NJ INTERAGENCY COUNCIL ON CLIMATE RESILIENCE 2024 ANNUAL REPORT













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Cover image of Wading River in Wharton State Forest by Paul Leaken

ΙΝΤRΟDUCTION

In 2019, Governor Murphy signed <u>Executive Order No. 89 (EO89)</u>, which ordered New Jersey to take proactive and coordinated efforts toward climate resilience. This landmark executive order called for the development of the <u>Scientific</u> <u>Report on Climate Change</u>, summarizing the current state of knowledge regarding the effects of climate change on New Jersey's environment. Released in 2020, the Scientific Report informs state and local decision-makers as they seek to understand and respond to the impacts of climate change. This report identified and presented the best available science and existing data regarding the current and anticipated environmental effects of climate change globally, nationally, regionally, and in our backyards.

Importantly, EO89 established the <u>Interagency Council on Climate Resilience</u> (referred throughout this report as "Interagency Council"). Now encompassing 26 state departments and agencies and the Governor's Office, the Interagency Council is tasked with coordinating the state's resilience policies and initiatives. To support and enhance this work, EO89 established the position of Chief Resilience Officer to lead what is now the Office of Climate Resilience within the New Jersey Department of Environmental Protection.

Together, the Chief Resilience Officer and Interagency Council, with support from the Office of Climate Resilience, develop and coordinate on short- and long-term actions that promote the mitigation, adaptation, and resilience of New Jersey's economy, communities, infrastructure, and natural resources. EO 89 charged the Interagency Council with the development of a <u>Statewide Climate Change Resilience Strategy</u> (Resilience Strategy), the foundational policy framework guiding state agency actions to address the impacts of climate change, and its implementation thereafter.

The inaugural Resilience Strategy was released in October 2021, and outlined 126 recommendations for state agency action on climate resilience. The Resilience Strategy exists as a model and guidance document, establishing resilience goals for the state and its agencies across six priority areas:



Both the Scientific Report and the Resilience Strategy recognize that the impacts of climate change are not evenly distributed. Socially vulnerable populations and overburdened communities often face the impacts of climate change first and worst, so careful consideration of these groups is critical when developing policies and distributing resources.

Since the release of the Resilience Strategy in October 2021, the Interagency Council has continued to turn the Resilience Strategy's vision into action. Last year, in recognition of the two year anniversary of the release of the Resilience Strategy, the Interagency Council released a compilation of more than 40 programmatic, regulatory, and policy actions undertaken by NJ executive branch agencies to advance climate resilience. The <u>Two-Year Anniversary Accomplishments</u> <u>Report</u> served to showcase the state's accomplishments and reaffirm the Interagency Council's pursuit of a more resilient and sustainable future for New Jersey communities.

The Interagency Council's 2024 Annual Report builds upon that foundation and will serve as a model for future annual reports moving forward, highlighting New Jersey state agencies' climate resilience achievements and ongoing efforts.

INTERAGENCY COUNCIL ON CLIMATE RESILIENCE | MEMBERAGENCIES

- Board of Public Utilities
- Department of Agriculture
- Department of Banking and Insurance
- Department of Children and Families
- Department of Community Affairs
- Department of Corrections
- Department of Education
- Department of Environmental Protection
- Department of Health
- Department of Human Services
- Department of Labor and Workforce Development
- Department of Law and Public Safety
- Department of Military and Veterans Affairs

- Department of State
- Department of Transportation
- Department of the Treasury
- Economic Development Authority
- Highlands Council
- Housing and Mortgage Finance Agency
- New Jersey Infrastructure Bank
- New Jersey Turnpike Authority
- NJ Transit
- Office of Emergency Management
- Pinelands Commission
- Port Authority of New York and New Jersey
- Sports and Exposition Authority



2024 IN CLIMATE

Globally, 2024 was the hottest year on record, overtaking the previous record held by 2023, It was also the first year to surpass the Paris Agreement threshold of 1.5° Celsius of warming. These warm temperatures have driven near-record low Antarctic sea ice and the acceleration of glacier loss. Ocean surface temperatures have broke records, contributing to a busy 2024 hurricane season in the Atlantic, with Hurricanes Helene and Milton causing the most devastation in the the country. Meanwhile, global greenhouse gas emissions continue to rise.

These global effects contribute to the climate impacts we see here in New Jersey. 2024 began with a relatively warm and dry winter, with below-average snowfall across every region of the state. A mild spring established the first half of the year as the second warmest since recordkeeping began in 1895, a precursor to yet another hot summer. All ten of New Jersey's warmest summers on record have occurred since 2005, including the summer of 2024.

October 2024 marked the driest month ever recorded in New Jersey, kicking off a statewide drought period that continues as of the writing of this report. From early October to mid-November, the New Jersey Forest Fire Service responded to over 537 wildfires, a more than 1,300% increase compared to the same period in 2023.

In the face of these events, New Jersey has continued to make bold strides in how we address, adapt to, and plan for the impacts of climate change on our communities, at both the state and local level.

COLLABORATIVE ACTIVITIES OF THE NJ INTERAGENCY COUNCIL

This report, which can be accessed online on the Interagency Council <u>webpage</u>, focuses on the accomplishments that the Interagency Council has made towards a resilient New Jersey in 2024.

In 2024, the Interagency Council developed a workplan identifying efforts that enabled agencies to continue collaborating to incorporate climate resilience within and across their programs and increasing the visibility of the Interagency Council's efforts. To advance the workplan, the Interagency Council held monthly meetings of senior staff representatives to review progress of implementation of the Statewide Climate Change Resilience Strategy and related publications, and provide opportunity to learn about—and—learn from each other's resilience efforts.

In 2024, the Council developed the <u>New Jersey Extreme</u> <u>Heat Resilience Action Plan</u>, which was released in July. This plan builds on the <u>Resilience Strategy</u> and focuses on mitigating the effects of extreme heat, one of the deadliest impacts of climate change. This plan identifies the challenges associated with rising temperatures and identifies new, existing, and expanded actions of state departments and agencies to address extreme heat.

Beginning in March, the Interagency Council established and operated workgroups on specific topics that furthured its goals and implementation of the Resilienc Stategy and Extreme Heat Resilience Action Plan.

Outreach and Engagement Strategy Workgroup

Chaired by the New Jersey Department of Transportation, the Interagency Council's Outreach & Engagement Strategy workgroup was established to enhance and improve public understanding of its work. To that end, the Interagency Council hosted two public Listening Sessions during the New Jersey Coastal and Climate Resilience Conference (March 2024, Monmouth University) and the 2024 Annual Meeting of the New Jersey League of Municipalities (November 2024, Atlantic City Convention Center).



IAC Listening Session during the New Jersey Coastal Resilience Concerence (March 2024, Monmouth University)

During these sessions, a panel of senior representatives from various Interagency Council member agencies shared insights related to interagency resilience programs, projects, and initiatives and invited session participants to join them in a series of informal, interactive discussions guided by three core questions:

- What would you like to see the Interagency Council do more/less?
- How can the Interagency Council best support municipal and local-level climate resilience action?
- What one action do you think the Interagency Council needs to take in the next 5 years to increase New Jersey's overall resilience to climate change?

A overview of the Listening Sessions can be found on the <u>Interagency Council's Engagement and Outreach</u> <u>webpage</u>.

The Outreach & Engagement Strategy Workgroup also led the development of <u>member agency profiles</u>, designed to succinctly highlight how each agency is working to advance climate resilience in New Jersey.

"The Interagency Council on Climate Resilience demonstrates New Jersey's commitment to an all-of-government approach to resilience. The wide-ranging efforts of Council member agencies are critical to adapting our communities, environment, and economy to the current and increasing impacts of climate change." - Nick Angarone, NJ Chief Resilience Officer



Extreme Heat Coordinated Communications Workgroup

Chaired by the New Jersey Department of Environmental Protection (DEP), the Extreme Heat Coordinated Communications Workgroup was launched in the months preceding the release of the final <u>Extreme Heat Resilience</u> <u>Action Plan</u> with the core purpose of developing and disseminating consistent outreach and educational materials on extreme heat. The workgroup's social media messaging is designed to educate the public on the harmful effects of extreme heat and provide tips on how to stay cool.

The Extreme Heat Coordinated Communications Workgroup also initiated a public education webinar series focused on climate-driven extreme heat to raise awareness among residents about this climate impact and its effects. Each webinar looks at extreme heat impacts through various lenses such as meteorology, health, ecology, and emergency management. The first webinar, held on August 13, 2024, featured climate and weather experts discussing how and why New Jersey's temperatures have changed over time and what we can expect moving forward. The second webinar, hel on on September 25, 2024, brought together a panel of physicians, researchers, and mental health professionals to discuss the impacts of extreme heat on physical and behavioral health. Additional information can be found in the webinar section of the Interagency Council's Engagement and Outreach webpage.



Co-chaired by the New Jersey Turnpike Authority and the New Jersey Sports and Exposition Authority, the Vulnerability Assessments Workgroup was formed to provide a platform for Interagency Council members to discuss how state agencies are conducting vulnerability assessments, to increase interagency information sharing, and help standardize concepts related to vulnerability used in assessments and other resilience analyses. Sixteen Interagency Council member agencies participate in this workgroup, representing a majority of the Council.

The workgroup has recently concluded a four-month peer exchange series launched to help agencies learn from one another about various approaches to developing and using vulnerability assessments. Presentations were provided by DEP, the New Jersey Pinelands Commission, NJ TRANSIT, the Port Authority of New York and New Jersey, and the San Francisco Bay Conservation and Development Commission. Lessons learned from this peer-exchange series and workgroup outputs are designed to support climate resilience work across executive branch agencies seeking to better understand the impacts of climate-related natural hazards to their programs and operations.







NJPACT REAL (NJ Department Environmental Protection)

On August 5, 2024, the New Jersey Department of Environmental Protection (DEP) proposed the <u>Resilient</u> <u>Environments and Landscapes (REAL)</u> rules to address sea-level rise, climate change, current and future flood storage, flooding,stormwater management, and inundation concerns. The proposal amends, repeals, and adds new requirements to the Coastal Zone Management Rules, Freshwater Wetlands Protection Act Rules, Flood Hazard Area Control Act Rules, and Stormwater Management Rules as part of a comprehensive update of the state's land resource protection regulations to reflect the latest global, regional, and state-specific scientific information on climate change. Additionally, the proposal includes amendments to update and clarify various aspects of these rules, as well as further DEP's continued efforts to increase efficiency, consistency, and accountability in the processing, issuance, and enforcement of permit applications. The REAL reforms are part of the <u>New Jersey Protecting Against Climate Threats (NJ PACT</u>) initiative directed by Governor Murphy's <u>Eexcutive Order No. 100</u>.

> Over half a million acres of New Jersey land are highly vulnerable to coastal hazards. DEP has proposed modernizing land resource protection rules to better support New Jersey communities, residents, and businesses in building their resilience to sea-level rise, extreme weather, chronic flooding, and other impacts of our changing climate.

State Hazard Mitigation Plan Update (NJ Office of Emergency Management)

Adopted in April 2024, the <u>State of New Jersey 2024 All-Hazard Mitigation Plan</u> (State HMP) is the cornerstone to reducing New Jersey's vulnerability to disasters, codifying goals, objectives, and key strategies to reduce the impacts of natural hazards across the state. The State HMP 2024 update captures historic disaster experiences, presents the hazards New Jersey faces based on current science and research, outlines a strategy to reduce risks from hazards, and serves as the basis for prioritizing future project funding. With administrative adoption and final approval from the Federal Emergency Management Agency (FEMA), the State HMP enables state and local governments to apply for and participate in the various FEMA-funded mitigation programs.

Preliminary State Development and Redevelopment Plan (NJ Department of State)

On December 4, 2024, the State Planning Commission approved the release of the <u>Preliminary State Development and</u> <u>Redevelopment Plan</u>. In addition to a substantial update, new goals "Climate Change: Effectively Address the Adverse Impacts of Global Climate Change" and "Equity and Environmental Justice" have been added as part of the 2050 Statewide Planning Goals, Strategies, and Priorities. In conjunction with this effort, the New Jersey Department of State worked with Rowan University's Geospatial Research Lab to develop the <u>NJ Smart Growth Explorer *Beta*</u>. The Explorer provides a digitally accessible visualization for residents and decision-makers to understand factors of development, redevelopment, and environmental sensitivities across New Jersey's 564 municipalities.

Municipal Plan Endorsement (NJ Department of State)

<u>Municipal Plan Endorsement</u> is a voluntary review process designed to ensure the coordination of state, county, and municipal planning efforts in achieving the goals and policies of the State Development and Redevelopment Plan, such as climate resilience. Through Plan Implementation Agreements, each endorsed municipality is required to complete a <u>climate change-related hazard vulnerability assessment</u> (CCRHVA) to analyze current and future threats associated with climate change-related natural hazards, including increased temperatures, drought, flooding, hurricanes, and sea-level rise, as required by New Jersey's Municipal Land Use Law. In 2024, the State Planning Commission and staff engaged 14 municipalities in the Plan Endorsement process.



Resilient NJ Burlington County Tour

Resilient NJ (NJ Department Environmental Protection)

<u>Resilient NJ</u> DEP's flagship climate resilience planning assistance program, supports NJ communities through the development of community-driven Resilience Action Plans. This program provides guidance and technical assistance to local governments to respond to climate hazards through local decision-making and planning efforts that address vulnerabilities and risks affecting their community. In addition to analyzing a community's awareness of current and future conditions related to climate hazards, vulnerability, adaptation, and risk. Based on an analysis of a community's current and future conditions related to climate hazards, vulnerability, adaptation, and risk, a menu of strategic actions spanning a variety of costs, timeframes, and level of efforts is developed for implementation. Since 2020, Resilient NJ has supported 32 municipalities through the technical assistance program which has resulted in participating <u>communities receiving over \$26.5 million in requested federal funding</u> for implements of plan actions

The Resilient NJ program also provides tools to support municipalities working on climate resilience including the <u>Local</u> <u>Planning for Climate Change Toolkit</u>—a resource to help communities understand how they can proactively plan for the changing climate and build resilience into local governance—as well as the Climate Resilience Funding Directory. With additional funding made available through the Ready to Be Resilient Stormwater and Resilience Funding Program (see page 34), DEP contracted with Rutgers University and The College of New Jersey to provide technical assistance to towns interested in developing CCRHVA assessments (see Municipal Plan Endorsement on page 8).

Climate Resilience Funding Directory (NJ Department Environmental Protection)

In November 2024, DEP released the <u>Resilient NJ Climate Resilience Funding Directory</u> to support local and regional resilience planning efforts throughout New Jersey by helping stakeholders access, apply for, and secure funding to implement resilience projects. This easy-to-navigate directory covers a wide range of funding opportunities for individuals, communities, state agencies, and regional partners interested in pursuing resilience projects under a variety of topics critical to fostering climate resilience, including flood risk reduction, infrastructure, and nature-based solutions.

Implementation of Flood Disclosure Law (multiple agencies)

In July 2023, Governor Phil Murphy signed a <u>new law on flood risk notification</u> that requires sellers of real property and landlords to disclose knowledge of a property's history of flooding, flood risk, and location in a flood zone area. These disclosures are an important step to ensure that consumers are equipped to make informed decisions as they navigate the risks of climate change and extreme weather events. Following the law's signing, agencies worked collaboratively to set up the necessary systems to put the law into effect. The New Jersey Department of Law and Public Safety published a "flood risk addendum" to the property condition disclosure statement for use by sellers, and the Department of Community Affairs (DCA) published a flood risk model notice for use by landlords. A website was developed by DEP with links to each of these forms as well as a link to the <u>Flood Risk Notification Tool</u>, which enables users to disclose whether the property is located in a FEMA-designated Flood Hazard Area, as required by law. With these systems in place, the law on flood risk notification went into effect on March 20, 2024.

Blue Acres (NJ Department of Environmental Protection)

Since its inception in 1995, DEP's <u>Blue Acres</u> program has worked to better protect public safety and the environment through voluntary buyouts, relocating New Jersey families out of areas subject to repeated flooding. Over the past thirty years, the program has acquired nearly 1,200 homes, creating open space, reducing flood risk, and enhancing local flood storage. During the 2024 calendar year, 22 Blue Acres properties were acquired and 27 voluntary buyout offers were accepted, which are anticipated to close with Blue Acres in 2025. Additionally, 29 homes were demolished and converted to open space in 2024. Presently, 81 additional homes are pending full and final approval for federal buyout funding from FEMA, the U.S. Department of Housing and Urban Development (HUD), or the Natural Resources Conservation Service.

In 2024, the Blue Acres program also received its largest state funding support ever: a \$900,000 administrative authorization under the state budget and approval for \$24.5 million in dedicated buyout and conservation funding from the <u>Garden State Preservation Trust</u> (GSPT) fund. The GSPT funding bills authorizing this allocation were approved by the Legislature in December and signed in January 2025. This GSPT allocation to Blue Acres will be the largest single funding allocation in the program's history.



Post-demolition floodplain restoration on Blue Acres property in Linden, NJ.

Housing Elevation (NJ Department of Community Affairs)

The New Jersey Department of Community Affairs has implemented home elevation programs in areas of significant flood or storm surge risk, thus mitigating the potential damage caused by future floods and storms. This work, funded primarily with federal FEMA resilience and HUD disaster recovery dollars, began after Hurricane Sandy and continues to the present day. Thousands of properties have been elevated over the last 12.5 years since Hurricane Sandy, with hundreds more advancing throughout 2024.

Flood Repairs for Warren Residential Community Home site (NJ Department of Law and Public Safety)

In July 2023, the Warren Residential Community Home (WRCH), a home for at-risk youth, experienced significant flooding due to a torrential rainstorm that caused a nearby creek to overflow its banks and wash out part of the WRCH driveway. Temporary repairs were completed by partners at the New Jersey Department of Transportation (NJDOT) in 2023. In 2024, LPS developed a more permanent solution for cleaning and jetting the pond overflow drain.

New Jersey Watershed Evaluation Tool (NJ Department of Environmental Protection)

In 2023, DEP released NJ-WET, an interactive tool designed to help communities with watershed improvement planning as required pursuant to their municipal separate storm sewer system (MS4) stormwater discharge permits. Increasing extreme rainfall events will result in a literal flood of nutrients and pollution into our waterways, threatening ecology, recreation, and drinking water. Addressing stormwater water through sound planning and prudent mitigation measures will increase our collective resilience. The NJ-WET platform was improved throughout 2024 and can be used to view and download data that intersects with each municipality. Data layers include, but are not limited to, Total Maximum Daily Load, a determination of how much pollution a given body of water can tolerate; the geographic extent of subwatersheds, a hydrologic unit used by DEP to delineate drainage basin boundaries; water quality impairments; surface water quality classifications; MS4 infrastructure; impervious surfaces; and overburdened communities. Watershed-level planning can help communities prepare for water quality challenges that may be exacerbated by climate-related hazards, such as severe storms.

Analyzing Increased Evaporation, Water Demands, and Water Use Changes (NJ Department Environmental Protection)

In the <u>2024 New Jersey Statewide Water Supply Plan</u>, DEP described expected changes in various water cycle conditions and water usage patterns resulting from climate change. According to water withdrawal data submitted by purveyors, overall potable water use from 1990-2020 stayed relatively even, despite increasing population growth in New Jersey. However, this pattern may be shifting in more recent years, as domestic irrigation changes influenced by climate change may be altering this trend. Similarly, with longer growing seasons—and with rain events becoming more intense but less frequent—DEP anticipates that more frequent irrigation of agricultural lands is likely to occur as well. With the benefit of a newly developed statewide Land Phase Model launched in beta form in 2024, DEP can now better quantify groundwater aquifer recharge, evapotranspiration, streamflow variability attributable to climate change, and precipitation pattern changes. In cooperation with Rutgers University, DEP anticipates building on this work and existing datasets to provide even more percise dterminations in the near future.



Fall 2024 Water Supply Drought Response (NJ Department of Environmental Protection)

New Jersey experienced a record dry period which started in September 2024 and continued into 2025. October 2024 was the driest month ever recorded (with data going back to 1896) and the September through November period was the driest fall on record. This led to DEP issuing a Statewide Water Supply Drought Watch on October 18, 2024, followed by the issuance of a Statewide Water Supply Drought Warning on November 13, 2024 via <u>Administrative Order 2024-15</u>. This Order DEP to take several actions, such as the modification of passing flows and reservoir releases, to better manage the state's water resources. Additionally, the State called on the residents of New Jersey to voluntarily <u>conserve water</u>. Weekly updates are provided on the <u>Water Supply Drought website</u>, and as of the writing of this document, New Jersey remains in a statewide Drought Warning.

New Jersey Forest Fires (NJ Department of Enviornmental Protection)

The Forest Fire Service has responded to a marked increase in wildfires since the onset of the state's abnormally dry period in September 2024, which saw one of the busiest fall wildfire seasons on record, with 798 wildfires burning 4,847 acres. All regions of New Jersey have been under drought warning since November 13, 2024. As of the publication of this report (March 2025), New Jersey remains under an official drought warning and enters spring following minimal precipitation in the fall coupled with the third-driest January on record and well-below average precipitation throughout the winter. The last statewide drought emergency was declared in March 2002 and lifted in January 2003. To learn more about wildfires in New Jersey, steps to protect property, and other resources, visit <u>www.njwildfire.org</u>.



Manasquan Reservoir, NJ



NJ Interagency Council on Climate Resilience | March 2025

Weatherization Assistance Program (NJ Department of Community Affairs)

Managed by DCA, the <u>Weatherization Assistance Program</u> leverages federal Low Income Energy Assistance Program (LIHEAP) funding from the U.S. from Department of Health and Human Services and the U.S. Department of Energy to assist elderly, handicapped, and low-income persons in weatherizing their homes, improving their heating system efficiency, and conserving energy. The 2024 program limits assistance to individuals with incomes at or under 200% of the federal poverty guidelines and helps communities become more resilient to extreme heat events. Through 2024, the Weatherization Assistance Program provided assistance to 1,395 housing units, which included 3,499 total occupants. Weatherization Assistance Program funds are administered in partnership with a <u>network of 17 non-profit organizations</u> that serve as sub-grantees tasked with providing weatherization services to their respective communities at the local level. In 2024, the Weatherization Assistance Program provided assistance Program provided assistance to 1,395 housing units, which included 3,499 total occupants.

Low Income Home Energy Assistance (NJ Department of Community Affairs)

DCA operates the Low Income Home Energy Assistance Program, which provides assistance to families unable to afford utility payments for heating and termined by the applicant's specific systems and needs. This program is critical to the resilience and safety of the state's most vulnerable populations, who are often the first affected and most severely impacted by extreme weather. Funding through LIHEAP can be leveraged to help lower utility costs for income-eligible residents with a documented medical need for residential cooling services.



Sustainability and Climate Adaptation Planning Guidance for Municipalities in the Highlands Region (NJ Highlands Council)

In November 2024, the New Jersey Highlands Council released <u>climate resilience guidance for municipalities</u> titled "Sustainability and Climate Adaptation Planning: An Integrate Guide for Highlands Region Municipalities." This comprehensive document assists municipalities in integrating climate adaptation and environmental sustainability into their municipal master plans. It includes guidance on conducting a CCRHVA Assessment and preparing a Sustainability Reexamination Report as part of the Land Use Plan Element in alignment with the New Jersey Municipal Land Use Law. This guidance also provides a model scope of work that Highlands municipalities can use to apply for grant funding from the Highlands Council to support climate adaptation planning.

Land Use Capability Zone Map Update (NJ Highlands Council)

In April 2024, the Highlands Council updated the Land Use Capability Zone (LUCZ) Map and its accompanying technical report, a foundational tool guiding the implementation of the Highlands Regional Master Plan (RMP). Originally adopted in 2008, the LUCZ Map provides a policy framework for protecting the Highlands Region's critical resources, including forests, wetlands, stream corridors, steep slopes, and critical habitats. This update incorporates the latest scientific data, including 2020 land use/land cover data from DEP and FEMA flood hazard data up to and including the 500-year floodplain, reflecting the heightened importance of addressing climate change impacts. By integrating these updated datasets, the revised LUCZ Map strengthens the region's ability to mitigate climate-related risks, such as flooding, while supporting sustainable land use planning. These improvements ensure that the LUCZ Map remains an effective tool for protecting the region's natural resources and promoting climate resilience.

Policy Standards for Warehousing in the New Jersey Highlands Region (NJ Highlands Council)

To further support the resilience of the Highlands Region, the Highlands Council amended the Regional Master Plan in April 2024 to include policy standards for warehousing. These standards aim to limit warehouse development to areas where impacts on natural resources will be minimal while considering factors such as proximity to highways and access to existing infrastructure. The policy also prioritizes the protection of the region's significant agricultural lands, recognizing their value as a resource and a potentially crucial food supply in an uncertain climate future. Additionally, the policy requires that projects be designed to minimize watershed impervious coverage, mitigate environmental impacts, and implement stormwater management strategies to enhance groundwater recharge and safeguard water quality from the effects of severe storms and extreme heat.



Delaware Water Gap National Recreation Area



Stormwater Funding Assistance (NJ Highlands Council)

Recognizing the critical role of stormwater management in maintaining water quality, the Highlands Council allocated nearly \$1.4 million from its grant budget in 2024 to help Highlands municipalities meet the updated DEP municipal separate storm sewer system (MS4) permit requirements. These updates are designed to address projections of more intense and frequent storm events driven by climate change.

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

The Port Authority of New York and New Jersey (PANYNJ) Climate Risk Assessment (CRA) is an engineering-level initiative across all PANYNJ facilities to identify key multi-stressor risks, develop corresponding risk mitigation measures, and prioritize cost-beneficial mitigations for investment. The CRA will enable the identification of critical risks and develop corresponding mitigation measures, resulting in strategic priority risk reduction project recommendations for the PANYNJ Capital Plan. In 2024, PANYNJ completed the facility-specific CRAs for ports, bridges, tunnels, and the Port Authority Trans-Hudson system, and the CRA for airports is underway.

Transportation Resilience Improvement Plan (Port Authority of New York and New Jersey)

A Transportation Resilience Improvement Plan (RIP) enhances the infrastructure to climate risks through strategic prioritization of investments. In 2024, the North Jersey Transportation Planning Authority and PANYNJ partnered to develop a RIP. The North Jersey RIP is aligned with requirements for the federal funding program under the Federal Highway Administration's <u>Promoting</u> <u>Resilient Operations for Transformative, Efficient, and</u> <u>Cost-Saving Transportation (PROTECT) initiative.</u> The RIP increases eligibility for funding opportunities and reduces the local match from 20% to 10%, supporting cost-effective and timely resilience measures in North Jersey.

Resilience Program Launch (NJ Turnpike Authority)

The New Jersey Turnpike Authority (Turnpike Authority) is implementing a Resilience Program that aims to better understand the impacts of flood hazards—including storm surge, inland fluvial (riverine) flooding, and pluvial (stormwater) flooding—on its assets and assess how climate change will exacerbate these hazards through sea-level rise and increased precipitation. The Resilience Program will integrate resilience into Turnpike Authority's decision-making processes (planning, design, construction, and maintenance) and provide guidance and criteria to adapt its operations, systems, and assets to prepare for changing conditions and shocks. The Resilience Program will better inform capital investments today that will support future anticipated climate conditions.

Vulnerability Pilot Projects (NJ Turnpike Authority)

In 2024, the Turnpike Authority completed vulnerability pilots at five locations across the New Jersey Turnpike and the Garden State Parkway to determine whether assets are vulnerable to flooding and, if so, under which risk scenarios. The results are intended to inform resiliencerelated criteria, including the consideration of present and future flood risk in asset design; the development of emergency response plans; and the prioritization of asset inspection, and maintenance; adaptation interventions.

Flood Exposure (FLEX) Visualization Tool (NJ Turnpike Authority)

To incorporate flood hazard design requirements into ongoing capital improvements, the Turnpike Authority developed a Flood Exposure (FLEX) Visualization tool

which identifies potential flood exposure and maximum flood depths exclusive to individual Authority assets, including roads, bridges, culverts, buildings, and best management practices. The tool supports baseline screening efforts to help inform project design and prioritization by accounting for current and future inland and coastal flooding, allowing the Turnpike Authority to incorporate climate impacts into asset management. The FLEX tool is strictly used as an internal agency guide and is not indicative of any active impact on the Turnpike Authority's assets.

Sustainability Plan Publication and Resilience Funding Awards (NJ TRANSIT)

In April 2024, NJ TRANSIT released the agency's first-ever <u>Sustainability Plan</u>, establishing the agency's commitment to develop policies and strategies that reflect best practices in sustainability and resilience for the transportation industry and to be a leader in sustainable public transportation. The document also summarizes the actions NJ TRANSIT is already taking to support New Jersey's sustainability, climate action, and resilience goals. Leveraging commitments articulated in the plan, NJ TRANSIT secured \$115.8 million in new federal funds in 2024 to advance four capital resilience projects.

Resilience Management System (NJ Department of Transportation)

The NJDOT developed an internal Resilience Management System (RMS) in 2019 to integrate flooding considerations into state, county, and regional planning documents and initiatives to help guide local actions by the agency. RMS Tools such as NJDOT's Criticality Tool and the Climate Hazard Visualization Tool have continued to be used throughout 2024 to assess a given project's potential exposure to flooding risks. If possible, based on funding and project limitations and permit requirements, flood mitigation measures may be incorporated into the project.

Updated Vulnerability Assessments and Risk Analysis Tools (NJ Department of Military and Veterans Affairs)

In 2020, the New Jersey Department of Military and Veterans Affairs (DMAVA) partnered with Rutgers University to develop the "Climate Change Risk and Resilience Assessment of New Jersey's National Guard Facilities" and the 2021 "Site Profiles and Risk Analysis: National Guard Training Center (NGTC) at Sea Girt" to help the agency make climate-informed resilience decisions in their master planning and construction and development activities. In 2024, as part of DMAVA's 2025-2029 update of the Integrated Natural Resources Management Plan, the Vulnerability Assessment and Risk Analysis Tools were used to assess climate change vulnerability which will inform the DMAVA Environmental Team as they advance existing projects and prepare to implement new climate change adaptation projects. Resilience projects, both completed and intended for future implementation, include the removal of the existing bulkhead, construction of a living shoreline, improvement of the stormwater drainage system, and relocation of New Jersey Army National Guard facilities and equipment. In 2024, three buildings were demolished and removed along Stockton Lake at the NGTC at Sea Girt, and the site was restored to pre-disturbance conditions with the addition of a berm to provide additional flood protection.



Enhancing Resilience in Open Space Acquisition and Development (NJ Department of Environmental Protection) The DEP is enhancing its land preservation approach to support climate resilience and protect New Jersey's natural resources while advancing environmental, social, and economic goals. The Green Acres program has incorporated principles from New Jersey's <u>2023-2027 Outside, Together! A Statewide Comprehensive Outdoor Recreation Plan for</u> <u>New Jersey (SCORP)</u>, approved by the National Park Service on March 1, 2024. One of the SCORP's six foundational principles is to enhance climate resilience and sustainability through acquisition and development of open and green space. This has informed DEP's efforts to strategically prioritize acquisition criteria within both the State Land Acquisition program and the Local and Nonprofit Grant Program. By investing in parks and open spaces, DEP aims to safeguard future generations from climate change and ensure access to the state's recreation and conservation resources.

Resilience Designs for Liberty State Park and Essex-Hudson Greenway (NJ Department of Environmental Protection)

The <u>Liberty State Park Revitalization Program</u> will bring more than one hundred acres of active recreational, arts, and cultural improvements to Liberty State Park's perimeter and create a central park at its heart with world-class natural landscapes that build resilience to flooding and climate change while providing passive recreation and educational opportunities for the public. Based on the results of a flood resilience assessment, some of the resilient design elements incorporated into park revitalization plans include raising Audrey Zapp Drive to limit flooding events, improving historic built features to ensure they can "live with water" (i.e., withstand periodic flooding), and incorporating native and resilient plant communities into the landscaping design.

The <u>Greenway</u> is an approximately nine-mile, 100-foot-wide former rail line spanning Essex and Hudson Counties through eight municipalities—Montclair, Glen Ridge, Bloomfield, Belleville, Newark, Kearny, Secaucus, and Jersey City—which is being converted from a blighted corridor into a thriving park with recreation and transportation amenities. Resilience features interwoven throughout the design include tree canopy to help reduce the urban heat island effect in the immediate vicinity of the Greenway, native and resilient plant communities, and green infrastructure storm water management practices.



The New Jersey Extreme Heat Resilience Action Plan (Interagency Council on Climate Resilience)

Under leadership of the Murphy Administration, the Interagency Council on Climate Resilience (Interagency Council) released the Extreme Heat Resilience Action Plan on July 19, 2024. The groundbreaking plan sets specific actions by agencies to protect the health and welfare of residents from the impacts of extreme heat caused by a changing climate. The Extreme Heat Resilience Action Plan was developed with significant public input, and is only the third of its kind in the nation. The plan identifies 135 specific actions to be implemented by individual agencies (or across multiple agencies) to mitigate the effects of extreme heat, one of the deadliest climate-related hazards facing New Jersey residents. The Extreme Heat Resilience Action Plan is structured into 20 focus areas, aligning with the priorities outlined in the foundational policy framework of New Jersey's Climate Change Resilience Strategy. Action commitments identified in the Plan include those planned for the future, currently underway or ongoing, and already completed.



Extreme Heat-Related Event Race Cancellation (NJ Department of Law & Public Safety)

The New Jersey Racing Commission Acting Executive Director granted a request to cancel racing on August 2, 2024 at Monmouth Park due to extreme heat pursuant to the authority at N.J.A.C. 13:70-1.43, which permits postponement or cancellation of racing for any reason posing a serious risk to the health, safety, and welfare of the racing participants due to extreme weather conditions, such as high heat and humidity when the heat index reaches 105°F. The Commission has sometimes postponed races until later in the day after the weather cooled down and in one instance, canceled racing altogether.

Green Workforce Training Grants (NJ Economic Development Authority)

Through the <u>Green Workforce Training Grant Challenge</u>, the New Jersey Economic Development Authority awards grants to aid implementation of innovative workforce training and skills programs focused on strengthening and diversifying New Jersey's green economy talent pipeline, especially in overburdened communities. A total of \$7 million will be available through this program with individual award amounts ranging from \$250,000 to \$1.5 million. Possible initiatives include green design and construction, environmental and green infrastructure, grid resilience, clean transportation, energy efficiency, and offshore wind and other renewable energy technologies. Applications were due on October 8, 2024, and project selection will be announced in 2025.

Apprenticeship and Pre-Apprenticeship Grant Programs (NJ Department of Labor and Workforce Development)

The New Jersey Department of Labor and Workforce Development (NJDOL) issues grants that have, among others, a focus on growing New Jersey's green economy and the development of renewable energy. For example, the Growing Apprenticeship in Nontraditional Sectors (GAINS) program can provide funding to train new apprentices hired into U.S. Department of Labor's Registered Apprenticeships programs who would be working in green jobs or renewable energy. In June 2024, <u>NJDOL awarded more than \$6.3 million in grant funding</u> through Round 2 of GAINS and <u>Pre-Apprenticeship in Career Education grant programs</u> to foster the creation and expansion of apprenticeships throughout the state.

Heat Resilience in Solar Siting Analysis 3.0 (NJ Department Environmental Protection)

To guide the environmentally responsible siting of solar photovoltaic systems, DEP released a new Solar Siting Analysis Version 3.0, incorporating 20 unique geospatial datasets to determine the solar siting preference. Impervious surfaces were highly scored to encourage solar development that provides shading on areas such as parking lots, helping to reduce the amount of heat absorbed by pavements and lowering surrounding temperatures.

Community Energy Planning Support Programs (NJ Board of Public Utilities)

The New Jersey Board of Public Utilities's <u>Community Energy Plan Grant (CEPG) Program</u> supports municipalities in developing tailored community energy plans that align with the <u>State's Energy Master Plan</u>, focusing on enhancing resilience and increasing energy efficiency, clean energy generation, and storage. These plans serve as a foundation for the Community Energy Plan Implementation (CEPI) Grant Program, which provides up to \$250,000 in funding for clean energy and energy resilience projects. In its inaugural year in 2024, CEPI awarded a total of \$3,400,086 to 16 municipalities, including \$200,000 to the Borough of Madison for renovating two historic buildings. The Hartley Dodge Memorial Building will receive air source heat pumps for improved heating, cooling, and indoor air quality, while a 200-year-old building planned to become the Borough's Senior Center will undergo an all-electric retrofit, also featuring air source heat pumps to enhance comfort and resilience.

Assessing Insurance Carrier Readiness (NJ Department of Banking and Insurance)

The New Jersey Department of Banking and Insurance requires that all regulated insurance companies submit their most up-to-date disaster response plan annually to ensure that all insurers are prepared for climate-related disasters, prioritizing the financial soundness of insurance companies and their operational readiness to respond to disasters. In 2024, hundreds of regulated entities doing business in New Jersey submitted a plan, providing the state with insights regarding the business continuity planning these entities have in place in the event of a catastrophic event.

Trees for Schools Program (NJ Department Environmental Protection)

In 2023, 23 public school districts, two public charter schools, and nine public colleges and universities were awarded \$4.55 million to plant trees on campuses across the state under the Trees for Schools program, a joint effort of DEP, Sustainable Jersey, and The College of New Jersey. Funding was prioritized for municipalities that are most impacted by lack of tree cover and a high percentage of impervious surface. A total of 1,846 trees were planted in 25 New Jersey overburdened communities during the 2024 planting season, bringing a multitude of benefits, including helping to sequester carbon, mitigating urban heat island impacts, and assisting in stormwater management.



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

Connecting Habitat Across NJ (NJ Department Environmental Protection)

The New Jersy Department of Environmental Protection (DEP) continues to oversee <u>Connecting Habitat Across NJ (CHANJ) Initiative</u> designed to identify habitat cores and wildlife corridors, including both terrestrial and aquatic crossings, to allow wildlife populations to adapt to a changing climate. In keeping with the recent Flood Hazard Area rule changes, DEP now requires crossings to consider CHANJ in design and implementation in an effort to increase the number of passable corridors across the state. One terrestrial passage project was permitted in 2024, the program's first year, with another dozen projects moving through the pre-approval phase.

Advancing Climate-Smart Agriculture (NJ Department of Agriculture)

The New Jersey Department of Agriculture is actively involved in the state's comprehensive efforts to mitigate climate-related hazards. These initiatives have been articulated in several strategic documents, expanded efforts to secure complimentary grant funding, and integration of climate-smart agricultural practices within implemented conservation programs. The selection of specific climate-smart practices is driven by a three-pronged approach: enhancing sustainable agricultural production, helping farmers to adapt their production methods for a changing climate, and improving the capacity of agricultural soils to sequester carbon.

Promoting Sustainable Agriculture & Protecting Agricultural Lands in the Highlands Region (NJ Highlands Council)

Through its Sustainable Agriculture Grant Program, the Highlands Council awarded over \$600,000 towards initiatives that promote regenerative agriculture, sustainable land management, and environmentally friendly farming practices, as well as the planning of a local food processing center. More than \$300,000 of this funding supported work completed in 2024. Grantees include the Foodshed Alliance, Northeast Organic Farms Association, North Jersey RC&D, the Ramapough Culture and Land Foundation, City Green, and Northwest Jersey Food Processing. These efforts aim to strengthen the resilience of the Highlands region's significant agricultural resources, ensuring a robust local economy and food

supply while safeguarding the drinking water supplied by the region.

Pinelands Management Area Climate Vulnerability Assessment (NJ Pinelands Commission)

In Fiscal Year 2024, the New Jersey Pinelands Commission completed a comprehensive review of Pinelands management area boundaries to identify areas designated for growth that are vulnerable to increased climate-related risks, such as flood hazards and wildfire. The findings of the assessment found that the areas of the Pinelands with the most climate-related hazard risk are generally outside of the growth-oriented management areas and have limited development potential. To address the limited high-risk areas within growth-oriented management areas, the Pinelands Commission updated its land acquisition target areas and is considering additional wetlands protection standards.





Chatswoth, NJ





Cedar Swamp in Brendan T. Bryne State ForestForest - photo by Paul Leakan

Pinelands Conservation Fund (NJ Pinelands Commission)

In 2024, the Pinelands Commission launched a round of land acquisition grant funding. The criteria for funding any selected projects gave added weight to climate change impact functions like flood protection, wildfire hazard reduction, and carbon sequestration potential. In addition, the Commission expanded target areas for land preservation where the Pinelands Conservation Fund can be used to permanently protect land from development.

The expanded acquisition target areas resulted from the evaluation of potential climate change impacts to growth oriented Pinelands Management Areas Pinelands Management Areas in keeping with assessment results from the Climate Vulnerability Assessment (described in the previous action).. An acquisition target area was added in Pemberton Township to recognize wildfire and flooding risks in a Regional Growth Area that adjoins an existing urbanized area. An existing acquisition target area was expanded in Maurice River Township in the Pinelands Village of Port Elizabeth-Bricksboro to increase resilience from flooding and inundation due to sea-level rise.

Kirkwood-Cohansey Rules and Ordinances (NJ Pinelands Commission)

Effective December 2023, the Pinelands Commission adopted new rules that strengthen protections of the Kirkwood-Cohansey aquifer. The Kirkwood-Cohansey is a shallow freshwater surficial aquifer (also known as an "unconfined" or "water table" aquifer) underlying the Pinelands region that contains an estimated 17 trillion gallons of water. It is a source of potable and non-potable water to hundreds of thousands of people in South Jersey and sustains the ecology of the Pinelands by supporting wetlands, and unique Pinelands vegetation, and animal communities. As a result, withdrawals from the aquifer can negatively impact the essential character of the Pinelands environment. With the rules' implementation, the Pinelands Commission now has clear, quantifiable standards in place to address potential adverse local and regional impacts, helping to enhance the protection of the aquifer and the Pinelands ecology as a whole while ensuring sufficient water supply for authorized development in the growth-oriented portions of the Pinelands Area. This effort advances climate resilience by assuring more stability in water supplies that serve public water uses and supports forests that might be more fire prone due to climate variability.

Restoring Surface Water Habitats (NJ Department Environmental Protection)

Surface water temperatures, particularly in trout streams that harbor cold-water dependent species, are critical to protecting species important for both recreation and consumption to the people of New Jersey. Surface waters are subject to increased flooding, pollution, and thermal spikes, and the restoration and protection of riparian buffers is critical to maintain and enhance impacted waters and reduce consequences caused by human impacts, including climate change. In 2024, DEP received \$3,500,000 from the National Fish and Wildlife Foundation's America the Beautiful Challenge to restore and enhance cold-water habitat for Eastern brook trout with partners across New Jersey, New York, and Pennsylvania.

In addition, American Rivers received approximately \$9 million from the U.S. Department of Agriculture's 2024 Regional Conservation Partnership Program to remove and decommission the Warren Mills Dam along the Musconetcong River. Riverine connectivity is important for promoting healthy species populations. Removing antiquated dams, where appropriate, can improve ecological conditions while also increasing flood resilience in nearby communities.



Speedwell damn, Morristown NJ

Protecting Drinking Water Sources from Harmful Algal Blooms (NJ Department Environmental Protection)

More frequent extreme precipitation events increase runoff carrying excess sediment, nutrients, and contaminants into New Jersey's streams and, combined with increased temperatures and drier conditions, and lead to increased potential for rapid and excessive growth of harmful algal blooms (HABs). In 2024, DEP continued its use of continuous monitoring capabilities (buoys and telemetry), real-time or near real-time satellite imagery, and aerial flyovers to assist with long-term monitoring. A HAB expert team, made up of program staff from the U.S. Environmental Protection Agency (EPA), the U.S. Geological Survey, academia, watershed organizations, and local health departments, was also engaged to ensure that monitoring and response activities are aligned. These efforts have helped DEP to more effectively track blooms through various waterbodies in the state.

Enhancing Resilience-Related Ecosystem Services on Damaged and Degraded Ecosystems (NJ Sports and Exposition Authority)

To restore the shorelines and marshes of the Sawmill Creek wetland complex in Kearny and Lyndhurst, the New Jersey Sports and Exposition Authority (NJSEA) began a five-year pilot project in late 2024 as part of the Building a Climate Ready NJ initiative (for more information, see page 37). This project builds off a three-year study, completed in December 2024, that NJSEA undertook with a grant from the EPA's Wetland Program Development Grant. The study was undertaken to better understand the historic and baseline conditions of Sawmill Creek Marsh to inform future ecological restoration actions to preserve and restore the natural ability of the brackish marshes to sequester carbon, provide fish and wildlife habitat, protect against storm surges, support human recreational activities, and protect adjacent human infrastructure. Based on the results of this study, NJSEA is using 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 in the region and across the state. These nature-based features are being restored to help protect the man-made infrastructure that runs through the area, including the New Jersey Turnpike, the Essex-Hudson Greenway, NJ TRANSIT and Amtrak rail lines, and multiple gas pipelines. In addition to protecting built infrastructure, the restored area will provide increased recreation opportunities, improved water quality, and enhanced wildlife habitat.

Incorporating Adaptive Management and Future Conditions into Plans and Operations (NJ Sports and Exposition Authority)

In Spring 2023, NJSEA collaborated with a graduation planning studio at the Rutgers University Edward J. Bloustein School of Planning and Public Policy to develop "Resilience Planning in the New Jersey Meadowlands" and has been working with Rutgers throughout 2024 to bring the plan to life by engaging local municipalities, coordinating resilience efforts, increasing the communities' knowledge of resilient coastal strategies, and improving access to natural areas and waterways. This work included building boardwalks in local parks to provide improved access and protect sensitive wetland habitat, meeting with local community environmental groups to discuss future restoration plans, and sharing monitoring data with other organizations to further shared resilience goals.

Ecological Restoration (NJ Department of Transportation)

As part of its permit conditions and/or National Environmental Policy Act environmental commitments, the New Jersey Department of Transportation (NJDOT) restores damaged and degraded ecosystems to enhance their ability to perform resilience-related services. In 2024, such measures have included installation of green infrastructure to augment water quality protection and stormwater management. For example, bioretention and infiltration basins were installed for the Route 34 Bridge over the Former Freehold and Jamesburg Railroad Project (completed Spring 2024) and the I-76 / I-676 Bridges and Pavement Project (completed Fall 2024). The latter won the distinction of being one of two New Jersey-based projects selected as winners of the 2024 America's Transportation Awards Competition.



I-295, Burlington Township New Jersey, Photo courtesy of NJDOT



PRIORITY 3: PROMOTE COORDINATED GOVERNANCE



Trenton, NJ

State Hazard Mitigation Team & FEMA-funded Hazard Mitigation Projects (NJ Office of Emergency Management) Originally established in 1994, the State Hazard Mitigation Team (SHMT) was updated in October 2023, as directed by Executive Order No. 344, to better reflect present-day mitigation efforts and programs across state agencies and provide increased public insight into state use of Federal Emergency Management Agency (FEMA) funds. The SHMT released an Annual Report in October 2024 highlighting 97 FEMA-funded projects advanced by the New Jersey Office of Emergency Management. Of these, 41 projects remain open and active, 13 were closed during this period, one is currently pending, and an additional 42 were submitted to FEMA's Flood Mitigation Assistance or Building Resilient Infrastructure & Communities funding programs in 2024 for consideration.

Resilience and Sustainability Communication Plan (NJ Turnpike Authority)

The New Jersey Turnpike Authority is developing a Resilience and Sustainability Communications Plan to effectively build awareness across the Turnpike Authority on climate impacts and how the Resilience and Sustainability Program will be integrated into the Turnpike Authority's culture, operations, services, and asset management to be more climate resilient agencywide. The plan will provide strategies for engagement with internal and external stakeholders in resilience and sustainability discussions and educational opportunities to support the Turnpike Authority's Resilience and Sustainability Program.

Interagency Resilience Partnerships (NJ Department of Community Affairs)

The New Jersey Department of Community Affairs (DCA) has partnered with other state agencies, municipalities, and universities to ensure that programs and services are designed and delivered by agencies with the most relevant expertise and in consultation with subject matter experts, including a range of resilience projects. DCA has successfully partnered with the New Jersey Department of Environmental Protection on several resilience projects underway in 2024, including the Greenway Project (providing green space and reducing heat island effect through parkland in Newark), Rebuild By Design (enhancing flood and surge resilience in Hoboken and the Meadowlands), and over \$200 million dollars in combined sewer system separation projects (mitigating sewer overflow during flooding or heavy precipitation).

Resilience Partnerships (NJ Department of Transportation)

The New Jersey Department of Transportation (NJDOT) cooperates with partners and stakeholders through multiple avenues, including transportation infrastructure research initiatives with state academic institutions. One such example is the development of NJDOT's Climate Hazard Visualization Tool by Rutgers University, made available in beta mode in December 2022, and finalized in May 2023. Similarly, NJDOT began an ongoing effort with Rutgers University to develop design strategies to improve highway bridge resilience against multiple hazards and investigate corrosion issues in steel structural components to extend their lifespan and ensure safety. Likewise, NJDOT is currently reviewing a draft of a report by Rowan University that outlines a strategy for including extreme heat and other considerations into NJDOT's Pavement Management System that increases the quality and duration of pavement projects. This effort was identified as action TR-2 in the New Jersey Extreme <u>Heat Resilience Action Plan</u>, finalized July 2024. For more information, review the Transportation section of the Resilience Action Plan (page 43 of the report, and page 12 of the appendix).

To better support NJDOT's project selection process, the NJDOT has recently reorganized internally to support the NJDOT's Problem Screening and Concept Development Phases. This reorganization, which took place in September 2024, will allow for better planning, coordination, and development of new projects, very early in the NJDOT's Project Delivery Process to identify all environmental considerations to include socioeconomic and flooding concerns.

NJDOT is also changing its approach to routine asset maintenance and project prioritization by increasing funding to its drainage maintenance contracts and is working on improving an internal process to identify drainage and flooding issues on state-owned roadways.



George Washington Bridge

Climate Risk Disclosure and Homeowners Insurance Data Call (NJ Department of Banking and Insurance)

In 2024, the Department began a process to collect data covering more than 90% of New Jersey's homeowners insurance market by premium volume. This market intelligence data call will assist the Department in better understanding homeowner insurance markets at a state and ZIP Code level, including how coverages and deductibles have impacted affordability and availability challenges. Nationally, rising property insurance costs and coverage challenges underscore the importance of this effort. The wide-ranging data call will provide deeper insights into property insurance market costs, coverages, and protection gaps amid the increasing frequency and severity of natural disasters, escalating reinsurance costs, and continued inflationary pressures. This data call is in conjunction with the National Association of Insurance Commissioners (NAIC) and is part of a long-term strategy to gain more insight into the health of property markets at both the state and national level in order to inform regulator insights.

Local Floodplain Administrator Education (NJ Department of Environmental Protection)

The <u>National Flood Insurance Program (NFIP) Review Course</u> is a no-cost training that NJDEP makes available to New Jersey municipal, county, and state officials and the general public in order to improve their knowledge of floodplain management and compliance and obtain their Certified Floodplain Manager (CFM) certification. The course features three in-person instructional days—two days focused on the NFIP and a third day focused on New Jersey-specific requirements—to complement online self-paced learning. Students can arrange to take the CFM exam virtually. In 2024, 3-day training courses were held in Bergen, Monmouth, Somerset, Ocean, Union, Atlantic, and Morris counties.





Climate Change Public Education Outreach Campaign (NJ Department Environmental Protection)

The New Jersey Department of Environmental Protection (DEP) launched an outreach campaign to help understand the science behind the Murphy Administration's climate policies and the worsening impacts of climate change in New Jersey. Three different messages taken directly from the <u>New Jersey Scientific Report on Climate Change</u> communicated the risks of heat-related illness, sealevel rise, and flooding." Over 13 million impressions were made through radio public service announcements, billboards, and social media ads. All materials were translated into Spanish, and 15% of the advertisements buy was in Spanish. During the campaign, there was a 3,900% increase in visitors to <u>DEP's climate change homepage</u>, reaching approximately 20,000 visitors per month.



Climate Change in Education (NJ Department of Education)

In 2020, New Jersey became the first state in the nation to <u>incorporate K-12 climate change education</u> across content areas in its state academic standards. The New Jersey Department of Education has provided grants to school districts and institutions of higher education to advance climate change education. In 2024, districts used these grants to develop climate change learning resources and student-led community resilience projects. Colleges and universities created <u>Climate</u> <u>Change Learning Collaboratives</u> to provide training to teachers on how to infuse climate change into the curriculum. Eight of the Fiscal Year 2024 school district projects focused on mitigating flooding and coastal erosion across the state.

Heat Hub NJ (NJ Department of Environmental Protection)

Heat Hub NJ is a comprehensive resource for all things related to extreme heat in New Jersey. This statewide website was originally launched during Climate Week 2023, with key information on extreme heat and the impact it will have on people, communities, and the environment. Heat Hub NJ was re-launched on Earth Day 2024 in alignment with the release of the draft Extreme Heat Resilience Action Plan. The updated site now includes Chill Out NJ, an interactive mapping application designed to help people find low or no cost places throughout the state to cool off, focused sections on behavioral health and extreme heat emergencies, and a direct link to the New Jersey Department of Health's (DOH's) <u>Heat-Related Illness Dashboard</u> (see page 30). The relaunched Heat Hub NJ saw a significant increase in views, jumping tenfold from 4,000 visits before Earth Day 2024 to 40,000 visits by the end of the summer 2024.

Community Resilience Videos (NJ Department Environmental Protection)

DEP is working to highlight communities' resilience efforts through promotional videos on social media. So far, DEP has spotlighted two communities' resilience work: the City of Lambertville and Stafford Township. The videos featured Lambertville's work updating their stormwater management policy and partnership with DEP on the Resilience Accelerator initiative and Blue Acres Program as well as Stafford's updated <u>Climate</u> <u>Resilience Action Plan</u> and additional long-term resilience projects.

Climate Change Exhibits in State Parks (NJ **Department Environmental Protection**)

During New Jersey Climate Week 2024, DEP launched informational exhibits at state parks spotlighting climate change, sea-level rise, harmful algal blooms, extended wildfire seasons, and ghost forests. The exhibits connect these impacts directly to the resources in New Jersey's state parks and forests. Each display has a QR code that visitors may scan to test their climate change resilience knowledge through an interactive guiz. The exhibits give a real-time opportunity to immediately understand climate change, its effects, and what can be done to protect our parks and resources for future generations. Currently, 19 parks will feature exhibits with more locations in the works.

MyCoast NJ Photo Station Challenge (NJ Department of Environmental Protection)

MyCoast NJ, a portal used to collect and analyze photos of coastal events and places, held its first annual Photo Station Challenge from August 30, 2024 - October 31, 2024 to encourage all MyCoast NJ users to visit six photo station locations and help document our changing coastlines. MyCoast NJ photo stations are located at Liberty State Park (Cherry Tree Cove), Cheesequake State Park (Crabbing Bridge), Island Beach State Park (Johnny Allen's Cove trail, oceanside, and Fisherman's Walkway trail, oceanside), Margate City Fishing Pier, and Cape May Point State Park (western ADA beach entrance).

Climate & Environmental Stewardship Focused AmeriCorps Training Programs (NJ Department of State)

New Jersey AmeriCorps announced a comprehensive approach toward climate and environmental stewardship in the nation's most densely populated state. The five programs-DEP Watershed Ambassadors, Camden PowerCorps, Native American Advancement Corporation-Cohanzick Climate Corps, Isles Inc.'s Trenton Climate Corps, and Rutgers University Cooperative Extensionrepresent conservation initiatives throughout the state. The efforts span urban, suburban, and rural areas and specifically address city beautification, food rescue,

CLIMATE CHANGE

Caused by several centuries of human activities, it has made the Earth less habitable due to:



Ecosystem Impacts

But we're not focused on the fear, we're focused on the fight. And our state has the people, plans and power to make a difference.

NJ has a plan. See it now.



watershed protection, arborist training, energy efficiency, and community and student education. New Jersey AmeriCorps programs are included as part of the national American Climate Corps, a federal program developed to increase climate response and expand skills-based training in clean energy, conservation, and climate resilience.

Developing a Clearinghouse Website for Climate Change (NJ Department Environmental Protection)

DEP has continued its efforts to make climate change research more readily available to the public. In addition to the core features of the <u>climate change science webpage</u>, which includes the <u>2020 New Jersey Scientific Report on Climate Change</u>, significantly more content was added, including updated environmental reports for Trends in Temperature & Sea Level, Energy Use, and Greenhouse Gas Emissions, and web-based decision support tools such as the <u>NJ Restoration Tool Organization Suite (ResTOrS)</u>.

Current Science on Sea-Level Rise and Coastal Storms in New Jersey (NJ Department of Environmental Protection)

In 2016, Rutgers University convened a panel of scientists to identify and evaluate the latest science on sea-level rise projections and coastal storms to inform coastal decision-making. This panel, the New Jersey Science and Technical Advisory Panel (STAP), was re-convened in 2019 on behalf of DEP to update its findings based on new climate science and data. The 2019 STAP report formed the scientific basis for critical DEP efforts and decisions, including the rulemaking as part of NJ Protecting Against Climate Threats Resilient Environments And Landscapes. As such, in 2024, DEP again called for a re-convening of the STAP to re-evaluate and update its findings on sea-level rise, future storms, and flood hazards to support risk-informed planning and decision-making efforts in New Jersey. The updated STAP report is expected to be released in 2025.

Updated New Jersey Climate Model Projections (NJ Department Environmental Protection)

Starting with the International Panel on Climate Change's (IPCC) Sixth Assessment Report (finalized in March 2023), the international community of climate scientists have transitioned to Shared Socioeconomic Pathways (SSPs) to derive a shared understanding of greenhouse gas emissions trajectories under five different climate policy scenarios. These range from SSP1: Sustainability ("Taking the Green Road") to SSP5: Fossil-fueled Development ("Taking the Highway"). This represents a divergence from the Regional Concentration Pathways used by the IPCC since 2014 to describe projected future greenhouse gas concentrations. In response, DEP has developed updated climate model projections in 2024 that provide alignment with the most recent scientific guidance and policy. The effort uses temperature and precipitation data from the <u>AdaptWest</u> database generated using the <u>ClimateNA</u> software. ClimateNA downscales gridded data from <u>PRISM</u>, and <u>WorldClim</u> for current climate and downscales data from the Coupled Model Intercomparison Project phase 6 database which corresponds to the 6th IPCC Assessment Report for future projections. The results of this analysis are referenced in the *Climate Change in New Jersey: Impacts & Effects* web resource.

New Jersey Tidal Wetland Monitoring Network (NJ Department of Environmental Protection)

In 2018, the New Jersey Tidal Wetland Monitoring Network (the Network) was formed to improve the resilience of coastal communities and ecosystems by identifying current conditions and trends of tidal wetlands in New Jersey to better prioritize restoration efforts and inform management decisions. The Network is now composed of more than 15 entities that collect long-term monitoring of tidal wetlands in New Jersey. The current focus of Network efforts has been towards standardizing and collecting data related to the 200+ Surface Elevation Tables positioned across the state. Relevant research studies are available at https://dep.nj.gov/dsr/wetlands/. In one such study, published July 2024, drone footage and traditional field metrics were collected in Great Bay Boulevard Wildlife Management Area and E. B. Forsythe National Wildlife Refuge and combined to evaluate the use of multispectral drones to identify high and low marsh vegetation communities and conditions that can lead to high marsh pond expansion and vegetation loss.



Delaware Bay and Surrounding Marshes in New Jersey

Climate Change & Health Resources Webpage (NJ Department of Health)

DOH maintains an <u>online resource page</u> to inform public health professionals, local health departments, schools and youth camps, and the public about the health impacts of climate change. The page offers tools, resources, and educational materials in English and Spanish on topics such as heat-related illness (including focus on workers), air quality impacts from wildfires, carbon monoxide poisoning, post-storm tree damage safety, and other related topics.

Public Health Dashboards for Decision-Making (New Jersey Department of Health)

Vector-borne diseases and heat-related illness are the primary climate change-related health risks currently monitored by public-facing DOH surveillance dashboards. Public health surveillance and early warning systems are important for managing the health risks of climate change.



DOH has developed a near real-time <u>dashboard</u> to track cases of tick- and mosquito-borne diseases, such as Lyme disease and West Nile virus, and vector-related emergency department visits, which are expected to increase as New Jersey warms. This surveillance helps health officials understand the spread of vector-borne disease and may help identify the impacts of a changing climate on patterns of known diseases as well as detect the emergence of new diseases. It also helps the public to be informed about the risks of vector-borne diseases in their area. DOH is also evaluating the feasibility of new geospatial and temporal analyses of mosquito-borne diseases in order to enhance surveillance capabilities and better target mosquito prevention and local public health activities.

Similarly, the Environmental Public Health Tracking Project has developed a <u>Heat-related Illness Dashboard</u>. Heat-related illness, also known as HRI or hyperthermia, happens when the body is unable to maintain a normal body temperature, resulting in heat exhaustion or life-threatening heat stroke. The HRI Dashboard offers New Jerseyans a comprehensive, statewide view of emergency department visits, hospitalizations, deaths, and illnesses associated with heat exposure. Updated between April and October, the dashboard provides detailed breakdowns by day, age, sex, and race/ethnicity.

Climate and Behavioral Health Training (NJ Department of Human Services)

The Department of Human Services equips New Jersey residents and crisis responders with information and resources to help them prepare for and respond to climate-related hazards. In 2024, Human Services provided education to crisis responders and to the public about the relationship between behavioral health and climate-related hazards, including extreme heat and wildfires. In addition, Human Services has developed public-facing materials explaining how climate change can impact behavioral health as well as guidance on how to avoid heat- and sun-related health risks.

Occupational Safety and Health On-Site Consultation Program (NJ Department of Labor and Workforce Development)

The New Jersey Department of Labor and Workforce Development provides free On-Site Safety and Health Consultation services to private sector employers through which trained staff identify safety and health violations of the Occupational Safety and Health Administration (OSHA) Standards and work with employers to improve their internal occupational safety and health management systems. Through this program, employers can find out about potential hazards (including temperature-related dangers at their worksites), improve their occupational safety and health management systems, arrange safety and health training, and even qualify for a safety recognition award. Employers have a responsibility to prevent heat illnesses at their worksites and guidelines are provided by federal OSHA to that effect. In Federal Fiscal Year 2024, OSHA On-Site Consultation program conducted 418 consultation visits, of which 117 covered the topic of indoor or outdoor heat with employers.

Beach Monitoring Program (NJ Department Environmental Protection)

During the beach season, New Jersey's bathing beaches are monitored regularly with daily status, including warnings and closures, reported online. Beginning in 2024, the annual beach summary report transitioned to a web-based StoryMap, affording the public an easy-to-navigate and interactive format.



Long Branch, New Jersey



PRIORITY 5: PROMOTE CLIMATE-INFORMED INVESTMENTS AND INNOVATIVE FINANCING



Bergen County Utilities Authority Join Meeting Pump Station

Funding for Hazard Mitigation and Resilience Projects (NJ Infrastructure Bank and NJ Office of Emergency Management)

In September 2024, New Jersey was selected to receive a \$15 million capitalization grant award from the federal fiscal year (FFY) 2024 Safeguarding Tomorrow Through Ongoing Risk Mitigation (STORM) Revolving Loan Fund (RLF) program to apply to the New Jersey Community Hazard Assistance Mitigation Program (NJ CHAMP). States awarded with capitalization grant funds from the STORM RLF are then able to provide low interest loans at a flat 1% interest rate to local governments for hazard mitigation and resilience-related projects. Including the initial award received for FFY 2023, NJ CHAMP currently has approximately \$23 million available to finance eligible hazard mitigation and resilience projects. Loans through NJ CHAMP are available to finance the local match portion of projects receiving Federal Emergency Management Agency (FEMA) grants.

New Jersey became the first state in the nation to lend funds from FEMA's STORM Act when New Jersey Infrastrcuture Bank successfully closed a \$1.61 million agreement with the Bergen County Utilities Authority supplementing a \$4.65 million Building Resilient Infrastructure and Communities) C grant to reduce flooding risk at the Joint Meeting Pump Station in Rutherford.

Resilient Communities Program (NJ Department of Community Affairs)

The <u>Resilient Communities Program</u> is a competitive grant program designed to fund unmet recovery and mitigation needs for public infrastructure projects in communities impacted by Hurricane Ida with federal Community Development Block Grant-Disaster Recovery funding that New Jersey received from the U.S. Department of Housing and Urban Development. This program helps communities become more resilient to current and future flood-related natural hazards. In 2024, <u>DCA announced grants to ten municipalities</u>, totaling \$34.47 million dollars.

Online Web-based Applications for Hazard Mitigation Projects (NJ Infrastructure Bank)

Over the course of 2024, the New Jersey Infrastructure Bank (I-Bank) partnered with the New Jersey Office of Emergency Management on the creation of a new web-based application screening system designed to help identify potential hazard mitigation projects which may be eligible to receive a FEMA Building Resilient Infrastructure and Communities (BRIC) grant. The new application screening system will help the state identify suitable mitigation projects in order to develop a steady queue of application ready projects for BRIC submissioneligible for BRIC funding.



NJ Water Bank Resilience Requirements and Supplemental Guidance (NJ Department Environmental Protection and NJ Infrastructure Bank)

In conjunction with the I-Bank, the New Jersey Department of Environmental Protection (DEP) administers the New Jersey Water Bank (NJWB), which provides extremely low- or no-cost financing for entities to improve drinking water quality or reliability or improve ambient environmental water quality. As of State Fiscal Year (SFY) 2024, the NJWB requires project sponsors to demonstrate resilience of their proposed projects to climate change impacts as a part of the Project Report and Alternatives Analysis. The purpose of these requirements is to verify exposure of the project to current and future climate change impacts and to incorporate resilience as a crucial component of the alternatives analysis and justification for the selected alternative. The NJWB requires project sponsors to present a Resilience Assessment that demonstrates consideration of potential climate impacts and long-term resilience goals consistent with a 2100 planning horizon, while recognizing that a shorter planning horizon may be appropriate due to the nature of a project or other relevant circumstances. In July 2024, DEP published the "Resilience Requirements Supplemental Guide and Checklist" to assist NJWB applicants to comply with new resilience requirements available <u>online</u>.

Incorporating Resilience into Water Infrastructure Funding Programs (NJ Department Environmental Protection and NJ Infrastructure Bank)

In 2024, the NJWB provided project priority points to clean water and drinking water projects that implemented climate resilience measures, provided that the resilience components represented a significant amount of the overall project scope. The NJWB also set aside an additional \$20 million for principal forgiveness for clean water projects that improve stormwater management, enhance community resilience, and mitigate localized flooding and enhance the ecological health of waterways, with a focus on projects that utilized green infrastructure technology and nature-based solutions, especially in overburdened communities. In 2024, the NJWB awarded approximately \$68 million of short-term construction financing for four projects that included resilience measures to protect water infrastructure. For more information, see the <u>State Fiscal Year 2025 Clean Water Intended Use Plan</u>, published May 16, 2024.

State Revolving Fund Allocations for Stormwater Resilience and Sustainable Community Planning (NJ Department Environmental Protection)

In 2024, the SRF continued to provide priority points for proposals in communities that have adopted master plans and ordinances that improve the overall quality of life for citizens of today as well as future generations by planning within natural resource capacity constraints and providing for a healthy economy, environment, and society. Projects located in or benefiting municipalities where sustainable community strategies have been developed and master plans and/or ordinances have been adopted (i.e., policies that require consideration of green design in municipal construction projects and redevelopment projects, such as green roofs, green streets, tree filters, rain gardens, rain barrels, porous pavements, etc.) are awarded an additional 100 priority points. State Revolving Fund (SRF) applicants are required by DEP to incorporate climate change considerations, including extreme precipitation and predicted sea-level rise, into project planning and design. For SFY 2025, DEP is reserving funds and providing principal forgiveness for priority stormwater management to improve stormwater infrastructure and enhance community resilience. A significant focus of these projects is the utilization of green infrastructure technology and nature-based solutions, particularly in overburdened communities. The primary objectives are to mitigate localized flooding and enhance the ecological health of waterways, goals that have gained urgency due to delays caused by the public health emergency.

Ready to be Resilient Stormwater and Resilience Funding Program (NJ Department of Environmental Protection)

Using \$20 million in American Rescue Plan funding, DEP will provide technical assistance and grants to local entities to enhance stormwater management and resilience, including allocation for the design of projects identified through Resilient NJ, Long-term Control Plans, Highlands Watershed Planning grants and Watershed Restoration Plans, among others.

To encourage implementation of demonstration projects that promote stormwater management and increased resilience, funding has been allocated for the construction of stormwater quality projects such as basin retrofits, riparian area restoration, removal of impervious surfaces, and green infrastructure. The NJWB's "Project Priority List" contains over 20 projects, estimated at over \$200 million, that meet the proposed eligibility requirements. Funds will also be used to develop data and protocols related to flood and flood damage. The program is also staffing a cohort of Regional Cooperative Extension Engineers through the <u>Rutgers University</u> <u>Cooperative Extension Water Resources Program</u> who will help communities better position themselves for funding opportunities and begin to evaluate lasting solutions such as stormwater utilities. Beginning in July 2024, Rutgers University hired four engineers, covering the Northeast, Northwest (Highlandsregion), Central, and South regions of New Jersey. Work is underway in Eatontown, Fair Haven, Long Branch, and West Orange.

Office of Natural Resource Restoration Grants (NJ Department Environmental Protection)

DEP was awarded \$1,070,822 in grants to seven local government agencies in the Hudson-Raritan Estuary for stormwater reduction and water quality enhancement projects. The funds support the design and construction of rain gardens and bioretention facilities to improve stormwater quality and reduce runoff. Preference was given to projects in communities with combined sewer overflow (CSO) systems or in overburdened communities. The grants were funded utilizing settlements obtained from Natural Resource Damage cases, specifically by monies appropriated for the Hudson-Raritan Estuary Water Quality Infrastructure/CSO Improvements.

Financing & Financial Assistance for Private Sector & Commercial Building Resilience (NJ Economic Development Authority)

On October 9, 2024, the Garden State Commercial Property Assessed Clean Energy (C-PACE) Program received approval from the New Jersey Economic Development Authority (NJEDA) Board. The C-PACE program provides financing for hurricane resistant construction improvements, flood resistance construction improvements, stormwater management systems, energy storage, and microgrids, as well as energy efficiency improvements. The New Jersey Green Bank similarly supports climate-related investments and financial assistance by helping to mobilize private capital in advancement of the state's climate goals, including in areas such as zero-emission transportation, building decarbonization and resilience, and clean energy generation and storage.







Incorporating Resilience into Real Estate and Development Incentives Programs (NJ Economic Development Authority)

NJEDA has incorporated climate resilience into the <u>Aspire</u> and <u>Brownfields Redevelopment Incentive</u> real estate development tax credit programs by including climate resilience and adaptation planning into program scoring criteria. By emphasizing resilience, NJEDA is prioritizing sustainable, resilient and equitable economic growth.

Incorporating Resilience into Brownfields Redevelopment Programs (NJ Department Environmental Protection)

On October 30, 2023, DEP relaunched its nationally recognized Brownfield Development Area (BDA) Program, designed to help communities affected by multiple brownfield sites plan and implement investigation, remediation, and redevelopment of brownfield sites in a comprehensive and coordinated manner. Fifteen applications were received from municipalities across the state by the deadline of July 31, 2024 and thirteen BDA applications were approved in December 2024. Upon BDA designation, local municipalities and redevelopment authorities will be eligible for up to \$5 million annually in Hazardous Discharge Site Remediation Fund grants, including remedial action matching grants providing up to 75 percent for remedial action costs for any site reuses in the BDA. In addition, DEP posted the <u>Administrative Guidance for Green, Sustainable, and Resilient Remediation</u>, which includes examples such as the consideration of "green caps," green infrastructure and flood mitigation, tree canopy and riparian corridor improvements, and solar energy projects.



Phillips 66 Oil Refinery, Linden, New Jersey



Concord, Hillsborough

Prioritizing Sustainable and Resilient Housing (NJ Housing and Mortgage Finance Authority)

The New Jersey Housing and Mortgage Finance Agency (NJHMFA) has introduced a new site assessment protocol to evaluate climate change risks as part of its development projects. This comprehensive analysis will identify potential hazards such as flooding, extreme heat, and other environmental vulnerabilities that could impact housing resilience. Alongside this, NJHMFA now requires an emergency management plan to address disaster preparedness, ensuring housing developments are equipped to safeguard residents during climate-related emergencies. To further NJHMFA's commitment to green and resilient building, projects applying for competitive 9% Low Income Housing Tax Credit awards will be required to select from a list of possible site adaptations. These include floodproofing infrastructure, heat island reduction, fostering a certified wildlife habitat, and vegetated roofs, among many other innovative solutions. These initiatives reflect NJHMFA's commitment to sustainable, resilient, and secure housing for New Jersey communities.

Port Authority Resilience Grants Roadmap (Port Authority of New York and New Jersey)

In 2024, the Port Authority of New York and New Jersey (PANYNJ) completed the development of a Resilience Grants Roadmap. The Grants Roadmap matches PANYNJcapital projects to resilience grant opportunities and identifies best practices for grant funding pursuits. The PANYNJ reviews the Grants Roadmap at least quarterly in preparation for upcoming grant opportunities. The Grants Roadmap is a component of the PANYNJ's Resilience Action Plan, a strategic plan to integrate climate resilience into core agency programs, processes, and policies and identify avenues for implementation.

School Facilities Funding (NJ Department of Education)

In September 2023, the New Jersey Department of Education, in conjunction with the School Development Authority, announced the approval of nearly \$450 million in school construction funds to address critical facilities needs in 261 school districts throughout the state. The grant prioritized school facilities projects that addressed the most critical operational building needs, including health and safety issues. Specific top priority areas included essential building systems upgrades (repair or replacement of structural, mechanical/heating and cooling, electrical, and plumbing systems), building skin (repair of roof, windows, masonry, etc.), and building code issues. Funds awarded were used by school districts in 2024 to provide numerous high-priority upgrades, including 320 HVAC systems, 79 boilers or water heaters, and 211 roofs.



) PRIORITY 6: COASTAL RESILIENCE PLAN

Building a Climate Ready NJ (NJ Department of Environmental Protection)

In July 2024, DEP was awarded \$72.4 million through the National Oceanic & Atmospheric Administration's Climate Resilience Regional Challenge to launch the Building a Climate Ready NJ initiative. Building a Climate Ready NJ partners DEP with a network of 15 New Jersey-based organizations to establish and expand programs that will support communities through the resilience pipeline, from resilience planning through the project design phase and into implementation over a five-year period. This initiative also expands education, climate awareness, training, and engagement efforts. Building a Climate Ready NJ will ultimately expand the number of New Jersey communities engaging in resilience activities.

Expansion of Tidal Wetland Monitoring and Assessment Projects (NJ Sports and Exposition Authority)

Before action can be taken to address the serious threat facing tidal marshes, their current health and capacity to adapt needs to be assessed. In 2024, the New Jersey Sports and Exposition Authority's (NJSEA) expanded their ongoing tidal wetland monitoring and assessment projects to embrace newer technologies to help streamline monitoring efforts and data collection, including the use of drones for mapping and eDNA and Acoustic Recording Units to detect hard-to-observe fish and wildlife. NJSEA continues to collaborate with the New Jersey Tidal Wetland Monitoring Network (see page 29) to standardize monitoring protocols.



NJ Coastline at the Shore

CONCLUSION | LOOKING AHEAD

In 2025, the Interagency Council will build on its efforts by continuing to develop and implement policies, programs, and projects that advance climate resilience action in New Jersey. These efforts reflect actions as part of the continuous opportunity for the Interagency Council to address the impacts of climate change. Readers of this report are invited to sign up for quarterly updates regarding the work of the Interagency Council by subscribing to the New Jersey Department of Enviornmental Protection newsletter at resiliencecouncil.nj.gov.

Outreach

The Extreme Heat Coordinated Communications and Outreach and Engagement Strategy workgroups will continue to create educational materials and host events such as listening sessions, webinars, informational videos, social media graphics and printed materials for distribution by key partners across the state.

Publications

State Agency Actions to Increase Resilience to Flooding

In 2025, the Interagency Council will release the "State Agency Actions to Increase Resilience to Flooding" report. This report will outline ongoing and short-term flood resilience initiatives undertaken by Interagency Council member agencies. This document will be the second of its kind produced by the Interagency Council. In 2023, the Interagency Council developed a similar document focused on heat entitled <u>State Agency Actions to Increase Resilience to Extreme Heat Due to Climate Change.</u>

Extreme Heat Resilience Action Plan 2025 Update

New Jersey's first-ever Extreme Heat Resilience Action Plan (Extreme Heat RAP) was released on July 19, 2024. Since then, the Interagency Council has expanded to include four new member agencies: the New Jersey Department of Children and Families, the New Jersey Department of Corrections, the New Jersey Department of Education, and the New Jersey Department of Labor and Work Force Development. This RAP update will incorporate new actions identified by agencies new to the Interagency Council and capture new or updated commitments from all member agencies.



Goethals Bridge

