

An aerial photograph of a vast wetland landscape. A winding waterway, likely a canal or river, flows through the center of the frame, surrounded by dense, golden-brown marsh grasses. A straight, light-colored path or road runs parallel to the waterway on the right side. The horizon is flat, and the sky is a clear, bright blue with a few wispy clouds. The overall scene is a mix of natural and managed wetland environments.

6.0 MITIGATION STRATEGY

SECTION 6.0 MITIGATION STRATEGY

6.0-1 CHANGES FROM THE 2019 PLAN

- The mitigation goals and objectives were updated, including a new goal (Goal 7) to reduce the risk of natural hazards for socially vulnerable populations and underserved communities.
- A comprehensive review and evaluation of the 2019 SHMP mitigation action plan was conducted, and a synopsis of notable achievements was developed.
- 2019 SHMP mitigation actions that have not been completed or discontinued, results of the updated risk assessment, results of the updated capability assessment, applicable actions identified in local county HMPs, and stakeholder input were used to identify mitigation actions for the 2024 SHMP Update.

6.0-2 OVERVIEW

The mitigation strategy outlined below is New Jersey’s blueprint for reducing potential future losses from hazards. The mitigation strategy is composed of goals, objectives, and actions that directly address the risks and vulnerabilities identified in the risk assessment as well as the findings of the capability assessment. The following sections outline the State’s mitigation goals and objectives; reviews, evaluates, and updates the mitigation actions identified in the 2019 SHMP; identifies new actions; and prioritizes all actions for implementation over the performance period of the 2024 SHMP Update.

6.0-3 GOALS AND OBJECTIVES

Element S9, HHPD3, and 44 § CFR 201.4(c)(3)(i): The state plan must include goals to reduce long-term vulnerabilities from the identified hazards. The goals represent what the state seeks to accomplish through mitigation plan implementation using a wide range of funding, including non-FEMA funding. The goals must be consistent with the hazards and vulnerabilities identified in the risk assessment.

Mitigation goals are broad, long-term policy and vision statements that explain what will be achieved by implementing the mitigation actions. Mitigation objectives are defined, short-term, measurable efforts that lead to achieving an overall goal. Mitigation goals and objectives provide the guidance for the development of the mitigation actions.

Figure 6.0-1 Goals, Objectives, and Actions



State Goals and Objectives

For this State Hazard Mitigation Plan (SHMP) update, the State Hazard Mitigation Team (SHMT) reviewed the 2019 SHMP mitigation goals and objectives. The goals were updated to include language on increased risks due to climate change in Goal 4 and the addition of a new Goal 7 to reduce the risk of natural hazards for socially vulnerable populations and underserved communities. Objectives were also updated for each goal to better align with current State priorities and the new State Mitigation Planning Policy Guide from FEMA. Changes to objectives include the addition of objectives to mitigate High Hazard Potential Dams (2.5), promote a comprehensive community strategy to reduce flood risk in high hazard areas (2.6), and objectives under new Goal 7 to work with communities to identify the impacts of hazards on socially vulnerable populations (7.1), ensure hazard mitigation planning includes and is responsible for the entire community (7.2), and direct resources to build capacity to lower-resourced communities (7.3).

Mitigation actions were selected and prioritized to move the State and its counties closer to achieving these goals and objectives over the performance period of the 2024 SHMP Update. Actions that were selected are discussed in Section 6.7: Mitigation Strategies.

Table 6.0-1 lists the goals and objectives for the 2024 SHMP. For a comparison of changes from the 2019 SHMP Goals and Objectives, refer to Appendix H - Mitigation Strategy Supplement.

Table 6.0-1 2024 New Jersey SHMP Goals and Objectives

Goals	Objectives
Goal 1: Protect life	1.1: Improve warning and emergency communications systems 1.2: Effectively address hazard mitigation issues, laws, and regulations 1.3: Strengthen state and local planning, building codes, ordinances, and enforcement
Goal 2: Protect property	2.1: Protect critical facilities, buildings, infrastructure, and community lifelines 2.2: Reduce repetitive and severe repetitive losses 2.3: Implement hazard mitigation policies to protect environmental resources that serve a natural hazard mitigation function 2.4: Encourage cost-effective and environmentally sound development and land use in low-risk areas 2.5 Mitigate High Hazard Potential Dams within the State 2.6: Promote a comprehensive community strategy to reduce flood risk in high hazard areas
Goal 3: Increase public preparedness and awareness	3.1: Improve public awareness of hazards and the risks they pose 3.2: Improve hazard information databases, maps, and tools and increase accessibility to those resources 3.3: Enhance stakeholder education and training
Goal 4: Develop and maintain an understanding of increased risk from climate change impacts to natural hazards	4.1: Review and incorporate updated hazard data into the State Hazard Mitigation Plan 4.2: Increase support for the development of local mitigation planning and projects 4.3: Incorporate new State of New Jersey and FEMA guidance, rules, and regulations into the appropriate plans 4.4: Update the Plan incorporating local and national best practices
Goal 5: Enhance state and local mitigation capabilities to reduce hazard vulnerabilities	5.1: Integrate the State Hazard Mitigation Plan with other state and regional planning initiatives 5.2: Monitor the progress of ongoing mitigation activities by State agencies 5.3: Provide current information, technical assistance, and incentives for mitigation planning and actions 5.4: Encourage the formation of partnerships to leverage and share mitigation resources 5.5: Incentivize best practices through mitigation planning
Goal 6: Support continuity of operations pre-, during, and post-hazard events	6.1: Increase continuity of operations of government, non-government, commerce, private sector, and infrastructure 6.2: Increase resiliency by facilitating rapid disaster response and recovery 6.3: Encourage planning and the implementation of alternative energy sources
Goal 7: Reduce the risk of natural hazards for socially vulnerable populations and underserved communities	7.1: Work with communities to identify the impacts of hazards on socially vulnerable populations 7.2 Ensure hazard mitigation planning includes and is responsive to the entire community 7.3 Direct resources to build capacity in lower-resourced communities

Local Mitigation Plan Goals

The 2024 SHMP goals were compared to goals listed in the effective local county-level HMPs to determine the current state of integration of SHMP goals in local HMPs. Table 6.0-2 compares the goals of the 2024 SHMP with goals presented in local county HMPs. Overall, many of the local HMP goals aligned with the 2024 SHMP's goals.

Table 6.0-2 Integration of State Goals within Local County Hazard Mitigation Plans

County	NJ SHMP 2024 Goals						
	Goal 1: Protect life	Goal 2: Protect property	Goal 3: Increase public preparedness and awareness	Goal 4: Develop and maintain an understanding of increased risk from climate change	Goal 5: Enhance state and local mitigation capabilities to reduce hazard vulnerabilities	Goal 6: Support continuity of operations pre-, during, and post-hazard events	Goal 7: Reduce the risk of natural hazards for socially vulnerable populations and underserved communities
Atlantic		X	X		X		
Bergen	X	X	X			X	X
Burlington	X	X	X		X	X	
Camden	X	X	X	X	X	X	X
Cape May		X	X		X	X	
Cumberland			X	X	X		X
Essex	X	X	X	X	X	X	
Gloucester	X	X	X	X	X	X	X
Hunterdon	X	X	X	X	X	X	
Hudson	X	X	X	X		X	
Mercer	X	X	X	X	X	X	X
Middlesex		X	X		X		
Monmouth	X	X	X		X	X	
Morris	X	X	X	X	X	X	
Ocean	X	X	X			X	
Passaic	X	X	X	X	X	X	
Salem*			X	X	X		
Somerset	X	X	X		X	X	X
Sussex	X	X	X	X	X	X	
Union		X	X		X		
Warren	X	X	X		X	X	

Note: The Salem County HMP update was underway during the development of the 2024 NJ SHMP update. The review of the Salem County HMP goals was based on the effective HMP at the time of the SHMP update.

Local Mitigation Project Overview

To further facilitate hazard mitigation planning efforts, the New Jersey Office of Emergency Management (NJOEM) works in cooperation with other governmental agencies and relevant industry groups to provide direction and technical assistance in the development of local and multi-jurisdictional plans and projects. With assistance from NJOEM, a number of New Jersey local jurisdictions have been successful in obtaining funds for mitigation projects. As these success stories continue, more jurisdictions

will recognize the potential for mitigating hazards in their communities. NJOEM coordinates and works closely with counties and municipalities to identify and successfully secure FEMA Hazard Mitigation Assistance (HMA) funding.

The individual local hazard mitigation plan (HMP) actions statewide were compiled and reviewed to determine if any actions from the local HMPs should be incorporated into the 2024 SHMP Mitigation Action Plan. While numerous actions involving State agencies were considered, it was determined that the actions were for localized issues and best suited to remain in the local plans or involved State agencies in supporting roles.

For the purposes of the 2024 Plan Update, the common existing hazard mitigation strategies of the current county HMPs are below. The list below summarizes the common hazard mitigation measures in the local HMPs by general action/strategy.

- Flood control measures
- Address Repetitive Loss (RL) and Severe Repetitive Loss (SRL) properties
- Improved floodplain management
- Stormwater improvements/maintenance/inspections
- Stream clearing
- Reduce losses to all buildings/infrastructure
- Retrofit vulnerable critical facilities and infrastructure
- Improve data collection related to hazard data and critical facility inventories
- Public outreach/education/awareness
- Encourage higher regulatory standards
- Promote/participate in CRS
- Emergency power/generator
- Communication projects

It is evident that all mitigation types are addressed by the counties: local plans and regulations, structure and infrastructure projects, natural systems protection, and education and awareness programs. As noted in Section 9.0: Plan Maintenance, to better document mitigation project effectiveness, NJOEM has an online tracking tool called *NJEM.grants* to track all mitigation project progress through the grant application, project execution and close-out phases.

6.0-4 REVIEW AND EVALUATION OF 2019 SHMP MITIGATION ACTIONS

Element S12 and 44 § CFR 201.4(d): The state plan must reflect progress in statewide mitigation efforts and changes in priorities by providing a narrative of the status of each mitigation action in the previous plan identifying which actions have been completed and describing if an action is no longer relevant or included in the updated plan. The prioritization of mitigation actions and activities must be updated based on the updated analysis of risks, capabilities, and progress.

The 2024 SHMP Update included a comprehensive review of the 160 mitigation actions identified in the 2019 SHMP. Each action was reviewed by the State agency or organization that was listed as the lead agency. Progress on each identified mitigation action was reviewed to determine the status of each action, the source of funding used to implement the completed actions, actions that have become ongoing capabilities, and, for those actions that were not completed, if the action should be carried forward to the 2024 SHMP Update or discontinued. Actions that were identified for inclusion in the updated mitigation strategy were reviewed and evaluated to determine if the action should be revised to reflect any new information obtained as part of the plan update process (for example, changes in the risk assessment, capabilities, lead agency, or funding sources).

As required by FEMA, the SHMT completed a comprehensive evaluation of the mitigation strategies and actions from the previous plans and reported on the status of each.

44 CFR 201.4(c)(3)(iii): The state plan must provide an identification, evaluation, and prioritization of cost-effective, environmentally sound, and technically feasible mitigation actions.

Over the course of several months, the SHMT and all State agencies and stakeholders with previous mitigation actions were asked to provide a status update using the guidance below:

- No Progress – The mitigation action has not been completed.
- In Progress – Implementation of the mitigation action has begun but has not been completed.
- Ongoing Capability – The mitigation action has been implemented and will be completed on an annual or regular basis (for example, maintenance activities, annual outreach, etc.).
- Completed – The mitigation action has been fully implemented.
- Discontinued – The mitigation action has been designated for removal from the 2024 SHMP mitigation strategy. Reasons for discontinuing an action include that the action has been evaluated as being duplicative, impractical, unfeasible, or undesirable, or if the problem that the action was originally developed for is no longer present.

The following is a summary of the progress in mitigation efforts over the performance period of the 2019 SHMP:

- 11 actions (6.6% of total actions) were completed.
- 64 actions (38.6% of total actions) were initiated but were not completed.
- 49 actions (29.5% of total actions) were determined to be ongoing activities and/or capabilities integrated into standard operations.
- 21 actions (12.7% of total actions) were not initiated or had no reported progress.
- 21 actions (12.7% of the total actions) were discontinued for many reasons, including changes in priorities or the action is no longer under the State’s authority.

The comprehensive review and evaluation of the 2019 SHMP actions can be found in Appendix H - Mitigation Strategy Supplement.

Actions that were identified as completed or discontinued have been removed from the mitigation strategy for the 2024 SHMP. If an action was identified as being an ongoing capability as it has been completed and is currently in operation with funded staff, an operation budget, and established goals, it is now noted as a capability within Section 5.0: Capability Assessment.

Actions that were identified as no progress or in progress are considered carryover actions that are being included in the 2024 SHMP mitigation strategy. Carryover actions have been reviewed and updated to provide additional details or reflect changes in the action approach. Future updates will continue to report of the success of these mitigation action programs.

6.0-5 NEW STATE PRIORITIES AND APPROACHES TO HAZARD MITIGATION

Major events like Superstorm Sandy and the flooding associated with the remnants of Hurricane Ida remain a constant reminder that New Jersey needs to continue to prepare for and mitigate against potential hazard events. As methods to focus on mitigation today, the State is:

- Working closely with local communities and stakeholders to develop comprehensive plans for recovery and to maximize disaster relief funds;
- Providing critical resources to rebuild housing, public buildings, small businesses, and infrastructure in a manner that is cost-efficient and disaster resilient;
- Developing hazard mitigation initiatives to create stronger communities;
- Cutting red tape and streamlining the regulatory framework for recovery and rebuilding;

- Incorporating compliance measures into the State’s grant programs to ensure effective and efficient use of funds; and
- Coordinating mitigation investments among State agencies to provide for collaboration, community based mitigation approaches, and prevent perverse mitigation investments that increase long-term exposure to risk.

6.0-6 NEW FUNDING SOURCES TO SUPPORT HAZARD MITIGATION

Since the 2019 SHMP, additional funding sources have been established to support hazard mitigation.

The Disaster Recovery Reform Act (DRRA), Public Law 115-254, was enacted on October 5, 2018, and made numerous legislative changes to the Robert T. Stafford Relief and Emergency Assistance Act (Stafford Act). Section 1204 of the DRRA amended Section 404 of the Stafford Act to allow FEMA to establish Hazard Mitigation Grant Program (HMGP) Post Fire assistance. This assistance is available to help communities implement hazard mitigation measures after wildfire disasters (FEMA 2023).

In fiscal year (FY) 2020, FEMA introduced a new Hazard Mitigation Assistance (HMA) grant program, the Building Resilient Infrastructure and Communities Grant Program (BRIC), with \$500 million available in FY2020, \$1 billion available in FY2021, \$2.295 billion in FY2022, and an anticipated \$500 million in FY2023 (Congressional Research Service 2023). BRIC largely replaced and discontinued the Pre-Disaster Mitigation (PDM) program as an annual funding source. However, PDM has still been available on a limited basis as a congressionally directed funding source (FEMA 2023).

The Safeguarding Tomorrow through Ongoing Risk Mitigation (STORM) Act became law on Jan. 1, 2021, establishing the Revolving Loan Fund (RLF). The STORM RLF program complements and supplements FEMA’s Hazard Mitigation Assistance grant portfolio to support mitigation projects at the local government level and increase the nation’s resilience to natural hazards and climate change. These low interest loans will allow jurisdictions to reduce vulnerability to natural disasters, foster greater community resilience and reduce disaster suffering (FEMA 2023).

The Infrastructure Investment and Jobs Act (H.R. 3684), commonly known as the Bipartisan Infrastructure Bill, was passed in November 2021, resulting in funding availability for a variety of project types, including road and bridge projects, power infrastructure upgrades, and infrastructure resiliency improvements to protect against the impacts of climate change and extreme weather events. Mitigation funding opportunities related to the Infrastructure Investment and Jobs Act are anticipated to continue to be available in the near future.

In March 2022, FEMA launched the Flood Mitigation Assistance (FMA) program Swift Current initiative that seeks to substantially speed up the delivery of funding following a flood event. Swift Current aims to better align the delivery of flood mitigation funding to better support disaster survivors by expediting FMA awards following a disaster, rather than through an annual grant application cycle (FEMA 2022).

Carryover mitigation actions have been reviewed and updated where appropriate with new funding opportunities. For more information on changes to previous funding sources, refer to Section 5.0: Capability Assessment and Appendix C - Capability Assessment Supplement.

6.0-7 IDENTIFICATION OF MITIGATION ACTIONS FOR THE 2024 SHMP

Element S10, FMAG2, HHPD4, and 44 CFR 201.4(c)(1), 201.4(c)(3)(i), 201.4(c)(4)(ii), and 204.51(d)(2): The state plan must prioritize mitigation actions to reduce vulnerabilities identified in the risk assessment to reduce the vulnerability of jurisdictions within the state as well as the vulnerability of state-owned assets. The plan must describe the process to evaluate and prioritize actions that are cost-effective, environmentally sound, and technically feasible. Actions must contribute to goals and the state must describe how local government mitigation strategies link to the state mitigation strategy.

Mitigation actions for inclusion in the 2024 SHMP Update were identified through four primary sources:

2019 SHMP Mitigation Strategy – Actions that were not completed during the 2019 SHMP were reviewed, revised, and included as described in Appendix D - 2024 SHMP Mitigation Action Plan. Actions identified as ongoing capabilities are now included as State capabilities in Section 5.0: Capability Assessment.

- *Risk Assessment* – The results of the updated risk analysis identified problem areas and the vulnerability of State assets.
- *Capability Assessment* – The capability assessment identified challenges and opportunities that provided guidance on continuing the State’s progress in hazard mitigation capabilities development.
- *Stakeholder Workshops and Listening Sessions* – Discussions focusing on current work by State agencies and organizations to address increasing risks due to climate change and protect and support socially vulnerable populations and underserved communities provided input on problems and potential mitigation strategies.
- *June Mitigation Strategy Workshops* – Workshops were held to improve the quality of previous mitigation actions and fully develop new mitigation actions with detailed information to support implementation including leading agencies, funding sources, and time frames.

Individual State agencies submitted actions that had been approved within their departments. The June 2023 workshop participants had the opportunity to identify mitigation actions. Actions were reviewed by the State Hazard Mitigation Officer (SHMO) and the NJOEM. Not all potential actions identified from the above sources were ultimately selected for inclusion in the 2024 SHMP updated mitigation strategy. Actions were prioritized to ensure they are cost-effective, environmentally sound, and technically feasible. Those actions that were selected are summarized in the following sections and included in Appendix D - 2024 SHMP Mitigation Action Plan.

NJSHMP 2024 State Mitigation Action Plan

Appendix D - 2024 SHMP Mitigation Action Plan houses the 2024 State Mitigation Action Plan. Each mitigation action included in the 2024 SHMP State Mitigation Action Plan includes narrative to describe the problem and solution and identifies various information that will support the planned implementation of the hazard mitigation actions, including responsible agencies, estimated costs, and potential funding sources.

The NJSHMP 2024 Mitigation Action Plan includes the following information for each action:

- *Action Name* – Each action in the action plan has a short action name to allow for quick identification.
- *Action Number* – The action plan assigns a numeric identifier to each action for tracking and progress reporting.
- *Lead Agency* – The action plan identifies the lead agency (and department/bureau if applicable) responsible for implementation of the action.
- *Supporting Agencies* – The action plan identifies any supporting agencies and/or departments (if applicable) that will partner with the lead agency to complete the action or phases of the action.
- *Hazard(s) of Concern* – The action plan includes a list of hazards addressed by the mitigation action.
- *Description of the Problem* – The action plan provides a problem statement for context as to why the action is needed. The problem connects the risk assessment, capability assessment, or both to the mitigation action.
- *Description of the Solution* – The action plan describes the mitigation strategies used within each action and how the action will be implemented, including phases and responsibilities.
- *Estimated Costs* – The action plan lists estimated costs to implement each action.
- *Potential Funding Sources* – The action plan lists options for funding the action, including annual budgets, state grants, and federal funding opportunities.
- *Funding Sources* – The action plan lists options for funding the action, including annual budgets, state grants, and federal funding opportunities.

- *Implementation Timeline* – The action plan provides general project implementation timing as follows:
- *Short-Term* – Implementation of the action can begin within 1 year.
- *Mid-Term* – Implementation can begin within 2-3 years.
- *Long-Term* – Implementation can begin within 4-5 years.
- *Goals Met* – The action plan lists the NJ SHMP goals that the action supports.
- *Benefits* – The action plan discusses the overall benefits resulting from the implemented action.
- *Impact on Socially Vulnerable Populations* – The action plan identifies if and how the action reduces risk for underserved communities and/or socially vulnerable populations.
- *Impact on Future Development* – The action plan identifies if and how the action will reduce risk in areas that are under development pressures.
- *Impact on Critical Facilities* – The action plan identifies if and how the action reduces risk for critical facilities/community lifelines.
- *Impact on Capabilities* – The action plan identifies if and how the action supports or improves State hazard mitigation capabilities.
- *Climate Change Considerations* – The action plan identifies if and how the action addresses anticipated changes to hazards as a result of climate change or how the action is able to adapt to changes in risk over time.

The State anticipates utilizing the plan maintenance process identified in Section 9.0: Plan Maintenance to evaluate and enhance the mitigation actions included in the 2024 mitigation strategy. Based on the evaluation, the State may supplement the actions found in Appendix D - 2024 SHMP Mitigation Action Plan. Consideration/evaluation of new mitigation actions will be a part of the annual plan maintenance meetings outlined in Section 9.0: Plan Maintenance.

Mitigation Strategies

The State pursues resilient infrastructure projects and mitigation opportunities to prevent future damage and utilizing construction techniques and materials that will better withstand future weather events. This is accomplished through numerous initiatives and programs such as FEMA’s Public Assistance program, FEMA’s HMA program, and new State programs and initiatives to achieve recovery goals and mitigate against future losses. Clearly, continued efforts to build local mitigation capabilities in all areas (e.g. planning and regulatory, technical, and administrative, and fiscal) are vital to our State’s long-term management of natural hazard risk. As federal pre- and post-disaster funding will likely never meet overall needs, communities must be encouraged and equipped to promote local mitigation efforts with available local resources.

State and regional level planning guidance and support will serve as the foundation of effective and sustained local risk reduction. 2024 SHMP mitigation actions include development of new technical assistance opportunities, monitoring systems to track mitigation progress, GIS/web-based tools for mitigation planning support, and trainings for plan maintenance improvements. The State will also continue to enhance education and outreach opportunities for State agencies, stakeholders, and the general public through new approaches and expanded hazard mitigation topic areas.

While the 2024 State Mitigation Action Plan includes 137 mitigation actions that address the full range of hazards of concern, a primary emphasis has been placed on developing new mitigation actions, continuing in progress actions, or maintaining ongoing capabilities that mitigate the impacts of the following hazards of concern.

Coastal Erosion

The State continues efforts to mitigate the impacts of episodic and incremental coastal erosion. Large-scale efforts to build up New Jersey beachfronts to better protect against erosion and wave action include beach nourishment, dune replenishment, dune fortification, dune grass plantings, bulkheading, seawalls, and jetties. Numerous living shoreline projects continue to be implemented in lower energy coastal shorelines to restore shoreline positions and provide ecosystem services.

Dam/Levee Failure

Numerous projects in the State’s mitigation strategy focus on the rehabilitation and repair of dams, particularly high hazard potential dams, and the update of data and GIS mapping to inform emergency planning. Similar efforts are either identified or already underway for protective dikes and levees.

Extreme Temperature

The 2024 State Mitigation Action Plan aims to address extreme temperatures by focusing on continuity of operations of critical facilities through the establishment and maintenance of backup power sources to. Additional mitigation strategies to mitigate extreme temperature are likely to be identified in the next few years as the New Jersey Department of Environmental Protection (NJDEP) develops Resilience Action Plans and will be considered for inclusion in the next update of the SHMP.

Flood

By far, the most repetitive and impactful type of disaster affecting New Jersey is flooding. Acquisitions and elevations continue to be one of the State’s top priorities in mitigating flood risk as discussed in the Hazard Mitigation Grant Program Administrative Plan. The State has identified the following nine priorities to fund elevation and buyouts projects within the State. Funding to mitigate Severe Repetitive Loss properties that are substantially damaged is the highest priority.

Figure 6.0-2 HMGP Funding Priorities



The State does not support implementation of mitigation actions that provide perverse incentives. For example, the State see's significant risk in (or discourages) funding elevation projects located within Zone V of FEMA’s Flood Insurance Rate Maps. V zones are the most hazardous flood zones within the Special Flood Hazard Areas. Elevation of structures in these zones would encourage homeowners to remain exposed to potential damages and risk to life.

Habitable structures in flood-prone areas rely on critical facilities, infrastructure, and other FEMA lifelines. Before investing in any of these elements, the State will aim to gain a high level of understanding of the interrelationships and costs associated with maintaining structures in flood-prone areas. Benefits to projects will need to justify the investment and revolve around the community level instead of only individual structures. The State will use this approach to avoid overinvestment in infrastructure such as roadways that service/protect high flood risk neighborhoods that are best addressed through acquisition when considering long-term risk due to climate change.

For neighborhoods where acquisitions have taken place, the State is aiming to use post-acquisition management to restore floodplain function to develop a fully functional system.

Severe Weather, Severe Winter Weather, and Hurricane/Nor’Easter/Tropical Storm

Major storm events, including severe weather, severe winter weather, and coastal storms, continue to impact the State of New Jersey. The 2024 State Mitigation Action Plan aims to mitigate the impacts of these events at the State level by ensuring critical services can be maintained. Continuity of operations efforts include retrofits and establishment of backup power at critical facilities, updated emergency planning, improved monitoring systems, and improved warning systems.

The 2024 State Mitigation Action Plan also aims to develop or improve existing post-disaster capabilities. Actions include guidance for counties to identify temporary housing locations and establish disaster recovery centers. Damage assessments to major storm events has been identified as an opportunity for improvement. Actions to improve damage assessments include historic resources windshield survey updates, establishing a State strategy to address substantial damage events, and providing guidance to counties and municipalities on developing proper substantial damage assessment, response, and management strategies.

The 2024 State Mitigation Action Plan also includes mitigation actions to evaluate and plan for the impacts of anticipated climate change-driven increases in the frequency and severity of storm events. This includes actions to maintain and analyze weather and climate data.

Wildfire

The State of New Jersey continues to proactively address wildfire risk through prescribed burning by the NJ State Forest Fire Service. The primary purpose of prescribed burning in New Jersey is to reduce the hazardous accumulations of forest fuels. This aids in the prevention of wildfires, reduces the intensity of the fires, and provides a foundation for safer, more effective fire suppression and protection operations (NJDEP 2020).

6.0-8 PRIORITIZING MITIGATION ACTIONS

44 CFR 201.4(c)(3)(iii): The state plan should include an identification, evaluation, and prioritization of cost-effective, environmentally sound, and technically feasible mitigation actions.

In previous versions of the SHMP the social, technical, administrative, political, legal, economic, and environmental (STAPLEE) criteria were used for project evaluation and prioritization. The STAPLEE method provides a systematic approach that considers the opportunities and constraints of implementing a particular mitigation action.

The 2014 and 2019 New Jersey State Plan used a STAPLEE methodology identified in FEMA planning guidance (March 2013) that identified a modified STAPLEE mitigation action evaluation schema that uses a set of 11 evaluation criteria more suited to the purposes of mitigation strategy evaluation. The 11 evaluation criteria are defined below:

- *Life Safety* – How effective will the action be at protecting lives and preventing injuries?
- *Property Protection* – How significant will the action be at eliminating or reducing damage to structures and infrastructure?
- *Cost-Effectiveness* – Are the costs to implement the action commensurate with the benefits achieved? Do financial benefits of the action exceed the implementation costs?
- *Technical* – Is the mitigation action technically feasible? Is it a long-term solution? Eliminate actions that, from a technical standpoint, will not meet the goals.
- *Political* – Is there overall public support for the mitigation action? Is there the political will to support it?
- *Legal* – Does the State have the authority to implement the action?
- *Environmental* – What are the potential environmental impacts of the action? Will it comply with environmental regulations?
- *Social* – Will the proposed action adversely affect one segment of the population? Will the action disrupt established neighborhoods, break up voting districts, or cause the relocation of lower-income people?
- *Administrative* – Does the State have the personnel and administrative capabilities to implement the action and maintain it, or will outside help be necessary?
- *Agency Champion* – Is there a strong advocate for the action among State agencies that will support the action's implementation?

- *Other State and Local Objectives* – Does the action advance other State and local objectives, such as capital improvements, economic development, environmental quality, or open-space preservation? Does it support the policies of other plans and programs?

For the 2024 SHMP Update, the STAPLEE approach used in 2014 and 2019 was modified to remove redundancies, highlight the State’s priorities, and align with HMA grant program guidance. Some criteria were not changed, but additions to their definitions have expanded the scope of the individual criterion. This modification resulted in the establishment of the Mitigation Action Prioritization Tool (MAP-T). The following list describes the substantial changes to the STAPLEE methodology that have been adopted into the MAP-T:

- The “technical” criterion was eliminated as only technically feasible actions are included in the mitigation strategy. Actions lacking technical feasibility will be identified and removed from the mitigation strategy prior to prioritization.
- A fiscal criterion was added to gauge if the action is likely to have available funding.
- The social criterion has been modified to consider the benefits and potential negative impacts to socially vulnerable populations and underserved communities.
- A hazards of concern criterion was added to note if the action addresses a high-ranked hazard(s).
- A timeline criterion was added to identify if the action can be completed within the plan effectiveness period (five years).
- A community lifelines criterion was added to note if the action benefits a community lifeline.
- An optional recovery criterion was established that can be added following a disaster event to identify if the action aligns with the current disaster recovery funding sources (Hazard Mitigation Grant Program [HMGP], etc.) and disaster recovery needs. The scoring of the recovery criterion can also be updated when existing funding sources have modified eligibility requirements/areas of focus, when new funding sources are established, and when emerging disaster recovery needs based on communities impacted are identified. This will allow the prioritization of actions to be aligned with available funding and disaster recovery needs.

Agencies were asked to use these criteria to assist them in evaluating and prioritizing mitigation actions identified in the 2024 SHMP Update. Specifically, for each mitigation action, agencies were asked to assign a numeric rank (-1, 0, or 1) for each of the 15 evaluation criteria, defined as follows:

- 1 = Highly effective or feasible
- 0 = Neutral
- -1 = Ineffective or not feasible

The numerical results of this exercise were then used to help prioritize the action or strategy as Low, Medium, or High based on the following totals for numeric ranks:

- 0 – 6 = Low
- 7 – 11 = Medium
- 11 – 14 = High

Actions that resulted in a low prioritization were re-evaluated to determine if alternative approaches to the problem could perform better in the STAPLEE prioritization evaluation. While the 2024 modified STAPLEE provided a consistent, systematic methodology to support the evaluation and prioritization of mitigation actions, agencies may have additional considerations that could influence their overall prioritization of mitigation actions.

Table 6.0-3 2024 SHMP Mitigation Action Prioritization Tool (MAP-T)

Criteria	Description	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	How effective will the action be at protecting lives and preventing injuries? <i>Will the proposed action adversely affect one segment of the population?</i>		
Property Protection	How significant will the action be at eliminating or reducing damage to structures and infrastructure? <i>Developing in the floodplain or high-risk areas?</i>		
Cost-Effectiveness	Are the costs to implement the action commensurate with the benefits achieved?		
Political	Is there overall public support for the action? Is there the political will to support it? <i>Is the action at odds with development pressures?</i>		
Legal	Does the entity have the authority to implement the action?		
Fiscal	Can the action be funded under existing program budgets (i.e., is this initiative currently budgeted for)? Or would it require a new budget authorization or funding from another source such as grants?		
Environmental	What are the potential environmental impacts of the action? Will it comply with environmental regulations? <i>Are there co-benefits of this action?</i>		
Social Vulnerability	Does the action benefit socially vulnerable populations and underserved communities? Additional considerations can include the SVI index and other appropriate measures of social vulnerability. Note: Use of this criteria should include which, if any, social vulnerability indices are used. The social vulnerability indices used should be consistent with any indices used in the risk assessment.		
Administrative	Does the entity have the personnel and administrative capabilities to implement the action and maintain it or will outside help be necessary? <i>Does the scale and scope of the project align with the entity's capabilities?</i>		
Hazards of Concern	Does the action address one or more of the entity's high-ranked hazards?		
Climate Change	Does the action incorporate climate change projections for the State? Is the action designed to withstand/address long-term conditions? Is the action consistent with the State's climate resilience goals?		
Timeline	Can the action be completed in less than 5 years (within the planning horizon of the SHMP)?		
Community Lifelines	Does this project benefit community lifelines?		
Other State and Local Objectives	Does the action advance other entity objectives, such as capital improvements, economic development, environmental quality, or open-space preservation? Does it support the policies of other plans and programs?		

Criteria	Description	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Total			
Priority (High/Med/Low)			

It is important to note that certain initiatives from the 2011, 2014, and 2019 HMPs are being carried forward in the 2024 SHMP Update. As discussed, these initiatives were previously prioritized using the STAPLEE approach established in 2011 and 2014. With the new STAPLEE approach established for the 2024 SHMP Update, these carryover actions have been re-prioritized using the updated STAPLEE methodology.

Optional recovery criteria can also be added to the MAP-T following disaster events to aid in prioritization of recovery related mitigation actions.

Table 6.0-4 2024 MAP-T Optional Recovery Criteria

Criteria	Description	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Recovery	How does this action align with current disaster recovery funding sources (HMGP, etc.) and disaster recovery needs?		

HHPD Action Prioritization

NJDEP and NJOEM prioritize funding for actions that address potential dam failures using a risk-based eligibility matrix. Dams that are ranked as high hazard dams that have received poor/unsatisfactory safety inspections are considered HHPD eligible dams. Mitigation actions for poor/unsatisfactory dams are also prioritized using the 2024 MAP-T. Prioritization for mitigation of HHPD eligible dams is also re-evaluated based on annual updates to the HHPD program’s annual requirements and eligible activities as outlined in the annual notice of funding opportunity (NOFO).