

15. CAPABILITY ASSESSMENT

A capability assessment is an inventory of a community's missions, programs, and policies and an analysis of its capacity to carry them out (FEMA 2003). This assessment is an integral part of the planning process. It enables identification, review, and analysis of current local and state programs, policies, regulations, funding, and practices that could either facilitate or hinder mitigation. Through assessing its capabilities, a jurisdiction learns how or whether it can implement certain mitigation actions by determining the following:

- Limitations that may exist on undertaking actions
- The range of local and/or state administrative, programmatic, regulatory, financial, and technical resources available to assist in implementing their mitigation actions
- Actions that are infeasible because they are outside the scope of current capabilities
- Types of mitigation actions that may be technically, legally, administratively, politically, or fiscally challenging or infeasible
- Opportunities to enhance local capabilities to support long-term mitigation and risk reduction

This chapter presents a summary and description of the existing plans, programs, and regulatory mechanisms at all levels of government (federal, state, county, local) that reduce hazard risks and support hazard mitigation within the planning area. These capabilities are presented in three categories:

- Planning and regulatory capabilities
- Administrative and technical capabilities
- Fiscal capabilities

Each Planning Partner's annex in Volume II also includes a capability assessment specific to those jurisdictions. In addition to the above categories, the annexes review capabilities in the more localized categories of adaptive capacity and education and outreach.

15.1 CAPABILITY ASSESSMENT PROCESS

Jurisdiction specific capabilities are assessed in each jurisdictional annex in Volume II. All participating jurisdictions were tasked with developing or updating their capability assessment for this update, evaluating the effectiveness of their capabilities in supporting hazard mitigation and identifying opportunities to enhance local capabilities. Each jurisdiction identified how it has integrated hazard mitigation into its existing planning, regulatory, and operational/administrative framework and how it intends to promote ongoing integration.

The contracted consultant met with Passaic County and each jurisdiction virtually to review the capability assessment from the 2020 HMP and update accordingly. The consultant also reviewed plans, codes, and ordinances to enhance the information provided by the jurisdictions.

15.2 PLANNING AND REGULATORY CAPABILITIES

Planning and regulatory capabilities are based on ordinances, policies, local laws, state statutes, plans, and programs that relate to managing growth and development. Planning and regulatory capabilities refer not only to current plans and regulations, but also to the jurisdiction's ability to change and improve those plans and





regulations as needed. This section summarizes planning and regulatory capabilities for Passaic County. Further information is provided in the jurisdictional annexes in Volume II.

15.2.1 Federal

National Flood Insurance Program

The U.S. Congress established the National Flood Insurance Program (NFIP) with the passage of the National Flood Insurance Act of 1968 (FEMA's 2002 NFIP: Program Description). The NFIP is a Federal program enabling property owners in participating communities to purchase insurance as a protection against flood losses in exchange for State and community floodplain management regulations that reduce future flood damages. The flood hazard profile in Chapter 9 provides further information on the NFIP as implemented in Passaic County.

There are three components to the NFIP: flood insurance, floodplain management and flood hazard mapping. Communities participate in the NFIP by adopting and enforcing floodplain management ordinances to reduce future flood damage. In exchange, the NFIP makes federally backed flood insurance available to homeowners, renters, and business owners in these communities. Community participation in the NFIP is voluntary. Flood insurance is designed to provide an alternative to disaster assistance to reduce the escalating costs of repairing damage to buildings and their contents caused by floods. Flood damage in the U.S. is reduced by nearly \$1 billion each year through communities implementing sound floodplain management requirements and property owners purchasing flood insurance. Additionally, buildings constructed in compliance with NFIP building standards suffer approximately 80 percent less damage annually than those not built in compliance (American Institutes for Research 2006).

All municipalities in Passaic County actively participate in the NFIP. As of 2024, there were 2,150 NFIP policies in Passaic County. There have been 9,538 claims made, totaling over \$267 million for damages to structures and contents. There are 870 NFIP Repetitive Loss (RL) properties in the County. Further details on the County's flood vulnerability may be found in the flood hazard profile in Chapter 9.

Municipal compliance with the NFIP is described in each of the jurisdictional annex in Volume II (Jurisdictional Annexes). The County's municipalities have been compliant with the NFIP. To enhance their flood damage prevention programs and enhance compliance with the NFIP in the future, several municipalities propose actions in their mitigation strategies to ensure that their flood plain administrators complete training on floodplain management and the NFIP, to update their flood damage prevention ordinance if they have one already, or to adopt one of FEMA's code-coordinated ordinances for flood damage prevention if they do not already have one. All municipalities have included an action to improve their procedures for determining substantial damage and to develop substantial damage response plans if they do not currently have one. In addition, Passaic County's mitigation strategy (see Chapter 16) includes an action to encourage and empower municipalities to participate in FEMA's Community Rating System. Additional information on the NFIP program and its implementation throughout the County may be found in the flood hazard profile (Chapter 9).

The state and municipalities within it may adopt higher regulatory standards when implementing the provisions of the NFIP. Specifically identified are the following:

- **Base Flood Elevation (BFE)**: The elevation of surface water due to flooding that has a 1 percent chance of being equaled or exceeded in any given year.
- **Freeboard:** The state's minimum design base flood elevation is 3 feet above the designated base flood elevation. Additional revisions to the Flood Hazard Area Control Act Rules that are still in development may define the regulatory tidal elevation as 5 feet above the base flood elevation. Any municipal or other



entity in New Jersey vested with authority to adopt rules and regulations concerning the development and use of land may adopt requirements more restrictive than those contained in the state rules and regulations. Communities are encouraged to adopt standards that exceed NFIP requirements.

• Cumulative Substantial Improvements/Damages: The NFIP allows improvements valued at up to 50 percent of the building's pre-improvement value to be permitted without meeting the flood protection requirements. Over the years, a community may issue a succession of permits for different repairs or improvement to the same structures. This can greatly increase the overall flood damage potential for structures within a community. The community may wish to deem "substantial improvement" cumulatively so that once a threshold of improvement within a certain length of time is reached, the structure is considered to be substantially improved and must meet flood protection requirements.

NFIP Community Rating System

As an additional component of the NFIP, the Community Rating System (CRS) is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. As a result, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from the community actions meeting the three goals of the CRS: (1) reduce flood losses; (2) facilitate accurate insurance rating; and (3) promote the awareness of flood insurance (FEMA 2024).

As of 2024, five communities in Passaic County participate in the CRS program: Borough of Bloomingdale, Township of Little Falls, Borough of Pompton Lakes, Township of Wayne, and Borough of Woodland Park (see Table 15-1). Passaic County is exploring the program requirements of the CRS through technical expertise and assistance to guide interested municipalities through the application process.

Jurisdiction	CRS Entry Date	Current Class	Premium Discount
Bloomingdale (B)	October 10, 2016	8	10 percent
Little Falls (Twp)	May 1, 2010	5	25 percent
Pompton Lakes (B)	October 1, 2011	5	percent
Wayne (Twp)	October 1, 1991	7	15 percent
Woodland Park (B)	October 1, 2016	8	10 percent

Table 15-1. Community Rating System Participation in Passaic County

Source: NJOEM 2024

Risk Rating 2.0: Equity in Action

FEMA's Risk Rating 2.0: Equity in Action program considers specific characteristics of a building to provide individualized and equitable flood insurance rates. The new rating methodology considers frequency of flooding, multiple flood types, proximity to flood sources, and building characteristics such as first floor heights and costs to rebuilt. The update was rolled out in October 2021 through April 2022, and as of April 1, 2023 has been fully implemented (FEMA 2022). According to a July 10, 2023 article by NJ Spotlight News, 12,000 NFIP flood insurance policies in the State of New Jersey have been dropped since Risk Rating 2.0 became effective. The drop in flood insurance coverage has been attributed to rising flood insurance costs based on Risk Rating 2.0's new flood insurance calculations (NJ Spotlight News 2023). Homeowners that elect to drop NFIP insurance policies will no longer have access to Flood Mitigation Assistance (FMA) funding for future mitigation efforts. At the time of this HMP update, it is difficult to determine what the aggregate cost increase through Risk Rating 2.0 will be on post-mitigation properties.





Across the country, official are finding it to be increasingly difficult to communicate the benefits of mitigation to some property owners where insurance rates are likely to stay high even after mitigation due to factors such as proximity to flood sources and frequency of flooding. Continued shifts in flood insurance costs, coverage, impacts to mitigation of flood prone properties, and potential updates to Risk Rating 2.0 will be monitored by Passaic County throughout the period of performance of the 2025 HMP.

Risk Mapping, Assessment, and Planning (Risk MAP)

FEMA works with federal, state, tribal, and local partners across the nation to identify flood risk and promote informed planning and development practices to help reduce that risk through the Risk MAP program. Risk MAP provides high-quality flood maps and information, tools to better assess the risk from flooding, and planning and outreach support to communities to help them take action to reduce (or mitigate) flood risk. Each Risk MAP flood risk project is tailored to the needs of each community and may involve different products and services.

According to the Risk MAP Progress interactive map available online at the time of this plan update, there are numerous active Risk MAP projects taking place throughout New Jersey (FEMA n.d.). FEMA coordinates and works directly with municipal floodplain managers during the Risk MAP project process. The State NFIP Coordinator is kept apprised of project activities and consults as needed.

Since 2006, the New Jersey Department of Environmental Protection (NJDEP) and FEMA have maintained a Cooperating Technical Partnership Agreement (CTP) to perform map production together to build the next generation of FEMA and State flood mapping. New Jersey will continue to take the lead in prioritizing projects, coordinating available data sources, conducting outreach, and all essential components of data production and map adoption. Moving forward, NJDEP will be developing new floodplain data, producing digital Flood Insurance Rate Maps (FIRMs) and post-preliminary processing (NJDEP Bureau of Flood Engineering 2023).

New Jersey will integrate its mapping program with the FEMA program. This integration hinges on creating FEMA FIRMs for New Jersey, which delineate the New Jersey Flood Hazard Area Design Flood (NJFHADF) on the mapping and plots the NJFHADF water levels on the stream profiles, the State's regulatory standard. The NJFHADF is based on the 100-year flood discharge plus 25 percent. The State is obligated to compare the State flood elevations and floodway with the FEMA data for higher flood levels and wider floodways. By including the NJFHADF on the FIRM, the State would be able to use the FEMA FIRMs as the single source for both federal and state floodplain management, freeing up staff resources and reducing errors (NJDEP Bureau of Flood Engineering 2023).

Disaster Mitigation Act of 2000 (DMA 2000)

The DMA is the current federal legislation addressing hazard mitigation planning. DMA 2000 provides an opportunity for states, tribes, and local governments to take a new and revitalized approach to mitigation planning. DMA 2000 amended the Robert T. Stafford Disaster Relief and Emergency Assistance Act (the Act) by repealing the previous mitigation planning provisions (Section 409) and replacing them with a new set of mitigation plan requirements (Section 322). This new section emphasizes the need for state, tribal, and local entities to closely coordinate mitigation planning and implementation efforts. It emphasizes planning for disasters before they occur. It specifically addresses planning at the local level, requiring plans to be in place before Hazard Mitigation Assistance grant funds are available to communities. HMPs designed to meet the requirements of DMA will remain eligible for future FEMA Hazard Mitigation Assistance funds. This plan is designed to meet the requirements of DMA, improving eligibility for future hazard mitigation funds.





The New Jersey Office of Emergency Management (NJOEM) Mitigation Unit is the lead agency within New Jersey to promote mitigation planning. The law sets forth a more granular review of mitigation planning. Once approved, the applicant is eligible to apply for federal funds for mitigation of hazards. The rules provide detailed guidance on what applicants should include in a plan.

Code of Federal Regulations, Standard State Mitigation Plans (44 CFR PART 201.4)

FEMA has prepared policies and procedures for FEMA's review and approval of state and local emergency allhazard mitigation plans.

The State Hazards Mitigation Plan provides actions based on risk assessments and capabilities of the State to achieve and fund mitigation activities based on those actions. Both the law and regulations have encouraged the counties to prepare plans.

Robert T. Stafford Disaster Relief and Emergency Assistance Act

The Act provides an orderly and continuing means of assistance by the federal government to state and local governments in carrying out their responsibilities to alleviate the suffering and damage that results from disasters. The provisions of the Act include (1) revising and broadening the scope of existing disaster relief programs; (2) encouraging the development of comprehensive disaster preparedness and assistance plans, programs, capabilities, and organizations by state and local governments; (3) achieving greater coordination and responsiveness of disaster preparedness and relief programs; (4) encouraging individuals, and state and local governments to protect themselves by obtaining insurance coverage to supplement or replace governmental assistance; (5) encouraging hazard mitigation measures to reduce losses from disasters, including development of land-use and construction regulations; and (6) providing federal assistance programs for both public and private losses sustained in disasters.

From a mitigation perspective of the Act, the NJOEM Mitigation Unit is the lead agency that reviews, submits, and administers federal funding to programs that mitigate hazards. These programs help find projects that are cost beneficial to help reduce damages from hazards.

Disaster Recovery Reform Act

This bill amends the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act) to modify the Pre-disaster Hazard Mitigation Grant Program to permit the use of technical and financial assistance to establish and carry out enforcement activities to implement codes, specifications, and standards that incorporate the latest hazard-resistant designs; direct the President to establish a National Public Infrastructure Pre-disaster Mitigation Fund; authorize the President's contribution to the cost of hazard mitigation measures to be used to increase resilience in any area affected by a major disaster; and direct the Federal Emergency Management Agency (FEMA) to issue a final rulemaking that defines the terms "resilient" and "resiliency.

From a mitigation perspective of the Act, the NJOEM Mitigation Unit is the lead agency that reviews, submits, and administers federal funding to programs that mitigate hazards. These programs help find projects that are cost beneficial to help reduce damages from hazards.

Presidential Policy Directive 8 (PPD-8)

PPD-8 requires that a Threat Hazard Identification and Risk Assessment (THIRA) be developed for a state to remain eligible for Homeland Security Grant Program (HSGP) and Emergency Management Program Grant (EMPG) funding.



TETRA TECH



The New Jersey Office of Homeland Security and Preparedness is the lead agency in preparing the State's THIRA. The fiscal year 2013 NJ State THIRA and Strategic Planning Report was submitted to FEMA Region II in December 2013.

Bunning-Bereuter-Blumenauer Flood Insurance Reform Act of 2004

The Flood Insurance Reform Act of 2004 amended the 1994 National Flood Insurance Reform Act of 1968 to reduce losses to properties for which repetitive flood insurance claim payments have been made. This Act established a program for mitigation of severe repetitive loss properties and gave FEMA the authority to fund mitigation activities for individual repetitive loss claims properties. The Act provides additional coverage for compliance with land-use and control measures.

The NJDEP Flood Control Division is the lead coordinator of New Jersey's NFIP efforts. NJOEM Mitigation Unit is the agency working with New Jersey communities with severe repetitive loss properties. This Statute helps New Jersey residents with affordable flood insurance and gives additional tools to the states and communities to mitigate severe repetitive loss properties.

Biggert Waters National Flood Insurance Reform Act of 2012

Under the Biggert-Waters National Flood Insurance Reform Act of 2012, long-term changes to the National Flood Insurance Program have been adopted that have increased rates overall to reflect the flood risk more accurately to buildings in flood hazard areas. This has significantly influenced construction and reconstruction within flood hazard areas.

Property owners are encouraged to consider long-term insurance costs when undertaking reconstruction or elevation of damaged buildings. An investment to reconstruct the lowest floor of a building an additional foot or two higher today may translate into significant future flood insurance savings.

Homeowner's Flood Insurance Affordability Act

This 2014 law repeals and modifies certain provisions of the Biggert-Waters Flood Insurance Reform Act, which was enacted in 2012, and makes additional program changes to other aspects of the program not covered by that Act. The new law lowers the recent rate increases on some policies, prevents some future rate increases, and implements a surcharge on all policyholders. The Act also repeals certain rate increases that have already gone into effect and provides for refunds to those policyholders. The Act also authorizes additional resources for the National Academy of Sciences (NAS) to complete the affordability study.

FEMA, Congress, the private Write Your Own insurance companies, and other stakeholders work together to implement these Congressionally mandated reforms and to work toward shared goals of helping families maintain affordable flood insurance, ensuring the financial stability of the NFIP, and reducing the risks and consequences of flooding nationwide.

Emergency Support Function (ESF) #14, Long-Term Recovery Planning

Long-Term Community Recovery provides a mechanism for coordinating Federal support to State, tribal, regional, and local governments, nongovernmental organizations (NGOs), and the private sector to enable community recovery from the long-term consequences of extraordinary disasters. ESF #14 accomplishes this by identifying and facilitating availability and use of sources of recovery funding and providing technical assistance (such as impact analyses) for community recovery and recovery planning (FEMA 2008).





ESF #14 may be activated for incidents that require a coordinated Federal response to address significant longterm impacts (e.g., impacts on housing, government operations, agriculture, businesses, employment, community infrastructure, the environment, human health, and social services) to foster sustainable recovery (FEMA 2008).

Actions coordinated under ESF #14 include pre-incident planning and coordination, immediately prior to the incident, post-event planning, and operations (FEMA 2008).

Through ESF 14, Long-Term Recovery Planning, NJOEM works with the Office of Homeland Security and Preparedness to have a plan for long-term planning and recovery prior to a disaster or emergency. One of the areas of planning includes mitigation. This coordination allows for another Statewide plan to incorporate mitigation principles and planning.

Post-Hurricane Sandy Transportation Resilience Study of New York, New Jersey, and Connecticut

This Post-Sandy Study was part of a series of research projects funded by FHWA with a goal of mainstreaming the consideration of climate vulnerability and risk in transportation decision making. The Post-Sandy Study was intended to inform the collective understanding on how to integrate climate resilience at multiple levels: in planning, during the project development process, and as part of operations and maintenance strategies, including asset management and emergency management.

U.S. Army Corps of Engineers

Under Section 404(e) of the Clean Water Act, the U.S. Army Corps of Engineers (USACE) can issue general permits to authorize activities that have only minimal individual and cumulative adverse environmental effects. A nationwide permit (NWP) is a general permit that authorizes activities across the country unless a district or division commander revokes the nationwide permit in a state or other geographic region. There are 54 nationwide permits, and they authorize a wide variety of activities, including linear transportation projects, bank stabilization activities, residential development, commercial and industrial developments, aids to navigation and certain maintenance activities (USACE 2017).

There are three types of USACE permits: standard, nationwide (described above), and regional. Standard permits are individual permits that involve full public interest review of an individual permit application and includes the issuance of a public notice for any project that does not meet the terms and conditions of an NWP or a Letter of Permission (LOP). Regional general permits are for small, specialized projects.

15.2.2 State

Municipal Land Use Law

The State of New Jersey Municipal Land Use Law (MLUL; P.L.1975, c. 291, s. 1, effective August 1, 1976) is the legislative foundation for the land use process in the State of New Jersey, including decisions by Planning Boards and Zoning Boards of Adjustment. It defines the powers and responsibilities of boards and is essential to their functions and decisions. It also provides the required components of a municipal master plan.

Every municipal agency must adopt and can amend reasonable rules and regulations consistent with this act or with any applicable ordinance for the administration of its functions, powers, and duties. These plans help jurisdictions review their land use plans and policies with public participation.





In 2017 the MLUL was amended to add a new subparagraph (f) to New Jersey Statutes Annotated (NJSA) 40-55D-28.b.(2), which requires that any land use plan element adopted after the amendment include a statement of strategy concerning smart growth, storm resiliency, and environmental sustainability. This section of the MLUL was further amended on February 4, 2021, to require that any land use plan element of the master plan adopted or amended after that date must include a climate change-related hazard vulnerability assessment, which shall include an analysis of current and future threats to and vulnerabilities of the municipality associated with climate change-related hazards, including many of those identified in this Hazard Mitigation Plan update. The Municipal Land Use Law requires that each municipality prepare a comprehensive plan and update that plan every 10 years.

New Jersey Soil Erosion and Sediment Control Act

New Jersey has 15 soil conservation districts, following county boundaries that implement the New Jersey Soil Erosion and Sediment Control Act (NJSA 4:24), which governs certain aspects of new development.

Uniform Construction Code

Building codes mandate best practices and technology, much of which is designed to reduce or prevent damage from occurring when structures are under stress.

The Uniform Construction Code (UCC) adopts up-to-date building codes as its Building Subcode and One- and Two-Family Subcode. These Subcodes contain requirements that address construction in both A and V flood zones. Also, all new construction is required to comply with the UCC for flood zone construction.

New Jersey has enacted legislation directing the Department of Community Affairs (NJ DCA) to adopt a radon hazard code or revise the State building code to establish standards to ensure that schools and residential buildings in tier one areas, as defined by the State, are constructed in a manner that minimizes radon gas entry and facilitates any necessary subsequent remediation (see NJSA 52:27D-123).

The Department then adopted a radon hazard sub-code which does not reference existing model standards or guidance, but which sets forth the basic requirements for a passive sub-slab or sub-membrane depressurization system. See New Jersey Administrative Code (NJAC) 5:23-10.4. The radon control standards and procedures apply to new residential construction (and school construction) in "tier one" areas, as defined by the State, and Appendix 10-A of the sub-code lists the specific municipalities that are designated as tier one areas.

All incorporated municipalities in New Jersey have adopted standardized building codes (IBC 2021 NJ edition).

Growth Management Policy

Land preservation and recreation comprise one of the cornerstones of New Jersey's smart growth policy. The New Jersey Statewide Comprehensive Outdoor Recreation Plan provides Statewide policy direction to the State, local governments, and conservation organizations in the preservation of open space and the provision of public recreation opportunities. The State Plan was prepared and adopted by the State Planning Commission according to the requirements of the State Planning Act of 1985 as amended (NJSA 52:18A-196 et seq.) to serve as an instrument of State policy to guide State agencies and local government in the exercise of governmental powers regarding planning, infrastructure investment and other public actions and initiatives that affect and support economic growth and development in the State.





The State Planning Act has enhanced the traditionally limited role of county land-use planning and control. The Act also provides tools for municipalities when preparing their master land use plans and better opportunity for a comprehensive approach to planning so not to harm or be in conflict with neighboring municipalities' plans.

The State of New Jersey's smart growth is growth that serves the environment, the economy, and the community equally. It attempts to concentrate development into already-existing communities when possible, and it addresses the inherent interconnections between environmental protection, social equity, public health, and economic sustainability.

Flood Hazard Area Control Act (NJSA 58:16A-52) Flood Hazard Area Control Regulation (NJAC 7:13)

New Jersey enacted this law to delineate and mark flood hazard areas; authorize NJDEP to adopt land-use regulations for the flood hazard area; control stream encroachments; coordinate effectively the development, dissemination, and use of information on floods and flood damages that may be available; authorize the delegation of certain administrative and enforcement functions to county governing bodies; and integrate the flood control activities of the municipal, county, State, and federal governments. The intent of the regulations is to minimize potential on- and off-site damage to public or private property caused by development that, at times of flood, subject structures to flooding and increase flood heights and/or velocities both upstream and downstream. These rules are also intended to safeguard the public from the dangers and damages caused by materials being swept onto nearby or downstream lands, to protect and enhance the public's health and welfare by minimizing the degradation of water quality from point and non-point pollution sources, and to protect wildlife and fisheries by preserving and enhancing water quality and the environment associated with the floodplain and the watercourses that create them.

Inland Flood Protection Rule

The Inland Flood Protection Rule, effective July 17, 2023, ensures that areas at most significant risk are better defined and that new and reconstructed assets in these areas are designed and constructed using the best available climate-informed precipitation data (NJDEP 2023). The Rule accomplishes the following:

- Establishes the new Design Flood Elevation (DFE), which raises fluvial (non-tidal) flood elevation mapped by NJDEP by 2 feet
- Requires use of future projected precipitation when calculating flood elevations
- Ensures that NJDEP's Flood Hazard Area permits conform to NJ UCC standards and meet or exceed minimum FEMA NFIP requirements
- Requires stormwater Best Management Practices (BMPs) to be designed to manage runoff for both today's storms and future storms
- Removes use of Rational and Modified Rational methods for stormwater calculations (NJDEP 2023)

NJDEP anticipates similar rule changes will be established to address increasing flood risk in coastal areas due to sea-level rise and storm surge threats.

Wetlands Act of 1970 (NJSA 13:9A - 1 to 10)

In 1970, the New Jersey Legislature declared that one of the most vital and productive areas of our natural world is the area between the sea and the land known as the "estuarine zone." This area protects the land from the force of the sea, moderates the weather, provides a home for waterfowl and for fish and shellfish, and assists in absorbing sewage discharge by the rivers of the land. It is necessary to preserve the ecological balance of this





area and prevent its further deterioration and destruction by regulating the dredging, filling, removing, or otherwise altering or polluting.

Coastal Zone Management Rules Program (NJAC 7:7E) Coastal Zone Management Adopted Amendment (NJAC 7:7-16.9)

Coastal Zone Management (CZM) rules mandate the use and development of coastal resources, to be used primarily by the Land Use Regulation Program in the Department in reviewing permit applications under the Coastal Area Facility Review Act (CAFRA), NJSA 13:19-1 et seq. (as amended to July 19, 1993); Wetlands Act of 1970, NJSA 13:9A-1 et seq.; Waterfront Development Law, NJSA 12:5-3; Water Quality Certification (401 of the Federal Clean Water Act); and Federal Consistency Determinations (307 of the Federal Coastal Zone Management Act). The rules also provide a basis for recommendations by the Program to the Tidelands Resource Council on applications for riparian grants, leases, and licenses. The most recent amendment, effective as of September 18, 2017, creates rules that update several provisions in the Department's requirements to provide public access to tidal waterways and their shores.

Freshwater Wetland Protection Act (NJSA 13: B:1) Freshwater Wetland Protection Rules (NJAC 7:7A)

New Jersey enacted this law to support development and enhancement of State and local wetland protection programs. Projects must clearly demonstrate a direct link to increasing the State's ability to protect wetland resources. Grants are federally funded and administered by the NJDEP. The associated implementing regulations support the New Jersey freshwater wetlands program. The Freshwater Wetlands Protection Act was last amended in 2016 and the Freshwater Wetland Protection Rules were last amended April 16, 2018.

Waterfront Development Statute (NJSA 12:5-1) Coastal Permit Program (NJAC 7:7)

This Law sets forth the requirements of filling or dredging of, or placement or construction of structures, pilings, or other obstructions in any tidal waterway or in certain upland areas adjacent to tidal waterways outside the area regulated under Coastal Area Facility Review Act. These requirements are fully explained in NJAC 7:7-2.3. These implementing rules establish the procedures by which the NJDEP will review permit applications and appeals from permit decisions the Waterfront Development Law.

Safe Dam Act of 1981 NJAC 7:24A

No municipality, corporation, or person shall (without the consent of the Commissioner of Environmental Protection) build any reservoir or construct any dam; or repair, alter, or improve existing dams on any river or stream in this State or between this State and any other state that will raise the waters of the river or stream more than five feet above its usual mean low water height.

Tidelands Act (NJSA 12:3)

Tidelands, also known as "riparian lands," are lands now or formerly flowed by the tide of a natural waterway. This includes lands that were previously flowed by the tide but have been filled and are no longer flowed by the tide. These lands are owned by the people of the State of New Jersey. Individuals must first get permission from the State to use these lands, in the form of a tidelands license, lease, or grant, and must pay for this use.

The management of tidelands in New Jersey is overseen by the Tidelands Resource Council, a board of 12 Governor-appointed volunteers, along with DEP staff at the Bureau of Tidelands Management. Grants, licenses,





and leases are issued by the Tidelands Resource Council, which makes all ultimate decisions with regard to tidelands.

State Planning Act (NJSA § 52:18A-196 et seq)

The State Planning Act (1985) created the New Jersey State Planning Commission (SPC) and the Office of State Planning (OSP) as staff to the SPC.

New Jersey Department of State, Office for Planning Advocacy Duties of the SPC are to prepare and adopt a State Plan to provide a coordinated, integrated, and comprehensive plan for the growth, development, renewal, and conservation of the State and its regions; to prepare a long-term Infrastructure Needs Assessment, which shall provide information on present and prospective conditions, needs and costs with regard to State, county and municipal capital facilities, including water, sewerage, transportation, solid waste, drainage, flood protection, shore protection, and related capital facilities; to develop and promote procedures to facilitate cooperation and coordination among State agencies and local governments; to provide technical assistance to local governments; to periodically review State and local government planning procedures and relationships; and to review any bill introduced in either house of the Legislature which appropriates funds for a capital project.

Stormwater Management Rules (NJAC 7:8)

These rules set forth the required components of regional and municipal stormwater management plans and establish the stormwater management design and performance standards for new (proposed) development. The design and performance standards for new development include groundwater recharge, runoff quantity controls, runoff quality controls, and buffers around Category 1 waters.

New Jersey's Stormwater Management rules are implemented by the New Jersey Department of Environmental Protection through the review of permits issued by the Division of Land Use Regulation (Flood Hazard, Freshwater Wetlands, CAFRA, Waterfront Development, and Coastal Wetlands). The Stormwater Management rules (Stormwater rules or rules) are also implemented by local authorities through the Municipal Land Use Law (MLUL) and the Residential Site Improvement Standards (RSIS). Per the New Jersey Department of Community Affairs, the RSIS are applicable to any residential application that goes before a local board. Through the RSIS, the Stormwater rules are activated whenever a municipality requires the control of runoff from a site that is the subject of a site or subdivision application.

New Jersey Pollutant Discharge Elimination System Stormwater Regulation Program Rules (NJAC 7:14A).

The New Jersey Pollutant Discharge Elimination System (NJPDES) Stormwater Rules are intended to address and reduce pollutants associated with existing stormwater runoff. The NJPDES Rules govern the issuance of permits to entities that own or operate small, separate municipal storm sewer systems. The permit program establishes the Statewide Basic Requirements that must be implemented to reduce nonpoint source pollutant loads from these sources. The Statewide Basic Requirements include measures such as the adoption of ordinances (litter control, pet waste, wildlife feeding, proper waste disposal, etc.); the development of a municipal stormwater management plan and implementing ordinance(s); requiring certain maintenance activities (such as street sweeping and catch basin cleaning); implementing solids and floatables control; locating discharge points and stenciling catch basins; and a public education component.

Guidance for the development of Municipal Mitigation Plans was developed and made available in February 2004. This has been effective in guiding the community for stormwater runoff.





The program was developed in response to the EPA Phase II rules published in December 1999. The department issued final stormwater rules on February 2, 2004, and four NJPDES general permits authorizing stormwater discharges from Tier A and Tier B municipalities as well as public complexes and highway agencies that discharge stormwater from municipal separate storm sewers. There are 462 Tier A municipalities and 100 Tier B municipalities. The general permits address stormwater quality issues related to new development, redevelopment, and existing development by requiring municipalities to implement several Statewide Basic Requirements. All municipalities have a local stormwater coordinator, and the department has case managers assigned to each municipality for compliance assistance (see NJAC 7:22 below). Long-term water quality trends in rivers and streams indicate dramatic improvement over the past 30 years, likely the result of elimination or minimization of point sources, upgrades of wastewater treatment plants and natural attenuation of pollutants.

Municipal stormwater management renewal permits have changed for Tier A and Tier B municipalities, effective as of January 1, 2018. The Tier A and Tier B Municipal Stormwater General Permits authorize the discharge of stormwater from small municipal separate storm sewers. The Tier A permit addresses stormwater quality issues related to both new and existing development. The Tier B permit focuses on new development and redevelopment projects and public education.

Construction Permits (NJSA 13: 1D-29 to 34)

The Law mandates that NJDEP make timely decisions on construction permit applications to ensure adequate public notice of procedures and to continue effective administration of the substantive provisions of other laws.

This Law ensures NJDEP issues permits in a timely manner so as not to delay necessary construction projects. Historical records indicate NJDEP's conformance with this law. This does not apply to freshwater wetland rules, only coastal and flood hazard regulations. As part of the effort to recover from the impacts of Superstorm Sandy, this law was amended March 25, 2013, in conjunction with the amendment of R.2013d to the Flood Hazard Area Control Act.

New Jersey Green Acres Land Acquisition Act of 1961

The Legislature enacted the New Jersey Acres Land Acquisition Acts to achieve, in partnership with others, a system of interconnected open spaces, whose protection will preserve and enhance New Jersey's natural environment and its historic, scenic, and recreational resources for public use and enjoyment. On November 3, 1998, New Jersey voters approved a referendum that created a stable source of funding for open space, farmland, and historic preservation and recreation development, and on June 30, 1999, the Garden State Preservation Trust Act was signed into law. The law establishes, for the first time in history, a stable source of funding for preservation efforts. These rules implement the Green Acres laws, governing the award of loans or matching grants, or both, to local government units for the acquisition or development of land, and 50% matching grants to nonprofits for the acquisition or development of land, for outdoor recreation and categories and criteria, matching grant and loan terms, and program administrative requirements. The rules also contain procedures for the disposal, or diversion to a use other than recreation and conservation, of those lands acquired or developed with Green Acres funding or otherwise encumbered with Green Acres restrictions.

Emergency Building Inspection Act (NJSA 52:27D-126.3)

Enacted on January 17, 2007, this Act addresses how building code officials would be compensated if called to support damage assessment outside of their jurisdiction.





The Commissioner of the Department of Community Affairs established a program to deploy State and local construction code officials to assist local construction code officials and inspectors. This program has provided flexibility and redundancy to the State and local governing bodies in the deployment of essential personnel to evaluate buildings and other structures affected by a natural or man-made disaster or emergency.

New Jersey Civilian Defense and Disaster Control Act

The purpose of this act is to provide for the health, safety, and welfare of the people of the State of New Jersey and to aid in the prevention of damage to and the destruction of property during any emergency as herein defined by prescribing a course of conduct for the civilian population of this State during such emergency and by centralizing control of all civilian activities having to do with such emergency under the Governor and for that purpose to give to the Governor control over such resources of the State Government and of each and every political subdivision thereof as may be necessary to cope with any condition that shall arise out of such emergency and to invest the Governor with all other power convenient or necessary to effectuate such purpose.

Implementation is overseen by the State Department of Defense, Office of Civilian defense director. The director is appointed by the Governor. The Act is implemented through coordination and established lines of communication through the State Office of Emergency Management and county emergency management coordinators.

NJSA 38A:17-1

The Governor is authorized to enter into agreements with the governors of any of the states bordering on New Jersey for the protection in the event of emergency of any or all interstate bridges, tunnels, ferries, and other communications facilities.

The State Office of Emergency Management (OEM) is responsible for the implementation of the Governor's directive to assist emergency response counterparts in bordering states. OEM manages inter-state assistance through delineated lines of communication and standard operating procedures.

Forest Fire Prevention and Control Act (NJSA 13:9-44 to 44.10)

The Forest Fire Service is responsible for determining wildfire hazards; removing or overseeing removal of brush, undergrowth, or other material that contributes to wildfire hazards; maintaining or overseeing maintenance of firebreaks; setting backfires; plowing lands; closing roads; and making regulations for burning brush. The Forest Fire Service has the authority to summon any male person between the ages of 18 and 50, who may be within the jurisdiction of the State, to assist in extinguishing fires. The Fire Service can require the use of property needed for extinguishing fires, issue permits, collect extinguishment costs and fines for violations, and direct all persons and apparatus engaged in extinguishing wildfires. The Service has the right of entry to inspect and ascertain compliance and extinguish wildfires, investigate fires to determine cause, close the woods to all unauthorized persons in an emergency, and arrest (without an official warrant) anyone violating the Forest Fire Laws.

The laws that apply are 13:9-2, 9-23, and 9-24. Also, Forest Fire mitigation efforts are not exempted in other environmental regulations. Certain mitigation efforts sometimes occur where there is threatened and endangered habitat, even when that habitat was caused by past prescribed burning operations.





NJSA 52:14E-11 (3-10-2003) The Fire Service Resource Emergency Deployment Act

This Act allows for the Fire Division within the Department of Community Affairs to deploy fire assets to a predesignated location in advance of a disaster or emergency as well as move assets to a pre-designated location to avoid assets being damaged. This has been used successfully in every disaster since the Act was passed.

Best Management Practices for Creating and Maintaining Wildfire Fuel breaks in New Jersey's Wildland Urban Interface, 2011

In New Jersey, residential communities and development continue to spread into new, previously undisturbed natural areas which create a "wildland urban interface" where rural land and developed areas meet. This fragmented rural landscape has greater ignition sources and more frequent fires, which makes it difficult for the Forest Fire Service to manage land for wildfire protection and preparedness. This problem can be seen throughout the country and in New Jersey, especially with the State having such a rapidly growing population. In a study done by the American Planning Association, 46 percent of homes in New Jersey are located in the Wildland Urban Interface, which stresses the importance of the problem in New Jersey.

NJ Statewide Water Supply Plan

The Water Supply Management Act of 1981 requires that the NJ Department of Environmental Protection (NJDEP) develop and periodically update the NJ Statewide Water Supply Plan to guide future water supply management. The NJ Statewide Water Supply Plan addresses the following issues:

- Identify surface and ground water sources, and current demands on those resources
- Make demand projections for duration of the plan
- Identify intended uses of land purchased for water supply facilities but not yet used
- Recommend:
 - Improvements, new construction, and interconnections
 - Diversions for aquaculture
 - Legislative and administrative actions to protect watershed areas
 - · Identification and purchase of land for water supply facilities
 - Administrative actions to protect surface and ground water supplies

The 2023 to 2028 plan addresses the following issues:

- Climate change implications for water availability and water supply demands,
- Extend the planning period from 2040 to 2050,
- Environmental justice and equity issues related to water supply management,
- Potential water supply implications of source water contamination, especially regarding emerging contaminants of concern; and
- More specific water management recommendations for stressed water resources (NJDEP n.d.).

New Jersey's Rising Seas and Changing Coastal Storms: Report of the 2019 Science and Technical Advisory Panel (STAP)

A 2016 New Jersey STAP was convened by Rutgers University, culminating in a report that identified planning options for practitioners to enhance the resilience of New Jersey's people, places, and assets to sea-level rise,





coastal storms, and the resulting flood risk. The same team at Rutgers University was engaged by the NJDEP to update the 2016 report based on the most current scientific information. Similar to the inaugural work, the 2019 STAP was charged with identifying and evaluating the most current science on sea-level rise projections and changing coastal storms, considering the implications for the practices and policies of local and regional stakeholders, and providing practical options for stakeholders to incorporate science into risk-based decision processes. The 2019 STAP is used by multiple State agencies including NJDEP and NJOEM for sea level rise and coastal flooding planning and project design purposes.

2020 New Jersey Scientific Report on Climate Change

NJDEP's first scientific report on climate change summarizes the effects of climate change on New Jersey's environment to inform State and local decision-makers as they seek to understand and respond to the impacts of climate change. This report identifies and presents the best available science and existing data regarding the current and anticipated environmental effects of climate change globally, nationally, and regionally (NJDEP 2023).

2021 New Jersey Climate Change Resilience Strategy

New Jersey's first Statewide Climate Change Resilience Strategy provides a suite of forward-looking policy options to promote the long-term resilience of New Jersey to climate change. As a framework for policy, regulatory, and operational changes, the Resilience Strategy presents actions that New Jersey's Executive Branch can take to support the resilience of the state's communities, economy, and infrastructure. The Resilience Strategy includes 125 recommended actions across six priority areas (NJDEP 2021):

- Build resilient and healthy communities
- Strengthen the resilience of New Jersey's ecosystems
- Promote coordinated governance
- Invest in information and increase public understanding
- Promote climate informed investments and innovative financing
- Coastal resilience plan.

Coordinate Efforts to Protect and Enhance Tidal Marshes

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

15.2.3 County

The following summarizes the planning and regulatory capabilities available to Passaic County at the county and regional levels.

Passaic River Basin Climate Resilience Planning Study

In June 2019, a comprehensive climate resilience planning effort for transportation in the New Jersey portion of the Passaic River Basin was completed. This initiative included parts of Bergen, Essex, Hudson, Morris, Passaic,



TETRA TECH



Somerset, Sussex, and Union counties. The primary objective of the study was to identify adaptation strategies to safeguard transportation corridors and assets from extreme weather events, such as excessive flooding, heat waves, and sea level rise. The study involved several key activities (NJTPA 2019):

- Conducting a vulnerability assessment of the area's transportation system
- Projecting future climate risks for the Passaic River Basin
- Developing adaptation strategies for critical transportation corridors and assets
- Formulating recommended actions and strategies to protect the transportation system from damage and disruption.

Highlands Regional Master Plan

The Highlands Regional Master Plan (RMP) is a comprehensive framework designed to guide the implementation of the Highlands Water Protection and Planning Act of 2004. The plan aims to protect and enhance the significant natural resources of the Highlands Region, which includes parts of Passaic County. It focuses on sustainable land use, water resource management, and environmental preservation. The RMP includes various technical reports and guidelines to ensure that development within the Highlands Region is consistent with the goals of protecting water quality, preserving open space, and maintaining the ecological integrity of the area (NJ Highlands Council 2008).

Passaic County Master Plan

The Passaic County Master Plan is a comprehensive document that guides the County's development and land use planning. It includes key elements, such as the following:

- The Transportation Element focuses on improving transportation infrastructure and connectivity
- The Corridor Enhancement Program is aimed at enhancing specific transportation corridors.
- The Green Stormwater Infrastructure Element promotes sustainable stormwater management practices
- The Highlands Element and Regional Master Plan align with the New Jersey Highlands Regional Master Plan to protect natural resources
- The Parks, Recreation, and Open Space Master Plan guides the development and maintenance of parks and recreational areas.
- The Sustainability Element encourages sustainable development practices.

Additionally, the plan includes technical studies and initiatives, such as the Morris Canal Greenway and the Highlands Rail Trail Facilities Plan (Passaic County 2025).

Passaic County Comprehensive Economic Development Strategy

The Passaic County Comprehensive Economic Development Strategy (CEDS) is a detailed plan designed to promote economic growth and revitalization in the County. Developed in collaboration with public, non-profit, and private sectors, the CEDS aims to create a comprehensive framework for sustainable economic development. Key components of the CEDS include the following:

- Gathering and analyzing data related to historic and current demographic and economic trends to inform strategic planning
- Establishing clear economic goals and objectives to guide development efforts
- Identifying and prioritizing strategic projects and initiatives that will drive economic growth



- Efficiently allocating resources to support economic development activities
- Fostering collaboration among various stakeholders, including government agencies, businesses, and community organizations

The CEDS serves as a roadmap for Passaic County to enhance its economic vitality, attract investment, and improve the quality of life for its residents (Passaic County 2015).

Passaic County Emergency Operations Plan

The County's Emergency Operations Plan (EOP) is a comprehensive framework designed to coordinate responses to emergencies and disasters within the County. It outlines the roles and responsibilities of various agencies and provides guidelines for effective coordination and resource management during emergencies. The plan includes the following key components:

- Mitigation involves activities aimed at reducing or eliminating the impact of disasters through public education, building codes, and floodplain management.
- Preparedness focuses on planning, training, and exercises to ensure readiness for potential emergencies.
- The response component covers immediate actions taken to protect lives and property, including evacuation, emergency medical services, and firefighting.
- Recovery efforts aim to restore the community to normal functioning by providing temporary housing, food, and restoring essential services.

The EOP is maintained by the Passaic County Office of Emergency Management, which collaborates with local, state, and federal agencies to ensure a coordinated response to any emergency.

Strategic Infrastructure Investment Plan

Passaic County's Strategic Infrastructure Investment Plan is a comprehensive countywide effort to identify Priority Investment Areas. This plan, completed in July 2024, aims to stimulate private investment, redevelopment, and new development through targeted public investment in transportation project improvements (Passaic County 2025).

Passaic County Code Blue Alert Plan

The Passaic County Code Blue Alert Plan is activated when temperatures drop below freezing, creating dangerous conditions for vulnerable individuals. During a Code Blue Alert, authorities coordinate efforts to assist unhoused individuals by providing access to local shelters and designated warming centers. These facilities expand their capacity to offer additional beds and space until weather conditions improve, and the alert is lifted (Passaic County 2025).

Site Plan Resolution

The Passaic County Site Plan Resolution outlines the requirements and procedures for site plan approval within the County. It ensures that any proposed land development along county roads or affecting county-maintained drainage systems is reviewed and approved by the Passaic County Planning Board (Passaic County 2014).





Subdivision Resolution

The Passaic County Subdivision Resolution sets forth the procedures and standards for the subdivision of land within the County. This resolution ensures that any proposed subdivision complies with county regulations and is reviewed by the Passaic County Planning Board (Passaic County 2014).

15.2.4 Local

Plans are often developed at the county and regional level in the State of New Jersey, but the majority of regulations are adopted and enforced by local municipalities. New Jersey's municipalities are granted the ability to establish and enforce various ordinances and planning requirements. New Jersey's Home Rule Act (1917) grants municipal governments broad authorities to enact ordinances and regulations providing for public welfare and order and stands as one of the major sources of authorization for local autonomy in the State. Municipalities can leverage these powers to address local conditions that affect their residents. To ensure a minimum set of standards, New Jersey has passed laws and regulations mandating that each municipality adopt local ordinances with the same basic criteria so that jurisdictions may add additional requirements but cannot have fewer requirements than the State.

For more information on the local plans and regulations adopted by each municipality in Passaic County that contribute to risk reduction, refer to Volume II.

Master Plans

The Municipal Land Use Law (MLUL) of 1975 (N.J.S. 40:55D-1 et seq.) grants municipalities the power to enact a master plan which has a land use element. Master plans create the foundation for the local zoning and land ordinances that govern development. These plans help jurisdictions review their land use plans and policies with public participation. The MLUL provides the required components of a municipal master plan and requires all zoning ordinances to be consistent with the master plan. The local zoning administrator as well as the volunteer planning and zoning board members have the responsibility to interpret and enforce the municipality's master plan.

In recognition of the critical need for climate science to inform land use planning, on February 4, 2021, Governor Phil Murphy signed into law Public Law 2021, c6. This law requires municipalities to incorporate a climate change-related hazard vulnerability assessment into any Master Plan Land Use Element adopted after the signing.

According to the amended law, these vulnerability assessments must rely on the most recent natural hazard projections and best available science provided by the NJDEP. They must also consider environmental effects associated with climate change, including but not limited to temperature, drought, and sea-level rise, and contain measures to mitigate reasonably anticipated natural hazards, such as coastal storms, shoreline erosion, flooding, storm surge, and wind.

Zoning Ordinances

The authority to regulate land use is encompassed within the powers granted to the legislative branch of government by Article III of the New Jersey Constitution of 1947. The legislature, however, is authorized by Article IV, Section VI, paragraph 2, to delegate some of its power to municipalities. This has been done by virtue of several land use laws, including the MLUL, which grants municipalities the power to enact a master plan which has a land use element and to adopt a zoning ordinance (N.J.S. 40:55D-28 and 40:55D-62). Under the MLUL, each municipality must adopt a zoning ordinance. A property owner can request a variance from the municipality,





and if granted, the owner can use the land in a way that is ordinarily not permitted by the local zoning ordinance. Zoning ordinances have three major constraints:

- Municipalities may not exercise authority in ways that conflict with provisions of the federal or state constitutions.
- Municipal authority may not be exercised in conflict with authority exercised by the county, state, or federal governments.
- Municipal authority must be exercised in strict conformity with the provisions of the MLUL.

Each municipal clerk is required to file a copy of the planning and zoning ordinances of the municipality with the county planning board (NJ Statute 40:27-6.10). The local zoning administrator, as well as the volunteer planning and zoning board members, have the responsibility to interpret and enforce the municipality's zoning and other land development ordinances.

Subdivisions

The MLUL also dictates subdivisions in New Jersey. The MLUL allows every municipality in the State to adopt its own building and land use laws within a municipal boundary, and all property owners must abide by these laws.

The board of commissioners provides for the review of all subdivisions of land within the county by the county planning board and for the approval of those subdivisions affecting county road or drainage facilities (NJ Statute 40:27-6.2).

Building Codes

Building codes mandate best practices and technology, much of which is designed to reduce or prevent damage from occurring when structures are under stress. As evidenced during recent storm events (e.g., Hurricane Irene and Superstorm Sandy), structures built to code and sufficiently elevated suffer far less damage during hazard events. In New Jersey, municipalities are required to adopt the New Jersey State Uniform Construction Code (UCC). The MLUL (NJSA 40:55D-1) permits every municipality in the State to adopt its own building regulations, in which all property owners must abide by these regulations at a local level. Building regulations can be amended to be more stringent than the requirements of the UCC but not to be more lax.

The UCC Act authorizes the Commissioner of the Department of Community Affairs to adopt and enforce rules pertaining to construction codes and provides for the administration and enforcement of those rules throughout the State. The UCC (NJAC 5:23) contains the UCC Act and all rules issued under the Act relating to the administration and enforcement of construction regulations. The UCC is composed of four basic technical subcodes for construction: building, electrical, fire protection, and plumbing. In addition, the UCC contains technical subcodes for fuel gas installations; mechanical installations; one- and two-family dwellings; accessible (barrier free) construction; the rehabilitation of existing buildings; the construction of manufactured homes; asbestos hazard abatement; radon hazard abatement; and playground safety. In New Jersey, State-licensed, municipally employed code enforcement professionals (construction officials, subcode officials, and inspectors) are responsible for the enforcement of the UCC (NJDCA n.d.).

Stormwater Management Ordinances

Title 7 of the NJ Administrative Code (NJAC 7:8) establishes design and performance standards for management of stormwater that address water quality, water quantity, and recharge. All municipal stormwater control ordinances must be designed to:





- Reduce flood damage, including damage to life and property.
- Minimize, to the extent practical, any increase in stormwater runoff from any new development.
- Reduce soil erosion from any development or construction project.
- Ensure the adequacy of existing and proposed culverts and bridges, and other instream structures.
- Maintain ground water recharge.
- Prevent, to the greatest extent feasible, an increase in nonpoint pollution.
- Maintain the integrity of stream channels for their biological functions, as well as for drainage.
- Minimize pollutants in stormwater runoff from new and existing development in order to restore, enhance and maintain the chemical, physical, and biological integrity of the waters of the State, to protect public health, to safeguard fish and aquatic life and scenic and ecological values, and to enhance the domestic, municipal, recreational, industrial and other uses of water.
- Protect public safety through the proper design and operation of stormwater management basins.

Municipal ordinances can be amended to be more stringent than the requirements of the Stormwater Management rules but not to be more lax. The Residential Site Improvement Standards (RSIS) allow municipalities to require stormwater runoff controls for development falling below major development to address groundwater recharge and stormwater runoff quantity, but not for water quality as provided in the RSIS at NJAC 5:21-7.1 (NJDEP 2023).

Amendments to New Jersey's stormwater management rules in 2021 include the required use of green infrastructure practices that use or mimic the natural water cycle to capture, filter, absorb, and/or re-use stormwater.

Shoreline Management

The Coastal Area Facility Review Act (CAFRA) (NJSA 13:19) regulates almost all development along the coast involved in residential, commercial, or industrial sectors for activities including construction, relocation, and enlargement of buildings or structures; and all related work, such as excavation, grading, shore protection structures, and site preparation. This law is implemented through New Jersey's Coastal Zone Management Rules (NJAC 7:7E-1.1 et seq). The law divides the CAFRA area into pieces or zones and regulates different types of development in each zone. Generally, the closer a structure is to the water, the more rigorous the development regulations.

Stormwater Management Plan and Ordinances

In response to the U. S. Environmental Protection Agency's (USEPA) Phase II rules published in December 1999, the NJDEP Storm Water Management Rule (NJAC 7:8, et seq.) was developed. This rule includes establishment of the Municipal Stormwater Regulation Program and four NJPDES general permits authorizing stormwater discharges from Tier A and Tier B municipalities as well as public complexes and highway agencies that discharge stormwater from municipal separate storm sewers (MS4s). These rules set forth the required components of regional and municipal stormwater management plans.

A municipal stormwater management plan (MSWMP) documents the strategy of a specific municipality to address stormwater-related impacts. A plan may address an existing water quantity issue, such as localized flooding; an existing water quality issue, such as excess pollutant loading; or issues of water quantity and quality that may be generated by future development. MSWMPs provide the structure and process for addressing stormwater management in the municipality. They are required by the Environmental Protection Agency's Phase II





Stormwater Permitting Rules; the mandatory elements of the plan are described in the Stormwater Management Rule (NJDEP 2004).

Emergency Operations Plans

Local municipalities in the State of New Jersey are required to have an approved emergency operations plan. The plan specifies the vulnerabilities for major emergencies the municipality may have and outlines the resources the municipality has or can access to meet the emergency. The plan is reviewed at the County and State Offices of Emergency Management.

15.3 ADMINISTRATIVE AND TECHNICAL CAPABILITIES

This section summarizes administrative and technical capabilities in Passaic County. Further information is provided in the jurisdictional annexes in Volume II.

15.3.1 Federal

FEMA

FEMA is responsible for providing assistance before, during, and after disasters. FEMA is the federal reviewer of hazard mitigation plans and sets federal standards for local and state hazard mitigation plans.

Community Assistance Visits and Community Assistance Contacts

FEMA evaluates NFIP minimum compliance through compliance audits known as Community Assistance Visits (CAV) or Community Assistance Contacts (CAC). CAVs and CACs are performed to ascertain community compliance with the NFIP, at entry into the CRS, and to maintain participation in the CRS. FEMA may conduct these with Region 2 staff, with NJDEP staff under the Compliance Assistance Program – State Support Services Element grant, or with private contractors. While there is some flexibility in how a CAV or a CAC is conducted, CAVs are generally more rigorous than CACs (NJDEP 2023).

(NJDEP 2023).

FEMA evaluates the following key areas in a compliance audit:

- The Community's Flood Damage Prevention Ordinance
- Mapping Products and other Ordinances used to regulate floodplain development
- Floodplain Development Permitting Procedures
- Floodplain Permit Applications and other Forms/Records, including Substantial Damage and Improvement Determinations
- Floodplain Development Review and Performance Standards
- Floodplain Development Permits Issued to Applicants (NJDEP 2023)

National Dam Safety Program

The National Dam Safety Program (NDSP) is a partnership of state and federal agencies, and other stakeholders that encourages individual and community responsibility for dam safety to protect people from dam failures. It is





administered through the Department of Homeland Security and FEMA. The program improves safety and security around dams by providing assistance grants to state dam safety agencies to assist them in improving their regulatory programs; producing educational materials for dam owners; funding research to enhance technical expertise as dams are built and rehabilitated; establishing training programs for dam safety inspectors; and creating a National Inventory of Dams (NID) (FEMA 2023).

HURREVAC

HURREVAC is the decision support tool of the National Hurricane Program, administered by FEMA, the U.S. Army Corps of Engineers (USACE), and the National Atmospheric and Oceanic Administration (NOAA) National Hurricane Center (HURREVAC n.d.). The NJOEM has established a strong working group with all 21 county Offices of Emergency Management (OEMs) to use HURREVAC software for tracking hurricanes. HURREVAC allows NJOEM and counties to work as a unified team, coordinating notification, communication, activations, public warning, and evacuation and sheltering efforts. By operating together, the State and the counties serve the public better by providing the same advisories and actions.

National Weather Service (NWS)

The NWS monitors weather and delivers weather forecasting for New Jersey. Most of the State is serviced by the Mount Holly weather forecast office (WFO). Passaic, Bergen, Essex, Hudson, and Union County are covered by the New York WFO. NJOEM uses conference calling with the NWS and county OEMs to share specific information and needs when severe weather is forecast. When an approaching storm warrants monitoring, NJOEM sends out e-mails with State Emergency Operations Center (EOC) status information and advice embedded in jpeg files to keep all emergency managers statewide up to date with NJOEM's direction. Resources are deployed as early as possible to prepare for storm impacts. The NWS also offers various education and training programs on weather-related hazards (NWS 2023).

StormReady Program

The NWS operates the StormReady program, which encourages communities to take a new, proactive approach to improving local hazardous weather operations by providing emergency managers with clear-cut guidelines on how to improve their hazardous weather operations. To be recognized by the program, a community must establish a 24-hour warning point and emergency operations center; have more than one way to receive severe weather warnings and forecasts and to alert the public; create a system that monitors weather conditions locally; promote the importance of public readiness through community seminars; and develop a formal hazardous weather plan, which includes training severe weather spotters and holding emergency exercises (NWS n.d.). In Burlington County, the Borough of Palmyra and the City of Burlington are StormReady communities. Joint Base McGuire-Dix-Lakehurst is a government/military participant in the program.

U.S. Army Corps of Engineers (USACE)

The USACE works to strengthen the nation's security by building and maintaining America's infrastructure and providing military facilities where servicemembers train, work, and live. Projects include dredging, storm damage reduction, and ecosystem restoration in and near waterways (USACE n.d.). New Jersey is serviced by the Philadelphia and New York districts. USACE has numerous initiatives to support hazard mitigation measures, including the Silver Jackets, planning assistance, and inspections and repair of flood control structures. USACE also maintains the National Inventory of Dams and the National Levee Database.





U.S. Geological Survey (USGS)

USGS maintains a network of gauges across New Jersey that continuously measure lake, reservoir table, stream, and tidal levels. These data sets are transmitted to the USGS and made available over the Internet. As project needs and funding levels change, gauges may be added or deactivated, and deactivated gauges may be reactivated (USGS 2023). USGS provides data to the Department of Environmental Protection for drought determinations. USGS also recovers high water marks post-coastal flooding (USGS 2018). In the back bays and along tidal waters, the U.S. Geological Survey (USGS) manages the New Jersey Tide Telemetry System. All systems transmit telemetry continuously to the NWS, USGS, State Climatologist, NJDEP, NJOEM, and all affected counties and many municipalities. These systems were created and installed with federal assistance through NOAA and USACE.

15.3.2 State

New Jersey Department of Environmental Protection (NJDEP)

Bureau of Dam Safety & Flood Control

The Bureau of Dam Safety & Flood Control leads the state's efforts filling the State NFIP Coordinator position and providing Community Rating System (CRS) support. In addition, the section's responsibilities include the funding of construction and operation of federal, state, and local flood control mitigation projects throughout the state. The section has also taken a lead role on the development and adoption of NJ Flood Hazard Area mapping, as well as an active partnership with FEMA on their Map Modernization Program efforts. The bureau assists communities participating in the NFIP and interested in joining CRS through the NJDEP Community Assistance Program Unit.

Dam Safety Section

The NJDEP Dam Safety Section under the Bureau of Dam Safety & Flood Control has responsibility for overseeing dam safety in the state. The primary goal of the program is to ensure the safety and integrity of dams in New Jersey and thereby protect people and property from the consequences of dam failures. The section also coordinates with the Division of State Police, local and county emergency management officials in the preparations and approval of emergency action plans.

The Dam Safety Section reviews plans and specifications for the construction of new dams or for the alteration, repair, or removal of existing dams. The section must grant approval before the owner can proceed with construction. Engineers from the Dam Safety Section evaluate each project, investigate site conditions, and check recommended construction materials. During construction, engineers identify conditions that may require design changes, check for compliance with approved plans and specifications, and approve foundations before material is placed.

Existing dams are periodically inspected to assure that they are adequately maintained, and owners are directed to correct any deficiencies found. The regulations require the owner to obtain a professional engineer to inspect their dams on a regular basis. These investigations include a comprehensive review of all pertinent material contained in the Section's files, a visual inspection, technical studies when necessary, and preparation of a comprehensive report.





Division of Water Supply and Geoscience

This Division works to ensure adequate, reliable, and safe water supply is available for the future. This goal is accomplished through the regulation of ground and surface water diversions, permitting of wells, permitting of drinking water infrastructure, monitoring of drinking water quality, and technical support for water systems to achieve compliance with all federal and state standards.

Water Supply staff provides technical assistance to assist water systems during water supply emergencies, as needed to re-establish safe and adequate public water supplies, and to address routine non-compliance from significant deficiencies or poor water quality test results. The Drinking Water State Revolving Fund (DWSRF) program assists water systems in financing the cost of infrastructure through the use of federal and New Jersey Environmental Infrastructure Trust (NJEIT) funds. Additionally, Water Supply provides operator licensing and training support as well as financial assistance through the DWSRF program.

New Jersey Geological and Water Survey

The New Jersey Geological and Water Survey evaluates geologic, hydrogeologic and water quality data to manage and protect water resources, to identify natural hazards and contaminants, and to provide mineral resources including offshore sands for beach nourishment. Information provided by the survey includes GIS data and maps of geology, topography, groundwater, and aquifer recharge. In addition, the data tracks wellhead protection areas, aquifer thicknesses, properties and depths, groundwater quality, drought, geologic resources, and hazards such as earthquakes, abandoned mines, karst-influenced sinkholes, and landslides.

New Jersey Department of the State

Office of Planning Advocacy

The New Jersey Office of Planning Advocacy (OPA) supports and coordinates planning throughout the state to protect the environment, mitigate development hazards and guide future growth into compact, mixed-use development and redevelopment while fostering a robust long-term economy. The OPA implements the goals of the State Development and Redevelopment Plan to achieve comprehensive, long-term planning; and integrates that planning with programmatic and regulatory land use decisions at all levels of government and the private sector.

Rutgers University

Office of the State Climatologist

The Office of the New Jersey's State Climatologist (ONJSC) generates and archives climate data. Generated data are from the New Jersey Weather and Climate Network (NJWxNet), which is an assemblage of 55 automated weather stations situated throughout the state. A decade or more of hourly observations are available from some of the stations, while others have shorter records. Since fall 2012 observations are available on a five-minute basis.

Along with these records, ONJSC archives or has ready access to National Weather Service Cooperative Weather Station data. These are daily observations from several dozen stations at any given time over the past century. Individual stations have as many as 120 years of data while other stations have started or ceased operating since the late 1800s. Another source of generated data is the Community Collaborative Rain, Hail and Snow Network (CoCoRaHS), which includes daily observations of rain and snow from as many as several hundred volunteers throughout the state.





New Jersey Climate Adaptation Alliance

The New Jersey Climate Adaptation Alliance (NJADAPT) focuses on climate change preparedness for New Jersey in key impact sectors (public health; watersheds, rivers, and coastal communities; built infrastructure; agriculture; and natural resources).

NJADAPT is a collaborative effort of scientists and data managers in academia, government, the private sector and non-governmental organization community who have developed a strategic plan for a New Jersey platform to host and apply climate science impacts and data. The NJADAPT website (http://www.njadapt.org/) includes a flood exposure profile for community discussions about hazard impacts; NJ Flood Mapper (which is a tool for flooding hazards and sea level rise); and Getting to Resilience (a tool used to help communities reduce vulnerability and increase preparedness).

New Jersey Highlands Council

The Highlands Water Protection and Planning Council (Highlands Council) is a regional planning agency that works in partnership with municipalities and counties in the Highlands Region to encourage a comprehensive regional approach to implementing the 2004 Highlands Water Protection and Planning Act (the Highlands Act).

The Highlands Act established the Highlands Council and charged it with the creation and adoption of a regional master plan to protect and enhance the natural resources within the New Jersey Highlands. The Highlands Regional Master Plan (RMP) was adopted by the Highlands Council on July 17, 2008 and became effective on September 8, 2008. Conformance with the Highlands RMP is a two-phase process: petition and implementation. During the petition process, municipalities and counties work in collaboration with Highlands Council staff to prepare draft documents that will integrate the land use and resource management requirements of the Highlands Act into local regulatory and planning documents. Once a petition is approved by the Highlands Council, work begins on implementation, which involves finalizing those documents for local adoption and ongoing management of resources.

Southeastern areas of Passaic County are located in the Highlands Region. The Highlands Council may provide grant funding to municipalities and counties to support local hazard mitigation planning. Such plans would identify local level risks associated with extreme storm events and develop local actions that would potentially prevent or mitigate hazardous situations. For example, grants fund stormwater management plans which support green infrastructure for stormwater management, as well as stormwater mitigation plans. These plans should be in place prior to disaster events.

Highlands Council grants may be used for planning, design, and/or engineering activities, but do not fund capital expenses.

The Highlands Council is participating in the Governor's Climate Resiliency initiative and is preparing to develop a Highlands Climate Change chapter of the Regional Master Plan.

The Highlands Council has initiated a stormwater management program for counties and municipalities to assist in advance planning. The Council also requires extensive green stormwater infrastructure for all projects reviewed.





New Jersey Office of Emergency Management

Emergency management functions at the State-level are coordinated by NJOEM of the New Jersey State Police. The Emergency Management Section Supervisor holds the rank of Major and serves as Assistant Deputy State Director, Office of Emergency Management (New Jersey State Police 2023).

The Emergency Management Section is under the command of the Deputy Superintendent of Homeland Security, who is the Deputy State Director, Office of Emergency Management. The section organizes, directs, staffs, coordinates, and reports the activities of the Incident Support Bureau and Communications Bureau. The section is also responsible for planning, directing, and coordinating emergency operations within the State, which are beyond local control (New Jersey State Police 2023).

The following bureaus make up Emergency Management Section:

- Communications Bureau
- Emergency Response Bureau
- Incident Support Bureau
- Recovery Bureau
- Preparedness Bureau (New Jersey State Police 2023).

Hazard mitigation efforts in the State are largely coordinated through the Recovery Bureau and Preparedness Bureau.

North Jersey Transportation Planning Authority

The North Jersey Transportation Planning Authority (NJTPA) is the federally authorized Metropolitan Planning Organization for the 13-county northern New Jersey region. Each year, they oversee over \$2 billion in transportation improvement projects and provide a forum for interagency cooperation and public input.

New Jersey Governor's Disaster Recovery Office

The New Jersey Governor's Disaster Recovery Office (GDRO) mission is to coordinate the multi-agency response to large-scale disaster events, such as COVID-19, Tropical Storm Ida, Superstorm Sandy, and other disasters, to ensure that every possible avenue of relief is pursued to assist in the recovery and rebuilding of the State. The GDRO also focuses on disaster resilience activities and sources of funding to mitigate damages from future events. The GDRO serves in a vital compliance role to ensure that federal disaster funds are expended in accordance with federal rules and are reported to the public in a transparent manner.

The GDRO officially assumed the role of the Governor's Office of Recovery and Rebuilding (GORR) in 2020 through the issuance of Governor Murphy's Executive Order (EO) No. 166. EO 166 formalized the GDRO's role for the Superstorm Sandy response and recovery, along with appointing the GDRO as the central point for oversight and coordination of COVID-19 federal funds and funding for all future disaster events. The GDRO works with other State agencies, including NJOEM (Federal Emergency Management Agency [FEMA] funding), New Jersey Department of Community Affair's (NJDCA) Disaster Recovery and Mitigation Division (HUD funding), and NJDEP (USACE and FEMA/HUD funding) to ensure that the funding received from Congress is put toward the most effective uses, including those related to hazard mitigation.

The GDRO works closely with NJOEM, NJDEP, NJDCA, and other areas of the Governor's Office in developing long-term hazard mitigation strategies. Important focus areas include updating the Flood Hazard Area Control Act,





deploying pre-disaster programs, and weighing in on State legislation that might fund hazard mitigation activities or change flood hazard understanding.

New Jersey State Hazard Mitigation Team

The State Hazard Mitigation Team (SHMT) is an advisory committee that serves as a coordination point for all FEMA-funded natural hazard risk reduction and mitigation activities and projects that will be evaluated in conjunction with other federal- and State-funded recovery and resilience activities. The SHMT is responsible for periodically updating the State Hazard Mitigation Plan and has the authority to call upon any other state, county, or local government agency, academic institutions, and nongovernmental entities to provide input to the State Hazard Mitigation Plan. The SHMT meets following a Presidentially declared disaster event that results in FEMA funding for hazard mitigation or resilience being made available to the State of New Jersey to coordinate recovery activities. In lieu of a presidentially declared disaster, the SHMT meets annually.

Executive Order No. 344 was signed by Governor Murphy on October 6, 2023 to replace Executive Order No. 115 (1994). The updated Executive Order reorganized the SHMT and outlines the membership, roles, and responsibilities of the SHMT members.

The updated SHMT is comprised of seven members, which includes:

- The Executive Director of the GDRO
- The SHMO
- The Chief Resilience Officer, or designee
- The State Director of Emergency Management, who is the Superintendent of State Police, or designee
- The Commissioner of Community Affairs, or designee
- The Commissioner of Transportation, or designee
- The Attorney General, or designee

The Governor also can appoint additional members to the SHMT. The SHMT is co-chaired by the Executive Director of the GDRO and the SHMO.

Sustainable Jersey

Sustainable Jersey is a nonprofit organization that provides tools, training and financial incentives to support communities as they pursue sustainability programs. By supporting community efforts to reduce waste, cut greenhouse gas emissions, and improve environmental equity, Sustainable Jersey aims to empower communities to build a better world for future generations. The organization also offers a certification program. Sustainable Jersey certification is a designation for municipal governments in New Jersey. All actions taken by municipalities to score points toward certification must be accompanied by documentary evidence and is reviewed. The certification is free and completely voluntary (Sustainable Jersey 2023). Many municipalities in Passaic County participate in Sustainable Jersey but only the following municipalities are certified: Sparta Township (bronze) and Hopatcong Borough (bronze) (Sustainable Jersey 2024).





15.3.3 County

Passaic County Office of Emergency Management

The Office of Emergency Management (OEM) serves as a coordinating entity among local, state, and federal agencies. It collaborates with County and municipal health agencies, health care providers, and emergency service personnel, including police, fire, EMS, and the Sheriff's Office, to manage responses during emergencies. The mission of the OEM is to deliver expertise and leadership through the integration of emergency management programs, functions, and supporting activities aimed at preventing, protecting against, mitigating the effects of, responding to, and recovering from all hazards (Passaic County 2025).

Passaic County Department of Planning and Economic Development

The Passaic County Department of Planning and Economic Development addresses key needs such as employment, affordable housing, efficient transportation, and access to leisure, recreational, and cultural opportunities. The department provides staff support for the Board of County Commissioners, the Passaic County Planning Board, and other advisory committees. It administers programs like the Community Development Block Grant (CDBG) to support local development projects and oversees public housing initiatives to ensure affordable housing options. Working closely with local municipalities and other stakeholders, the department guides future changes and improvements within the County (Passaic County 2025).

Passaic County Planning Board

The Passaic County Planning Board oversees land use and development within the County, ensuring that proposed developments comply with County regulations and align with overall planning goals. The board reviews and approves site plans, subdivisions, and other land development proposals, particularly those affecting County roads or drainage systems. It works in coordination with local municipalities to align development projects with county-wide planning objectives. The board also holds regular public meetings at the Passaic County Administration Building to discuss and approve development projects.

Passaic County Department of Engineering

The Engineering Department is responsible for infrastructure projects such as bridges, culverts, drainage systems, and road/traffic operations. This department prepares plans and specifications, manages projects, and inspects the construction of the County's capital improvement projects, which encompass buildings, parks, 122 bridges, 292 culverts, 246 miles of roadway and associated drainage systems, and five dams. Additionally, it maintains records of County facilities and recommends traffic rules and regulations (Passaic County 2025).

Passaic County Department of Culture and Historic Affairs

The Passaic County Department of Cultural & Historic Affairs (DCHA) operates and maintains historic sites, parks, and facilities throughout the County. It develops and implements cultural programs, exhibitions, grant programs, historic research, and heritage tourism campaigns to promote public awareness and visitation of the County's historic and cultural assets. Key functions include managing historic sites like the Dey Mansion Washington's Headquarters, Passaic County Arts Center, and Lambert Castle; organizing public programs and exhibitions; administering arts and historic preservation regrant programs; and assisting other county departments and municipalities with preservation matters and public art installations (Passaic County 2025).





Passaic County Roads Division

The Passaic County Roads Division maintains and repairs all county roadways, culverts, catch basins, and guide rails. This division oversees 246 miles of roadway across 16 municipalities within the County. Its duties include pavement maintenance, drainage system upkeep, street cleaning, and snow and ice control. Additionally, the Roads Division maintains warning and guide signs, as well as trees within County rights-of-way.

The division also handles the repair and maintenance of all County vehicles, except those belonging to the Sheriff's Office, and conducts State Motor Vehicle Inspections. Its sign shop creates custom signs for County events and provides lettering for offices and vehicles. The Roads Division lends equipment and labor to municipalities when needed and assists the Passaic County Sheriff's Office with the Sheriff's Labor Assistance Program. It is also part of the Emergency First Responder Program for the County (Passaic County 2025).

Passaic County Department of Health Services

The Passaic County Department of Health Services (PCDHS) is dedicated to protecting and promoting the health of the County's population across 16 municipalities. While not a traditional public health service provider, the department has a well-organized infrastructure and is a state-certified County Environmental Health Act (CEHA) agency. Key functions include organizing public health outreach events, providing health resources on topics such as diabetes and heart health, and managing environmental health concerns to ensure compliance with health regulations. The PCDHS collaborates with local health agencies, healthcare providers, and community organizations to ensure the well-being of Passaic County residents (Passaic County 2025).

Passaic County Parks and Recreation

The Passaic County Parks and Recreation Department provides recreational opportunities and maintains the County's parks and facilities. The department offers activities including arts and culture workshops, outdoor adventures, family fun events, senior programs, and sports classes. It manages several parks and recreational areas, ensuring they are well-maintained and accessible for public use (Passaic County 2025).

15.4 FISCAL CAPABILITIES

This section summarizes fiscal capabilities in Passaic County. Further information is provided in the jurisdictional annexes in Volume II. The *State Capabilities* section of the 2019 New Jersey State Hazard Mitigation Plan features a section on mitigation-related funding administered by state agencies that eligible jurisdictions can use to fund mitigation actions.

15.4.1 Federal

As noted on the FEMA Hazard Mitigation Assistance website (FEMA n.d.), FEMA administers five programs that provide funding for eligible mitigation planning and projects that reduces disaster losses and protect life and property from future disaster damages. The programs are the Hazard Mitigation Grant Program (HMGP), and the HMGP Post Fire Grant, the Flood Mitigation Assistance (FMA) Program, the Pre-Disaster Mitigation (PDM) Program, and the new Building Resilient Infrastructure & Communities (BRIC) Program. Table 15-1 provides an overview of program funding eligibility and cost share.



Programs	Cost Share (Percent of Federal / Non-Federal Share)
HMGP ^a	75 / 25
HMGP Post Fire	75 / 25
FMA (community flood mitigation, project scoping, individual mitigation of insured properties, and planning grants)	75 / 25
FMA—repetitive loss property ^b	90 / 10
FMA—severe repetitive loss property ^b	100 / 0
PDM	75 / 25
PDM—small and impoverished community	Up to 90 / 10
BRIC	75 / 25
BRIC—small and impoverished community	Up to 90 / 10

Table 15-2. FEMA Hazard Mitigation Assistance Grant Cost Share Requirements

Source: FEMA 2023; FEMA 2023

a. Subapplicants should consult their State Hazard Mitigation Officer (SHMO) for the amount of percentage of HMGP subrecipient management cost funding their State has determined to be passed through subrecipients.

b. To be eligible for an increased federal cost share, a FEMA-approved state or tribal (standard or enhanced) mitigation plan that addressed repetitive loss properties must be in effect at the time of award, and the property is being submitted for consideration must be a repetitive loss property.

HMGP assists in implementing long-term hazard mitigation planning and projects following a Presidential major disaster declaration. PDM provides funds for hazard mitigation planning and projects on an annual basis. FMA provides funds for planning and projects to reduce or eliminate risk of flood damage to buildings that are insured under the National Flood Insurance Program (NFIP) on an annual basis. BRIC supports jurisdictions in hazard mitigation projects, reducing the risks they face from disasters and natural hazards. The BRIC program will replace the existing Pre-Disaster Mitigation (PDM) program. The BRIC program guiding principles are supporting communities through capability- and capacity-building; encouraging and enabling innovation; promoting partnerships; enabling large projects; maintaining flexibility; and providing consistency (FEMA 2023).

HMGP funding is generally 15 percent of the total amount of Federal assistance provided to a State, Territory, or federally recognized tribe following a major disaster declaration. PDM and FMA funding depends on the amount congress appropriates each year for those programs. BRIC is funded by a 6 percent (\$500 million) set-aside from federal post-disaster grant funding.

Individual homeowners and business owners may not apply directly to FEMA. Eligible local governments may apply on their behalf (FEMA 2023).

Federal mitigation grant funding is available to all communities with a current hazard mitigation plan (this plan); however, most of these grants require a "local share" in the range of 10-25 percent of the total grant amount. The FEMA mitigation grant programs are described below.





FEMA

Hazard Mitigation Grant Program

The Hazard Mitigation Grant Program (HMGP) is a post-disaster mitigation program. It is made available to states by FEMA after each Federal disaster declaration. The HMGP can provide up to 75 percent funding for hazard mitigation measures. The HMGP can be used to fund cost-effective projects that will protect public or private property in an area covered by a federal disaster declaration or that will reduce the likely damage from future disasters. Examples of projects include acquisition and demolition of structures in hazard-prone areas, floodproofing or elevation to reduce future damage, minor structural improvements, and development of state or local standards. Projects must fit into an overall mitigation strategy for the area identified as part of a local planning effort. All applicants must have a FEMA-approved hazard mitigation plan (this plan).

Applicants who are eligible for the HMGP are state and local governments, certain nonprofit organizations or institutions that perform essential government services, and Indian tribes and authorized tribal organizations. Individuals or homeowners cannot apply directly for the HMGP; a local government must apply on their behalf.

Flood Mitigation Assistance Program

The Flood Mitigation Assistance (FMA) program combines the previous Repetitive Flood Claims and Severe Repetitive Loss Grants into one grant program. The FMA provides funding to assist states and communities in implementing measures to reduce or eliminate the long-term risk of flood damage to buildings, manufactured homes, and other structures insurable under the NFIP. The FMA is funded annually; no federal disaster declaration is required. Only NFIP insured homes and businesses are eligible for mitigation in this program. Funding for FMA is very limited and, as with the HMGP, individuals cannot apply directly for the program. Applications must come from local governments or other eligible organizations. The federal cost share for an FMA project is at least 75 percent. At most, 25 percent of the total eligible costs must be provided by a non-federal source. Of this 25 percent, no more than half can be provided as in-kind contributions from third parties. At minimum, a FEMA-approved local flood mitigation plan is required before a project can be approved. The FMA funds are distributed from FEMA to the state.

Building Resilient Infrastructure and Communities Program

Building Resilient Infrastructure and Communities (BRIC) will support states, local communities, tribes, and territories as they undertake hazard mitigation projects, reducing the risks they face from disasters and natural hazards. BRIC is a new FEMA pre-disaster hazard mitigation program that replaces the existing Pre-Disaster Mitigation (PDM) program.

The BRIC program guiding principles are supporting communities through capability- and capacity-building; encouraging and enabling innovation; promoting partnerships; enabling large projects; maintaining flexibility; and providing consistency.

Rehabilitation of High Hazard Potential Dams Program

The Rehabilitation of High Hazard Potential Dams (HHPD) grant program provides technical, planning, design, and construction assistance for eligible rehabilitation activities that reduce dam risk and increase community preparedness.





The HHPD Grant Program will provide assistance for technical, planning, design, and construction activities toward:

- Repair
- Removal
- Structural/nonstructural rehabilitation of eligible high hazard potential dams

Extraordinary Circumstances

For BRIC and FMA project subawards, the FEMA Region may apply extraordinary circumstances when justification is provided and with concurrence from FEMA Headquarters (Risk Reduction and Risk Analysis Divisions) prior to granting an exception. If this exception is granted, a local mitigation plan must be approved by FEMA within 12 months of the award of the project subaward to that community.

For HMGP, BRIC, and FMA, extraordinary circumstances exist when a determination is made by the Applicant and FEMA that the proposed project is consistent with the priorities and strategies identified in the State (Standard or Enhanced) Mitigation Plan and that the jurisdiction meets at least one of the criteria below. If the jurisdiction does not meet at least one of these criteria, the Region must coordinate with FEMA Headquarters (Risk Reduction and Risk Analysis Divisions) for HMGP; however, for BRIC and FMA the Region must coordinate and seek concurrence prior to granting an exception:

- The jurisdiction meets the small, impoverished community criteria (see Part VIII, B.2).
- The jurisdiction has been determined to have had insufficient capacity due to lack of available funding, staffing, or other necessary expertise to satisfy the mitigation planning requirement prior to the current disaster or application deadline.
- The jurisdiction has been determined to have been at low risk from hazards because of low frequency of occurrence or minimal damage from previous occurrences as a result of sparse development.
- The jurisdiction experienced significant disruption from a declared disaster or another event that impacts its ability to complete the mitigation planning process prior to award or final approval of a project award.
- The jurisdiction does not have a mitigation plan for reasons beyond the control of the State, federally recognized tribe, or local community, such as Disaster Relief Fund restrictions that delay FEMA from granting a subaward prior to the expiration of the local or Tribal Mitigation Plan.

For HMGP, BRIC, and FMA, the Applicant must provide written justification that identifies the specific criteria or circumstance listed above, explains why there is no longer an impediment to satisfying the mitigation planning requirement and identifies the specific actions or circumstances that eliminated the deficiency.

When an HMGP project funding is awarded under extraordinary circumstances, the Recipient shall acknowledge in writing to the Regional Administrator that a plan will be completed within 12 months of the subaward. The Recipient must provide a work plan for completing the local or Tribal Mitigation Plan, including milestones and a timetable, to ensure that the jurisdiction will complete the plan in the required time. This requirement shall be incorporated into the award (both the planning and project subaward agreements if a planning subaward is also awarded).

Assistance to Firefighters Grant Program

The goal of the Assistance to Firefighters Grants is to enhance the safety of the public and firefighters with respect to fire-related hazards by providing direct financial assistance to eligible fire departments, nonaffiliated





emergency medical services organizations, and state fire training academies. This funding is for critically needed resources to equip and train emergency personnel to recognized standards, enhance operations efficiencies, foster interoperability, and support community resilience.

Emergency Management Performance Grants Program

The Emergency Management Performance Grant (EMPG) provides state, local, tribal, and territorial emergency management agencies with the resources required for implementation of the National Preparedness System and works toward the national preparedness goal of a secure and resilient nation. The EMPG's allowable costs support efforts to build and sustain core capabilities across the prevention, protection, mitigation, response, and recovery mission areas.

Homeland Security Grant Program

The Homeland Security Grant Program (HSGP) plays an important role in the implementation of the National Preparedness System by supporting the building, sustainment, and delivery of core capabilities essential to achieving the National Preparedness Goal of a secure and resilient nation. The program supports efforts to build and sustain core capabilities across the Prevention, Protection, Mitigation, Response, and Recovery mission areas. This includes two priorities: building and sustaining law enforcement terrorism prevention capabilities and maturation and enhancement of state and major urban area fusion centers. HSGP is composed of three interconnected grant programs including the State Homeland Security Program (SHSP), Urban Areas Security Initiative (UASI), and the Operation Stonegarden (OPSG). Together, these grant programs fund a range of preparedness activities, including planning, organization, equipment purchase, training, exercises, and management and administration.

Disaster and Recovery Assistance Programs

Following a disaster, various types of assistance may be made available by local, state, and federal governments. The types and levels of disaster assistance depend on the severity of the damage and the declarations that result from the disaster event. Among the general types of assistance that may be provided should the President of the United States declare the event a major disaster includes the following:

Individual Assistance

Individual Assistance (IA) provides help for homeowners, renters, businesses, and some nonprofit entities after disasters occur. This program is largely funded by the U.S. Small Business Administration. For homeowners and renters, those who suffered uninsured or underinsured losses may be eligible for a Home Disaster Loan to repair or replace damaged real estate or personal property. Renters are eligible for loans to cover personal property losses. Individuals may borrow up to \$200,000 to repair or replace real estate, \$40,000 to cover losses to personal property, and an additional 20 percent for mitigation. For businesses, loans may be made to repair or replace disaster damages to property owned by the business, including real estate, machinery and equipment, inventory, and supplies. Businesses of any size are eligible. Nonprofit organizations such as charities, churches, private universities, etc. are also eligible. An Economic Injury Disaster Loan provides necessary working capital until normal operations resume after a physical disaster. These loans are restricted, by law, to small businesses only.



Public Assistance

Public Assistance (PA) provides cost reimbursement aid to local governments (state, county, local, municipal authorities, and school districts) and certain nonprofit agencies that were involved in disaster response and recovery programs or that suffered loss or damage to facilities or property used to deliver government-like services. This program is largely funded by FEMA with both local and state matching contributions required.

Small Business Administration Loans

The Small Business Administration (SBA) provides low-interest disaster loans to homeowners, renters, business of all sizes, and most private nonprofit organizations. SBA disaster loans can be used to repair or replace the following items damaged or destroyed in a declared disaster: real estate, personal property, machinery and equipment, and inventory and business assets.

Homeowners may apply for up to \$200,000 to replace or repair their primary residence. Renters and homeowners may borrow up to \$40,000 to replace or repair personal property (such as clothing, furniture, cars, and appliances) damaged or destroyed in a disaster. Physical disaster loans of up to \$2 million are available to qualified businesses or most private nonprofit organizations.

U.S. Department of Health and Human Services

Social Services Block Grant Program

The Social Services Block Grant (SSBG) is a flexible funding source that allows states and territories to tailor social service programming to their population's needs. Through the SSBG, states provide essential social services that help achieve a myriad of goals to reduce dependency and promote self-sufficiency; protect children and adults from neglect, abuse, and exploitation; and help individuals who are unable to take care of themselves to stay in their homes or to find the best institutional arrangements.

U.S. Department of Housing and Urban Development

Community Development Block Grants

Community Development Block Grants (CDBG) are federal funds intended to provide low and moderate-income households with viable communities, including decent housing, as suitable living environment, and expanded economic opportunities. Eligible activities include community facilities and improvements, roads and infrastructure, housing rehabilitation and preservation, development activities, public services, economic development, planning, and administration. Public improvements may include flood and drainage improvements. In limited instances, and during the times of "urgent need" (e.g., post-disaster) as defined by the CDBG National Objectives, CDBG funding may be used to acquire a property located in a floodplain that was severely damaged by a recent flood, demolish a structure severely damaged by an earthquake, or repair a public facility severely damaged by a hazard event.

Community Development Block Grant Disaster Recovery (CDBG-DR) grant funds are appropriated by Congress and allocated by HUD to rebuild disaster-impacted areas and provide crucial seed money to start the long-term recovery process. These flexible grants help cities, counties, Indian tribes, and States recover from presidentially declared disasters, especially in low-income areas, subject to the availability of supplemental appropriations. Since CDBG-DR assistance may fund a broad range of recovery activities, HUD can help communities and neighborhoods that otherwise might not recover due to limited resources.





Disaster Housing Assistance Program

The Disaster Housing Assistance Program provides emergency assistance for housing, including minor repairs of the home to establish livable conditions, mortgage, and rental assistance.

HOME Investment Partnerships Program

The HOME Investment Partnerships Program (HOME) provides grants to states and localities that communities use—often in partnership with local nonprofit groups—to fund a wide range of activities, including building, buying, and/or rehabilitating affordable housing for rent or homeownership or providing direct rental assistance to low-income people. HOME is the largest federal block grant to state and local governments designed exclusively to create affordable housing for low-income households. HOME funds are awarded annually as grants to participating jurisdictions. The program's flexibility allows states and local governments to use HOME funds for grants, direct loans, loan guarantees or other forms of credit enhancements, or rental assistance or security deposits.

The program's requirement that participating jurisdictions match 25 cents of every dollar in program funds mobilizes community resources in support of affordable housing.

Section 108 Loan Guarantee Program

The Section 108 Loan Guarantee Program (Section 108) provides communities with a source of low-cost, long-term financing for economic and community development projects. Section 108 financing provides an avenue for communities to undertake larger, more costly projects, where they may have limited resources to invest upfront.

Section 108 can fund economic development, housing, public facilities, infrastructure, and other physical development projects, including improvements to increase resilience against natural disasters. This flexibility of use makes it one of the most potent and important public investment tools that HUD offers to states and local governments.

Section 108 assistance can be deployed in two ways:

- Directly by the community or its governmental or non-profit partner to carry out an eligible project
- Indirectly with a community or its partner re-lending (or, in limited circumstances, granting) the funds to a developer or business to undertake an eligible project

U.S. Department of Transportation

Federal Highway Administration Emergency Relief

Federal Highway Administration (FHWA) Emergency Relief is a grant program that can be used for the repair or reconstruction of federal-aid highways and roads on federal lands that have suffered serious damage as a result of a disaster. New Jersey serves as the liaison between local municipalities and FHWA, making the municipalities sub-applicants of New Jersey. The program is appropriated \$100 million annually.

Federal Transit Administration Emergency Relief

Federal Transit Authority (FTA) Emergency Relief is a grant program that funds capital projects to protect, repair, reconstruct, or replace equipment and facilities of public transportation systems. Administered by the FTA and





directly allocated to mass transit and port authorities, this transportation-specific fund was created as an alternative to FEMA's PA.

Federal Highway Administration Recreational Trails

The Federal Highway Administration's Recreational Trails Program (RTP) provides financial assistance to states for developing and maintaining trails and trail facilities. The RTP funds come from the Federal Highway Trust Fund and represent a portion of the motor fuel excise tax collected from non-highway recreational fuel use. Since the program's inception in 1993, New Jersey has awarded more than \$16 million to federal, state, county and local governments, and non-profit agencies. Projects are funded on an 80% federal share and 20% matching share basis. In 2010, over \$1 million was available for projects. Of the funding available each year, 30% is allocated for non-motorized trail projects, 30% for motorized trail projects, and 40% for diversified use trail projects.

NJDEP's Green Acres Program administers the program in New Jersey. Projects are reviewed and recommended for funding by the New Jersey Trails Council and approved by the Federal Highway Administration under the Infrastructure Investment and Jobs Act (IIJA). The Trails Council comprises interest groups for hiking, mountain biking, horseback riding, motorized trail use and canoeing/kayaking, as well as several general trail advocates and state government representatives.

Rebuilding American Infrastructure with Sustainability and Equity Grant Program

The Rebuilding American Infrastructure with Sustainability and Equity (RAISE) grant program provides an opportunity for the U.S. Department of Transportation (USDOT) to invest in road, rail, transit, and port projects that promise to achieve national objectives. The RAISE program enables USDOT to examine these projects on their merits to help ensure that taxpayers are getting the highest value for every dollar invested.

The eligibility requirements of RAISE allow project sponsors at the state and local levels to obtain funding for multi-modal, multi-jurisdictional projects that are more difficult to support through traditional USDOT programs. RAISE can provide funding directly to any public entity, including municipalities, counties, port authorities, tribal governments, or others, in contrast to traditional federal programs that provide funding to very specific groups of applicants (mostly state departments of transportation and transit agencies). This flexibility allows RAISE and USDOT partners at the state and local levels to work directly with a host of entities that own, operate, and maintain much of that nation's transportation infrastructure but otherwise cannot turn to the federal government for support.

U.S. Department of Agriculture

Community Facilities Direct Loan and Grant Program

This program provides affordable funding to develop essential community facilities in rural areas. An essential community facility is defined as a facility that provides an essential service to the local community for the orderly development of the community in a primarily rural area and does not include private, commercial, or business undertakings. Funds can be used to purchase, construct, and/or improve essential community facilities, purchase equipment, and pay related project expenses. Rural areas including cities, villages, townships, towns, and federally recognized tribal lands, with no more than 20,000 residents according to the latest U.S. Census, are eligible for this program.





Emergency Loan Program

The Emergency loan program is triggered when a natural disaster is designated by the Secretary of Agriculture, or a natural disaster or emergency is declared by the President under the Stafford Act. These loans help producers who suffer qualifying farm-related losses directly caused by the disaster in a county declared or designated as a primary disaster or quarantine area. Also, farmers located in counties that are contiguous to the declared, designated, or quarantined area may qualify for emergency loans.

For production losses, a 30 percent reduction in a primary crop in a designated or contiguous county is required. Losses to quality, such as receiving a 30 percent reduced price for flood-damaged crops, may be eligible for assistance, too.

Emergency Watershed Protection Program

The Emergency Watershed Protection (EWP) Program, a federal emergency recovery program, helps local communities recover after a natural disaster. The EWP program offers technical and financial assistance to help local communities relieve imminent threats to life and property caused by floods, fires, windstorms, and other natural disasters that impair a watershed. EWP does not require a disaster declaration by federal or state government officials for program assistance to begin. The Natural Resources Conservation Service (NRCS) state conservationist can declare a local watershed emergency and initiate EWP program assistance in cooperation with an eligible sponsor. The sponsor must sign a cooperative agreement with NRCS. The EWP program offers financial and technical assistance for various activities, including the following:

- Remove debris from stream channels, road culverts, and bridges
- Reshape and protect eroded streambanks
- Correct damaged or destroyed drainage facilities
- Establish vegetative cover on critically eroding lands
- Repair levees and structures
- Repair certain conservation practices
- Buyouts

Additional information regarding the EWP is detailed below.

EWP – Recovery

The EWP – Recovery program is aimed at relieving imminent hazards to life and property caused by floods, fires, windstorms, and other natural occurrences. Public and private landowners are eligible for assistance but must be represented by a project sponsor that must be a legal subdivision of the state, such as a city, county, township, or conservation district, and Native American Tribes or Tribal governments. NRCS will pay up to 75 percent of the construction cost of emergency measures. The remaining 25 percent must come from local sources and can be in the form of cash or in-kind services.

EWP – Recovery work is not limited to any one set of measures. The program is designed for the installation of recovery measures to safeguard lives and property as a result of a natural disaster. NRCS completes a Damage Survey Report, which provides a case-by-case investigation of the work necessary to repair or protect a site. Watershed impairments that the EWP Program addresses are debris-clogged stream channels, undermined and unstable streambanks, jeopardized water control structures and public infrastructures, wind-borne debris removal, and damaged upland sites stripped of protective vegetation by fire or drought.





EWP – Floodplain Easement

Privately owned lands or lands owned by local and state governments might be eligible for participation in the EWP – Floodplain Easement program. To be eligible, lands must meet one of the following criteria:

- Lands that have been damaged by flooding at least once within the previous calendar year or have been subject to flood damage at least twice within the previous 10 years
- Other lands within the floodplain that would contribute to the restoration of flood storage and flow, provide for control of erosion, or improve the practical management of the floodplain easement
- Lands that would be inundated or adversely impacted as a result of a dam breach

Through this program, easements are restored to the natural environment to the extent practicable. Work can include both structural and nonstructural practices to restore flood storage and flow, control erosion, and improve the practical management of the easement.

Structures, including buildings, within the floodplain easement must be demolished and removed or relocated outside the 100-year floodplain or dam breach inundation area.

Regional Conservation Partnership Program

The Regional Conservation Partnership Program promotes coordination of NRCS conservation activities with partners that offer value-added contributions to expand the collective ability to address on-farm, watershed, and regional natural resource concerns. Through this program, NRCS seeks to co-invest with partners to implement projects that demonstrate innovative solutions to conservation challenges and provide measurable improvements and outcomes tied to the resource concerns they seek to address.

U.S. Fish and Wildlife Service

Partners for Fish and Wildlife

The Partners for Fish and Wildlife Program provides free technical and financial assistance to landowners, managers, tribes, corporations, schools, and nonprofits interested in improving wildlife habitat on their land. These projects range in size from a wetland of a few acres to a grassland restoration covering several hundred thousand acres.

Many Partners for Fish and Wildlife projects take place on working landscapes such as forests, farms, and ranches. Efforts are focused on areas of conservation concern, such as upland forests, wetlands, native prairies, marshes, rivers, and streams. Projects are designed to benefit federal trust species including migratory birds and endangered, threatened, or at-risk species.

U.S. Environmental Protection Agency

Smart Growth Implementation Assistance Program

The Smart Growth Implementation Assistance program focuses on complex issues such as stormwater management, code revision, transit-oriented development, affordable housing, infill development, corridor planning, green building, and climate change. Applicants can submit proposals under four categories: community resilience to disasters, job creation, the role of manufactured homes in sustainable neighborhood design, or medical and social service facilities siting.





Clean Water Act Section 604(b) Water Quality Planning Grants

Water Quality Planning Grants provide funding to implement regional comprehensive water quality management planning activities as described in Section 604(b) of the federal Clean Water Act. Funds are to be used for water quality management planning activities, including tasks to determine the nature, extent, and causes of point and nonpoint source water pollution problems, and to develop plans to resolve these problems.

U.S. Economic Development Administration

The U.S. Economic Development Administration (USEDA) is an agency of the U.S. Department of Commerce that supports regional economic development in communities around the country. It provides funding to support comprehensive planning and makes strategic investments that foster employment creation and attract private investment in economically distressed areas of the United States.

Public Works Program

Through its Public Works Program, USEDA invests in key public infrastructure, such as traditional public works projects, including water and sewer system improvements, expansion of port and harbor facilities, brownfields, multitenant manufacturing and other facilities, business and industrial parks, business incubator facilities, redevelopment technology-based facilities, telecommunications facilities, and development facilities.

Economic Adjustment Program

Through its Economic Adjustment Program, USEDA administers its Revolving Loan Fund Program, which supplies small businesses and entrepreneurs with the gap financing needed to start or expand their business in areas that have experienced or are under threat of serious structural damage to the underlying economic base.

National Park Service

Land and Water Conservation Fund

The Land and Water Conservation Fund (LWCF) was established by Congress in 1964 to fulfill a bipartisan commitment to safeguard natural areas, water resources, and cultural heritage, and to provide recreation opportunities. Using no taxpayer dollars, the LWCF invests earnings from offshore oil and gas leasing to help strengthen communities, preserve history, and protect the national endowment of lands and waters. The LWCF program is divided into the "State Side," which provides grants to State and local governments, and the "Federal Side," which is used to acquire lands, waters, and interests therein necessary to achieve the natural, cultural, wildlife, and recreation management objectives of federal land management agencies. The LWCF was permanently reauthorized in 2019 and permanently funded in August 2020.

Restore America's Estuaries

Coastal Watersheds Grant Program

Restore America's Estuaries, in close coordination with and financial support from EPA, administers the National Estuary Program (NEP) Coastal Watersheds Grant Program. This grant program funds projects within the geographic areas shown here and supports the following Congressionally set priorities:

• Loss of key habitats resulting in significant impacts on fisheries and water quality such as seagrass, mangroves, tidal and freshwater wetlands, forested wetlands, kelp beds, shellfish beds, and coral reefs.





- Recurring harmful algae blooms.
- Unusual or unexplained marine mammal mortalities.
- Proliferation or invasion of species that limit recreational uses, threaten wastewater systems, or cause other ecosystem damage.
- Flooding and coastal erosion that may be related to sea-level rise, changing precipitation, or salt marsh, seagrass, or wetland degradation or loss.
- Impacts of nutrients and warmer water temperatures on aquatic life and coastal ecosystems, including low dissolved oxygen conditions in estuarine waters.
- Contaminants of emerging concern found in coastal and estuarine waters such as pharmaceuticals, personal care products, and microplastics.

15.4.2 State

New Jersey Board of Public Utilities (BPU)

The New Jersey BPU works with private utility companies to provide analysis of natural hazard information affecting the provision of electric power, telecommunications, public water, sewage collection and treatment, and other regulated public utilities. The data are used during response and recovery efforts in the event of emergency or disaster and is also used to analyze impact of mitigation plans and projects. BPU also provides technical assistance for the Energy Resiliency Program

New Jersey Clean Energy Program (NJCEP)

NJCEP promotes increased energy efficiency and the use of clean, renewable sources of energy, including solar, wind, geothermal, and sustainable biomass. The results for New Jersey are a stronger economy, less pollution, lower costs, and reduced demand for electricity. NJCEP offers financial incentives, programs, and services for residential, commercial, and municipal customers.

The program also offers a Community Energy Plan Grant for government entities (e.g., municipality, county, Green Team or environmental commission, or other Sustainable Jersey organization within a community or county). The grant will provide funding for an entity to create a Community Energy Master Plan to align local communities with the State Energy Master Plan.

New Jersey Department of Environmental Protection

Sewage Infrastructure Improvement Act Grants (NJAC 7:22)

New Jersey Sewage Infrastructure Improvement Act establishes comprehensive requirements for NJDEP and municipalities/authorities to address combined sewer overflows and stormwater management.

NJDEP issues permits and provides below-market interest rate loans through the Environmental Infrastructure Financing Program to municipalities for capital improvements that improve water quality. To prioritize wastewater projects under the Environmental Infrastructure Financing Program, projects are ranked to address higher State priorities or high-water quality problems or improvements.





Environmental Aid Act (NJSA 13:1H – 1 to 7) Office of Environmental Services Matching Grants Program for Local Environmental Agencies (NJAC 7:5)

State aid may be granted by the department to a local environmental agency for any activity that the agency is authorized to perform by law and for the preparation of an environmental index. An environmental index shall be a report on environmental conditions within the locality and community objectives concerning open areas, parks, water supply, solid waste, wildlife protection, soil resources, air pollution, water pollution, and other related issues. The department may provide technical assistance in addition to (or in lieu of) State aid to any local environmental agency for the purpose indicated in this act. The purpose of the funding dedicated under this act is to assist local environmental commissions and soil conservation districts with funding for a variety of local environmental projects; including community education projects; environmental resource inventories; beach monitoring and management projects; environmental trail designs; lake rehabilitation studies; stream and water quality testing; wellhead delineation; GIS mapping projects; National Environmental Performance Partnership System indicator projects; and surveys of threatened and endangered species. The maximum annual grant is \$2,500. Applicants must match at least 50 percent of the total cost of the project (NJDEP n.d.).

Projects funded by this grant are reported online. Examples of mitigation projects that have been funded in the past include Waterways Beach Monitoring and Management Strategy, Dune Project, Beach Protection and Storm Drainage Plan, Beach Storm Water Drainage Analysis, Stream Corridor/Greenway Protection Plan, Shoreline Bioengineering Demonstration and Outreach Project, Stream, and the Pamphlet/Education Project.

Drinking Water State Revolving Fund

The DWSRF program assists water systems in financing the cost of infrastructure through the use of federal and New Jersey Infrastructure Trust funds. Additionally, the Water Supply program provides operator licensing and training support as well as financial assistance through the DWSRF program.

The New Jersey Infrastructure Bank

The New Jersey Infrastructure Bank is an independent State Financing Authority responsible for providing and administering low interest rate loans to qualified municipalities, counties, regional authorities, and water purveyors in New Jersey. Two programs provide and administer low interest rate loans to qualified municipalities, counties, regional authorities, and water purveyors in New Jersey. Approximately \$350 million is awarded annually.

- NJEIT for the purpose of financing water quality infrastructure projects that enhance ground and surface water resources, ensure the safety of drinking water supplies, protect the public health, and make possible responsible and sustainable economic development.
- The New Jersey Transportation Infrastructure Bank (NJTIB) is an independent State Financing Authority responsible for providing and administering low interest rate loans to qualified municipalities, counties, and regional authorities in New Jersey for the purpose of financing transportation quality infrastructure projects.

The New Jersey Infrastructure Bank provides principal forgiveness opportunities and better financing packages for those projects that implement climate change resilience measures.

Environmental Infrastructure Financing Program

Qualified borrowers receive loans in two equal parts: Approximately one half to three quarters comes from a 0percent interest State Revolving Fund maintained by the NJDEP. The other portion comes from proceeds of





highly rated tax-exempt revenue bonds sold by the Trust. Combining these two funds result in a loan that is 50 to 75 percent lower than traditional loan rates.

Dam Restoration Loan Program

The New Jersey Dam Restoration Loan Program was established by the "Dam, Lake, Stream, Flood Control, Water Resources and Wastewater Treatment Project Bond Act of 2003", Public Law 2003, c. 162. The purpose is to provide loans to dam owners for dam restoration projects.

NJDEP Dam Restoration and Inland Water Projects Loan Program

The New Jersey Dam Restoration and Inland Water Projects Loan Program was established by the "Green Acres, Clean Water, Farmland and Historic Preservation Bond Act of 1992", Public Law 1992, c. 88. The purpose is to provide loans to dam owners for dam restoration or inland waters projects.

New Jersey Water Bank

The New Jersey Water Bank (NJWB) is a partnership between the NJDEP and the New Jersey Environmental Infrastructure Trust (NJEIT) to provide low-cost financing for the design, construction, and implementation of projects that help protect and improve water quality and help ensure safe and adequate drinking water.

The NJWB finances projects by utilizing two funding sources. The Trust issues revenue bonds which are used in combination with zero percent interest funds to provide very low-interest loans for water infrastructure improvements. The NJDEP administers a combination of Federal State Revolving Fund capitalization grants, as well as the State's matching funds, loan repayments, State appropriations, and interest earned on such funds.

Blue Acres Program

The Blue Acres Program purchases flood-prone properties. This land preservation program assists local government units and nonprofits in their efforts to increase and preserve permanent outdoor recreation areas for public use and enjoyment, and conservation areas for the protection of natural resources such as waterways, wildlife habitat, wetlands, forests, and view sheds. A secondary benefit of these laws and rules is that flood-prone properties are often purchased and not available for future development. Funding for Blue Acres is a combination of dedicated state funding from the cooperate business tax and federal grants. To date, the program has received five state funding appropriations from 2009-2019, ranging from \$3 million to \$12 million to effectuate buyouts in flood-prone areas. Most recently, the 3 Garden State Preservation Trust appropriation recommendation proposed Blue Acres receive an infusion of \$10.5 million (\$10 million for buyouts and \$500,000 for administrative costs).

NJDEP Grant and Loan Programs

NJDEP offers a wide variety of funding opportunities for local governments and other types of organizations to fund numerous environmentally based projects involving mitigation of hazards such as flooding and wildfires. This includes funding for: air quality, energy, and sustainability; compliance and enforcement; engineering and construction; land use management; local government assistance; natural and historic resources; site remediation and waste management programs; and water resource management.

Green Acres Program

Together with public and private partners, Green Acres has protected well over a million and a half acres of open space and provided hundreds of outdoor recreational facilities in communities around the State. Green Acres



provides low interest (2 percent) loans and grants to municipal and county governments to acquire open space and develop outdoor recreation facilities. Green Acres also provides matching grants to nonprofit organizations to acquire land for public recreation and conservation purposes. Over the years, voters have authorized \$3.3 billion in Green Acres funding, approving every bond referendum put before them.

New Jersey State Agriculture Development Committee

Open Space and Farmland Preservation Programs

Farmland and open space preservation programs are often funded partially through grants administered by the NJ State Agriculture Development Committee and the New Jersey Green Acres Program. The objective of these programs is to expand the existing county and municipal park systems. Many counties in New Jersey also support land preservation acquisition through open space funding.

New Jersey Redevelopment Authority

The New Jersey Redevelopment Authority (NJRA) is an independent state financing authority committed exclusively to the redevelopment of New Jersey's urban areas. NJRA offers several financing resources, including site acquisition funding, predevelopment assistance, several development assistance resources, and technical assistance.

New Jersey Small Cities Communities Development Block Grants

The New Jersey Small Cities Communities Development Block Grants provide funds for economic development, housing rehabilitation, community revitalization, and public facilities designated to benefit people with low and moderate incomes or to address recent local needs for which no other source of funding is available to non-entitlement counties and municipalities.

New Jersey Department of Community Affairs

The New Jersey Department of Community Affairs (NJDCA) is a state agency created to provide administrative guidance, financial support, and technical assistance to local governments, community development organizations, businesses, and individuals to improve the quality of life in New Jersey. NJDCA offers a wide range of programs, funding, and services that respond to issues of public concern, including fire and building safety, housing production, community planning and development, and local government management and finance. Among other funding sources, NJDCA administers CDBG funding and is typically the CDBG-Disaster Relief funding recipient for the State of New Jersey.

New Jersey Conservation Foundation

The New Jersey Conservation Foundation (NJCF) is a private, not-for-profit organization. Through acquisition and stewardship, NJCF protects strategic lands, promotes strong land use policies, and forges partnerships to achieve conservation goals. Grants are used to help fund preservation activities.

New Jersey Department of Transportation

Local Aid and Economic Development

NJDOT is committed to advancing projects that enhance safety, renew the aging infrastructure and the State's economy and support new transportation opportunities. The Transportation Trust Fund (TTF) provides the





opportunity for State assistance to local governments for the funding of road, bridge, and other transportation projects. Annually, the TTF provides \$400 million in State Aid to municipalities and counties for local transportation improvements. In addition, several programs which provide funding to counties and municipalities are funded with federal monies available through the Transportation Equity Act for the 21st Century (TEA 21) legislation.

The Safe, Accountable, Flexible, Efficient Transportation Equity Act (SAFE-TEA) legislation provides the opportunity for funding assistance to local governments for road, bridge, and other transportation projects. NJDOT has established several local aid programs that provide financial support to counties and municipalities for capital improvements to transportation infrastructure.

New Jersey Turnpike Authority

Capital Program

The New Jersey Turnpike Authority (Authority) is dedicated to the safe and efficient movement of people and goods over two of the busiest toll roads in the United States – the New Jersey Turnpike (NJTP) and the Garden State Parkway (GSP). The Authority's highways are a critical link in the transportation network of the Northeast Corridor. Under the current 10-year, \$7 billion capital program adopted in 2008, the Authority has expanded capacity, repaired deteriorating bridges, reconfigured entrance and exit ramps, improved maintenance yards and toll plazas, and expanded the use of technology for collecting and communicating information about roadway conditions. Under this capital program, the following projects have been advanced addressing hazard mitigation: Bridge Security Program, Forest Fire Prevention, Roadside Weather Information System (RWIS), Coastal Evacuation.

Through the Asset Management Program, the Turnpike Authority invests approximately \$50 million annually on drainage-related projects to better equip the Authority's roadways in response to major rainfall events.

15.4.3 County

Passaic County and individual jurisdictions are (legally, not necessarily practically) able to fund mitigation projects though existing local budgets, local appropriations (including referendums and bonding), and a variety of federal and state loan and grant programs.

Passaic County Improvement Authority

The Passaic County Improvement Authority (PCIA) finances and plans public improvements within Passaic County. The PCIA provides cost-effective financing for projects and promotes shared services to reduce costs and improve efficiency among municipalities and school districts (Passaic County 2025). The PCIA's programs are part of the County's broader efforts to stimulate economic growth, improve infrastructure, and enhance the quality of life for residents. Financial opportunities offered by PCIA are listed below.

Gap Financing for Developers Program

The Gap Financing program supports economic development and revitalization efforts within the County. This program provides financial assistance to developers to bridge the gap between the total project cost and the amount of financing they can secure from traditional sources, making development projects financially viable, especially in targeted redevelopment areas.





Redevelopment Area Bond Financing Programs

The Redevelopment Area Bond Financing program allows municipalities to issue bonds to finance redevelopment projects, typically backed by the anticipated increase in property tax revenues resulting from the redevelopment.

Passaic County Banc Program

The Passaic County Banc Program, managed by the PCIA, is a lease/purchase program to help local government entities finance capital equipment and other essential assets at competitive, tax-exempt interest rates. The program guarantees up to \$15 million of leased capital assets, allowing municipalities, school districts, and other governmental entities to acquire items such as energy efficiency equipment, office equipment, vehicles, machinery, and health and safety equipment. Benefits of the program include no down payment, below-market interest rates, quick turnaround, minimal paperwork, and flexible payment schedules (Passaic County 2025).

Open Space, Farmland, and Historic Preservation Advisory Committee

This Committee is responsible for managing and providing grants to municipal and non-profit partners for open space acquisition, park development, and historic preservation projects. The committee ensures that these efforts align with the County's goals of preserving open space, conserving natural resources, and enhancing the quality of life for residents. The Committee provides funding from the Open Space, Farmland, and Historic Preservation Trust Fund, which was established following voter approval in 1996. Grant programs delivered by the Committee are listed below (Passaic County 2025).

Open Space Acquisition Grant Program

The Passaic County Open Space Acquisition Grant Program supports the preservation and enhancement of open spaces within the County. The program provides grants to municipalities and qualified nonprofit organizations for the acquisition of land for open space, park development, and historic preservation projects. The program aims to conserve natural resources, protect scenic and historic sites, and improve the quality of life for residents by ensuring sustainable land use and recreational opportunities.

Historic Preservation Grant Program

The Passaic County Historic Preservation Grant Program supports the preservation of historic sites in the County. The program provides grants to municipal governments and nonprofit organizations for activities such as stabilization, rehabilitation, restoration, and preservation of historic properties. Eligible properties include those listed on local, state, or national registers of historic places, or those certified as eligible by the State Historic Preservation Office. Applications are reviewed by the Open Space Coordinator and the Open Space Advisory Committee, which evaluates each project based on eligibility criteria and the applicant's ability to carry out the proposed work (Passaic County 2025).

Park Development Grant Program

The Passaic County Park Development Grants Program supports the development and enhancement of parks within the County. This program provides grants to municipalities and qualified nonprofit organizations for projects that improve public parks and recreational facilities.

