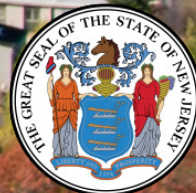


STATE OF  
NEW JERSEY

# CLIMATE CHANGE

## RESILIENCE STRATEGY

*TWO-YEAR ANNIVERSARY ACCOMPLISHMENTS*

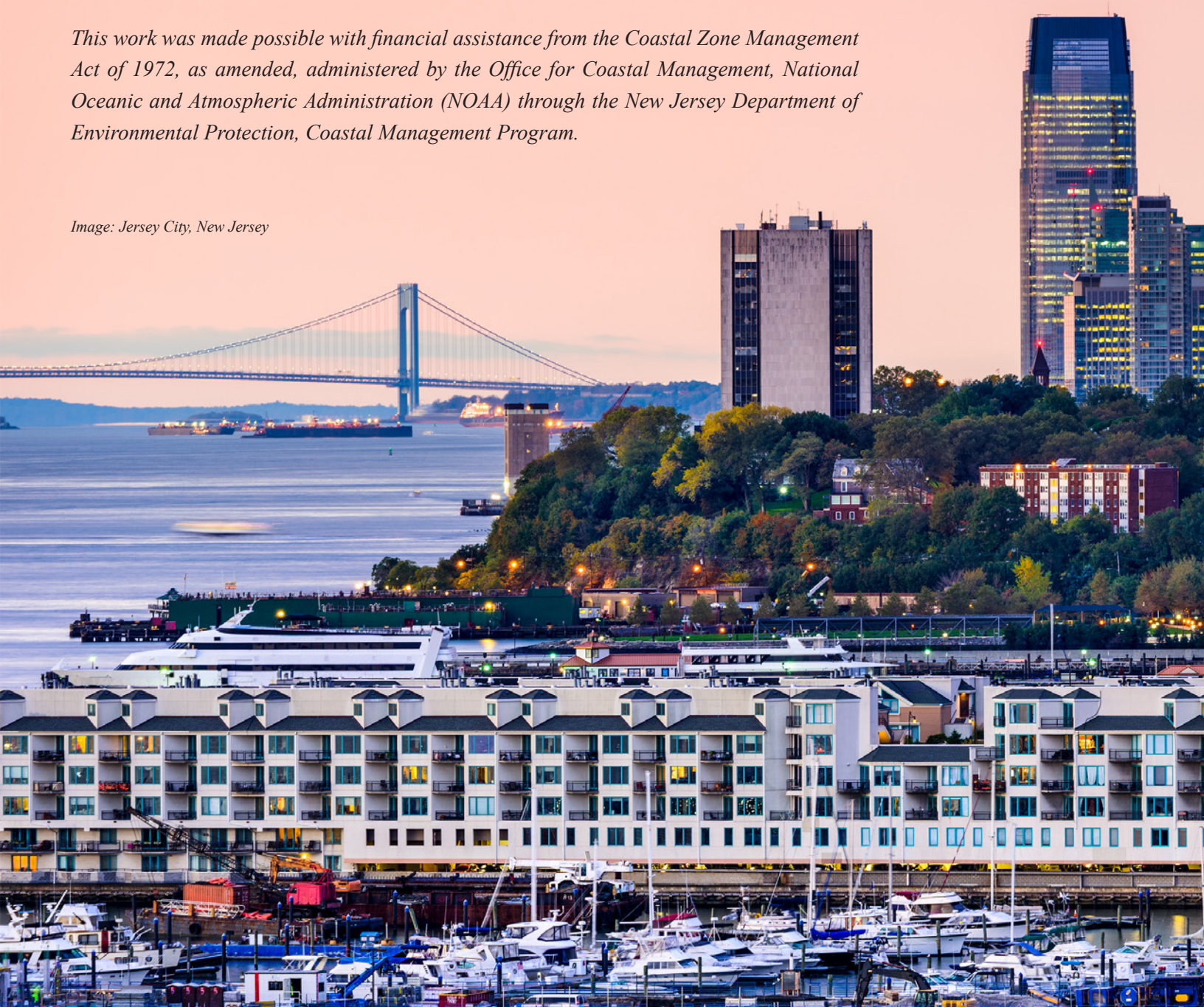


OCTOBER 2023

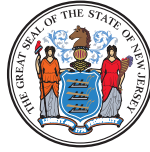


*This work was made possible with financial assistance from the Coastal Zone Management Act of 1972, as amended, administered by the Office for Coastal Management, National Oceanic and Atmospheric Administration (NOAA) through the New Jersey Department of Environmental Protection, Coastal Management Program.*

*Image: Jersey City, New Jersey*







October 2023

Fellow New Jerseyans,

It is my pleasure to present this update on progress the [New Jersey Interagency Council on Climate Resilience](#) has made since releasing the first statewide [Climate Change Resilience Strategy](#), which promotes the long-term mitigation, adaptation, and resilience of New Jersey's economy, communities, infrastructure, and natural resources within the broader framework of the Murphy Administration's climate resilience and mitigation policies.

At the time of the Strategy's release in October 2021, we stated clearly and emphatically that climate change is the single greatest long-term threat currently facing humanity, and that our state and economy are uniquely vulnerable to its devastating effects.

The immediacy of this threat has been underscored by the events of our most recent summer. Canadian wildfire smoke covered the skies for much of June, exposing individuals to dangerous levels of air pollution. In August, heavy rains - not a tropical storm or a hurricane - led to devastating floods across Warren County. On a global scale, this summer was the hottest three-month period on record.

While New Jersey remains committed to reducing emissions that contribute to climate change, we are also working aggressively to enact measures to adapt to the impacts we are seeing today. This Two-Year Anniversary Accomplishments Report is not intended to identify every action taken by every agency over the last two years, however, it does showcase accomplishments as a testament to our relentless pursuit of a more resilient and sustainable future for our communities.

This update highlights the progress that we have made on many initiatives and programs that are vital to making New Jersey more resilient to climate threats - and, consequently, making us stronger and safer. We have accomplished a great deal. But it's only the beginning of what must be a commitment to climate consciousness and action by each and every one of us - each and every day.

A handwritten signature in blue ink that reads 'Nicholas Angarone'.

Nicholas J. Angarone, PP/AICP  
New Jersey Chief Resilience Officer

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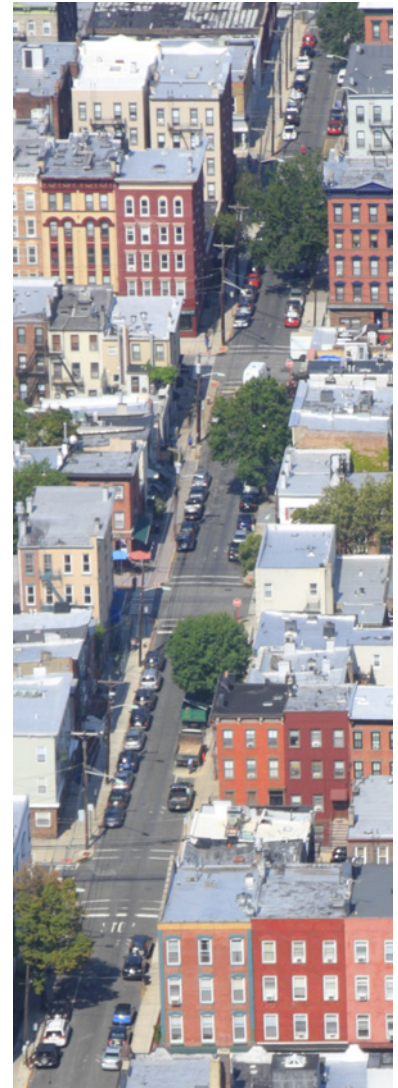
## **PRIORITY 1: BUILD RESILIENT AND HEALTHY COMMUNITIES**

### **Resilient NJ (NJ Department of Environmental Protection)**

The Department of Environmental Protection (DEP)'s [Resilient NJ](#) program has greatly expanded since its inception, which started with four coastal regional projects. To date, up to 44 municipalities across the state are receiving services (or have been selected to begin to shortly), with more funding opportunities continuing to arise. Additionally, under the Resilient NJ umbrella, the [Local Planning for Climate Change Toolkit](#) serves as an online tool to provide guidance and resources to municipalities undergoing resilience planning processes; a funding directory, identifying both state and federal funding opportunities, will begin development in early 2024.

### **NJ Protecting Against Climate Threats (NJPACT) Resilience Regulatory Reforms (NJ Department of Environmental Protection)**

In response to Governor Murphy's [Executive Order 100](#), DEP took the first critical step to modernize New Jersey's existing flood hazard and stormwater regulations through adoption of the Inland Flood Protection Rules in July 2023. By replacing outdated precipitation estimates with modern data, this rule better protects our communities and residents from worsening riverine flooding and stormwater runoff. The Inland Flood Protection Rule was the first component of [NJPACT](#) resilience regulatory reforms; the second step is the proposal of the Resilient Environments and Landscapes (REAL) rule package, a suite of environmental land use regulation reforms that address the unavoidable impacts of climate change, such as sea-level rise, extreme weather and chronic flooding. These reforms amend environmental land use rules, including the Coastal Zone Management, Freshwater Wetlands, Flood Hazard and Stormwater rules, to facilitate development and redevelopment that is safe, sustainable and resilient; encourages green building design; and the re-creation and restoration of natural systems that will assist in mitigating climate threats.



*Hoboken, New Jersey*

## **2021 Climate Change Resilience Strategy and the Interagency Council on Climate Resilience**

Through Executive Order No. 89, the Interagency Council on Climate Resilience (Interagency Council) was established with the mandate to develop short- and long-term action plans that will promote the long-term mitigation, adaptation and resilience of New Jersey's economy, communities, infrastructure and natural resources. In addition to these coordinated efforts, the Interagency Council supports the development and implementation of the Climate Change Resilience Strategy which guides and informs state actions to address the impacts of climate change.

New Jersey's first Statewide Climate Change Resilience Strategy provides a suite of forward-looking policy options to promote the long-term resilience of New Jersey to climate change. As a framework for policy, regulatory and operational changes, the Resilience Strategy presents actions that New Jersey's Executive Branch can take to support the resilience of the state's communities, economy and infrastructure. The Resilience Strategy includes 127 recommended actions across six priority areas. To learn more, visit: <https://dep.nj.gov/climatechange/resilience/resilience-council/>.



### **Helping NJ Highlands Municipalities Adapt to Climate Change (NJ Highlands Council)**

In May 2022, the Highlands Council kicked off a project to help Highlands municipalities meet new Municipal Land Use Law (MLUL) requirements for incorporating climate resilience, environmental justice and environmental sustainability into local master plans. To achieve this, the Highlands Council is developing a comprehensive municipal guidance document that will enable communities to effectively meet the new MLUL requirements. These guidance documents are under development, and a significant milestone of this initiative will be the establishment of a Highlands grant program. This program will provide support for implementing recommended changes detailed in the guidance, and also will include a model scope of work that municipalities can use as a basis for their funding applications.

### **NJ State Hazard Mitigation Plan 2024 (NJ Office of Emergency Management)**

The forthcoming State Hazard Mitigation Plan 2024 update has been meticulously crafted over the past two years. This guide is an instrumental tool for local jurisdictions and counties, equipping them with vital information on potential climate risks, mitigation techniques and strategies for addressing repetitive losses. As New Jersey grapples with evolving weather patterns and intensifying climate change impacts, this document stands as a testament to the state's commitment to fostering resilient communities by offering guidance grounded in the most up-to-date and comprehensive research.

### **Resilient Communities Grant Program (NJ Department of Community Affairs)**

DCA's [Resilient Communities Program](#) is a competitive grant program designed to fund recovery and mitigation needs for public infrastructure projects, with a focus on areas considered most impacted and distressed by recent natural disasters. This program will allow eligible communities to fund a wide range of projects designed to mitigate risks to essential infrastructure components like utilities and roads, as well as community lifelines such as food, water and shelter. DCA has modeled the Resilient Communities Program on Federal Emergency Management Agency (FEMA)'s Building Resilient Infrastructure in Communities (BRIC), a federal program that awards funds nationally through an annual competition. This alignment with the BRIC program will allow eligible applicants to Resilient Communities build the knowledge and skills necessary to be nationally competitive in FEMA's BRIC applications. For details on Resilient Communities, please consult New Jersey's [Hurricane Ida Action Plan](#).

### **Smart Move (NJ Department of Community Affairs)**

DCA's Smart Move is a home construction program that will work with local governments and construction firms to create quality, energy-efficient, resilient and affordable single-family housing in low flood risk areas within or near disaster-impacted communities. This program will provide a path to affordable homeownership for disaster-impacted residents, so they can both reduce their risk in future disasters and remain in their communities. The current iteration of the program will prioritize both Blue Acres buyout program participants who have sold their



*“In June of this year, NJ TRANSIT unveiled for public comment their first ever draft Sustainability Plan.”*

Newark, New Jersey



*Trenton, New Jersey*

high-risk properties, as well as income-qualified first-time homebuyers. Smart Move will offer discounted final sale price and down payment assistance. For details on Smart Move, please consult New Jersey’s [Hurricane Ida Action Plan](#).

#### **New Jersey Racing Commission Regulations (NJ Department of Law and Public Safety)**

The New Jersey Racing Commission (NJRC) recently adopted regulations (N.J.A.C. 13:70-1.43 and N.J.A.C. 13:71-1.38) that permit its Executive Director to order postponement or to cancel racing for any reason that poses a serious risk to the health, safety and welfare of the equine and human race participants, including extreme weather conditions such as high heat and humidity.

#### **Juvenile Justice Commission Facilities Upgrades (NJ Department of Law and Public Safety)**

The Juvenile Justice Commission will continue the upgrading of decades-old HVAC units in certain facilities, especially gymnasiums, with high-efficiency air conditioning units that meet the Board of Public Utilities’ (BPU) Clean Energy Program standards for efficiency. Several Juvenile Justice Commission locations also have received new roofs that feature increased insulation and cool roof design.

#### **Passive House Incentives (NJ Housing and Mortgage Finance Agency)**

The NJ Housing and Mortgage Finance Agency (NJHMFA) is incentivizing affordable housing projects to attain the Passive House standard, an advanced building envelope technique that will help to mitigate high thermal gains, decrease cooling demands during warmer months and help residents to significantly save on utility bills.

#### **Climate Change-Related Hazard Vulnerability Assessments in State Plan Endorsement (NJ Department of State)**

During the past two years, 18 municipalities have been endorsed by the State Planning Commission with the

requirement to develop and incorporate a Climate Change-Related Hazard Vulnerability Assessment into their Master Plan, consistent with [2021 amendments](#) to the NJ Municipal Land Use Law.

#### **Independent Resilience Review (Port Authority of New York and New Jersey)**

The Port Authority is actively improving its organizational resilience capabilities, building on an Independent Resilience Review of the agency’s policies, programs and procedures that was completed in 2022.

#### **Sustainability Plan (NJ TRANSIT)**

In June, NJ TRANSIT unveiled its first-ever draft [Sustainability Plan for public comment](#). The plan development started by determining priority sustainability issues to ensure that the agency is working on issues that matter most to it, its employees, customers and communities. A goal-oriented sustainability framework was constructed, with appropriate performance indicators, metrics and strategies. The final version of the plan is scheduled to be revealed by the end of this year.

#### **Resilience and Sustainability Program Development (NJ Turnpike Authority)**

The New Jersey Turnpike Authority (Authority) is undertaking a multi-year, multi-pronged Resilience and Sustainability Program. Addressing climate impacts (e.g., increased annual precipitation frequency and intensity, sea-level rise and extreme heat) are critical to providing a safe and resilient toll-road system. Incorporating sustainability practices and principles reduces carbon emissions and air pollution; cuts spending on infrastructure replacement and materials; and enhances public health. Over time, the Resilience and Sustainability Program aims to address climate change, resilience and sustainability by integrating these considerations across the Authority. These changes will help the Authority to adapt and transform to meet the needs of tomorrow and provide customers on the New Jersey Turnpike and Garden State Parkway with a safe, efficient, innovative and reliable toll road system.



### **Exposure Assessment (NJ Turnpike Authority)**

To understand climate change impacts on the Authority's assets, the agency has completed a flood exposure assessment of both the Turnpike and Parkway roadways. The assessment considered eight risk scenarios of increasing precipitation frequency and intensity, as well as sea-level rise across four time horizons (2023/2050/2070/2100). Utilizing this information during project development allows the Authority to assess the flood risks faced by its assets and systems as a result of climate change.

### **Vulnerability Pilot Projects (NJ Turnpike Authority)**

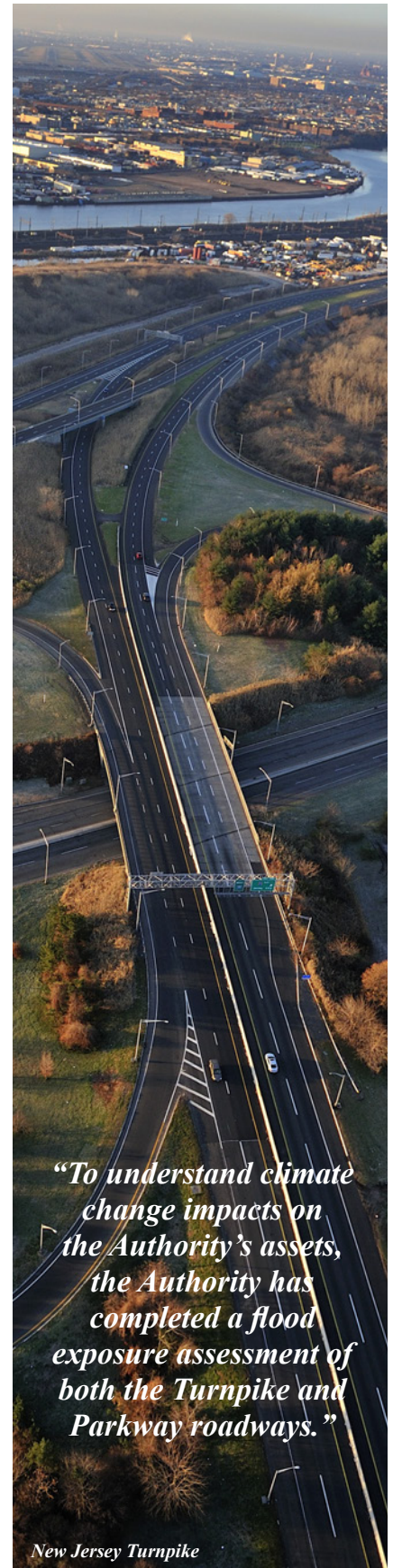
The Authority has selected five locations across the Turnpike and Parkway for a detailed asset-level study to determine whether or not assets are vulnerable to flooding and if so, under which risk scenarios. The pilots will be used to develop a detailed assessment methodology and determine what (if any) additional datasets should be collected and/or databased to make it faster and easier to scale up assessments to the Authority's entire transportation network.

### **Inclusive Healthy Communities Grant Program (NJ Department of Human Services)**

The Inclusive Healthy Communities (IHC) grant program is an initiative to support localities and ensure that the voices and needs of individuals with disabilities are included in healthy community planning. The program aims to promote change at the local level by addressing preexisting physical, environmental, social and economic challenges that prevent people with disabilities from having full access to conditions that support health and well-being. Spearheaded by the New Jersey Department of Human Services' Division of Disability Services, the grant program is available to nonprofits and county or municipal government agencies.

### **Coastal Flood Mitigation Efforts Through Infrastructure Investment Programs (IIPS) (NJ Board of Public Utilities)**

On Dec. 19, 2017, BPU adopted new regulations for utility "Infrastructure Investment and Recovery," supporting the implementation of an IIP. Such a program allows a utility to accelerate its investment in the construction, installation and rehabilitation of certain non-revenue producing utility plants and facilities that enhance safety, reliability and/or resilience. Since the publishing of the CCRS, the Board approved Atlantic City Electric's third IIP in June 2023, which included approximately \$11.4 million of investments in 13 substation elevation projects, 10 of which directly benefit coastal communities. This is one example of the more than \$120 million in coastal flood mitigation investments that the Board has approved since 2017 for some utilities in the state. Flooding is a major threat to our grid and by strategically and responsibly investing in infrastructure upgrades to reduce risk and mitigate hazards presented by flooding, the Board is working to build a stronger, safer and more resilient New Jersey and energy system.



*"To understand climate change impacts on the Authority's assets, the Authority has completed a flood exposure assessment of both the Turnpike and Parkway roadways."*

New Jersey Turnpike

### **Sustainable Building Designs (NJ Department of Military and Veteran Affairs)**

The NJ Department of Military and Veteran Affairs (DMAVA) Construction & Facilities Management Office (CFMO) follows U.S. Department of Defense directives for sustainable growth by designing its newest buildings to meet LEED (Leadership in Energy and Environmental Design) silver certification level. The designs for new buildings, such as the Vineland Vehicle Maintenance Shop, will have increased building envelope insulation, greater HVAC efficiencies, reduced energy and water consuming equipment, solar panels and green stormwater infrastructure. Recent efforts to be more sustainable include replacing fuel oil with less polluting natural gas used to run building heating boilers, starting at the Port Murray armory. In the upcoming building modernization projects at the Woodstown and Atlantic City armories, geothermal heating and cooling systems, and solar panels with battery back-up are being evaluated and included in designs, where practicable. These efforts also follow the state's electrification initiative by reducing fossil-fuel usage and increasing building resiliency during emergencies.

### **NJ Establishes Flood Disclosure Law (multiple agencies)**

In July, Gov. Phil Murphy signed bill S3110/A4783, which requires sellers of property and landlords to make certain notifications regarding flooding. Under the law, sellers of real property and landlords must disclose knowledge of a property's history of flooding, flood risk and location in a flood zone or area. Additionally, the law requires landlords to notify tenants of the availability of insurance for renters through the National Flood Insurance program.

### **Integrate Public Health and Community Resilience Planning and Activities (NJ Department of Health)**

For the first time, the NJ Department of Health (NJDOH) has incorporated climate resilience into its long-range health improvement efforts. The Department collaborates with multiple partners and stakeholders across the state on the [Healthy New Jersey](#) (HNJ) initiative, with the goal of improving the health of all residents. While health equity has been, and continues to be, integrated across the HNJ initiative, in 2020, resilience was added to the list of cross-cutting issues designed to impact all project activities. From a public health perspective, resilience refers to the ability of an individual or community to withstand, adapt to and recover from emergency, threats, tragedy, trauma or other adverse experiences and circumstances. NJDOH is partnering with the DEP to develop several HNJ strategies intended to improve climate resilience by mitigating the health risks of air and water quality, flooding, heat and zoonotic disease.

### **Port Authority Climate Risk Assessment (Port Authority of New York and New Jersey)**

The Port Authority Climate Risk Assessment (CRA) is an asset-scale, multi-stressor exercise to identify key risks, develop corresponding risk mitigation measures, and prioritize cost-beneficial mitigations for investment. The CRA will enable identification of critical risks and develop corresponding mitigation measures, resulting in selective integration of priority risk reduction projects for the Port Authority capital plan. The CRA will reach substantial completion in 2024.



*“The NJ State Hazard Mitigation Plan 2024 serves as an instrumental tool for local jurisdictions and counties, equipping them with vital information on potential climate risks, mitigation techniques, and strategies for addressing repetitive losses.”*



## PRIORITY 2: STRENGTHEN THE RESILIENCE OF NEW JERSEY'S ECOSYSTEMS



### **Coordinate Efforts to Protect and Enhance Tidal Marshes (multiple agencies)**

In 2023, DEP, NJ Sports and Exposition Authority (NJSEA), Pinelands Commission and Highlands Council coordinated to develop the first fully integrated statewide Wetland Program Plan, which serves to direct current and future wetland protection, management and restoration efforts along a coordinated path to the benefit of New Jersey's wetland resources and the quality of life for future generations. Within this plan, efforts also were made to weave an environmental justice component into the program's core elements in an attempt to lessen environmental and public health stressors in historically overburdened communities.

### **Land Conservation and Resource Management (NJ Department of Agriculture)**

The Department of Agriculture (NJDA)'s Division of Agricultural and Natural Resources works to provide financial and technical assistance for farm conservation measures through partnering with NRCS, and the State Agricultural Development Committee for preserved farms. In response to New Jersey's [80 x 50 Report](#), staff have been in collaboration with other state agencies to develop climate smart practice recommendations for the DEP-led Natural Working Lands Strategy. Much emphasis has been directed toward the prioritization of developing conservation cost share programs that incorporate climate smart agricultural practices, particularly those that build on-farm resilience and enhance food security. The intended recipients of these programs would include not only preserved farms, but also unpreserved farms.

### **Lake and Watershed Restoration Planning (NJ Highlands Council)**

In the past two years, the Highlands Council has allocated \$1.3 million in funding to protect and restore water quality across 65 lakes and watersheds, spanning 29 municipalities within the Highlands region. The Council actively collaborates with Highlands municipalities to enhance water quality by financing lake and watershed restoration and protection plans. These plans include strategies such as implementing green stormwater infrastructure, revitalizing stormwater facilities and providing recommendations for septic system maintenance projects that are impacted by increasing climate impacts. These initiatives build upon the \$1.2 million in funding allocated by the Highlands Council since 2018 for restoration projects covering 68 lakes and watersheds within the area. Notably, \$600,000 of this funding has been directed toward projects related to lake, sewer and stormwater management in the vicinity of Lake Hopatcong, the largest lake in the state.



Nantuxent Wildlife Management Area



***“In the last two years, the Highlands Council has allocated \$1.3 million in funding to protect and restore water quality across 65 lakes and watersheds spanning 29 municipalities within the Highlands region.”***





*“In December 2021, the Commission adopted new rules that will better protect Pinelands resources by requiring the use of green infrastructure and other more stringent standards to manage stormwater.”*

*Batsto Lake, New Jersey Pine Barrens*

#### **Stormwater Management (NJ Pinelands Commission)**

In December 2021, the Commission adopted new rules to better protect Pinelands resources by requiring the use of green infrastructure and other more stringent standards to manage stormwater. The new rules integrate the stormwater management standards previously adopted by the DEP and incorporate additional standards to provide enhanced protection to the Pinelands environment. For the first time, the Commission’s rules require stormwater management for all residential development, including projects involving only one new housing unit, and stricter standards for nitrogen removal that apply to larger projects in the Pinelands area. The new rules are intended to reduce the volume of stormwater runoff, lower the potential for localized flooding and help to maintain water levels in the Kirkwood-Cohansey aquifer, which underlies the Pinelands, provides fresh drinking water and supports the region’s special ecosystem.

#### **Water Supply (NJ Pinelands Commission)**

After decades of intensive study, the Commission adopted new water management rules on Sept., 8 2023 to strengthen protections to the Kirkwood-Cohansey aquifer and the Pinelands ecology as a whole, while ensuring sufficient water supply for authorized development in the growth-oriented portions of the Pinelands. The Kirkwood-Cohansey is a freshwater reservoir underlying the Pinelands, which contains an estimated 17 trillion gallons of water. Withdrawals from the aquifer can negatively impact the essential character of the Pinelands

environment; therefore, the Commission set clear, quantifiable standards to address potential adverse local and regional impacts.

#### **Ecosystem Restoration for Resilience (NJ Sports and Exposition Authority)**

To restore the shorelines and marshes of the Sawmill Creek Wildlife Management Area and expand stakeholder engagement, NJSEA has been conducting a multi-year study to document baseline conditions and determine the best alternative for ecological restoration. The final report will be published in 2024, and efforts are underway for a pilot project employing a suite of ecological enhancements to recreate a diverse coastal ecosystem with strengthened shorelines, vegetated high and low marshes, and upland islands, which can then be replicated throughout the remainder of the site, as well as in other coastal communities.

#### **Incorporating Adaptation into Meadowlands Regional Planning (NJ Sports Exposition and Authority)**

In 2023, NJSEA worked with Rutgers University’s Edward J. Bloustein School of Planning and Public Policy to develop a planning document titled “Resilience Planning in the New Jersey Meadowlands.” This document evaluated existing resilience planning efforts in the Meadowlands District and recommends next steps for promoting science-informed and equitable climate adaptation. NJSEA will continue to engage with Rutgers to develop climate resilience strategies for the District.



### **Strengthen the Resilience of New Jersey’s Ecosystems (NJ Department of Transportation)**

Pollinator species are in decline and climate change will further affect these species and their habitat. The New Jersey Department of Transportation (DOT) has initiated pollinator-friendly activities on highway rights-of-way, including the planting of milkweed and seeding native of grasses and wildflowers. This initiative creates havens for birds, butterflies, bees and other wildlife along the networked highways. As more havens are provided on connected lands, more habitat corridors will be created to link otherwise fragmented pollinator habitat, aiding migration for these wildlife species.

### **Demonstration Rain Garden (NJ Pinelands Commission)**

In June 2022, the Commission installed a 340square-foot rain garden at its headquarters in Pemberton. Designed in coordination with the Rutgers Cooperative Extension Water Resources Program, the garden captures and filters stormwater generated by the main office building while providing habitat for wildlife and helping to mitigate climate change impacts, such as flooding. The garden is designed to collect, treat and infiltrate an estimated 53,287 gallons of stormwater onsite each year. It features 100% native Pinelands plants and a new interpretative sign that details a list of the plant species used. Following completion of the rain garden, the Commission launched a new web page containing the garden’s final engineering, design and planting plan, as well as links for purchasing native plants and installing a rain garden. A [PowerPoint presentation](#) is also posted on the Commission’s website.

### **Environmental Policies and Programs for Army Sites (NJ Department of Military and Veterans Affairs)**

The DMAVA CFMO manages environmental policies and programs at NJ Army National Guard (ARNG) sites under the guidance of Army Regulation 200-1. On-going planning and programming efforts include climate change’s effects on NJ ARNG sites and activities. The [CFMO’s Environmental Bureau](#) is in the final stages of creating an integrated natural resources management plan (INRMP) for the NJARNG largest site, the Sea Girt Training Center. This plan follows Army Directive 2020-08 by incorporating the results of climate change prediction analysis tools into the report. The projected impacts of a changing climate and extreme weather conditions are discussed and reflected in this plan, as are goals for outreach and education efforts that include climate impacts, along with the research, management and support of climate sustainability projects on site, and infrastructure improvement to handle predicted increasing temperature and humidity concerns. Recent activities on-site also align with the report goals, including the repair of two stormwater basins and the removal of buildings in low-lying areas to increase naturalization in flood-prone areas of the campus.



*Pinelands Commission’s Demonstration Rain Garden (Source: Pinelands Commission)*



*Fresh Tidal Marsh*



### 3 **PRIORITY 3: PROMOTE COORDINATED GOVERNANCE**

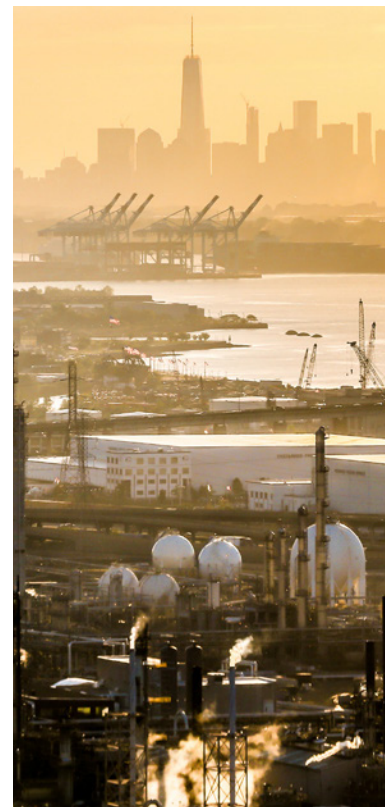
#### **Extreme Heat RAP (NJ Interagency Council)**

The NJ Interagency Council is working to draft the Extreme Heat Resilience Action Plan. This plan will outline a range of policy changes, programs and regulatory actions, both new and existing, aimed at addressing this climate impact. It is expected to be released in the spring of 2024. The actions outlined in these Resilience Action Plans will exemplify the practical realization of NJ state agencies' and departments' commitment to fulfilling the vision outlined in the overarching Resilience Strategy.

#### **NJ Resilience Accelerator (multiple agencies)**

Led by FEMA and NJ state partners (DOS, DEP, OEM, DCA), this technical assistance program helped 10 NJ municipalities identify and communicate their resilience goals, develop strategies and critical projects, find pathways for funding and integrate resilience into daily operations.

***“The New Jersey Interagency Council is working collaboratively to craft the Extreme Heat Resilience Action Plan.”***



Northern New Jersey

### 4 **PRIORITY 4: INVEST IN INFORMATION AND INCREASE PUBLIC UNDERSTANDING**

#### **Science & Data Accessibility (NJ Department of Environmental Protection)**

To create the Climate Change Resilience Strategy, the Council relied on the best-available science published in the 2020 NJ Scientific Report on Climate Change. Since then, DEP has worked closely with the NJDOH to produce a comprehensive report on the impacts of climate change on human health and communities by adding a human health addendum (2022). The Scientific Report and Human Health Addendum also have been translated into a user-friendly [Climate Change in New Jersey web resource](#) that can be easily revised as new science and data become available. DEP's climate communications extend into the real world, too: In September 2023, DEP launched [Climate Change Learning Stations](#) in several state parks, allowing visitors to envision how climate change is causing the shoreline to shift through a compilation of citizen-submitted photos.

#### **Climate Risk Disclosure Survey (NJ Department of Banking and Insurance)**

The NJ Department of Banking and Insurance recently began collecting climate risk disclosure information from the largest national insurance companies under state regulation. Data gathered through its survey is expected to provide insight on the importance a carrier places on its financial stability and business model, related to impacts of climate change. The information will enable the department to better evaluate potential risks and losses, as well as identify factors that could increase or reduce risks. That, in turn, will inform the department's ability to protect New Jersey policyholders and strengthen the industry.



#### **DEP's Climate Change Web Resource**

*The Scientific Report and Human Health Addendum have recently translated into a user-friendly [Climate Change in New Jersey web resource](#).*



*“Gov. Phil Murphy and legislature allocated \$20 million of American Rescue Plan Act (ARPA) funds in SFY 2023 for New Jersey Water Bank projects that address climate change/resiliency in drinking water infrastructure.”*

## **PRIORITY 5: PROMOTE CLIMATE-INFORMED INVESTMENTS AND INNOVATIVE FINANCING**



5

### **Water Infrastructure Investment Plan (NJ Department of Environmental Protection/NJ Infrastructure Bank)**

The NJ Water Bank (NJWB), a partnership between DEP and NJ Infrastructure Bank, provides low-cost financing for the design, construction and implementation of water quality infrastructure projects to enhance ground and surface water resources, ensure the safety of drinking water supplies, protect public health and make responsible and sustainable economic development possible. The Bipartisan Infrastructure Bill Law will provide New Jersey with nearly \$1 billion in funding over five years, which will help the state respond to climate threats by administering funds to projects such as relocation or elevation of structures above projected flood levels; energy efficiency projects to reduce greenhouse gas emissions; backup generators and physical hardening of electrical systems and equipment; dry proofing of structures; installation of flood attenuation, diversion or retention infrastructure; and saltwater resistant equipment and components to enhance resilience. The NJWB has provided \$93.8 million in funding for resilience projects in State Fiscal Year 2023 and \$30.9 million to date for State Fiscal Year 2024.



*Delaware River*

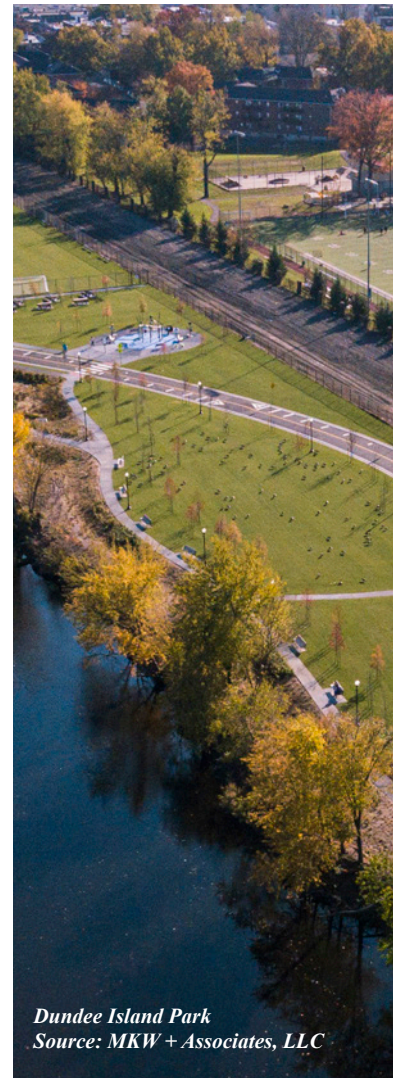


### **Climate Change/Resilience for Drinking Water State Revolving Fund Projects (NJ Department of Environmental Protection/NJ Infrastructure Bank)**

Gov. Phil Murphy and legislature allocated \$20 million of American Rescue Plan Act (ARPA) funds in State Fiscal Year 2023 for NJWB projects that address climate change/resilience in drinking water infrastructure. These projects include the rehabilitation of essential desalination plants, or the relocation of critical infrastructure due to the potential for flooding. Providing low-cost financing for drinking water projects that address climate change/resilience is key to strengthening New Jersey's environmental infrastructure. For State Fiscal Year 2024, the NJWB will provide additional priority points when ranking projects that implement climate resilience measures, if the resilience components represent a significant amount of the overall project activities.

### **Resilience Water Infrastructure Guidance (NJ Department of Environmental Protection)**

In keeping with the state's commitment to resilience in New Jersey, the NJWB has developed [Building Resilient Water Infrastructure Climate Change Resilience Guidance](#). This guidance serves as a robust framework to help applicants develop and justify selection of climate resilient projects for the State Revolving Fund program. It also provides users with the best available, New Jersey-specific climate science; details use of climate impact projections, with a focus on those anticipated to be the most disruptive to New Jersey's water infrastructure; and enables users to prepare the Resilience Assessment required by the NJWB. For drinking water projects that meet the criteria, 150 additional priority points will be awarded. Similarly, for clean water projects that meet the criteria, 100 additional priority points will be awarded. The NJWB Priority System sets forth ranking methodology for and prioritizes projects that are eligible for financial assistance through the NJWB. As such, additional priority points will enhance the availability for projects implementing climate resilience to receive low-cost financing through the NJWB program. The NJWB has a resilience project application pipeline totaling more than \$625 million in estimated costs.




*Dundee Island Park  
Source: MKW + Associates, LLC*

### **Stormwater & Flood Resilience Grants Programs (NJ Department of Environmental Protection)**

DEP has developed various grants to ensure communities have the support they need to implement stormwater and flood risk reduction projects, including:

- Stormwater Assistance Grant Program -- \$7 million in grants awarded for projects across the state that will enhance and modernize local stormwater management practices and infrastructure in the face of worsening impacts from climate change.
- A total of \$19 million in grants is available to assist municipalities with the transition to new municipal stormwater permitting system requirements designed to better protect New Jersey's waterways from pollutants in stormwater.
- The Stormwater Utility Feasibility Study Technical Assistance Program -- A total of \$2 million has been allocated to assist and facilitate the exploration of critical stormwater management initiatives for all entities eligible to form a stormwater utility (SWU), such as municipal governments, county governments, county or municipal sewerage or utility authorities, or county improvement authorities.
- More than \$1 million in grants to 7 local government agencies in the Hudson-Raritan Estuary for stormwater reduction and water quality enhancement projects.



*“NJHMFA’s 2023 Qualified Allocation Plan will require all projects applying for the Low-Income Housing Tax Credit to perform a Risk Assessment prior to application applying for the Low-Income Housing Tax Credit to perform a Risk Assessment prior to application.”*

### **Qualified Allocation Plan (NJ Housing and Mortgage Finance Agency)**

The NJHMFA’s [2023 Qualified Allocation Plan](#) will require all projects applying for the Low-Income Housing Tax Credit to perform a risk assessment prior to application. Site-specific risk factors, such as heat island exposure, as well as resilience recommendations, will be reviewed and implemented into the plans and specifications for each project. Additionally, post-construction, projects will need to submit an Emergency Management Plan to address any site-specific risk hazards, as well as provide guidance for residents during climate-related events, such as extreme heat.

### **Local Hazard Mitigation Projects (NJ Office of Emergency Management)**

The NJ Office of Emergency Management (OEM) has successfully procured millions of dollars earmarked for funding local hazard mitigation projects. As a result, the state helped finance dozens of hazard mitigation projects that increase the resilience of communities against flooding and extreme weather damage. Among these initiatives is the Two Rivers Water Reclamation Authority project, which upgrades a critical sewage line and a pump station nearing the end of their operational lives, and is poised to benefit approximately 90,000 residents. The new sewage line will be securely positioned 100 feet beneath the seabed, stretching over half a mile, and the renovated pump station promises to shield neighborhoods and homes from flooding hazards. Together, these enhancements safeguard residents and prevent the potential discharge of millions of gallons of untreated sewage into the bay.

### **Incorporating Resilience into Green Acres (NJ Department of Environmental Protection)**

The 2023 Green Acres Funding Round invested more than \$92 million in local governments and nonprofit land trusts in New Jersey for open space acquisition, park development and stewardship activities. Evaluation criteria for all categories of grants and loans included anticipated and addressed climate change impacts, advanced long-term resilience goals, provided equitable and meaningful public access, and maximized social, environmental and

health benefits, with a focus on overburdened communities facing adverse stressors.

### **Garden State Commercial Property Assessed Clean Energy Program (NJ Economic Development Authority)**

The Economic Development Authority (EDA) is incentivizing climate resilience through the creation of the new [Garden State Commercial Property Assessed Clean Energy \(C-PACE\) Program](#), which aims to provide financing for hurricane-resistant construction improvements, flood resistance construction improvements and stormwater management systems, as well as energy efficiency improvements.

### **Promote Climate-Informed Investments and Innovative Financing (NJ Department of Transportation)**

The DOT has created an internal Resiliency Management System (RMS) to help inform its investment decision-making process. The RMS evaluates potential future climate hazard exposure, criticality and demographic indicators. A Climate Hazard Visualization Tool is used to reflect flood exposure and future conditions relative to sea-level rise, heat and precipitation. A Criticality Tool identifies the urgency of road and bridge assets to support concept development, maintenance and project prioritization. The criticality assessment is based on several factors, including evacuation routes and freight routes. Demographic data is also evaluated in relation to environmental justice considerations. The RMS information is then utilized along with other management systems, such as bridge and pavement conditions, to assist in evaluating project selection and prioritizing potential projects for advancement.

### **Real Estate Development Tax Programs (NJ Economic Development Authority)**

EDA has incorporated climate resilience into the [Aspire](#) and [Brownfields Redevelopment Incentive](#) real estate development tax credit programs by including climate adaptation planning documents into their scoring criteria. By emphasizing resilience, EDA is prioritizing sustainable and equitable economic growth.



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## PRIORITY 6: COASTAL RESILIENCE PLAN

### Sea-Level Rise Guidance (NJ Department of Environmental Protection)

DEP issued [Sea-Level Rise Guidance](#) to aid decision-makers in planning, mitigating for, and adapting to sea-level rise, based on New Jersey-specific projections compiled by the 2019 Science and Technical Advisory Panel convened by Rutgers University. The guidance lays out core principles, a recommended process and proposals on which sea-level projection to use, contingent on the planning horizon and risk tolerance of any activity.

### NJ Coastal Ecological Restoration and Adaptation Planning Tool (NJ Department of Environmental Protection)

The [Coastal Ecological Restoration and Adaptation Planning Tool](#) (CERAP Tool) provides the locations of at-risk areas, coastal resource restoration sites and other data that will greatly assist in the targeting, development and coordination of projects needed to adapt communities to rising sea levels, increased flooding and more severe storms associated with climate change. Among its many attributes, the tool will help in the development of storm and flood-protection projects to protect communities, in addition to resource restoration and nature-based solutions to mitigate climate change impacts. These solutions include projects that maximize carbon sequestration and shoreline stability. Data obtained from the tool may also be used to provide supporting documentation to applications for federal and state funding opportunities.



Sandy Hook, New Jersey



*“The CERAP Tool, provides the locations of at-risk areas, coastal resource restoration sites, and other data that will greatly assist in the targeting, development and coordination of projects needed to adapt communities to rising sea levels, increased flooding and more severe storms associated with climate change.”*





*Hoboken, New Jersey*