating the metes and bounds of the flood hazard area, floodway, and inundation risk zone. For applications submitted electronically, this information shall be provided to the Department in a zipped folder or by delineating the metes and bounds on verification plans;

7. (No change.)

8. For an application for an individual permit for which the Department is reviewing a stormwater management plan pursuant to N.J.A.C. 7:13-12.2, the following information where applicable:

i. A demonstration of how green infrastructure has been [incorporated to meet the requirements **used to satisfy the groundwater recharge, stormwater runoff quality, and stormwater runoff quantity standards**, at N.J.A.C. 7:8-5.3;

ii. A demonstration of how the regulated activity and/or project meets the groundwater recharge standards at N.J.A.C. 7:8-5.4[(b)];

iii. [A table that compares existing and proposed stormwater discharges for the two-, 10-, and 100-year storm in order to demonstrate compliance with] **A demonstration of how the regulated activity and/or project meets** the runoff quantity standards at N.J.A.C. 7:8-5.6; [and]

iv. (No change.)

v. A maintenance plan for the stormwater management measures incorporated into the design, as required at N.J.A.C. 7:8-5.8; and

9. For an application for an individual permit for a project located in the Central Passaic Basin that relies on fill credits, as described at N.J.A.C. 7:13-11.4(s) and (t), [documentation that the fill credits have been purchased by the applicant prior to the submittal of the application.] **a demonstration that:**

i. The applicant has entered into a contract to purchase the necessary fill credits. If additional fill credits are determined to be required upon issuance of the permit, the permittee shall arrange to purchase the additional fill credits. No activities authorized by the individual permit

may commence unless and until the permittee provides documentation to the Department that all necessary fill credits have been purchased; and

ii. The flood storage volume requirements at N.J.A.C. 7:13-11.4(e)3 are met onsite to the maximum extent practicable.

7:13-18.8 Environmental report requirement for an application for an individual permit

(a) In addition to meeting the requirements at N.J.A.C. 7:13-18.2, 18.4, and 18.7 an application for an individual permit shall include an environmental report. The environmental report shall include:

1.-2. (No change.)

3. An analysis of any potential temporary and/or permanent adverse environmental impact(s), whether onsite or offsite, of the proposed regulated activity or project on regulated waters, channels, riparian zones, **inundation risk zones,** fishery resources, and threatened or endangered species and their habitat. The analysis shall include:

i. A justification for the proposed regulated activity or project, including an explanation of why any proposed regulated activity or project and its location is the most appropriate for the site, and how the proposed location and design minimizes adverse environmental impact(s)**, including, but not limited to, sea level rise and increased rainfall,** to the resources identified [in] **at** (a)3 above;

ii. – v. (No change.)

(b) Where a survey for threatened or endangered species and their habitat [under] **pursuant to** N.J.A.C. 7:13-[11.6(e)]**11.7(e)** is required, the survey shall be performed by a person with education and experience in wildlife biology, zoology, and/or botany, as appropriate, and shall include:

1.-8. (No change.)

7:13-18.9 Acknowledgement of potential flood and inundation risk

(a) Except as provided at (d) below, an application for authorization pursuant to a general permit pursuant to N.J.A.C. 7:13-9 or an individual permit pursuant to N.J.A.C. 7:13-10 that proposes any regulated activity in a flood hazard area shall include an acknowledgment of potential flood and inundation risk as set forth at (c) below.

(b) The acknowledgement required pursuant to (a) above, shall be signed by:

1. The owner(s) of the site on which the regulated activity is proposed, not by any agent; or

2. Where work is proposed by a government entity, an individual with executive level signatory authority.

(c) The appropriate person(s) listed at (b) above shall complete a checklist, available at www.nj.gov/dep/wlm, acknowledging the significant risks associated with undertaking the project within the flood hazard area, including potential economic or other costs to current and future property owners, including government entities for activities on public land, associated with the projected present and future flooding and inundation risk, such as increased insurance costs throughout the lifespan of any new or improved structure, and the cost of restoration and cleanup following flooding to the climate-adjusted flood elevation.

(d) The requirements of this section shall not apply to improvements undertaken by a public transportation entity along a public roadway, railroad, parking area, or airport runway or taxiway.

SUBCHAPTER 19. REQUIREMENTS FOR AN APPLICANT TO PROVIDE PUBLIC NOTICE OF AN APPLICATION

7:13-19.1 Purpose and scope

(a) An applicant shall provide public notice in accordance with this subchapter for the following:

1. An application for a verification, pursuant to N.J.A.C. 7:13-5[, which is based on Methods 4, 5,

or 6, pursuant to N.J.A.C. 7:13-3.4(f), 3.5, and 3.6, respectively];

2. (No change.)

3. An application for an authorization [under] **pursuant to** a general permit pursuant to N.J.A.C. 7:13-6 and 9, except for **authorization pursuant to the portion of** general permit 1 for channel cleaning [under] **pursuant to** the Stream Cleaning Act **set forth** at N.J.A.C. 7:13-9.1**(a)1**;

4. – 6. (No change.)

(b) An applicant is not required to provide public notice for the following:

1. – 2. (No change.)

[3. An application for a verification that is based on Methods 1, 2, or 3, pursuant to N.J.A.C. 7:13-3.3, 3.4(d), or (e), respectively;]

[4.] **3.** Conducting an activity [under a permit-by-rule] **pursuant to a permit-by-registration** pursuant to N.J.A.C. 7:13-6 and 7;

[5.] **4.** An application for authorization [under] **pursuant to** general permit 1 for [channel cleaning under] **removal of accumulated sediment and debris from a regulated water, in cases where such activities are authorized pursuant to** the Stream Cleaning Act pursuant to N.J.A.C. 7:13-9.1**(a)1 and (c)**;

[6.] **5.** (No change in text.)

[7.] **6.** An application for an extension of the term of a verification, authorization [under] **pursuant to** a general permit, or individual permit pursuant to N.J.A.C. 7:13-[22.3]**22.4**;

[8.] **7.** The transfer of a verification, authorization [under] **pursuant to** a general permit, or individual permit pursuant to N.J.A.C. 7:13-[22.4]**22.5**; and

[9.] **8.** An application for an administrative or minor technical modification pursuant to N.J.A.C. 7:13-[22.5(c)]**22.6(c)** or (d), respectively.

(c) –(d) (No change.)

7:13-19.3 Contents and recipients of public notice of an application

(a) (No change.)

(b) For any of the applications listed [in] **at** N.J.A.C. 7:13-19.1(a), the applicant shall provide notice of the application to all of the persons or entities at (b)1 through [6] **7** below, in accordance with the timeframe specified at N.J.A.C. 7:13-19.2. The notice shall include the information specified at (d) below.

1.-4. (No change.)

5. The local Soil Conservation District if the regulated activity or project will disturb 5,000 square feet or more of land; [and]

6. All owners of real property, including easements, located within 200 feet of the property boundary of the site in the manner set forth in the Municipal Land Use Law at N.J.S.A. 40:55D-12.b, unless the delineation, regulated activity, or project is one of those listed at (c)1 through 5 below, in which case the notice shall be provided as set forth [in] **at** (c) below. The owners of real property, including easements, shall be those on a list that was certified by the municipality. The date of certification of the list shall be no earlier than one year prior to the date the application is submitted to the Department[.]**; and**

7. Local emergency responders serving the project site, including the police department, fire department, emergency medical services, and office of emergency management, for an application for an individual permit for activities located within an inundation risk zone. If a municipality does not possess one or more emergency responders listed above, then the notice shall instead be provided to the corresponding county or State equivalent emergency responder.

(c)-(e) (No change.)

(f) In addition to the information required at (d) above, the public notice for an application for an individual permit for activities located within an inundation risk zone shall include a description of the activities located within the inundation risk zone.

[(f)] **(g)** (No change in text.)

7:13-19.4 Content and format of newspaper notice

(a) (No change.)

(b) The newspaper notice pursuant to N.J.A.C. 7:13-19.3(c) shall include all of the following:

1.-6. (No change.)

7. For an application for an individual permit based on a hardship exception pursuant to N.J.A.C. 7:13-15.1:

i. (No change.)

ii. The citation and subject matter of each requirement in this chapter for which the hardship exception is being requested; [and]

8. A description of any activities located within an inundation risk zone pursuant to an application for an individual permit; and

[8.] **9.** (No change in text.)

SUBCHAPTER 20. APPLICATION FEES

7:13-20.1 Application fees

(a) This subchapter establishes the application fees for:

1. – 5. (No change.)

6. An extension of a verification, authorization [under] **pursuant to** a general permit, or individual permit, pursuant to N.J.A.C. 7:13-[22.3]**22.4**; and

7. A modification of a verification, authorization [under] **pursuant to** a general permit, or individual permit, pursuant to N.J.A.C. 7:13-[22.5]**22.6**.

(b) There is no application fee for:

1. (No change.)

2. A [permit-by-rule] **permit-by-registration** pursuant to N.J.A.C. 7:13-6 and 7;

3. An authorization [under] **pursuant to** the following general permits-by-certification:

[i. General permit-by-certification 4 for enhancement of a riparian zone through the planting of native, non-invasive plant species, N.J.A.C. 7:13-8.4; and]

[ii.] **i.** General permit-by-certification [5] **1** for reconstruction, relocation, expansion, and/or elevation of a building outside a floodway **and/or inundation risk zone**, N.J.A.C. 7:13-8.1;

ii. General permit-by-certification 2 for the construction of an addition to a lawfully existing building, N.J.A.C. 7:13-8.2;

iii. General permit-by-certification 6 for construction of an aboveground swimming pool associated with residential use, N.J.A.C. 7:13-8.6;

iv. General permit-by-certification 9 for construction of an aquatic habitat enhancement device, N.J.A.C. 7:13-8.9;

v. General permit-by-certification 11 for construction of barrier-free access to a building in a floodway, N.J.A.C. 7:13-8.11; and

vi. General permit-by-certification 14 for construction of a gauge, weir, flume, monitoring well, or a similar device, N.J.A.C. 7:13-8.14;

4. An authorization [under] **pursuant to** the following general permits:

i. General permit 1 for [channel cleaning under the Stream Cleaning Act] **removal of accumulated sediment and debris from a regulated water**, N.J.A.C. 7:13-9.1;

ii. General permit 4 for creation, restoration, and enhancement of habitat and water quality values

and functions, N.J.A.C. 7:13-9.4; [and]

iii. General permit 5 for the reconstruction and/or elevation of a building in a floodway, N.J.A.C. 7:13-9.5; **and**

iv. General permit 9 for the construction of trails and boardwalks, N.J.A.C. 7:13-9.9;

5. (No change.)

6. A transfer of a verification, authorization [under] **pursuant to** a general permit, individual permit, or emergency authorization, pursuant to N.J.A.C. 7:13-[22.4]**22.5**; and

7. An administrative modification, pursuant to N.J.A.C. 7:13-[22.5]**22.6**.

(c) Application fees shall be paid as follows:

1. For applications submitted electronically, application fees shall be paid through the online service by credit card or e-check, or for applications for general permits, individual permits, or verifications in accordance with N.J.A.C. 7:13-[18.5(a)]**18.6(a)**, the applicant may elect to receive a bill that shall be payable directly to the New Jersey Department of the Treasury; or

2. (No change.)

(d) (No change.)

(e) The fees for applications [under] **pursuant to** this chapter are set forth [in] **at** Table 20.1 below:

Table 20.1

APPLICATION FEES

(Agency Note: The table below is intended to replace existing N.J.A.C. 7:13-20.1 Table 20.1.)

Revision of a Department delineation pursuant to N.J.A.C. 7:13-3.9

	Fee

Each major revision	**$4,000 plus $400.00 per each 100-foot segment of regulated water (or fraction thereof) to be re-delineated[2]**
Each minor revision	**$500.00**

Verification pursuant to N.J.A.C. 7:13-5

	Fee
Department delineation pursuant to N.J.A.C. 7:13-3.5	**$1,000[1]**
FEMA flood mapping pursuant to N.J.A.C. 7:13-3.6	**$1,000[1]**
Approximation pursuant to N.J.A.C. 7:13-3.7	**$1,000[1]**
Calculation pursuant to N.J.A.C. 7:13-3.8	**$4,000 plus $400.00 per each 100 linear feet of regulated water (or fraction thereof)[2]**
Delineation of riparian zone only	**$1,000**
Delineation of an inundation risk zone only	**$1,000**

Authorization pursuant to a general permit-by-certification pursuant to N.J.A.C. 7:13-6 and 8

Type of General Permit-by-Certification	**Fee**
Pursuant to N.J.A.C. 7:13-8.1, 8.2, 8.6, 8.9, 8.11, and 8.14	**No fee**
Any other general permit-by-certification	**$1,000**

Authorization pursuant to a general permit pursuant to N.J.A.C. 7:13-6 and 9

Type of General Permit	**Fee**

Pursuant to N.J.A.C. 7:13-9.1, 9.4, 9.5, and 9.9	**No fee**
Any other general permit	**$1,000**

Individual permit pursuant to N.J.A.C. 7:13-10, 11, and 12

Individual Permit Elements		**Fee**
Individual permit for the construction of one single-family home or duplex, which is not being constructed as part of a residential subdivision or multi-unit development, or for the construction of an addition or other accessory structure to a single-family home or duplex		**$2,000**
Base fee for any other individual permit		**$3,000**
Additional review fee per project element[1]		
Bank or channel stabilization, reestablishment, protection, or modification project	**Review of hydrologic, hydraulic, and/or flood storage displacement (net-fill) calculations required**	**$4,000 plus $400.00 per each 100 linear feet of regulated water (or fraction thereof)[2]**
	No review of calculations required	**$1,000 per project**
Bridge, culvert, footbridge, low dam, or other water control structure	**Review of hydrologic, hydraulic, and/or flood storage displacement (net-fill) calculations required**	**$4,000 per structure**
	No review of calculations required	**$1,000 per structure**
Review of flood storage displacement (net-fill) calculations for any project not listed above		**$4,000**

Review of a hardship exception request	**$4,000**
Utility line	**$1,000 per crossing of a regulated water**

Extension of a verification, authorization pursuant to a general permit, or individual permit pursuant to N.J.A.C. 7:13-22.4

Type of Extension	**Fee**
Verification based on a Department delineation, FEMA flood mapping, or approximation	**$240.00**
Verification based on calculation	**25 percent of original verification application fee**
Verification of the riparian zone alone	**$240.00**
Verification of the inundation risk zone alone	**$240.00**
Authorization pursuant to a general permit	**$240.00**
Individual permit	**25 percent of original individual permit application fee**

Modification of a verification, authorization pursuant to a general permit, or individual permit pursuant to N.J.A.C. 7:13-22.6

	Fee
Administrative modification	**No fee**

Minor technical modification	**$500.00 per project element modified**
Major technical modification	**30 percent of the original permit application fee or $500.00, whichever is greater**

Additional application fee for stormwater review if a project is a "major development" pursuant to the Stormwater Management Rules (see N.J.A.C. 7:8-1.2)[3]

Stormwater Review Element	Fee
Base fee for any major development	**$3,000**
Additional fee for review of groundwater recharge calculations (see N.J.A.C. 7:8-5.4)	**$250.00 per acre of land disturbed by the project (or fraction thereof)**
Additional fee for review of runoff quantity calculations (see N.J.A.C. 7:8-5.6)	**$250.00 per acre of land disturbed by the project (or fraction thereof)**
Additional fee for review of water quality calculations (see N.J.A.C. 7:8-5.5)	**$250.00 per acre of regulated motor vehicle surface subject to water quality review (or fraction thereof)**
Modification of previously reviewed stormwater calculations	**30 percent of the original stormwater fee**

[1] This fee does not apply for any application associated with the construction of one single-family home or duplex, which is not being constructed as part of a residential subdivision or multi-unit development, or for the construction of an addition or accessory structure to a single-family home or duplex.

[2] The length of the regulated water shall be measured along its centerline. The length of a regulated water in which no channel is discernible shall be determined by measuring along the approximate centerline of the regulated water.

[3] The additional application fee for stormwater review set forth in this table shall not exceed $20,000.

SUBCHAPTER 21. APPLICATION REVIEW

7:13-21.1 General application review provisions

(a) (No change.)

(b) The review procedures for the following are set forth elsewhere in this chapter:

1. (No change.)

2. For an application for a revision of a Department delineation, see N.J.A.C. 7:13-[3.7]**3.9**;

3. – 4. (No change.)

5. For a request to extend, transfer, or modify an approval, see N.J.A.C. 7:13-[22.3, 22.4, or 22.5]**22.4, 22.5, or 22.6**, respectively.

(c) Any application for an authorization [under] **pursuant to** a general permit or for an individual permit reviewed in accordance with this subchapter, other than those identified at [(d)1] **(c)1** and 2 below, is subject to the application review requirements of the Construction Permits Law, N.J.S.A. 13:1D-29 et seq. This subchapter incorporates those requirements and is consistent with N.J.S.A. 13:1D-29 et seq.

1. (No change.)

2. An application for authorization [under] **pursuant to the portion of the** general permit 1 for channel cleaning [under] **pursuant to** the Stream Cleaning Act at N.J.A.C. 7:13-9.1**(a)1** is subject only to the review requirements at N.J.A.C. 7:13-21.4.

(d) – (g) (No change.)

7:13-21.4 Department review and decision on an application for an authorization [under] **pursuant to** general permit 1 for channel cleaning [under] **pursuant to** the Stream Cleaning Act

(a) Within 15 calendar days after receiving an administratively and technically complete application for authorization [under] **pursuant to** a general permit 1 for activities that do not include the removal of sediment, or within 60 calendar days after receiving an administratively and technically complete application for activities that include the removal of sediment, where day one of the 15- or 60-calendar-day period is the date the application is received, the Department shall take one of the following actions:

1. -2. (No change.)

(b) If the Department does not make a decision to approve or deny an application for [a] **an** authorization [under] **pursuant to** a general permit 1 by the applicable deadline set forth [in] **at** (a) above, the applicant is authorized to commence stream cleaning activities in accordance with the Stream Cleaning Act provisions of the Flood Hazard Area Control Act at N.J.S.A. 58:16A-67.

1. -2. (No change)

(c) The Department shall provide notice of the decision on an application for authorization [under] **pursuant to the** general permit [1] in the DEP Bulletin and to any person who specifically requested notice of the decision on a particular application.

SUBCHAPTER 22. PERMIT CONDITIONS; EXTENSION; MODIFICATION, TRANSFER, SUSPENSION, AND TERMINATION OF VERIFICATIONS, AUTHORIZATIONS, AND PERMITS

7:13-22.2 Conditions that apply to all permits

(a) The Department places conditions on a permit to ensure that the approved project complies with this chapter. The conditions that apply to all permits are set forth [in] **pursuant to** (c) below, and the additional conditions that apply to all permits except [permits-by-rule] **permits-by-registration** are set forth [in] **at** (d) below.

(b) (No change.)

(c) The following conditions apply to all permits:

1.-6. (No change.)

7. The permittee shall immediately inform the Department by telephone at (877) 927-6337 (Warn DEP Hotline) of any noncompliance that may endanger the public health, safety, and welfare, or the environment. The permittee shall inform the Division of Land [Use Regulation] **Resource Protection** by telephone at (609) 292-0060 of any other noncompliance within two working days of the time the permittee becomes aware of the noncompliance, and**,** in writing**,** within five working days of the time the permittee becomes aware of the noncompliance. Such notice shall not, however, serve as a defense to enforcement action if the project is found to be in violation of this chapter. The written notice shall include:

i.-iv. (No change.)

8.-14. (No change.)

(d) In addition to the conditions at (c) above, the following conditions apply to all permits except [permits-by-rule] **permits-by-registration**:

1.-2. (No change.)

3. Except for an authorization [under] **pursuant to the** general permit [1] for channel cleaning

[under] **pursuant to** the Stream Cleaning Act **or removal of accumulated sediment and debris from a regulated water either for agricultural purposes or from an engineered channel** at N.J.A.C. 7:13-9.1, the permittee shall record the permit, including all conditions listed therein, with the [Office of the County Clerk] **office of the county clerk** (the Registrar of Deeds and Mortgages, if applicable) of each county in which the site is located**, in accordance with N.J.A.C. 7:13-22.3**. [The permit shall be recorded within 30 calendar days of receipt by the permittee, unless the permit authorizes activities within two or more counties, in which case the permit shall be recorded within 90 calendar days of receipt. Upon completion of all recording**s**, a copy of the recorded permit shall be forwarded to the Division of Land Use Regulation at the address set forth at N.J.A.C. 7:13-1.3;]

4. – 11. (No change.)

12. Where the permittee becomes aware that it failed to submit any relevant facts in an application, or submitted incorrect information in an application or in any report to the Department, it shall promptly submit such facts or information; [and]

[13. The permittee shall submit written notification to the Bureau of Coastal and Land Use Compliance and Enforcement, 401 East State Street, 4th Floor, P.O. Box 420, Mail Code 401-04C, Trenton, NJ 08625, at least three working days prior to the commencement of regulated activities.]

13. No more than 14 calendar days prior to undertaking an activity authorized pursuant to a general permit-by-certification, general permit, or individual permit, the permittee (or a consultant, engineer, or architect that is designated by the permittee to register on their behalf) shall electronically register the activity through the Department's online system at https://www.nj.gov/dep/online, which requires the registrant to identify or provide the following:

i. The Department's file number for the authorization or permit;

ii. The anticipated date that authorized activities will begin;

iii. Contact information for the registrant, including name, street address, telephone

number, email address, organization, and organization type; and

iv. The following certification using the PIN that was issued to the registrant upon registering with the Department's online system:

"I certify under penalty of law that the information submitted herein is true, accurate, and complete, that I am the permittee or that the permittee has provided me with written consent to register for this authorization. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment.";

14. Where the authorization or permit authorizes the construction, repair, reconstruction, rehabilitation, addition placement, or other improvement of any habitable building, roadway, or railroad within a flood hazard area, permitted activities shall commence within 180 days of the date of issuance of the authorization or permit.

i. Where the construction, repair, reconstruction, rehabilitation, addition placement, or other improvement of the habitable building, roadway, or railroad within a flood hazard area has not commenced within 180 days of issuance, said activities may not commence unless and until the permittee takes one of the following actions:

(1) Registers at https://www.nj.gov/dep/online and certifies that the climate-adjusted flood elevation, floodway limits, and flood zone designation for the site have not been amended by the Department or FEMA since the date of the initial authorization;

(2) Demonstrates that the amended climate-adjusted flood elevation, floodway limits, and/or flood zone designation for the site does not alter compliance with this chapter as applied in the issued authorization or permit; or

(3) Demonstrates that the project has been revised where necessary to comply with the amended climate-adjusted flood elevation, floodway limits, and/or flood zone designation for the site.

ii. For the purposes of this paragraph, commencement of authorized activities for a habitable building means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not intended for human occupancy or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

iii. For the purposes of this paragraph, commencement of authorized activities for a roadway or railroad means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, the placement of subsurface improvements for a roadway, or any work beyond the stage of excavation. Permanent construction does not include land preparation, such as clearing, grading, and filling.

iv. Permittees seeking to demonstrate that either (d)14ii or iii above apply to an authorization or permit shall provide the Department with all necessary information supporting the permittee's assertion. Commencement of authorized activities shall not occur unless and until the Department concurs with the permittee in writing.

v. A registrant may request an adjudicatory hearing to contest the re-registration requirement of this paragraph, in accordance with the procedures set forth at N.J.A.C. 7:13-23; and

15. Upon completion of authorized activities, the permittee (or a consultant, engineer, or architect that is designated by the permittee to register on their behalf) shall electronically provide, through the Department's online system at https://www.nj.gov/dep/online, the following:

i. Contact information for the registrant;

ii. The Department's file number for the authorization or permit; and

iii. The completion date of the authorized activities.

7:13-22.3 Deed notice requirement for a verification, an authorization pursuant to a general permit-by-certification, general permit, or an individual permit

(a) Except as provided at (b) below, the recipient of a verification, an authorization pursuant to a general permit-by-certification or general permit, or an individual permit, shall submit, in a form approved by the Department, the following information to the office of the county clerk or the registrar of deeds and mortgages in which the site is located, pursuant to (c) below, and shall send proof to the Department, pursuant to (d) below, that this information is recorded on the deed of each lot referenced in the approval:

1. The Department file number for the verification, authorization, or permit;

2. The approval and expiration dates of the verification, authorization, or permit;

3. The climate-adjusted flood elevation(s) at the site, if identified in the approval(s);

4. For any authorized or permitted activity located in a flood hazard area, an explanation that the activity is likely to be subject to periodic inundation and associated flood damage, as well as the expected depth of inundation resulting from flooding to the climate-adjusted flood elevation;

5. For any authorized or permitted activity located in an inundation risk zone, an explanation that the activity is likely to be subject to permanent inundation during the anticipated lifetime of any structure being constructed, reconstructed, or modified, as well as the depth of

inundation expected due to sea level rise through the year 2100;

6. For any habitable building pursuant to N.J.A.C. 7:13-12.5:

i. The anticipated depth of flooding at the building;

ii. The approximate frequency at which the building is anticipated to be impacted by floodwaters;

iii. A prohibition on habitation of any enclosure situated below the lowest floor of any building and an explanation that converting the enclosure into a habitable area may subject the property owner to enforcement pursuant to this chapter; and

7. For any private roadway or parking area proposed to be constructed or raised to less than one foot above the climate-adjusted flood elevation, the deed for each lot on which the private roadway or parking area is constructed, as well as any lot served by the private roadway or parking area, and each lease or rental agreement for a unit within a multi-residence building served by a private roadway or parking area that lies below the climate-adjusted flood elevation, shall be modified to:

i. Explain that the private roadway or parking area is likely to be inundated by floodwaters, which may result in damage and/or inconvenience; and

ii. Disclose the climate-adjusted flood elevation and associated depth of flooding, as well as the approximate frequency at which the private roadway or parking area is anticipated to be impacted by floodwaters.

(b) Deed notice is not required for:

1. A verification within a State right-of-way or easement;

2. A permit or authorization to undertake regulated activities on public land by a State agency; or

3. A permit or authorization to undertake sediment and debris removal activities.

(c) Proof that the requirements at (a) above have been satisfied shall be provided to the Department in accordance with (d) below prior to the sooner of either:

1. The start of any site disturbance (including installation of silt fencing, pre-construction earth movement, removal of vegetation or structures, or construction of the project); or

2. The date that is 90 calendar days after the issuance of the verification, authorization, or permit.

(d) Proof that the information at (a) above has been recorded on the deed of each lot referenced in the approval shall be in the form of either a copy of the complete recorded document or a receipt from the clerk or other proof of recordation provided by the recording office. However, if the initial proof provided to the Department is not a copy of the complete recorded document, a copy of the complete recorded document shall be provided to the Department within 180 calendar days of the date of the verification, authorization, or permit.

Recodify existing 7:13-22.3 and 22.4 as **7:13-22.4 and 22.5** (No change in text.)

7:13-[22.5]**22.6** Modification of a verification, an authorization [under] **pursuant to** a general permit, or an individual permit

(a)-(f) (No change.)

(g) The modified verification, modified authorization [under] **pursuant to** a general permit, or modified individual permit, including all conditions listed therein, shall be recorded within 30 calendar days of receipt by the person requesting such modification, with the [Office of the County Clerk] **office of the county clerk** (the Registrar of Deeds and Mortgages, if applicable) of each county in which the site is located. Where the site subject to the modified verification, modified authorization [under] **pursuant to** a general permit, or modified individual permit is located within two or more counties, the modified

verification, authorization, or permit shall be recorded within 90 calendar days of receipt. Upon completion of all recordings, a copy of the recorded modified verification, authorization, or permit shall be forwarded to the Division of Land [Use Regulation] **Resource Protection** at the address set forth at N.J.A.C. 7:13-1.3.

7:13-[22.6]**22.7** Application for a modification

(a)-(b) (No change.)

(c) To apply for a minor technical modification of a verification, an authorization [under] **pursuant to** a general permit, or an individual permit pursuant to N.J.A.C. 7:13-[22.5(d)]**22.6(d)**, the person requesting the modification shall submit:

1. A completed application form as described at N.J.A.C. 7:13-[22.3(c)1]**22.4(c)1** and available from the Department at the address set forth at N.J.A.C. 7:13-1.3;

2.-8. (No change.)

(d) To apply for a major technical modification of a verifications, an authorization [under] **pursuant to** a general permit, or an individual permit pursuant to N.J.A.C. 7:13-[22.3(e)1]**22.4(c)1,** the person requesting the modification shall submit:

1.-11. (No change.)

Recodify existing 7:13-22.7 and 22.8 as **7:13-22.8 and 22.9** (No change in text.)

SUBCHAPTER 23. REQUESTS FOR ADJUDICATORY HEARING

7:13-23.1 Procedure to request an adjudicatory hearing; decision on the request

(a)-(c) (No change.)

(d) A person requesting an adjudicatory hearing shall:

1. (No change.)

2. Submit a copy of the hearing request to the Director of the Division of Land [Use Regulation] **Resource Protection**, at the address set forth at N.J.A.C. 7:13-1.3.

(e) – (g) (No change.)

SUBCHAPTER 24. ENFORCEMENT

7:13-24.1 General provisions

(a)-(c) (No change.)

(d) For the purposes of this subchapter, a permit shall mean **a registration pursuant to a permit-by-registration,** authorization [under] **pursuant to** a general permit-by-certification, authorization [under] **pursuant to** a general permit, individual permit, emergency authorization, letter of authorization, memorandum of agreement, or other written authorization, or other approval issued pursuant to N.J.S.A. 58:16A-50 et seq.

7:13-24.5 Civil administrative penalties for failure to obtain a permit prior to conducting regulated activities

(a) – (d) (No change.)

(e) The Department shall use the two factors described [in] **at** (e)1 and 2 below to determine the number of points assigned to each violation.

1. (No change.)

2. The seriousness factor of the violation is assigned points as provided below and shall be based on the type, size, and location of the violation as provided at (e)2i through iv below, whether the activity also constitutes a Tidelands violation as provided at (e)2v below, and whether the activity impacted a resource of concern as provided at (e)2vi below:

i. An impact to a channel, such as a physical alteration**,** including excavation, grading, channelization, channel widening, dredging, and channel relocation, or a change in the channel equilibrium, channel bank stability, or water quality, is assigned points as provided at (e)2i(1) [through]**, (2), and** (3) below and **the point assignment** shall be based on the length of the channel impacted. A violation that disturbed:

(1)-(3) (No change.)

ii. An impact to a floodway, such as the construction or placement of structures, [fill,] **alteration of topography through excavation, filling, or grading,** or obstruction within the floodway, is assigned points as provided at (e)2ii(1) [through]**, (2), and** (3) below and **the point assignment** shall be based on the type and volume of fill or obstruction constructed or placed within the floodway, whether the fill constitutes a habitable building, and the area of the footprint of the structure:

(1) A violation comprised of the [placement of fill] **alteration of topography through excavation, filling, or grading,** or **the placement of an** obstruction within the floodway:

(A)-(C) (No change.)

(2)-(3) (No change.)

iii. An impact to a flood fringe, such as the construction or placement of structures, [fill,] **alteration of topography through excavation, filling, or grading,** or obstruction within the flood fringe, is assigned points as provided at (e)2iii(1) [through]**, (2), and** (3) below and **the point assignment** shall be based on the volume of fill or obstruction constructed or placed within the flood fringe, whether the structure complies with this chapter**,** notwithstanding that a flood hazard area permit was not obtained, and, in the case of a building, the elevation of the lowest floor in relation to the minimum elevation required for the type of building:

(1) A violation comprised of the [placement of fill] **alteration of topography through excavation, filling, or grading,** or **the placement of an** obstruction within the flood fringe:

(A)-(C) (No change.)

(2)-(3) (No change.)

iv. An impact to an inundation risk zone, such as the construction, repair, reconstruction, alteration, or expansion of any structure, is assigned points as provided at (e)2iv(1) below, and the point assignment shall be based on whether an application to permit such an activity would be required to complete the analysis described at N.J.A.C. 7:13-11.5(b).

(1) A violation comprised of any regulated activity listed at N.J.A.C. 7:13-11.5(a) is assigned five points.

[iv.] **v.** An impact to a riparian zone, such as the clearing, cutting, and/or removal of vegetation, the construction, reconstruction, relocation, or enlargement of the footprint of any structure, and all site preparation such as excavation, filling, and grading of any kind within the riparian zone, is assigned points as provided at [(e)2iv(1) through] **(e)2v(1), (2), (3), and** (4) below and **the point assignment** shall be based on the area disturbed and the type of vegetation that was disturbed:

(1) - (4) (No change.)

[v.] **vi**. In addition to the points assessed in accordance with (e)2i through [iv] **v** above, for a violation located in a State-owned Tidelands area for which a current tidelands instrument has not been obtained, or for which payment is in arrears, the Department shall assess one point.

[vi.] **vii.** In addition to the points assessed in accordance with (e)2i through [v] **vi** above, for a violation that impacts a resource of concern as described at [(e)iv(1) through (6)] **(e)2vii(1) through (7)** below, the Department shall assess one point per resource of concern.

(1)-(4) (No change.)

(5) A channel or floodway; [and]

(6) An inundation risk zone; and

[(6)] **(7)** (No change in text.)

(f) The Department shall sum the total points assigned according to the two factors [in] **at** (e) above, and shall determine the base penalty amount per day using the following table:

Table 24.5A

Base Penalty Points Table

Points	Base Penalty
1- [3] **2**	$500
[4-6] **3-4**	$1,000
[7-8] **5**	$2,000
[9-10] **6**	[$3,000] **$4,000**
7	**$5,000**
[11-12] **8**	$6,000
[13-14] **9**	$8,000
10	**$9,000**
[15-16] **11-12**	$10,000
[17-19] **13-14**	$15,000
[20-22] **15-16**	$20,000
[23] **17** or more	$25,000

(g)-(j) (No change.)

7:13-24.6 Civil administrative penalties for violations other than failure to obtain a permit prior to conducting regulated activities

(a)-(d) (No change.)

(e) The seriousness of the violation shall be determined as major, moderate, or minor as follows:

1. Major seriousness shall apply to any violation which has caused or has the potential to cause

serious harm to human health or safety, property, the environment, or the flood hazard area regulatory program, or seriously deviates from the applicable law and/or condition. "Serious deviations" include, but are not limited to, those violations which are in complete contravention of the law, requirement, and/or condition, and/or which severely impair or undermine the protection, operation, or intent of the law, requirement, or condition. Violations of "major" seriousness include, but are not limited to:

i.-ii. (No change.)

iii. Any violation occurring within the inundation risk zone;

Recodify existing iii.-iv. as **iv.-v.** (No change in text.)

[v.] **vi.** Conducting regulated activities during a restricted time period identified [in] **at** Table [11.5] **11.6**, Restricted Time Periods for Regulated Waters with Fishery Resources, at N.J.A.C. 7:13-[11.5]**11.6**;

Recodify existing vi.-vii. as **vii.-viii.** (No change in text.)

2.-3. (No change.)

(f)-(h) (No change.)

APPENDIX 1

APPROXIMATING THE [FLOOD HAZARD AREA DESIGN] **CLIMATE-ADJUSTED** FLOOD ELEVATION

As described in detail at N.J.A.C. 7:13-3, the Department and FEMA have adopted flood mapping along many of the State's waters. In absence of a Department delineation[1][,] or FEMA flood mapping [that meets the requirements at N.J.A.C. 7:13-3.4(b)], an applicant may [use the approximation method described at] **approximate the climate-adjusted flood elevation and determine the approximate flood hazard area limits on a site, in accordance with** N.J.A.C. 7:13-[3.5]**3.7 and** in conjunction with this appendix.

Note that this method approximates only the [flood hazard area design] **climate-adjusted** flood elevation. This method does not approximate the floodway limit. Many activities are restricted within floodways and some calculations cannot be performed if the floodway limit is unknown. Therefore, the Department shall issue an individual permit for a regulated activity within an approximated flood hazard area only if the regulated activity meets the requirements at N.J.A.C. 7:13-[3.5(f)]**3.7(f)**.

HOW TO [USE METHOD 5 (APPROXIMATION METHOD)] **APPROXIMATE THE CLIMATE-ADJUSTED FLOOD ELEVATION**

1. - 4. (No change.)

5. The approximate [flood hazard area design] **climate-adjusted** flood elevation will be the higher of the following (see Figures 1 through 4):

• The depth from Table 1, measured above the average streambed.[4]

• The depth from Table 2, measured above the highest roadway low point described in 4 above.

NOTES

1. See Appendix 2 for a complete list of delineations and N.J.A.C. 7:13-[3.3]**3.5** for more detail.

2. - 4. (No change.)

...

APPENDIX 2

LIST OF DEPARTMENT DELINEATED WATERS

The following table lists the waters for which the Department has promulgated a delineation of the flood hazard area. This list is organized by county and municipality. In most cases the delineation includes both the flood hazard area design flood elevation and the floodway limit. To determine which

mapping is available for a particular water, or to obtain copies of maps or other information regarding the use or revision of these studies, contact the Department as described at N.J.A.C. 7:13-[3.3]**3.5**. [An asterisk indicates that the Department delineation for that studied water was promulgated on or after January 24, 2013.]

...

Hunterdon County		
Municipality	Name of Studied Water	Section Studied
Alexandria Township	Delaware River[*]	Entire reach
...		
Delaware Township	...	
	Delaware River[*]	Entire reach
...		
Frenchtown Borough	Delaware River[*]	Entire reach
...		
Holland Township	Delaware River[*]	Entire reach
...		
Kingwood Township	Delaware River[*]	Entire reach
...		
Lambertville City	Alexauken Creek	Entire reach
	Delaware River[*]	Entire reach
...		
Milford Borough	Delaware River[*]	Entire reach
...		
Stockton Borough	Brookville Creek	Entire reach
	Delaware River[*]	Entire reach
...		
West Amwell Township	Alexauken Creek	Downstream of State Highway 179
	Delaware River[*]	Entire reach
...		

Sussex County		
Municipality	Name of Studied Water	Section Studied
...		
Montague Township	Delaware River[*]	Entire reach
...		
Sandyston Township	Delaware River[*]	Entire reach
...		
Wantage Township	Delaware River[*]	Entire reach

...

Warren County		
Municipality	Name of Studied Water	Section Studied
...		
Belvidere Town	Delaware River[*]	Entire reach
...		
Hardwick Township	Delaware River[*]	Entire reach
...		
	Delaware River[*]	Entire reach
...		
Knowlton Township	Delaware River[*]	Entire reach
...		
Lopatcong Township	Delaware River[*]	Entire reach
...		
Phillipsburg Town	Delaware River[*]	Entire reach
...		
Pohatcong Township	Delaware River[*]	Entire reach
...		
White Township	Beaver Brook	Entire reach
	Delaware River[*]	Entire reach
...		

CHAPTER 14A

NEW JERSEY POLLUTANT DISCHARGE ELIMINATION SYSTEM

SUBCHAPTER 20. STANDARDS FOR THE USE OR DISPOSAL OF RESIDUAL

7:14A-20.8 Surface disposal of residual

(a) – (d) (No change.)

(e) For in-situ, closed surface disposal sites, the following management practices shall apply:

1. The closure of a surface disposal site shall not restrict the flow of [a base flood] **floodwaters within a flood hazard area**, unless otherwise approved by the Department [under] **pursuant to** the Flood Hazard Area Control [rules] **Act Rules**, N.J.A.C. 7:13;

2. – 9. (No change.)

(f) (No change.)

SUBCHAPTER 23. TECHNICAL REQUIREMENTS FOR TREATMENT WORKS APPROVAL APPLICATIONS

7:14A-23.13 Wastewater treatment plants

(a) – (b) (No change.)

(c) Siting requirements for wastewater treatment plants are as follows:

1. – 2. (No change.)

[3. Treatment plants shall be raised above the flood elevation level, or adequately flood proofed. For the purposes of this requirement, the flood elevation level is considered to be one foot above the 100 year flood elevation for non-delineated waterways and up to the Flood Hazard Design Flood Elevation for delineated waterways (see N.J.A.C. 7:13); and]

3. The lowest floor elevation of any habitable building constructed as part of a treatment plant shall be constructed or raised one foot above the climate-adjusted flood elevation, as described at N.J.A.C. 7:13, and all structures shall be built in accordance with N.J.A.C. 7:13-12.4 and 12.5; and

4. (No change.)

(d) – (p) (No change.)

CHAPTER 26

SOLID WASTE

SUBCHAPTER 2. DISPOSAL

7:26-2.9 Environmental and Health Impact Statement requirements

(a) – (b) (No change.)

(c) The EHIS for all solid waste facilities other than solid waste facilities for which specific requirements are set forth [in] **at** (d) below, shall contain the following:

1. – 2. (No change.)

3. An environmental inventory, prepared in detail for the site specific conditions and, unless otherwise specified herein, a general description for a minimum area of one mile from the perimeter of the proposed facility's property lines, describing existing conditions for each of the following categories:

i. Category I, the physical/chemical category, requires the following parameter descriptions:

(1) – (7) (No change.)

(8) Describe the topography by presenting contour data, drainage patterns and [100 year] floodway and flood hazard areas delineations pursuant to the Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq., or areas identified pursuant to and based upon the most current Federal Flood Emergency Management Act (F.E.M.A.) maps and data;

(9) – (11) (No change.)

ii. – iv. (No change.)

4. – 13. (No change.)

(d) – (g) (No change.)

7:26-2.10 General engineering design submission requirements

(a) (No change.)

(b) The general requirements for the preparation and submittal of engineering designs for all proposed solid waste facilities are as follows:

1. – 3. (No change.)

4. A key map of the engineering drawings, delineating the general location of the proposed facility, shall be prepared and submitted as part of the engineering design. The key map shall be plotted

on a seven and one-half minute United States Geological Survey topographical quadrangle. The quadrangle shall be the most recent revision available, shall include the name of the quadrangle and shall delineate a minimum of three miles from the perimeter of the proposed facility boundaries. One or more maps may be utilized where necessary to [insure] **ensure** clarity of the information submitted. The key map shall depict the following:

i. All surface waters, coastal zone areas as defined [in] **at** N.J.S.A. 13:19-1 et seq.; wetlands as defined [in] **at** N.J.S.A. 13:9A-1 et seq.; water supply wells and reservoirs; FW-1 and FW-2 Trout Production waters as defined [in] **at** N.J.A.C. 7:9B; wild, scenic, recreational or developed recreational rivers designated pursuant to the Natural Wild and Scenic River Act**,** 16 [USCA] **U.S.C. §§** 1271 et seq.**,** or the New Jersey Wild and Scenic River Act**,** N.J.S.A. 13:8-45 et seq., and all [100 year] floodway**s** and flood hazard areas as [delineated] defined [in] **at** N.J.A.C. 7:13:

ii. – iv. (No change.)

5. – 12. (No change.)

SUBCHAPTER 2A. ADDITIONAL SPECIFIC DISPOSAL REGULATIONS FOR SANITARY LANDFILLS

7:26-2A.6 Sanitary landfill environmental performance standards

(a) – (f) (No change.)

(g) All sanitary landfills regulated pursuant to N.J.A.C. 7:26-2A.1(c) shall be designed and constructed, in accordance with (h) below, to protect environmentally sensitive areas including, but not limited to, the following:

1. The flood [fringe areas of the flood] hazard area as identified by the Department pursuant to the State Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq.;

2. – 12. (No change.)

(h) In order to protect the environmentally sensitive areas identified [in] **at** (g) above, the Department shall require the design, construction**,** and operation of additional control systems or increased performance of the required systems to minimize and control adverse impacts and prevent pollution. The Department will consider documentation, submitted by the applicant, demonstrating that the topographical and geological conditions, in conjunction with the design, construction, operation**,** and maintenance of the sanitary landfill in accordance with this subchapter, will adequately prevent pollution of the environmentally sensitive area.

1. The additional environmental control systems or increased performance of the systems required to protect the environmentally sensitive areas identified [in] **at** (g) above shall**,** at a minimum**,** include the following for the particular identified area:

Environmentally Sensitive Area Impacted	Type of System Upgrading Required
i. Flood [fringe areas of flood] hazard area**s**, N.J.A.C. 7:26-2A.6(g)1;	Upgrading of the surface drainage system. Increase in the design storm size;

ii. – xii. (No change.)

(i) – (j) (No change.)

SUBCHAPTER 3. TRANSPORTATION

7:26-3.6 Intermodal container facility

(a) (No change.)

(b) A person registered and licensed in accordance with N.J.A.C. 7:26-3, 16**,** and 16A to transport solid waste in the State of New Jersey that seeks to operate an intermodal container facility shall submit an application containing all of the following information. Three copies of the entire

application and all accompanying documents shall be submitted to the Department at the address specified [in] **at** (c) below, and at the same time**,** one copy each to the host municipality and district solid waste plan implementation agency:

1. - 11. (No change)

12. Three copies of a site plan, prepared, signed, and sealed by a licensed New Jersey professional engineer or surveyor. The site plan must:

i. - iii. (No change.)

iv. Delineate [floodplains] **the flood hazard area** as defined at N.J.A.C. 7:13;

v.-viii. (No change.)

13. - 18. (No change.)

(c) - (o) (No change.)

SUBCHAPTER 3A. REGULATED MEDICAL WASTES

7:26-3A.39 Collection facilities for medical wastes

(a)-(c) (No change.)

(d) A person registered and licensed pursuant to this subchapter and N.J.A.C. 7:26-3, 16, and 16A to transport regulated medical waste in the State of New Jersey that seeks to operate a commercial collection facility for medical waste shall submit an application containing the information listed at (d)1 through 15 below. All maps of the proposed facility shall be prepared in a manner and format consistent with N.J.A.C. 7:1D[,] Appendix A. Three copies of the application and all accompanying documents shall be submitted to the Department at the address specified [in] **at** (e) below, and one copy each to the host municipality and district solid waste management plan implementation agency:

1.-9. (No change.)

10. Three copies of a site plan, prepared, signed, and sealed by a licensed New Jersey

professional engineer, surveyor**,** or architect. The site plan shall:

i.- iii. (No change.)

iv. Delineate [floodplains] **the flood hazard area** as defined at N.J.A.C. 7:13;

v. - viii. (No change.)

(e)-(r) (No change.)

CHAPTER 26A

RECYCLING RULES

SUBCHAPTER 3. APPROVAL OF RECYCLING CENTERS FOR CLASS B, CLASS C**,** OR CLASS D RECYCLABLE MATERIALS

7:26A-3.2 Application procedure for general approval to operate a recycling center for the receipt, storage, processing**,** or transfer of Class B, Class C**,** or Class D recyclable material

(a) Prior to commencing receipt, storage, processing**,** or transfer of any Class B, Class C**,** or Class D recyclable materials at a recycling center, the owner or operator of the recycling center shall submit to the Department the information set forth in this subsection. All maps of the proposed recycling center shall be prepared in a manner and format consistent with N.J.A.C. 7:1D[,] Appendix A. The applicant shall submit a minimum of three complete sets of the application. Additional complete sets may be required based upon the type, scale, location, and potential environmental impacts of the proposed recycling center. The owner or operator of a recycling center for Class C recyclable materials shall submit the additional information required pursuant to N.J.A.C. 7:26A-3.18. The owner or operator of a recycling center for Class D recyclable materials shall submit the additional information required pursuant to N.J.A.C. 7:26A-3.19 and 3.20.

1. – 8. (No change.)

9. A site plan map, prepared, signed**,** and sealed by a licensed professional engineer or other professional qualified in accordance with the State Board of Professional Engineers and Land Surveyors rules, N.J.A.C. 13:40, which identifies (plots) the placement of all equipment, buildings, activities**,** and areas related to the receipt, storage, processing**,** and transferring of all unprocessed and processed recyclable materials. This site plan shall also:

i. – ii. (No change.)

iii. Delineate the [floodplain] **flood hazard area** as defined at N.J.A.C. 7:13[-1.2];

iv. – ix. (No change.)

10. – 21. (No change.)

(b) – (j) (No change.)

CHAPTER 26G

HAZARDOUS WASTE

SUBCHAPTER 12. HAZARDOUS WASTE PERMIT PROGRAM

7:26G-12.1 Incorporation by reference

(a) – (b) (No change.)

(c) The following provisions of 40 [C.F.R.] **CFR** Part 270 are incorporated by reference with the specified changes:

1. – 5. (No change.)

6. 40 CFR 270.14(b), replace “100-year flood plain” with "flood hazard area, as defined at N.J.A.C. 7:13" and replace "100-year flood" with "flooding to the climate-adjusted flood elevation, as defined at N.J.A.C. 7:13";

Recodify existing 6. – 18. as **7. – 19.** (No change in text.)

(d) – (g) (No change.)

7:26G-12.2 Environmental and Health Impact Statement

(a) – (f) (No change.)

(g) The Environmental and Health Impact Statement shall include:

1. – 2. (No change.)

3. A Description of the Environmental Setting, including:

i. A detailed written description of the municipal and neighborhood setting of the proposed facility. The site location shall also be identified by the following:

(1) An 8 1/2 inch x 11 inch copy of the key map plotted on a seven and one-half minute [Unites] **United** States Geological Survey topographical quadrangle. The quadrangle shall be the most recent revision available, shall include the name of the quadrangle and shall delineate a minimum of three miles from the perimeter of the proposed facility boundaries. One or more maps may be utilized where necessary to ensure clarity of the information submitted. The key map shall depict the following:

(A) All surface waters, coastal zone areas as defined [in] **at** N.J.S.A. 13:19-1 et seq.; wetlands as defined [in] **at** N.J.S.A. 13:9A-1 et seq.; water supply wells and reservoirs; FW-1 and FW-2 Trout Production waters as defined [in] **at** N.J.A.C. 7:9-4; wild, scenic, recreational**,** or developed recreational rivers designated pursuant to the Natural Wild and Scenic River Act**,** 16 U.S.C. §§ 1271 et seq., or the New Jersey Wild and Scenic River Act, N.J.S.A. 13:8-45 et seq., and all [100 year] floodway**s** and flood hazard areas as delineated [in] **at** N.J.A.C. 7:13;

(B) – (D) (No change.)

(2) (No change.)

ii. An environmental inventory, prepared in detail for the site specific conditions and, unless otherwise specified herein, a general description for a minimum area of one mile from the perimeter of the proposed facility's property lines, described existing conditions for each of the following categories:

(1) Category I, the physical/chemical category, requires the following parameter descriptions:

(A) – (G) (No change.)

(H) Describe the topography by presenting contour data, drainage patterns**,** and [100 year] floodway and flood hazard area[s] delineations pursuant to the Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq., or areas identified pursuant to and based upon the most current Federal Flood Emergency Management Act (F.E.M.A.) maps and data;

(I) – (K) (No change.)

(2) – (4) (No change.)

4. – 11. (No change.)

(h) (No change.)

CHAPTER 28

RADIATION PROTECTION PROGRAMS

SUBCHAPTER 59. LICENSING REQUIREMENTS FOR LAND DISPOSAL OF RADIOACTIVE WASTE

7:28-59.1 Incorporation by reference

(a) – (b) (No change.)

(c) The following provisions of 10 CFR Part 61 are incorporated by reference with the specified changes:

1. – 14. (No change.)

15. 10 CFR 61.50(a)(5), replace “100-year flood plain" with “flood hazard area, as defined at N.J.A.C. 7:13”;

Recodify existing 15. – 21. as **16. – 22.** (No change in text.)

(d) – (g) (No change.)

CHAPTER 36

GREEN ACRES PROGRAM

SUBCHAPTER 6. LOCAL GOVERNMENT UNIT ACQUISITION PROJECTS: APPLICATION PROCESS

7:36-6.4 Application requirements

(a) For a project in the Standard Acquisition, Site Specific Incentive Acquisition, or Urban Aid Acquisition funding award category, a local government unit shall submit all of the following:

1. – 4. (No change.)

5. A project reference map with dimensions of at least 11 inches by 17 inches which contains the following information:

i. – xii. (No change.)

xiii. The location and area of the [floodplain] **flood hazard area**, as shown on the New Jersey State Flood Hazard area maps prepared [under] **pursuant to** the Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq.**,** and available from the Department at www.nj.gov/dep/gis, or as determined from other State or Federal mapping or from a **Department verified** site delineation **pursuant to N.J.A.C. 7:13**;

xiv. – xv. (No change.)

6. – 11. (No change.)

(b) – (e) (No change.)

(f) A local government unit that has submitted an application shall monitor and immediately notify Green Acres of any pending or proposed actions or events affecting the proposed project site such as, but not limited to, any applications made for Coastal Area Facility Review Act (CAFRA) permits or

for other Department permits, including, but not limited to, **flood hazard area** permits [for stream encroachment], waterfront development **permits**, and **permits for** sanitary landfill construction or operation; any application made to the Pinelands Commission [under] **pursuant to** the Pinelands Comprehensive Management Plan for projects in the Pinelands; any application made to the New Jersey Meadowlands Commission [under] **pursuant to** the New Jersey Meadowlands Master Plan for projects in the Meadowlands District; any application for a local building permit or subdivision approval; or any application made to the County Agricultural Development Board or the State Agricultural Development Committee related to the proposed project site. The local government unit shall also immediately notify Green Acres of any fires, demolitions, floods, natural disasters, donations, easements, leases, or survey discrepancies relevant to or affecting the proposed project site, or changes in ownership of the proposed project site.

SUBCHAPTER 17. NONPROFIT ACQUISITION PROJECTS: APPLICATION PROCESS

7:36-17.4 Application requirements

(a) For a project in the Standard Acquisition funding award category, a nonprofit shall submit all of the following:

1. – 3. (No change.)

4. A project reference map with dimensions of at least 11 inches by 17 inches**,** which contains the following information:

i. – xii. (No change.)

xiii. The location and area of the [floodplain] **flood hazard area**, as shown on the New Jersey State Flood Hazard area maps prepared [under] **pursuant to** the Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq.**,** and available from the Department at www.nj.gov/dep/gis, or as determined from

other State or Federal mapping or from a **Department verified** site delineation **pursuant to N.J.A.C. 7:13**;

xiv. – xv. (No change.)

5. – 12. (No change.)

(b) – (f) (No change.)

SUBCHAPTER 26. STANDARDS AND PROCEDURES FOR COMMISSIONER AND STATE HOUSE COMMISSION APPROVAL OF THE DISPOSAL OR DIVERSION OF FUNDED OR UNFUNDED PARKLAND

7:36-26.4 Minor disposals or diversions; pre-application requirements

(a) – (c) (No change.)

(d) Subsequent to the pre-application conference, the local government unit or nonprofit shall submit a pre-application that includes the following:

1. – 7. (No change.)

8. The following maps, provided in accordance with the instructions regarding format and number of copies that are set forth in the Green Acres pre-application checklist available from Green Acres at PO Box 412, Trenton, New Jersey 08625 or posted on the Green Acres [web site] **website** at www.nj.gov/dep/greenacres/.

i. (No change.)

ii. If the applicant proposes to offer replacement land to be dedicated as parkland to compensate in full or in part for the proposed disposal or diversion of parkland, a municipal or [County] **county** map and a site map, drawn to scale, showing the parkland proposed to be disposed of or diverted, and showing the proposed replacement land. The site map shall include, for the proposed replacement land, the tax map block and lot number(s) (current as of the date of request), the owner(s) of record, the approximate

dimensions and area (in acres), existing improvements and easements, road rights-of-way, wetlands (as shown on maps prepared by the Department [under] **pursuant to** the Wetlands Act of 1970, N.J.S.A. 13:9A1 et seq., and the Freshwater Wetlands Protection Act, N.J.S.A. 13:9B1 et seq. and available from the Department at www.nj.gov/dep/gis), [floodplains] **flood hazard areas** (as shown on the New Jersey State Flood Hazard Area maps prepared [under] **pursuant to** the Flood Hazard Area Control Act, N.J.S.A. 58:16A50 et seq.**,** and available from the Department at www.nj.gov/dep/gis or as determined from other State or Federal mapping or from a **Department verified** site delineation **pursuant to N.J.A.C. 7:13**), and tidelands (as determined from New Jersey Tidelands claim maps, conveyance overlays, and atlas sheets and available from the Department at www.nj.gov/dep/gis);

iii. – v. (No change.)

9. – 11. (No change.)

(e) – (j) (No change.)

7:36-26.9 Major disposals or diversions of parkland; preapplication requirements

(a) – (c) (No change.)

(d) Subsequent to the preapplication conference, the local government unit or nonprofit may submit a pre application that includes the following:

1. – 8. (No change.)

9. The following maps, provided in accordance with the instructions regarding format and number of copies that are set forth in the Green Acres preapplication checklist available from Green Acres at PO Box 412, Trenton, New Jersey 08625 or posted on the Green Acres [web site] **website** at www.nj.gov/dep/greenacres/.

i. (No change.)

ii. If the applicant proposes to offer replacement land to be dedicated as parkland to compensate in full or in part for the proposed disposal or diversion of parkland, a municipal or county map and a site map, drawn to scale, showing the parkland proposed to be disposed of or diverted, and showing the proposed replacement land. The site map shall include, for the proposed replacement land, the tax map block and lot number(s) (current as of the date of request), the owner(s) of record, the approximate dimensions and area (in acres), existing improvements and easements, road rights-of-way, wetlands (as shown on maps prepared by the Department [under] **pursuant to** the Wetlands Act of 1970, N.J.S.A. 13:9A-1 et seq., and the Freshwater Wetlands Protection Act, N.J.S.A. 13:9B-1 et seq.**,** and available from the Department at www.nj.gov/dep/gis), [floodplains] **flood hazard area** (as shown on the New Jersey State Flood Hazard Area maps prepared [under] **pursuant to** the Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq. and available from the Department at www.nj.gov/dep/gis or as determined from other State or Federal mapping or from a **Department verified** site delineation **pursuant to N.J.A.C. 7:13**), and tidelands (as determined from New Jersey Tidelands claim maps, conveyance overlays, and atlas sheets and available from the Department at www.nj.gov/dep/gis;

iii. – v. (No change.)

10. – 12. (No change.)

(e) – (j) (No change.)

CHAPTER 38

HIGHLANDS WATER PROTECTION AND PLANNING ACT RULES

SUBCHAPTER 1. GENERAL INFORMATION

7:38-1.2 Forms and information

(a) Forms or other information related to the Highlands permitting review program may be obtained as follows:

1. Applications, form letters for notification and information relating to exemptions and determinations of applicability of these rules to specific projects or activities may be found at the Division of Watershed **and Land** Management website at [www.nj.gov/dep/watershedmgt] **https://dep.nj.gov/wlm/lrp/highlands/** or obtained from the Division of Watershed **and Land** Management at:

Division of Watershed **and Land** Management

New Jersey Department of Environmental Protection

PO Box [418] **420**

[401] **501** East State Street

Trenton, New Jersey [08625-0418] **08625-0420**

(609) 984-0058

2. Applications and form letters for public notification related to HPAAs and waivers may be found on the Land [Use Regulation] **Resource Protection** Program's webpage at [www.state.nj.us/dep/landuse] **https://dep.nj.gov/wlm/** or obtained from the Land Use Regulation Program at:

Land [Use Regulation] **Resource Protection** Program

New Jersey Department of Environmental Protection

[P.O.] **PO** Box [439] **420**

Trenton, New Jersey [08625-0439] **08625-0420**

Phone: [(609) 984-0194] **609-633-6563**

i. Courier and other hand deliveries shall be delivered to:

Land [Use Regulation] **Resource Protection** Program

New Jersey Department of Environmental Protection

5 Station Plaza

501 East State Street

Trenton, New Jersey 08609

3. – 6. (No change.)

SUBCHAPTER 3 PRESERVATION AREA STANDARDS

7:38-3.7 Flood hazard areas

(a) A flood hazard area is any land [in a flood plain] **that lies below the climate-adjusted flood elevation** as defined [under] **pursuant to** the Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq., and its implementing rules, N.J.A.C. 7:13.

(b) (No change.)

(c) The flood storage volume of a site is the volume of space outside the floodway, as defined at N.J.A.C. 7:13-1.2, between the ground surface and the [flood plain] **climate-adjusted flood** elevation as determined [under] **pursuant to** N.J.A.C. 7:13. Additional flood storage can be created either by excavating material from below the surface of the ground and removing the material to outside of the [flood plain] **flood hazard area** so that floodwaters can freely enter and exit the excavated area, and/or by removing fill or structures that have been previously and lawfully placed within the [flood plain] **flood hazard area** and outside the floodway.

(d) Flood storage volume can be created onsite to compensate for regulated activities that displace flood storage provided the onsite compensation:

1. Is created within or adjacent to the [flood plain] **flood hazard area** of the same water as the proposed fill, or a tributary to the same water as the proposed fill if the [flood plain] **flood hazard area** of both waters connect on site;

2. – 4. (No change.)

(e) Flood storage volume can be created offsite to compensate for regulated activities that displace flood storage as described [in] **at** (b)2 above provided the offsite compensation:

1. (No change.)

2. Is created within or adjacent to the [flood plain] **flood hazard area** of the same water as the proposed fill, or a tributary to the same water as the proposed fill if the [flood plain] **flood hazard area** of both waters connect on site;

3. (No change.)

4. Is not separated from the proposed fill by a water control structure, such as a bridge, culvert**,** or dam, unless the applicant demonstrates that the water control structure causes no significant change in the [flood plain] **climate-adjusted flood** elevation;

5. – 9. (No change.)

7:38-3.10 Historic and archaeological areas

(a) – (b) (No change.)

(c) An HPAA application for a proposed regulated activity as described at (c)1 through 5 below shall contain a Phase I (identification of resources) archaeological survey completed by an archaeologist whose qualifications meet the Secretary of the Interior's Professional Qualifications Standards and related guidance as part of the larger Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation as referenced [in] **at** 36 CFR 61, incorporated herein by reference:

1. (No change.)

2. A proposed regulated activity on a site situated wholly or partially within the [floodplain] **flood hazard area** as defined at N.J.A.C. 7:13 or wholly or partially within 1,000 feet of the following waterways, whichever is greater:

i. – xv. (No change.)

3. – 5. (No change.)

(d) – (l) (No change.)

SUBCHAPTER 7. EMERGENCY PERMITS

7:38-7.1 Emergency permits

(a) – (b) (No change.)

(c) The permittee shall comply with any condition or requirement contained in an emergency permit issued pursuant to this subchapter. Work [under] **pursuant to** an emergency HPAA may commence upon the [permittees] **permittee's** receipt of a written emergency HPAA or upon oral authorization by the Director of the Land [Use Regulation] **Resource Protection** Program or the Director's designee. The Department shall fax a letter memorializing the oral authorization to the applicant, who shall post it at the work site until receipt of the written emergency HPAA**,** which shall be issued no later than [ten] **10** business days after the oral authorization is given.

(d) – (i) (No change.)

(j) The Director of the Land [Use Regulation] **Resource Protection** Program shall provide notice of the issuance of any emergency HPAA:

1. – 4. (No change.)

(k) – (l) (No change.)

SUBCHAPTER 8. PRE-APPLICATION PROCEDURES

7:38-8.1 Procedure for determining when a pre-application meeting is required

(a) Activities described in applications for an HPAA may require the review of several regulatory programs within the Department. In accordance with N.J.S.A. 20-33a, the Department shall not issue an HPAA unless the Department determines that the proposed activity either complies with the requirements of these other regulatory programs or that the activity meets the requirements for a waiver pursuant to N.J.A.C. 7:36-6. The regulatory programs which are included in the HPAA permit review program are:

1. The Freshwater Wetlands Protection Act, N.J.S.A.13:9B-1 et seq., as implemented by the Land [Use Regulation] **Resource Protection** Program;

2. – 7. (No change.)

8. The Flood Hazard Area Control Act, N.J.S.A. 58:16A-50 et seq. as implemented by the Land [Use Regulation] **Resource Protection** Program.

(b) – (c) (No change.)

(d) An applicant shall request a pre-application conference**,** in writing**,** to the Land [Use Regulation] **Resource Protection** Program at the address listed at N.J.A.C. 7:38-1.2(a)2, and shall include:

1. – 9. (No change.)

(e) – (f) (No change.)

SUBCHAPTER 9. APPLICATION CONTENTS

7:38-9.1 Basic application information

(a) – (j) (No change.)

(k) Application checklists and application forms for an HRAD, Highlands Applicability Determination (with or without waiver), HPAA, or a modification or extension to an HPAA can be downloaded and/or printed from the Land [Use Regulation] **Resource Protection** Program website at

[www.nj.gov/dep/landuse] **https://dep.nj.gov/wlm/lrp/highlands/** or they can be obtained by contacting the Department at the address [in] **at** N.J.A.C. 7:38-1.2(a)2. Application forms for new or modified water supply diversion projects pursuant to the Safe Drinking Water Act, N.J.S.A. 58:12A-1 et seq., if applicable to an HPAA (with and without waiver), or a modification or extension of same can be obtained from the Bureau of Water Allocation at the address [in] **at** N.J.A.C. 7:38-1.2(a)4. Application forms for NJPDES permits, treatment works approvals or septic approvals for 50 or more realty improvements can be obtained from the Division of Water Quality in the address at N.J.A.C. 7:38-1.2(a)3 or at www.state.nj.us/dep/dwq. Applications for septic approvals for 50 or more realty improvements should be directed to the Bureau of Nonpoint Pollution Control.

(l) – (r) (No change.)

SUBCHAPTER 10. FEES

7:38-10.2 Fee tables

(a) – (e) (No change.)

(f) In addition to the fee [in] **at** (d) above, the fee for a Highlands Preservation Area Approval that includes disturbance within the areas regulated [under] **pursuant to** the Flood Hazard Area Control Act rules (N.J.A.C. 7:13) shall be calculated in accordance with the [stream encroachment] fee table at N.J.A.C. [7:1C-1.5(a)4] **7:13-20.1**.

(g) – (k) (No change.)

SUBCHAPTER 11. REVIEW OF APPLICATIONS

7:38-11.5 Hearings on an application for an HPAA

(a) – (d) (No change.)

(e) The applicant shall give public notice of the public hearing by doing the following, at least 30 days before the hearing:

1. Sending a completed public hearing notice form, obtained from the Department at the address [in] **at** N.J.A.C. 7:38-1.2 or the Land [Use Regulation] **Resource Protection** Program website at [www.NJ.gov/dep/landuse] **https://dep.nj.gov/wlm/lrp/highlands/**, to the following:

i. – iii. (No change.)

2. (No change.)

(f) – (j) (No change.)