NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

Land Resource Protection Application GIS Layer Description and Sources

Base Layers
- Parcel (Block & Lot)
- Road (Centerline)
- Road Milepost
- Rail Station
- Railroad (Passenger & Freight)
- NJEMS Site
- County
- Municipality

Coastal Layers
- Head of Tide
- CAFRA Coastal Planning Area (2010)
- CAFRA and Coastal Center (2010)
- CAFRA Coastal Area Facilities Review Act (Line)
- CAFRA Coastal Area Facilities Review Act (Polygon)
- Shellfish Classification
- Tidelands Grid
- Tidelands Claim

Flood Hazard Layers
- Flood Plan Locator
- NJPDES Combined Sewer Overflow (CSO)
- Effective National Flood Hazard Layers (NFHL)
- Preliminary National Flood Hazard Layers (NFHL)

Groundwater Layers
- Aquifer Bedrock
- Aquifer Surficial
- Groundwater Contamination Area (CEA)
- Groundwater Contamination Area (CKE)
- Groundwater Recharge Area
- Sole-Source Aquifer

Historic Layers
- Archeological Site Grid
- Historic District
- Historic Property

Land (LULC, Open Space, Soil, Wetland) Layers
- Bedrock Surface Topography
- Bedrock Geology
- Open Space (State and Local)
- Park
- EPA Priority Wetland
- Wetland (2015)
- Wetland (2012)
- Land Use 2015
- Land Use 2012

Mitigation Layers
- Road Wildlife Mitigation Project (CHANJ)
- Wetland Mitigation Bank Site
- Wetland Mitigation Bank Service Area

Planning Areas Layers
- CAFRA Coastal Planning Area (2010)
- CAFRA and Coastal Center (2010)
- CAFRA Coastal Area Facilities Review Act (Line)
- CAFRA Coastal Area Facilities Review Act (Polygon)
- Highlands Preservation Area
- Meadowlands District Boundary
- Pinelands Management Area
- Sewer Service Area
- State Plan-Center
- State Plan-Core
- State Plan-Critical Environmental and Historical Site
- State Plan-Planning Area
- State Plan-Endorsed Plan
- State Plan-Node
- Overburdened Community under the NJ Environmental Justice Law
- Municipalities with Overburdened Community under the NJ Environmental Justice Law
- Urban Enterprise Zones

Site Remediation Layers
- Groundwater Contamination Area (CEA)
- Groundwater Contamination Area (CKE)
- Brownfield Development Area (Outline of NJ)
- Chromate Waste Site Boundary
- Deed Notice Area
- Historic Fill
- Known Contaminated Site List
- Underground Storage Tank Facility

Surface Water Layers
- Category 1 Waters
- Stream Network (2002 NHD)
- Surface Water Quality Classification
- Head of Tide
- National Hydrography Dataset (Waterbody 2015)
- Sub-Watershed (HUC14)
- Watershed (HUC11)
- Watershed Management Area

Threatened & Endangered Species Layers
- Landscape Region
- Landscape Project 3.3 – Atlantic Coastal
- Landscape Project 3.3 – Delaware Bay
- Landscape Project 3.3 – Marine
- Landscape Project 3.3 – Piedmont Plains
- Landscape Project 3.3 – Pinelands
- Landscape Project 3.3 – Skylands
- Landscape Project 3.3 – Vernal Habitat
- Landscape Project 3.3 – Vernal Pool Locations
- Natural Heritage Grid Map

Topography Layers
- Statewide DEM
- NJ Color Topo 24k
- NJ Black & White Topo 24k

Imagery Layers
- NJ Color Historical Maps
- NJ Color Topo 24k
- NJ Black & White Topo 24k
- New Jersey Black White 1930
- New Jersey Wetlands 1970
- New Jersey Tidelands 1977
- New Jersey Infrared 1995
- New Jersey Infrared 2002
- New Jersey Infrared 2007
- New Jersey Natural 2007
- New Jersey Natural 2010
- New Jersey Infrared 2012
- New Jersey Natural 2012
- New Jersey Natural 2013
- New Jersey Natural 2015
- New Jersey Infrared 2020
- New Jersey Natural 2020

Base Layers

Parcel (Block and Lot)

Parcels are a key framework dataset for the New Jersey spatial data infrastructure. This spatial layer provides basic information regarding property location and ID. The normalized parcels data were developed to be compatible with the NJ Department of the Treasury property tax management system. This publication is intended for users who require only parcel boundaries and minimal attributes.

Road (Centerline)

The Esri REST service and ArcGIS Online registered feature layer are intended to provide convenient and efficient live access to the latest published road centerline data from NJOGIS. Users who require a downloaded copy of the complete dataset should obtain it through one of the download Document Links on NJGIN Open Data. For more information, see the NJGIN Roads web page at https://njgin.nj.gov/njgin/edata/roads/#!/ . This latest version of the statewide Road Centerlines was created to support New Jersey's future Next Generation 9-1-1 system, along with the current needs of Public Safety Answering Points (PSAP) using New Jersey's current Enhanced 9-1-1 (E9-1-1) system. It also will be used to help support the New Jersey Department of Transportation, local government asset management needs, and statewide geocoding.

Road Milepost

The New Jersey Department of Transportation (NJDOT) 2021 Straight Line Diagrams (SLDs) are a way to view roadways in a line format. The SLD network presents approximately 12,528 miles of State (Interstate, US and NJ numbered roads), National Highway System (NHS), Surface Transportation Program (STP) and all County routes.

Rail Station

This layer is maintained by the GIS Department. Data is derived from a combination of the 2019 TRO-7, imagery from the 2012 PTC (Positive Train Control) Survey, 2017-2019 NAIK survey and the 2007 LiDAR survey.

Railroad (Passenger & Freight)

Network of passenger and freight rail lines in New Jersey.

NJEMS Site

This data was designed to support the NJGeoWeb interactive mapping application, to enable NJEMS and non-NJEMS users alike to view the locations of NJEMS sites in relation to each other and other features from GIS data layers. Users within the i-MapNJ application can run specific NJEMS queries using the data layer, searching for specific sites, or many sites with search

criteria related to NJDEP agency activity, discharged parameter, program interest, and violations. These sorts of queries can be run since the NJEMSSITES GIS layer connects to other NJEMS data through a database link. The NJEMSSITES layer by itself only contains general information about the sites - name, location, coordinate, how the coordinate was captured, and the site's unique identifier.

County

To provide basic jurisdictional information. This data set was developed to produce the most accurate delineation of municipal boundaries achievable from existing data sources.

Municipality

To provide basic jurisdictional information. This data set was developed to produce the most accurate delineation of municipal boundaries achievable from existing data sources.

Coastal Layers

Head of Tide

On 15 May 1979, the Division of Purchase and Property, NJ Dept. of Treasury, issued an award to Coast Survey, Ltd. (CSL), on behalf of the Office of Environmental Analysis (OEA), Dept. of Environmental Protection (DEP). Under the terms of that obligation CSL was required to: a). Locate the 'Head of Tide' (HOT) on all watercourses and their tributaries within the 2452 square mile area of the State subject to investigations for tidal claims; b). Document tidal rise and fall on all such watercourses and their tributaries.

CAFRA Coastal Planning Area (2010)

Coastal Planning Areas are areas that share a common set of conditions such as population density, infrastructure systems, level of development, or environmental sensitivity. Coastal Planning Areas are one component of regulations adopted by the NJDEP, pursuant to CAFRA. The impervious cover limits and vegetative cover percentages for proposed developments requiring a CAFRA permit are determined by the location of proposed development within a Coastal Planning Area, CAFRA center, CAFRA core, CAFRA node or non-mainland coastal center, and for the Coastal Suburban Planning Area, whether the site is located in a sewer service area. N.J.A.C. 7:7E-5B.4 and 5B.5 set forth the impervious cover limits and vegetative cover requirements for a site in the CAFRA area. There are five types of Coastal Planning Areas: Coastal Metropolitan Planning Area, Coastal Suburban Planning Area, Coastal Fringe Planning Area, Coastal Rural Planning Area, and Coastal Environmentally Sensitive Planning Area. Each Coastal Planning Area has associated with it a corresponding, pre-determined impervious cover limit and vegetative cover requirement.

CAFRA and Coastal Center (2010)

Centers and cores encompass areas of compact, mixed-use development and include adjacent areas for imminent growth where there are no significant environmental features. Nodes are

concentrations of facilities and activities that are not organized in a compact form. Centers, cores and nodes are one component of regulations adopted by the NJDEP, pursuant to CAFRA. The impervious cover limits and vegetative cover percentages for proposed developments requiring a CAFRA permit are determined by the location of proposed development within a Coastal Planning Area, CAFRA center, CAFRA core, CAFRA node, mainland coastal center or non-mainland coastal center. N.J.A.C. 7:7E-5B.4, 5B.5 and 5B.6 set forth the impervious cover limits and vegetative cover requirements for a site in the CAFRA area. There are five types of CAFRA centers: urban centers, regional centers, towns, villages and hamlets; four types of mainland coastal centers: regional centers, towns, villages and hamlets; and three types of non-mainland coastal centers: regional centers, towns, and villages. Each has associated with it a corresponding, pre-determined impervious cover limit and vegetative cover requirement.

CAFRA Coastal Area Facilities Review Act Boundary (Line)

Map the legislative boundary of the Coastal Area under the jurisdiction of the Coastal Area Facilities Review Act (CAFRA), N.J.S.A. 13:19-1 et seq (as amended to July 19, 1993).

CAFRA Coastal Area Facilities Review Act Boundary (Polygon)

Map the legislative boundary of the Coastal Area under the jurisdiction of the Coastal Area Facilities Review Act (CAFRA), N.J.S.A. 13:19-1 et seq (as amended to July 19, 1993).

Shellfish Classification

These regulations are designed to protect public health by preventing the harvest and consumption of contaminated shellfish from New Jersey's waters.

Tidelands Grid

This data was created to add a grid for riparian tidelands to a series of tidelands basemaps.

Tidelands Claim

The data was generated to be utilized in a GIS to show the Tidelands claims line which depicts natural waterways now or formerly tide-flowed at mean high water.

Flood Hazard Area Layers

Flood Plan Locator

The Flood Plan Locator allows users to identify if a locator is within a Flood Plan in New Jersey.

NJPDES Combined Sewer Overflow (CSO)

The data will be used for permitting, planning and program implementation. The DEP administers the New Jersey Pollutant Discharge Elimination System regulations (N.J.A.C. 7:14A 1 et seq.), which are promulgated pursuant to the authority of the New Jersey "Water Pollution Control Act" (N.J.S.A. 58:10A 1 et seq.), the New Jersey "Sewage Infrastructure Improvement Act"(N.J.S.A. 58:25 23 et seq.), the Federal Water Pollution Control Act (Clean Water Act) as

amended by the Water Quality Act of 1987 (P.L. 100 4, approved Feb. 4, 1987), the National CSO Control Policy (59 Federal Register 18688), and the Consolidated Appropriations Act for Fiscal Year 2001, P.L. 106-554 (or "2000 amendments to the federal Clean Water Act (CWA)"). One of the Nine Minimum Control Measures identified in the National CSO Policy is Public Notification. One of the objectives of Public Notification is to inform the public of the location of CSO discharge points. The Division of Water Quality has developed this digital GIS layer in an effort to make the locations of CSO points easily accessible to the public.

Effective National Flood Hazard Layers (NFHL)

This dataset comes directly from FEMA's public rest services. More information can be found at https://hazards.fema.gov/femaportal/wps/portal/NFHLWMS

Preliminary National Flood Hazard Layers (NFHL)

This dataset comes directly from FEMA's public rest services. More information can be found at https://hazards.fema.gov/femaportal/wps/portal/NFHLWMS

Groundwater Layers

Aquifer Bedrock

The Bedrock Aquifers of New Jersey consists of Geographic Information Systems (GIS) shape files of the bedrock aquifers and confining units in New Jersey. The bedrock-aquifer coverage includes fractured-rock aquifers of the Valley and Ridge, Highlands, and Piedmont physiographic provinces, and aquifers and confining units of the Coastal Plain physiographic province. The coverage was generalized to the 1:250,000 scale by eliminating polygons with less than 1,000,000 sq. ft. area (about 23 acres). The data were digitized from various published and unpublished 1:24,000, 1:100,000, and 1:250,000 scale geologic maps compiled from 1987 to 1993.

Aquifer Surficial

The Surficial Aquifers of New Jersey consists of Geographic Information Systems (GIS) shape file of the surficial aquifers and confining units in New Jersey. The surfical-aquifer coverage includes glacial sediment exceeding 50 ft. thickness in northern New Jersey, and surficial sediment thicker than 50 ft. overlying Coastal Plain aquifers and confining units. The coverage is generalized to the 1:250,000 scale by eliminating polygons with less than 1,000,000 sq. ft. area (about 23 acres). The data were digitized from various published and unpublished 1:24,000, 1:100,000, and 1:250,000 scale geologic maps compiled from 1987 to 1993.

Groundwater Contamination Area (CEA)

The CEA (Polygon) coverage was developed to provide information regarding the spatial extent of groundwater contamination within designated Classification Exception Areas (CEAs) and Well Restriction Areas (WRAs). This data, in its geographic format, is intended to provide information to the public regarding areas of contaminated groundwater to aid in new well placement and installation. A public understanding of where groundwater is known to be contaminated can

help prevent inappropriate well placement, preventing potential health risks and can minimize unintended contaminant plume migration.

Groundwater Contamination Area (CKE)

The CKE (Polygon) coverage was developed to provide information regarding the spatial extent of the Currently Known Extent of Groundwater Contamination (CKE). This data in its geographic format is intended to provide information to the public about contaminated GW areas in the state before a well is proposed and permitted and where potable well placement is restricted or should be avoided. If wells must be placed in these areas, the wells should be designed to eliminate the possibility of contamination migration to other areas of the aquifer.

Groundwater Recharge Area

New Jersey Ground-Water Recharge is an estimation of ground-water recharge for New Jersey. Ground-water recharge is estimated using the NJGS methodology from NJ Geological Survey Report GSR-32 "A Method for Evaluation of Ground-Water-Recharge Areas in New Jersey. Land-use/land-cover, soil and municipality-based climatic data were combined and used to produce an estimate of ground-water recharge in inches/year. Recharge was then ranked by volume (billions of gallons/year) using natural breaks in the percentage of total volume.

Sole-Source Aquifer

There are seven sole-source aquifers (SSAs) in New Jersey. These are defined by the EPA as those aquifers that contribute more than 50 percent of the drinking water to a specific area and the water would be impossible to replace if the aquifer were contaminated. Sole-source aquifers are defined with guidelines set forth by the U.S. Environmental Protection Agency (EPA) as authorized in section 1424(e) of the Safe Drinking Water act of 1974. Any federally-funded project in an area that could affect ground-water in a sole-source aquifer must be reviewed by the US EPA. This 'project review area' includes the aquifer's 'recharge zone' and it's 'stream-flow source zone'. The recharge zone is the area through which water recharges the aquifer. The source zone is the upstream area that contributes recharge water to the aquifer. The EPA sometimes modifies the project review areas as published in the Federal Register in order to better protect zone as originally published. Most of New Jersey is covered by the seven SSAs and their project review areas. Descriptions of the SSAs can be found in Entity and Attribute information. This is based on notifications published in the Federal Register. The order of chronological approval is as follows: 1.) Buried Valley SSA 2.) Ridgewood SSA 3.) Rockaway SSA 4.) Highlands SSA 5.) Northwest New Jersey SSA 6.) Coastal Plain SSA 7.) Ramapo SSA The sole source aquifer program is a federal program administered by the Environmental Protection Agency under the Safe Drinking Water Act.

Historic Layers

Archeological Site Grid

Archaeological Sites are locations of prehistoric or historic occupation or activity possessing archaeological value. This dataset includes a vector grid of approximately 1/2 mile cells

indicating the presence of Archaeological Districts or Sites that: 1. Are National Historic Landmarks, 2. Are included in the New Jersey or National Registers of Historic Places, 3. Have been determined Eligible for inclusion in the registers through federal or state processes administered by the HPO, 4. Have been designated as Local Landmarks or Districts by local government, or 5. Have been identified through early 20th century state-wide archaeological survey, modern cultural resource survey, or other documentation on file at the HPO. The majority of features in the dataset represent categories 1, 2, and 3 above. HPO is still in the process of comprehensive digitizing for categories 4 and 5. This dataset is limited to the resources on-file at the HPO and does not include the comprehensive catalog of archaeological sites on file at the New Jersey State Museum or the New Jersey Pinelands Commission. Inclusion in this dataset does not preclude the existence of other archaeological districts or sites as yet unidentified, unrecorded, or undocumented.

Historic District

Historic Districts possess a significant concentration, linkage, or continuity of buildings, sites, structures, or objects united historically or aesthetically by plan or physical development. This dataset represents the polygon boundaries of historic districts that: 1. Are National Historic Landmarks, 2. Are included in the New Jersey or National Registers of Historic Places, 3. Have been determined Eligible for inclusion in the registers through federal or state processes administered by the HPO, 4. Have been designated as Local Historic Districts by local government, or 5. Have been identified through cultural resource survey or other documentation on file at the HPO. The majority of features in the dataset represent categories 1, 2, and 3 above. HPO is still in the process of comprehensive digitizing for categories 4 and 5. Inclusion in this dataset does not preclude the existence of other historic districts as yet unidentified, unrecorded, or undocumented.

Historic Property

Historic Properties are buildings, sites, structures or objects that are evaluated as historically significant. This dataset represents the polygon boundaries of historic properties that: 1. Are National Historic Landmarks, 2. Are included in the New Jersey or National Registers of Historic Places, 3. Have been determined Eligible for inclusion in the registers through federal or state processes administered by the HPO, 4. Have been designated as Local Landmarks by local government, or 5. Have been identified through cultural resource survey or other documentation on file at the HPO. The majority of features in the dataset represent categories 1, 2, and 3 above. HPO is still in the process of comprehensive digitizing for categories 4 and 5. Inclusion in this dataset does not preclude the existence of other historic properties as yet unidentified, unrecorded, or undocumented.

Land (LULC, Open Space, Soil, Wetland) Layers

Bedrock Surface Topography

This GIS data set depicts the extent of bedrock-surface topography contours across the State of New Jersey. It was prepared in cooperation with the U. S. Geological Survey (USGS) National Geologic Mapping Program.

Bedrock Geology

The series is intended to provide the public with basic geoscience information for use in geoscience, natural resource and environmental analyses. The geologic themes include geologic units, their descriptions, structural features (faults, folds and dikes).

Open Space (State and Local)

To provide Natural and Historic Resource Divisions in NJDEP and various agencies outside the division with a manageable graphic inventory of open space and recreation areas throughout New Jersey. It serves as a valuable tool in land acquisition decisions and is NOT to be used for describing actual or true property ownership title.

Park

This data was produced to provide a graphic representation of information that depicts named selected places in New Jersey. The named places contained within this data can be found on the USGS 7.5' topoquad series.

EPA Priority Wetland

The identification of a priority wetlands list for New Jersey is part of EPA's commitment to develop comprehensive policy framework to establish a technically sound and consistent basis for EPA positions on proposed dredged or fill material discharges into waters of the United States, including wetlands. An important step in this effort is to focus regional resources on the identification and protection of the most important wetlands in the region. In general, the list for New Jersey recognizes those areas identified by various federal, state and private contributors which are considered to be the most important and vulnerable wetlands in the state. This is not a comprehensive inventory; rather it is a listing of areas currently known to EPA to be important and/or under particular threat. It must be noted that failure to include any particular area on the list in no way implies that it will/should receive less than full protection under the Section 404 regulatory Program. In New Jersey, the Legislature has decided to incorporate the EPA Priority Wetland List into the Freshwater Wetlands Protection Act and Rules to ensure that the State program complies and is consistent with the federal program. The New Jersey Freshwater Wetlands Act prohibits the use of certain general permits within areas on this list. This list replaces the former listing which was dated May 1989.

Wetland (2015)

The data set will provide information for regulators, planners, and others interested in LU/LC changes, and allow them to quantify those changes over time using GIS. The use of the updated

2015 LU/LC in land use analyses will provide a means of monitoring "the health of the citizens and ecosystems of New Jersey" through the use of diverse applications. This data set is intended to serve as a resource data set. The NJDEP may change the line work or polygon coding based on more in depth analysis and field inspection.

Wetland (2012)

The data set will provide information for regulators, planners, and others interested in LU/LC changes, and allow them to quantify those changes over time using GIS. The use of the updated 2012 LU/LC in land use analyses will provide a means of monitoring "the health of the citizens and ecosystems of New Jersey" through the use of diverse applications. This data set is intended to serve as a resource data set. The NJDEP may change the line work or polygon coding based on more in depth analysis and field inspection.

Land Use 2015

The data set will provide information for regulators, planners, and others interested in LU/LC changes, and allow them to quantify those changes over time using GIS. The use of the updated 2015 LU/LC in land use analyses will provide a means of monitoring "the health of the citizens and ecosystems of New Jersey" through the use of diverse applications. This data set is intended to serve as a resource data set. The NJDEP may change the line work or polygon coding based on more in depth analysis and field inspection.

Land Use 2012

The data set will provide information for regulators, planners, and others interested in LU/LC changes, and allow them to quantify those changes over time using GIS. The use of the updated 2012 LU/LC in land use analyses will provide a means of monitoring "the health of the citizens and ecosystems of New Jersey" through the use of diverse applications. This data set is intended to serve as a resource data set. The NJDEP may change the line work or polygon coding based on more in depth analysis and field inspection.

Mitigation Layers

Road Wildlife Mitigation Project (CHANJ)

The goal of the Road Wildlife Mitigation Database is to serve as a central repository for information on existing and permitted road wildlife mitigation projects in the state of New Jersey. The database is accessible to wildlife biologists, land use planners, transportation planners and engineers working on road wildlife mitigation projects to enable them to see what has been done in the past to inform decisions about future projects. It has tremendous utility as a component of the Division of Fish and Wildlife's Connecting Habitat Across New Jersey (CHANJ, www.CHANJ.nj.gov) project by improving knowledge sharing and coordination among project planners and engineers across the state regarding increasing safe passage through our road network for wildlife.

Wetland Mitigation Bank Site

Wetland mitigation bank data layer was created to provide a graphic representation of the wetland mitigation banks and their associated service areas for use by public, private, and academic entities. It provides a visual approach to identifying the appropriate bank for parties interested in or required to purchase mitigation bank credits or for other parties interested in the wetland banking aspects of the Department's wetland mitigation program.

Wetland Mitigation Bank Service Area

Wetland mitigation bank data layer was created to provide a graphic representation of the wetland mitigation banks and their associated service areas for use by public, private, and academic entities. It provides a visual approach to identifying the appropriate bank for parties interested in or required to purchase mitigation bank credits or for other parties interested in the wetland banking aspects of the Department's wetland mitigation program.

Planning Area Layers

CAFRA Coastal Planning Area (2010)

Coastal Planning Areas are areas that share a common set of conditions such as population density, infrastructure systems, level of development, or environmental sensitivity. Coastal Planning Areas are one component of regulations adopted by the NJDEP, pursuant to CAFRA. The impervious cover limits and vegetative cover percentages for proposed developments requiring a CAFRA permit are determined by the location of proposed development within a Coastal Planning Area, CAFRA center, CAFRA core, CAFRA node or non-mainland coastal center, and for the Coastal Suburban Planning Area, whether the site is located in a sewer service area. N.J.A.C. 7:7E-5B.4 and 5B.5 set forth the impervious cover limits and vegetative cover requirements for a site in the CAFRA area. There are five types of Coastal Planning Areas: Coastal Metropolitan Planning Area, Coastal Suburban Planning Area, Coastal Fringe Planning Area, Coastal Rural Planning Area, and Coastal Environmentally Sensitive Planning Area. Each Coastal Planning Area has associated with it a corresponding, pre-determined impervious cover limit and vegetative cover requirement.

CAFRA and Coastal Center (2010)

Centers and cores encompass areas of compact, mixed-use development and include adjacent areas for imminent growth where there are no significant environmental features. Nodes are concentrations of facilities and activities that are not organized in a compact form. Centers, cores and nodes are one component of regulations adopted by the NJDEP, pursuant to CAFRA. The impervious cover limits and vegetative cover percentages for proposed developments requiring a CAFRA permit are determined by the location of proposed development within a Coastal Planning Area, CAFRA center, CAFRA core, CAFRA node, mainland coastal center or non-mainland coastal center. N.J.A.C. 7:7E-5B.4, 5B.5 and 5B.6 set forth the impervious cover limits and vegetative cover requirements for a site in the CAFRA area. There are five types of CAFRA centers: urban centers, regional centers, towns, villages and hamlets; four types of mainland coastal centers: regional centers, towns, villages and hamlets; and three types of non-mainland

coastal centers: regional centers, towns, and villages. Each has associated with it a corresponding, pre-determined impervious cover limit and vegetative cover requirement.

CAFRA Coastal Area Facilities Review Act Boundary (Line)

Map the legislative boundary of the Coastal Area under the jurisdiction of the Coastal Area Facilities Review Act (CAFRA), N.J.S.A. 13:19-1 et seq (as amended to July 19, 1993).

CAFRA Coastal Area Facilities Review Act Boundary (Polygon)

Map the legislative boundary of the Coastal Area under the jurisdiction of the Coastal Area Facilities Review Act (CAFRA), N.J.S.A. 13:19-1 et seq (as amended to July 19, 1993).

Highlands Preservation Area

This data set was developed to correspond to language in the codified version of the NJ Highlands Water Protection and Planning Act (P.L. 2004, Chapter 120) and in support of the 2008 Regional Master Plan. The entire area of the Highlands Region in New Jersey is divided between the Highlands Preservation Area, in which development is more strictly regulated, and the Highlands Planning Area. Any major development project proposed in the Preservation Area must undergo extensive reviews specific to the Highlands, but the NJDEP Division of Land Use Regulation. Development activities in the Planning Area are governed by existing NJ land use regulations and by the Highlands regional master plan.

Meadowlands District Boundary

The Meadowlands District was delineated for the Hackensack Meadowlands Reclamation and Development Act of 1969. It defines the area managed under the Master Plan developed by the New Jersey Meadowlands Commission (NJMC; formerly the Hackensack Meadowlands Development Commission). NJMC served as the zoning and planning agency for a 30.4-square-mile area along the Hackensack River covering parts of 14 municipalities in Bergen and Hudson Counties in New Jersey. Since the creation of these data, it has been merged into the NJ Sports and Exposition Authority. The District is represented in this layer by NJ Meadowlands boundary polygon, with exclusion areas in parts of Secaucus.

Pinelands Management Area

The New Jersey Pinelands Management Areas divides the Pinelands area (state and federal) into sub-areas each area having different regulations with regard to development density and permitted uses, providing the foundation for municipal zoning. The layer represents the official boundaries as outlined in the New Jersey Pinelands Comprehensive Management Plan (CMP). The CMP was created in accordance with the "Pinelands Protection Act" legislation. (P.L. 1979, Chapter 111, approved June 28, 1979). For more information on Pinelands Management Areas see section 7:50-5.13 in the New Jersey Pinelands Comprehensive Management Plan.

Sewer Service Area

The Department of Environmental Protection (DEP) administers the WQM Planning rules, N.J.A.C. 7:15, in conjunction with the Statewide WQM Plan, which together constitute the

Continuing Planning Process conducted pursuant to the Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq., the Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq., and N.J.S.A. 13:1D-1 et seq., and as required by Sections 303(e) and 208 of the Federal Clean Water Act (33 U.S.C. 1251 et seq.). According to these regulations, the Commissioner of the DEP shall not undertake, or authorize through the issuance of a permit, any project or activity that conflicts with the applicable sections of adopted WQM Plans or the WQM Planning rules. The existing rules establish a mechanism for the determination of consistency between proposed projects or activities requiring Departmentally issued permits and the WQM Plans. One component of the WQM Plans is a Wastewater Management Plan (WMP). A WMP is a document that provides 20 year planning for wastewater and certain other water quality concerns for a specific planning area. SSA mapping is required to be prepared for all WMP's and is used in conjunction with the text of the adopted plans to determine consistency between projects and the WQM Planning rules, N.J.A.C. 7:15

State Plan-Center

The Centers file was created to help implement the goals of the New Jersey State Plan. It is used for making maps illustrating the NJSDRP, for analyzing the NJSDRP and for comparing to other GIS files and mapping. The State Plan is not itself a regulation but a statement of State policy that has been adopted by the State Planning Commission pursuant to statute to guide State, regional and local agencies in the exercise of their statutory authority.

State Plan-Core

The Cores file was created to help implement the goals of the New Jersey State Plan. It is used for making maps illustrating the NJSDRP, for analyzing the NJSDRP and for comparison to other GIS files and mapping. The State Plan is not itself a regulation but a statement of State policy that has been adopted by the State Planning Commission pursuant to statute to guide State, regional and local agencies in the exercise of their statutory authority.

State Plan-Critical Environmental and Historical Site

The CEHS2 file was created to help implement the goals of the New Jersey State Plan. To protect and manage the state's large areas of natural and environmentally significant resources, the Sate Plan Policy Map relies on the Environmentally Sensitive/Rural Planning Area and the Environmentally Sensitive Planning Area to direct development into Centers. But there are many environmentally sensitive features and landscapes of historic or aesthetic significance that are less than one square mile in extent or whose configuration does not readily permit application of the Policy Objectives of these Planning Areas. Additionally, many sites of historic, cultural, scenic or environmental sensitivity lie within developed areas or within Metropolitan, Suburban or Fringe Planning Areas. The Critical Environmental Sites (CES) and Historic and Cultural Sites (HCS) designations are used to help organize planning for new development or redevelopment by singling out the elements of natural systems, small areas of habitat, historic sites, and other features that should continue to be expressed in the future landscape through protection and restoration. The presence of CES and HCS gives land owners and developers important advance information on how to shape their proposals for development of the land around them, focusing

on including them within the design and function of the development whenever possible, while protecting them from adverse impacts. Designating a site as a CES or an HCS means that the site is of local, regional or statewide significance and that its protection and enhancement is of primary importance. Refer to the NJSDRP for further description of the geographic nature of Critical Environmental Sites and Historic and Cultural Sites. This file is used for making maps illustrating the NJSDRP, for analyzing the NJSDRP and for comparison to other GIS files and mapping. The State Plan is not itself a regulation but a statement of State policy that has been adopted by the State Planning Commission pursuant to statute to guide State, regional and local agencies in the exercise of their statutory authority.

State Plan-Planning Area

The planning areas file was created to help implement the goals of the New Jersey State Plan. It is used for making maps illustrating the NJSDRP, for analyzing the NJSDRP and for comparison to other GIS files and mapping. The State Plan is not itself a regulation but a statement of State policy that has been adopted by the State Planning Commission pursuant to statute to guide State, regional and local agencies in the exercise of their statutory authority.

State Plan-Endorsed Plan

The Endorsed Plan boundaries file was created to help implement the goals of the New Jersey State Plan. It is used for making maps illustrating the NJSDRP, for analyzing the NJSDRP and for comparison to other GIS files and mapping.

State Plan-Node

The Nodes file was created to help implement the goals of the New Jersey State Plan. It is used for making maps illustrating the NJSDRP, for analyzing the NJSDRP and for comparison to other GIS files and mapping. The State Plan is not itself a regulation but a statement of State policy that has been adopted by the State Planning Commission pursuant to statute to guide State, regional and local agencies in the exercise of their statutory authority. 08/18/2015 - Center expiration dates extended as appropriate per SPC action.

Overburdened Community under the New Jersey Environmental Justice Law

The purpose of this dataset is to identify Overburdened Communities under the New Jersey Environmental Justice Law. Overburdened community" means any census block group, as determined in accordance with the most recent United States Census, in which: (1) at least 35 percent of the households qualify as low-income households; (2) at least 40 percent of the residents identify as a minority or as members of a State recognized tribal community; or (3) at least 40 percent of the households have limited English proficiency

Municipality with Overburdened Community under the New Jersey Environmental Justice Law

Notifying municipalities having Overburdened Communities under the New Jersey Environmental Justice Law. "Overburdened community" means any census block group, as determined in accordance with the most recent United States Census, in which: (1) at least 35

percent of the households qualify as low-income households; (2) at least 40 percent of the residents identify as minority or as members of a State recognized tribal community; or (3) at least 40 percent of the households have limited English proficiency. Section 3 of the New Jersey Environmental Justice Law N.J.S.A. 13:1D-159 requires the NJDEP to "notify a municipality if any part of the municipality has been designated an overburdened community pursuant to this act". This data identifies municipalities that have a block group or Tribal Area meeting the census criteria for an Overburdened Community.

Urban Enterprise Zones

The current UEZ boundary data were generated to provide digital spatial representation of New Jersey's Urban Enterprise Zones (UEZ), located statewide, for use in a Geographic Information System (GIS). These data are intended to help businesses and agencies and interested parties determine whether a particular site is located within a UEZ. UEZ's provide significant financial incentives and benefits to qualified businesses that are located within these areas. Benefits to Businesses - Reduced Sales Tax - currently 3.3125% - Tax Free Purchases on certain items such as capital equipment, facility expansions, and upgrades - Financial Assistance from agencies such as NJEDA - Subsidized unemployment insurance costs for employees who earn less than $4,500 per quarter - Energy Sales Tax Exemption for qualified manufacturing firms with at least 250 employees, 50% of whom are working in manufacturing - Tax Credit Options (owners may elect one of the following) Up to $1,500 for new permanent full-time employees hired Up to 8% Corporate Business Tax credit on qualified investments. This feature class feeds an NJ Premier Business Services application designed for business owners to participate in the program.

Site Remediation Layers

Groundwater Contamination Area (CEA)

The CEA (Polygon) coverage was developed to provide information regarding the spatial extent of groundwater contamination within designated Classification Exception Areas (CEAs) and Well Restriction Areas (WRAs). This data, in its geographic format, is intended to provide information to the public regarding areas of contaminated groundwater to aid in new well placement and installation. A public understanding of where groundwater is known to be contaminated can help prevent inappropriate well placement, preventing potential health risks and can minimize unintended contaminant plume migration.

Groundwater Contamination Area (CKE)

The CKE (Polygon) coverage was developed to provide information regarding the spatial extent of the Currently Known Extent of Groundwater Contamination (CKE). This data in its geographic format is intended to provide information to the public about contaminated GW areas in the state before a well is proposed and permitted and where potable well placement is restricted or should be avoided. If wells must be placed in these areas, the wells should be designed to eliminate the possibility of contamination migration to other areas of the aquifer.

Brownfield Development Areas (Outline of New Jersey)

This is a graphical representation of the outline boundary for Brownfield Development Areas (BDA) in New Jersey. The data included in the layer enables GIS to map, as polygons, all current BDA's in New Jersey. A brownfield is any former or current commercial or industrial site that is currently vacant or underutilized and on which there has been, or there is suspected to have been, a discharge of contamination. Under the BDA approach, NJDEP works with selected communities affected by multiple brownfields to design and implement remediation and reuse plans for these properties simultaneously. The BDA approach enables remediation and reuse to occur in a coordinated fashion. In the process, we invite the various stakeholders, including owners of contaminated properties, potentially responsible parties, developers, community groups, technical experts for the local government and residents, and residents themselves, to participate in this cleanup and revitalization approach.

Chromate Waste Site Boundary

The purpose of this layer is to identify chromate waste site boundaries for all Hudson and Essex County Chromate Chemical Production Waste Sites that currently have or previously had chromate waste levels above standard as per three key documents: the June 26, 2009 Partial Consent Judgement concerning the PPG Sites, the 9/7/2011 Judicial Consent Judgement and the June 21, 2013 Judicial Consent Order. Where soil delineation for chromium contamination has been completed, the polygon representing the chromate waste site boundary has been refined to reflect the extent of chromate waste at the chrome site. In all other instances the chromate waste site boundary represents the historic and/or current parcel boundaries identified as havng been impacted by chromate waste for each particular chromate waste site. This layer also identifies site boundaries for properties that were originally listed as chrome sites based on visual observations, past recollections, etc. but later found not to have chromate waste contamination present above standard following sampling.

Deed Notice Area

This data layer identifies those Known Contaminated Sites (KCS) or sites on Site Remediation Programs' (SRP) Comprehensive Site List (CSL) that have been assigned a Deed Notice. A deed notice is described by NJ State Legislature (NJSA 58:10B-13a) as a "...notice to inform prospective holders of an interest in the property that contamination exists on the property at a level that may statutorily restrict certain uses of, or access to, all or part of that property, a delineation of those restrictions, a description of all specific engineering or institutional controls at the property that exist and that shall be maintained in order to prevent exposure to contaminants remaining on the property, and the written consent to the notice by the owner of the property".

Historic Fill

The "Brownfield Contaminated Site Remediation Act" (N.J.S.A. 58:10B-1 et seq.) requires the Department of Environmental Protection to map regions of the state where large areas of historic fill exist and make this information available to the public.

Known Contaminated Sites List

The Known Contaminated Sites List for New Jersey GIS layer is a GIS representation of the Known Contaminated Sites in New Jersey report. The Known Contaminated Sites in New Jersey report is produced by NJDEP in response to N.J.S.A. 58:10-23.16-17 that requires preparation of a list of sites affected by hazardous substances. It also satisfies the Site Remediation Program's obligations under the New Jersey New Residential Construction Off-Site Conditions Disclosure Act (N.J.S.A 46:3C1 et seq.).

Underground Storage Tanks Facility

This data layer was designed to assist NJDEP Site Remediation and Enforcement programs in their efforts to manage UST facility registrations and inspections through the use of desktop GIS (ArcView, ArcInfo) and web-based applications (NJ-GeoWeb). The layer enables users to view the locations of UST facilities in relation to each other, and in relation to other features in other GIS data layers.

Surface Water Layers

Category 1 Water

The hydrography stream network was created to support water management and monitoring activities within NJDEP, and to be a valuable layer for computerized cartographic products.

Stream Network (2002 NHD)

The data set will provide stream information for regulators, planners, and others interested in hydrography data. The use of the NHD data layers in hydrologic analyses will provide a means of monitoring "the health of the citizens and ecosystems of New Jersey" through the use of diverse applications. This data set is intended to serve as a resource for analysis rather than regulatory delineations. The NJDEP may change the line work based on more in depth analysis and field inspection for regulatory purposes. NJDEP/BGIS is a stewardship partner with USGS in the development of Local resolution data which is NHD compliant.

Surface Water Quality Classification

This data is a digital representation of New Jersey's Surface Water Quality Standards in accordance with "Surface Water Quality Standards for New Jersey Waters" as designated in N.J.A.C. 7:9 B. The Surface Water Quality Standards (SWQS) establish the designated uses to be achieved and specify the water quality (criteria) necessary to protect the State's waters. Designated uses include potable water, propagation of fish and wildlife, recreation, agricultural and industrial supplies, and navigation. These are reflected in use classifications assigned to specific waters. The line-work has been broken/altered to reflect the descriptions specified at N.J.A.C. 7:9B-1.15. When interpreting the stream classifications and anti-degradation designations, the descriptions specified in the SWQS at N.J.A.C. 7:9B-1.15 always take precedence. The GIS layer reflects the stream classifications and anti-degradation designations adopted as of the publication date and is supplemental only and is not legally binding.

Head of Tide

On 15 May, 1979, the Division of Purchase and Property, NJ Dept. of Treasury, issued an award to Coast Survey, Ltd. (CSL), on behalf of the Office of Environmental Analysis (OEA), Dept. of Environmental Protection (DEP). Under the terms of that obligation CSL was required to: a). Locate the 'Head of Tide' (HOT) on all watercourses and their tributaries within the 2452 square mile area of the State subject to investigations for tidal claims; b). Document tidal rise and fall on all such watercourses and their tributaries.

National Hydrography Dataset (Waterbody 2015 NHD)

The data set will provide Waterbody information for regulators, planners, and others interested in hydrography data. The use of the NHD data layers in hydrologic analyses will provide a means of monitoring "the health of the citizens and ecosystems of New Jersey" through the use of diverse applications. This data set is intended to serve as a resource for analysis rather than regulatory delineations. The NJDEP may change the line work based on more in depth analysis and field inspection for regulatory purposes. NJDEP/BGIS is a stewardship partner with USGS in the development of Local resolution data which is NHD compliant.

Sub-Watershed (HUC14)

This coverage defines hydrologic units for New Jersey. It is designed to identify the area which drains to a point of interest. It can be used as a starting point to delineate a study area with a drainage basin boundary.

Watershed (HUC11)

Drainage basins are delineated from 1:24,000-scale (7.5-minute) USGS quadrangles. The delineations have been developed for general purpose use by USGS District staff over the past 20 years. Arc and polygon attributes have been included in the coverage with basin names and ranks of divides, and 14-digit hydrologic unit codes. The New Jersey state boundary as originally defined in the USGS source coverage does not match that used by the NJDEP. Therefore the coverage was edited by the NJ Geological Survey to remove the USGS state boundary and insert the NJDEP state boundary, thus resolving most potential clipping errors. Note: Some information in this metadata describes the DEPHUC 14 coverage instead of the DEPHUC 11 because DEPHUC 14 is more detailed. Most processes and procedures used are identical for both coverages.

Watershed Management Area

Polygon and line coverage of watershed regions and watershed management areas (WMAS) proposed by the NJDEP for watershed characterization and assessment. Includes an polygon item field for the names of the WMAS and line item filed for State and WMA boundaries.

Threatened & Endangered Species Layers

Landscape Region

New Jersey's dunes, beaches, tidal marshes, cedar swamps, vast pitch pine forests, extensive grasslands, peat bogs, maple-oak forests, ridgetops, brackish bays, rivers, streams and the Atlantic Ocean support an amazing array of wildlife. That is true despite the fact that much of its diverse landscape has been greatly altered by human enterprises such as agriculture and development that fragments and degrades wildlife habitat. Sustaining wildlife populations over time requires large healthy landscapes with broad expanses of natural habitat. Thus, the Landscape Project focuses on ecoregions or Landscape Regions where plant and animal communities are ecologically similar and closely interlinked. The delineation of the state into regions serves as a spatial framework for management and conservation of species and their habitats, and as a means to organize information so that it is meaningful and widely accessible to end-users. Geographic features and landforms (e.g., rivers, watershed boundaries, ridgelines, soils, vegetation, etc.) were used to delineate the general area of five Landscape Regions in New Jersey. Region boundaries were shifted to align with major roads (county level or larger) that serve as barriers to movement for many species. A sixth region, the Marine Region, is an exclusively aquatic region that includes the New Jersey portion of the Delaware and Raritan bays as well as the portion of the Atlantic Ocean along the coast of New Jersey. ENSP has identified and mapped habitat for endangered, threatened and special concern wildlife within each Landscape Region utilizing an extensive database that combines species occurrence information with land-use/land-cover classification data and species habitat requirements. The resulting Landscape maps provide an accurate, reliable and scientifically sound basis for habitat protection within each region. One of the Landscape Project"s unique features is that it enables users to focus on the big picture, and not just on individual locations of imperiled and special concern species as those areas become threatened. Thus, within large landscapes, the Landscape Project identifies areas of endangered and threatened wildlife habitat that are important to the maintenance and recovery of New Jersey's endangered and threatened wildlife populations.

Landscape Project 3.3 – Atlantic Coastal

The Landscape Project combines documented wildlife locations with NJDEP aerial photo-based 2012 Land Use/Land Cover (LULC) to delineate imperiled and special concern species habitat within New Jersey. Many species occurrence locations cannot be published because they may represent nest sites, roost sites, dens and other sites used by species that are vulnerable to human disturbance and, in some cases, susceptible to illegal collection. At the same time, wildlife moves, as individual animals use various habitat features within the landscape to fulfill their foraging, sheltering and breeding needs. Therefore, protecting individual occurrences or the area used by one individual is generally not sufficient to protect the local population. Landscape Project maps address these issues by displaying habitat patches that animals use and that are required to support local populations, rather than pinpointing exact locations of the most sensitive wildlife sites or simply protecting points where species happened to be observed at one point in time. Prior to combining species occurrence data with LULC data to form the

habitat patches that make up the Species-Based Habitat layer, each dataset was generated according to a specific data development process.

Landscape Project 3.3 – Delaware Bay

The Landscape Project combines documented wildlife locations with NJDEP aerial photo-based 2012 Land Use/Land Cover (LULC) to delineate imperiled and special concern species habitat within New Jersey. Many species occurrence locations cannot be published because they may represent nest sites, roost sites, dens and other sites used by species that are vulnerable to human disturbance and, in some cases, susceptible to illegal collection. At the same time, wildlife moves, as individual animals use various habitat features within the landscape to fulfill their foraging, sheltering and breeding needs. Therefore, protecting individual occurrences or the area used by one individual is generally not sufficient to protect the local population. Landscape Project maps address these issues by displaying habitat patches that animals use and that are required to support local populations, rather than pinpointing exact locations of the most sensitive wildlife sites or simply protecting points where species happened to be observed at one point in time. Prior to combining species occurrence data with LULC data to form the habitat patches that make up the Species-Based Habitat layer, each dataset was generated according to a specific data development process.

Landscape Project 3.3 – Marine

The Landscape Project combines documented wildlife locations with NJDEP aerial photo-based 2012 Land Use/Land Cover (LULC) to delineate imperiled and special concern species habitat within New Jersey. Many species occurrence locations cannot be published because they may represent nest sites, roost sites, dens and other sites used by species that are vulnerable to human disturbance and, in some cases, susceptible to illegal collection. At the same time, wildlife moves, as individual animals use various habitat features within the landscape to fulfill their foraging, sheltering and breeding needs. Therefore, protecting individual occurrences or the area used by one individual is generally not sufficient to protect the local population. Landscape Project maps address these issues by displaying habitat patches that animals use and that are required to support local populations, rather than pinpointing exact locations of the most sensitive wildlife sites or simply protecting points where species happened to be observed at one point in time. Prior to combining species occurrence data with LULC data to form the habitat patches that make up the Species-Based Habitat layer, each dataset was generated according to a specific data development process.

Landscape Project 3.3 – Piedmont Plains

The Landscape Project combines documented wildlife locations with NJDEP aerial photo-based 2012 Land Use/Land Cover (LULC) to delineate imperiled and special concern species habitat within New Jersey. Many species occurrence locations cannot be published because they may represent nest sites, roost sites, dens and other sites used by species that are vulnerable to human disturbance and, in some cases, susceptible to illegal collection. At the same time, wildlife moves, as individual animals use various habitat features within the landscape to fulfill their foraging, sheltering and breeding needs. Therefore, protecting individual occurrences or

the area used by one individual is generally not sufficient to protect the local population. Landscape Project maps address these issues by displaying habitat patches that animals use and that are required to support local populations, rather than pinpointing exact locations of the most sensitive wildlife sites or simply protecting points where species happened to be observed at one point in time. Prior to combining species occurrence data with LULC data to form the habitat patches that make up the Species-Based Habitat layer, each dataset was generated according to a specific data development process.

Landscape Project 3.3 – Pinelands

The Landscape Project combines documented wildlife locations with NJDEP aerial photo-based 2012 Land Use/Land Cover (LULC) to delineate imperiled and special concern species habitat within New Jersey. Many species occurrence locations cannot be published because they may represent nest sites, roost sites, dens and other sites used by species that are vulnerable to human disturbance and, in some cases, susceptible to illegal collection. At the same time, wildlife moves, as individual animals use various habitat features within the landscape to fulfill their foraging, sheltering and breeding needs. Therefore, protecting individual occurrences or the area used by one individual is generally not sufficient to protect the local population. Landscape Project maps address these issues by displaying habitat patches that animals use and that are required to support local populations, rather than pinpointing exact locations of the most sensitive wildlife sites or simply protecting points where species happened to be observed at one point in time. Prior to combining species occurrence data with LULC data to form the habitat patches that make up the Species-Based Habitat layer, each dataset was generated according to a specific data development process.

Landscape Project 3.3 – Skylands

The Landscape Project combines documented wildlife locations with NJDEP aerial photo-based 2012 Land Use/Land Cover (LULC) to delineate imperiled and special concern species habitat within New Jersey. Many species occurrence locations cannot be published because they may represent nest sites, roost sites, dens and other sites used by species that are vulnerable to human disturbance and, in some cases, susceptible to illegal collection. At the same time, wildlife moves, as individual animals use various habitat features within the landscape to fulfill their foraging, sheltering and breeding needs. Therefore, protecting individual occurrences or the area used by one individual is generally not sufficient to protect the local population. Landscape Project maps address these issues by displaying habitat patches that animals use and that are required to support local populations, rather than pinpointing exact locations of the most sensitive wildlife sites or simply protecting points where species happened to be observed at one point in time. Prior to combining species occurrence data with LULC data to form the habitat patches that make up the Species-Based Habitat layer, each dataset was generated according to a specific data development process.

Landscape Project 3.3 – Vernal Habitat

In 2001, ENSP partnered with Rutgers University Center for Remote Sensing and Spatial Analysis (CRSSA) to develop a method for mapping potential vernal pools throughout New Jersey.

Through an on-screen visual interpretation of digital orthophotography, CRSSA identified over 13,000 potential pools throughout the state. A subset of these pools was field verified and confirmed, with an 88% accuracy rate, to meet the physical characteristics to qualify as a vernal pool (Lathrop et al. 2005). In accordance with N.J.A.C. 7:7A-1.4, the term "vernal habitat" includes a vernal pool - or the area of ponding - plus any freshwater wetlands adjacent to the vernal pool. Vernal habitat areas mapped in the Landscape Project rely upon those data developed by the DEP and CRSSA to identify sites that should be field checked for possible identification as vernal habitats areas. DEP staff is in the process of field-verifying these pools. The Department also maps vernal habitat areas based upon on-the-ground assessment of sites not captured by the CRSSA mapping. The Landscape Project includes all of the CRSAA-identified sites, as well as sites identified by on-the-ground reconnaissance, categorized as either "potential vernal habitat areas" or "vernal habitat areas" as defined below: Potential vernal habitat area - These are areas identified by CRSSA as possibly containing a vernal pool that meets the criteria of a "vernal habitat" pursuant to N.J.A.C. 7:7A-1.4. These sites include sites that have been field inspected and have been found to meet the physical characteristics of a vernal habitat, but for which biological criteria have not yet been measured, as well as sites that have not been checked by DEP staff. Vernal habitat areas - These are areas that contain pools that have been field-verified by the Department and have been determined to meet both the physical and biological characteristics of a vernal habitat in accordance with N.J.A.C. 7:7A-1.4. All areas mapped as "potential vernal habitat areas" and "vernal habitat areas" are derived from a point location estimated to be the center of an individual vernal pool and include all areas within 300 meters of the point. Note that the occurrence area is not intended to suggest or correspond with any specific regulatory requirement. Rather, the area added around the point accounts for variations in the size of individual vernal pools, variations in the width of freshwater wetlands adjacent to the pool, plus adjacent habitats sufficient to include the estimated home range for vernal pool obligate species. If there is an overlap between areas mapped around two or more nearby points, the boundaries are conjoined to generate contiguous patches. If the resulting patch contains areas mapped as "vernal habitat area" and areas mapped as "potential vernal habitat areas," the entire patch is labeled as a "vernal habitat area."

Landscape Project 3.3 – Vernal Pool Locations

In 2001 ENSP partnered with Rutgers University Center for Remote Sensing and Spatial Analysis (CRSSA) to develop a method for mapping potential vernal pools throughout New Jersey. Through an on-screen visual interpretation of digital orthophotography, CRSSA identified over 13,000 potential pools throughout the state. A subset of these pools was field verified and confirmed, with an 88% accuracy rate (Lathrop et al. 2005), to meet the physical characteristics to qualify as a vernal pool.In accordance with N.J.A.C. 7:7A-1.4, the term "vernal habitat" includes a vernal pool - or the area of ponding - plus any freshwater wetlands adjacent to the vernal pool. The Department here includes mapping of vernal habitat locations that relies upon data developed by the Department and Rutgers University Center for Remote Sensing and Spatial Analysis (CRSSA) to identify sites that should be field checked for possible identification as vernal habitats areas. DEP staff is in the process of field-verifying these pools. The

Department also maps vernal habitat areas based upon on-the-ground assessment of sites not captured by the CRSSA mapping. These vernal habitat locations, all of the CRSAA-identified sites, as well a sites identified by on-the-ground reconnaissance, are categorized as either "potential vernal habitat location" or "vernal habitat location."

Natural Heritage Grid Map

Through its Natural Heritage Database, the Office of Natural Lands Management (ONLM) documents rare plant species and rare ecological community habitat to inform decision-makers who need to address the conservation of natural resources. The Natural Heritage Grid Map is a geographic information system (GIS) file that provides a general portrayal of the geographic locations of rare plant species and rare ecological communities for the entire state without providing sensitive detailed information. It does not contain data for animal species. The Natural Heritage Grid Map was produced using computer-generated vector-based polygons that divide the boundary lines of each USGS 1:24,000 scale topographic map into 100 grid cells, each cell being between 358 and 372 acres in size. If a rare plant species or ecological community has been documented from anywhere within a cell, the entire cell will be coded as containing an occurrence of a rare plant species/ecological community. An associated data table can be linked or related to the NHPGRID table in order to display information about the individual rare plant species/ecological community occurrences within any cell.

Topography Layers

Statewide DEM

This statewide 10 foot resolution Digital Elevation Model (DEM) was developed from 4 major New Jersey LiDAR collection projects undertaken between 2014 and 2019. Bare earth points from the original point clouds were re-sampled to create 10 foot resolution bare earth models for each individual project. These individual 10 foot resolution models were then merged to create this statewide DEM. The Statewide 10 ft resolution DEM, edition 20210104 was updated to incorporate new data collected in the spring of 2019 for 5 southern New Jersey counties: Cumberland, Salem, Cape May, Atlantic and Ocean.

NJ Color Topo 24k

NJ Black & White Topo 24k

Imagery Layers

NJ Color Historical Maps

NJ Color Topo 24k

NJ Black & White Topo 24k

New Jersey Black White 1930

This OGC compliant Web Map Service includes a historical image data set of a mosaic of black and white photography of New Jersey from the early 1930s. The source imagery was hand cut to produce 261 mosaic tile prints on linen-backed paper. The data set was produced by scanning these mosaic tile prints at 400 dpi and saved as TIFF images. The scanned TIFF images had an approximate pixel resolution of 6.5 feet. They were georeferenced against 1995/97 color infrared digital orthophotography. The georeferenced TIFFs were clipped and merged into a single raster image for reference purposes only. The digital product has not been corrected for distortion or vertical displacement. They do not meet the National Standard for Spatial Data Accuracy (NSSDA). It is referenced to Geographic WGS 1984.

New Jersey Wetlands 1970

This Web Map Service publishes the series of chronoflex photo-basemaps known as the "1970 Wetlands Basemaps." These maps were scanned and geo-referenced using the NJDEP Tidelands Grid vector data layer as the reference data set. Cropped versions of the geo-referenced images are made available in this WMS.

New Jersey Tidelands 1977

This Web Map Service publishes the series of chronopaque photo-basemaps known as the "1977 Tidelands Basemaps." The maps were scanned and georeferenced using the NJDEP Tidelands Grid vector data layer as the reference data set. Cropped versions of geo-referenced images are made available in this WMS.

New Jersey Infrared 1995

This service was created to provide convenient internet access to 1995 - 1997 orthophotos. It can be used by anyone with internet access and client software that can consume Open Geospatial Consortium compliant Web Map Services (WMS).DOQ's serve a variety of purposes, from interim maps to field references for earth science investigations and analysis. The DOQ is useful as a layer of a geographic information system and as a tool for revision of digital line graphs and topographic maps.

New Jersey Infrared 2002

This service was created to provide convenient internet access to 2002 orthophotos. It can be used by anyone with internet access and client software that can consume Open Geospatial

Consortium compliant Web Map Services (WMS). The data provide aerial survey of the State of New Jersey. Orthophotos serve a variety of purposes, from interim maps to field references for earth science investigations and analysis. The digital orthophoto is useful as a layer of a geographic information system and as a tool for revision of digital line graphs and topographic maps.

New Jersey Infrared 2007

This service was created to provide convenient internet access to 2007 - 2008 orthophotos. It can be used by anyone with internet access and client software that can consume Open Geospatial Consortium compliant Web Map Services (WMS). The data provide aerial survey of the State of New Jersey. Orthophotos serve a variety of purposes, from interim maps to field references for earth science investigations and analysis. The digital orthophoto is useful as a layer of a geographic information system and as a tool for revision of digital line graphs and topographic maps.

New Jersey Natural 2007

This service was created to provide convenient internet access to 2007 - 2008 orthophotos. It can be used by anyone with internet access and client software that can consume Open Geospatial Consortium compliant Web Map Services (WMS).The data provide aerial survey of the State of New Jersey. Orthophotos serve a variety of purposes, from interim maps to field references for earth science investigations and analysis. The digital orthophoto is useful as a layer of a geographic information system and as a tool for revision of digital line graphs and topographic maps.

New Jersey Natural 2010

This service was created to provide convenient internet access to 2010 NAIP orthophotos. It can be used by anyone with internet access and client software that can consume Open Geospatial Consortium compliant Web Map Services (WMS).The data provide aerial survey of the State of New Jersey. Orthophotos serve a variety of purposes, from interim maps to field references for earth science investigations and analysis. The digital orthophoto is useful as a layer of a geographic information system.

New Jersey Infrared 2012

This service was created to provide convenient internet access to 2012 orthophotos. It can be used by anyone with internet access and client software that can consume Open Geospatial Consortium compliant Web Map Services (WMS).

New Jersey Natural 2012

This service was created to provide convenient internet access to 2012 orthophotos. It can be used by anyone with internet access and client software that can consume Open Geospatial Consortium compliant Web Map Services (WMS).

New Jersey Natural 2013

This service was created to provide convenient internet access to 2013 NAIP orthophotos. It can be used by anyone with internet access and client software that can consume Open Geospatial Consortium compliant Web Map Services (WMS).The data provide aerial survey of the State of New Jersey. Orthophotos serve a variety of purposes, from interim maps to field references for earth science investigations and analysis. The digital orthophoto is useful as a layer of a geographic information system.

New Jersey Natural 2015

This service was created to provide convenient internet live access to 2015 orthophotos. It can be used by anyone with internet access and client software that can consume Open Geospatial Consortium compliant Web Map Services (WMS). Orthophotos are useful as base maps, interim maps, reference base for field and emergency response mapping, and as a general base for GIS data development and comparison.

New Jersey Infrared 2020

This service was created to provide convenient internet live access to 2020 orthophotos. It can be used by anyone with internet access and client software that can consume Open Geospatial Consortium compliant Web Map Services (WMS). Orthophotos are useful as base maps, interim maps, reference base for field and emergency response mapping, and as a general base for GIS data development and comparison.

New Jersey Natural 2020

This service was created to provide convenient internet live access to 2020 orthophotos. It can be used by anyone with internet access and client software that can consume Open Geospatial Consortium compliant Web Map Services (WMS). Orthophotos are useful as base maps, interim maps, reference base for field and emergency response mapping, and as a general base for GIS data development and comparison.