

5.0 CAPABILITY ASSESSMENT 5.1 OVERVIEW

A Capability Assessment evaluates local regulatory, administrative, technical, and fiscal capabilities to accomplish hazard mitigation actions through existing mechanisms. This assessment helps Monmouth County and its municipalities identify strengths that could be used to reduce losses and risks in the community. The capability assessment also provides an inventory of the most critical local planning tools available within each municipality and a summary of the fiscal and technical capabilities available through programs and organizations outside of the County. It also identifies emergency management capabilities and the processes used to comply with the National Flood Insurance Program (NFIP).

Since Superstorm Sandy in 2012, there has been an increase in Federal and State grant money that allowed government agencies, Monmouth County, its municipalities, and local stakeholders to develop resiliency plans, design competitions, projects, and tools to help mitigate the risk of future coastal storms in Monmouth County. Some of the resiliency plans that emerged from post-Sandy grant money include Strategic Recovery Planning Reports (SRPR), Floodplain Management Plans, and municipal hazard mitigation plans. Rebuild by Design was a design competition funded through the U.S. Department of Housing and Urban Development (HUD) with project sites located in the City of Asbury Park and the Bayshore. Although the projects in Monmouth County were not selected for funding, several design proposals emerged from this competition to encourage towns to integrate in their future plans and development.

New Jersey Department of Environmental Protection (NJDEP) initiated a project called New Jersey Fostering Regional Adaptation through Municipal Economic Scenarios (FRAMES), which is a regional collaborative effort seeking to understand and address future flood vulnerability for 15 municipalities surrounding the Navesink and Shrewsbury Rivers, all within Monmouth County. Lastly, there have been several tools that emerged including NJFloodMapper and Getting to Resilience. As part of this Monmouth County HMP update, the Project Team discussed these resources that have emerged in the last five years with Monmouth County's municipalities and if approved by the local jurisdiction, rolled them into their mitigation actions and capability assessment.

Figure 5.1 - 1 Rebuild by Design Proposal for the Bayshore



To fully understand each jurisdiction's existing authorities, policies, programs, and resources, the Project Team distributed a **Figure 5.1-2 Capability Assessment Worksheet** to Monmouth County and its 53 municipalities prior to each municipal meeting. During the meetings, the Project Team and local officials discussed new capabilities since the acceptance of the previous Monmouth County HMP and updated the worksheet based on feedback. Where there were gaps in local knowledge or where extra information was available through research, this information was added to complement local feedback. The Worksheet divides capabilities into four categories: Planning and Regulatory; Administrative and Technical; Financial; Education and Outreach. Each municipal capability assessment is located in the Appendix Vol. I – Jurisdictional Information.

		CA	PABILITY ASSESSMENT WORKSHEET
Name:			Title:
urisdiction:			Organization:
ocal Mitigation Capabilities are e nazard impacts or that could be u ables and questions in the works	existing aut used to imp sheet as co	horities lement mpletel	s, policies, programs, and resources that reduce hazard mitigation activities. Please complete the y as possible.
Planning & Regulatory			
Planning and Regulatory Capabilit reduce the impacts of hazards. P place.	ties are the lease indic	plans, ate whi	policies, codes, and ordinances that prevent and ch of the following your jurisdiction currently has in
Plan	Yes/No	1. 2. 3. 4.	What is the date/year of the plan? Does the plan address hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions?
Plan Comprehensive/Master Plan	Yes/No	1. 2. 3. 4.	What is the date/year of the plan? Does the plan address hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions?
Plan Comprehensive/Master Plan Capital Improvements Plan	Yes/No	1. 2. 3. 4.	What is the date/year of the plan? Does the plan address hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions?
Plan Comprehensive/Master Plan Capital Improvements Plan Economic Development Plan	Yes/No	1. 2. 3. 4.	What is the date/year of the plan? Does the plan address hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions?
Plan Comprehensive/Master Plan Capital Improvements Plan Economic Development Plan Local Emergency Operations Plan	Yes/No	1. 2. 3. 4.	What is the date/year of the plan? Does the plan address hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions?

Figure 5.1 - 2 Capability Assessment Worksheet (page 1 of 6)



5.2 PLANNING AND REGULATORY CAPABILITY

Planning and regulatory capabilities are focused on the implementation of laws, ordinances, plans, policies, and programs that relate to land use, development, and growth management. Monmouth County and its incorporated jurisdictions have several policies, programs, and capabilities, which help to prevent and minimize future damages resulting from hazards. These tools are valuable instruments in pre- and post-disaster mitigation as they facilitate the implementation of mitigation activities through the current legal and regulatory framework.

5.2.1 FEDERAL PLANNING AND REGULATIONS

The National Flood Insurance Program (NFIP) aims to reduce the impact of flooding on both private and public structures by providing affordable flood insurance and encouraging floodplain management regulations. The NFIP administers Flood Insurance Rate Maps (FIRM), which are official maps the Federal Emergency Management Agency (FEMA) has delineated for both the Special Flood Hazard Area (SFHA) and the risk premium zones applicable to the community. Under Federal law, the purchase of flood insurance is mandatory for all Federal or Federally related financial assistance for the acquisition and/or construction of buildings in high-risk flood areas (Special Flood Hazard Areas or SFHAs).

The Community Rating System (CRS) program, which is also administered by the NFIP, was implemented in 1990 as a voluntary program for recognizing and encouraging community floodplain management activities that exceed the minimum standards by reducing flood insurance premiums for the community's property owners. The Monmouth County Division of Planning and the Monmouth County Office of Emergency Management (OEM) have partnered to offer their professional and technical expertise in hazard mitigation, community planning, public outreach, and GIS mapping to municipalities that wish to enter into or advance in CRS through the Monmouth County Community Rating System Assistance Program.

FEMA has developed a large number of documents that address implementing hazard mitigation at the local level. There are a number of FEMA brochures available that are required publications for the CRS program. The Monmouth County Library has these documents available in the FEMA Community Rating System Collection along with historic FIRMs.

Local Mitigation Planning Handbook. This handbook is the official guide for local governments to develop, update and implement local mitigation plans. While Federal requirements have not changed, the Handbook provides revised and expanded guidance, offering practical approaches, tools, worksheets and local mitigation planning examples for how communities can engage in effective planning to reduce long- term risk from natural hazards and disasters. The Handbook can be found on the FEMA web site at: <u>https://www.fema.gov/library/viewRecord.do?id=7209</u>

Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards, January 2013. The purpose of this document is to provide a resource that communities can use to identify and evaluate a range of potential mitigation actions for reducing risk to natural hazards and disasters. The focus of this document is mitigation, which is action taken to reduce or eliminate long-term risk to hazards. Ideas for mitigation actions are presented for the following natural hazards: drought, earthquake, erosion, extreme temperatures, flood, hail, landslide, lightning, sea level rise, severe wind, severe winter weather, storm surge, subsidence, tornado, tsunami, and wildfire. This resource can be found on the FEMA web site at:

https://www.fema.gov/media-library-data/20130726-1904-25045-0186/fema_mitigation_ideas_final508.pdf

Integrating Hazard Mitigation into Local Planning: Case Studies and Tools for Community Officials. The purpose of this document is to provide succinct and practical information to local government officials on how to best integrate hazard mitigation into the full range of community planning activities. It is intended for those who are engaged in any type of local planning, but primarily community planners and emergency managers that bear responsibility for hazard mitigation planning. This resource can be found at:

https://www.fema.gov/media-library-data/20130726-1908-25045-0016/integrating_hazmit.pdf

Post-Disaster Hazard Mitigation Planning Guidance for State and Local Governments. FEMA, DAP-12, September 1990. This handbook explains the basic concepts of hazard mitigation and shows State and local governments how they can develop and achieve mitigation goals within the context of FEMA's post-disaster hazard mitigation planning requirements. The handbook focuses on approaches to mitigation, with an emphasis on multi-objective planning.

Mitigation Resources for Success CD. FEMA 372, September 2001. This CD contains a wealth of information about mitigation and is useful for state and local government planners and other stakeholders in the mitigation process. It provides mitigation case studies, success stories, information about Federal mitigation programs, suggestions for mitigation measures to homes and businesses, appropriate relevant mitigation publication, and contact information.

A Guide to Federal Aid in Disasters. FEMA 262, April 1995. When disasters exceed the capabilities of State and local governments, the President's disaster assistance program (administrated by FEMA) is the primary source of Federal assistance. This handbook discusses the procedures and process for obtaining this assistance and provides a brief overview of each program.

The Emergency Management Guide for Business and Industry. FEMA 141, October 1993. This guide provides a step-by-step approach to emergency management planning, response, and recovery. It also details a planning process that companies can follow to better prepare for a wide range of hazards and emergency events. This effort can enhance a company's ability to recover from financial losses, loss of market share, damages to equipment, and product or business interruptions. This guide could be of great assistance to Monmouth County industries and businesses located in hazard prone areas.

Important Websites:

The following are important websites that provide focused access to valuable planning resources for communities interested in sustainable development initiatives.

- <u>http://www.fema.gov</u> Web site of the Federal Emergency Management Agency includes links to information, resources, and grants that communities can use in planning and implementation of sustainable measures. Most notably:
 - <u>http://www.fema.gov/what-mitigation</u> To learn more about mitigation and how to make it work for you.



- http://www.fema.gov/multi-hazard-mitigation-planning For information about multi-0 hazard mitigation planning.
- http://www.region2coastal.com For the latest information about flood risk in coastal 0 New York and New Jersey.
- https://www.floodsmart.gov -The official site of FEMA's National Flood Insurance Program.
- http://mitigationguide.org/ "Beyond the Basics: Best Practices in Local Mitigation Planning", a • website developed as part of a multi-year research study funded by the U.S. Department of Homeland Security, and led by the Center for Sustainable Community Design within the Institute for the Environment at the University of North Carolina at Chapel Hill.
- http://www.planning.org Web site of the American Planning Association, a non-profit professional association that serves as a resource for planners, elected officials, and citizens concerned with planning and growth initiatives.
- http://www.ibhs.org Web site of the Institute for Business and Home Safety, an initiative of the insurance industry to reduce deaths, injuries, property damage, economic losses, and human suffering caused by natural disasters. Online resources provide information on natural hazards, community land use, and ways you can protect your property from damage.

Federal Technical Assistance and Funding

We Make a Difference.

Michael Baker International.

The Federal government offers a wide range of funding and technical assistance programs that communities can access to assist in their long-term recovery. Some of these programs are geared to disaster preparedness and mitigation planning, while the focus of others is the long-term vitality of the communities. Examples of these programs include Emergency Watershed Protection Program (NOAA), National Cyber Security Awareness (NPPD), Disaster Assistance Loans (SBA), and National Disaster Resilience Competition (HUD).

Table 5.2-1 Federal Funding presents a summary of Federal funding sources available for mitigation activities. Further information on these and other Federal programs can be found in the Catalog of Federal Domestic Assistance (CFDA) available on online at <u>www.cfda.gov</u>.

	es an Approveu nazaru Milligation Flan.
Flood Mitigation Assistance Program (FMA)	Availability: Pre- disaster Description: To implement cost-effective measures that reduce or eliminate the long-term risk of flood damage to building, manufactured homes, and other structures insured under the National Flood Insurance Program (NFIP)/

Table 5.2 - 1 Federal Funding (FEMA, HUD, USDOT 2019)

Hazard Mitigation Grant Program (HMGP) Pre-Disaster Mitigation Program (PDM)	Availability: Post-disaster Description: To provide funds to states, territories, Indian Tribal governments, and communities to significantly reduce or permanently eliminate future risk to lives and property from natural hazards. HMGP funds projects in accordance with priorities identified in state, Tribal or local hazard mitigation plans, and enables mitigation measures to be implemented during the recovery from a disaster. Availability: Pre-disaster Description: To provide funds to states, territories, Indian Tribal governments, and communities for hazard mitigation plansing and the implementation of mitigation projects prior to a disaster event
	Funding these plans and projects reduces overall risks to the population and structures, while also reducing reliance on funding from actual disaster declarations.
Other Available Fede	eral Funds:
Fire Management	Availability: Post-disaster
Program	Description: Assistance for the mitigation, management, and control of fires on publicly or privately- owned forests or grasslands, which threaten such destruction as would constitute a major disaster.
Community	Availability: Pre- or Post-disaster
Grant (CDBG)	Description: Federal grant provided to CDBG "entitlement communities" (typically, municipalities with populations over 50,000 and urban counties with populations over 200,000) and to all states.
Reimbursement for Firefighting on Federal Property	Availability: Post-disaster Description: Provides reimbursement only for direct costs and losses over and above normal operation costs
National Dam	Availability: Pre-disaster
Safety Program (NDSP)	Description: The NDSP was formally established by the Water Resources and Development Act of 1996. Led by FEMA, the NDSP is a partnership of the states, Federal agencies, and other stakeholders to encourage individual and community responsibility for dam safety.
Land and Water	Availability: To states, local, and conservation organizations
(LWCF)	Description: Funding for outdoor recreational development, renovation, land acquisition, and planning.
The Forest Legacy Program (FLP)	Availability: Participation in Forest Legacy is limited to private forest landowners. Description: Federal program in partnership with states, supports state efforts to protect environmentally sensitive forest lands. Designed to encourage the protection of privately-owned forest lands, FLP is an entirely voluntary program. To maximize the public benefits it achieves, the program focuses on the acquisition of partial interests in privately owned forest lands. FLP helps the states develop and carry out their forest conservation plans. It encourages and supports acquisition of conservation easements, legally binding agreements transferring a negotiated set of property rights from one party to another, without removing the property from private ownership. Most FLP conservation easements restrict development, require sustainable forestry practices, and protect other values.



Transportation Trust Fund (TTF)	Availability: Pre- or Post-disaster Description: Grants are funded by the TTF through a competitive application-based process administered by the Local Aid District Offices.
U.S. Army Corp of Engineers	Availability: Post-disaster Description: Assistance for the management of mitigation projects after the project has met all of the performance standards for the project.

5.2.2 STATE PLANNING AND REGULATIONS

Michael Baker International. We Make a Difference.

State HMP: The State HMP includes an evaluation of the State's overall pre and post hazard mitigation policies, programs, and capabilities; the policies related to development in hazard prone areas; and the State's funding capabilities. Please refer to Appendix G for additional information, including but not limited to State grant and loan funding sources with the potential to address hazard mitigation projects that can be accessed by local jurisdictions. It provides an overview of these funding sources, potential availability, applicability of pre- or post- disaster requirements, and the type of funding that is available. The State Plan should be referred to directly for more specifics (on the web at <u>www.state.nj.us/njoem/</u>).

This capability assessment finds that the State of New Jersey's various departments collectively have a significant level of legal, technical, and fiscal tools and resources necessary for implementation of hazard mitigation strategies.

Emergency management in the State of New Jersey is under the direct control of the Governor, who is conferred specific emergency powers under the New Jersey Constitution and statues. The Superintendent of the State Police, a Division within the New Jersey Department of Law and Public Safety, is the State Director of Emergency Management.

The Emergency Management Section facilitates the flow of information to and from the various bureaus supervised and serves as a conduit for communication with other divisions. The Section is also responsible for planning, directing and coordinating emergency operations within the State which are beyond local control.

The Recovery Bureau supervises the Public Assistance, Mitigation and Finance Units.

- The <u>Preparedness Unit</u> disseminates preparedness information in advance of a disaster or potential disaster.
- The <u>Mitigation Unit</u> has the mission of enhancing State, county, and municipal risk reduction through the development and implementation of mitigation strategies. The Unit undertakes hazard mitigation planning and the review of mitigation projects in advance of potential disasters and is also activated during and immediately after disasters to evaluate existing and proposed mitigation measures in the affected areas. They make applicants aware of FEMA mitigation grant programs and conduct training sessions and workshops and participate in public meetings to facilitate grant processes.
- The <u>Finance Unit</u> supports the fiscal functions of both the Public Assistance and Mitigation Units. It ensures timely reimbursements and fiduciary responsibility.

The State has an Emergency Operations Center which is activated and staffed whenever a disaster occurs or is predicted to occur. The State's Emergency Operations Plan addresses the State's response to any disaster or emergency and provides the basis for coordinated emergency operations involving disaster planning, response, recovery and mitigation.

The NJOEM office has evolved from a small agency with limited planning, training, and response capabilities to its present status as an integral part of State government. The State Hazard Mitigation Officer is the representative of State government acting as the primary point of contact with FEMA, other Federal agencies, and county and local units of government in the planning and implementation of pre- and post-disaster mitigation programs and activities required under the Stafford Act.

NJOEM has prioritized support for the Mitigation Unit. A Mitigation Unit manager, civil engineer and regional manager were hired to manage the increased workload and responsibilities of the NJOEM Mitigation Unit. Additional planning assets are also scheduled to be hired in the very near future. The projected additions to the Mitigation Unit will bring a total workforce to 15 staff members. The Mitigation Unit also has seven to nine Contract staff members on staff to assist with New Jersey Hurricane Sandy (DR-4086) including specialists in federal environmental and historic preservation (EHP), Benefit Cost Analysis (BCA), and planning services.

New Jersey has several funding sources for conducting hazard mitigation projects. For example, grants for flood mitigation projects may be obtained through the New Jersey Office of Emergency Management for planning and projects.

Capital needs of the state are primarily funded through three methods, which may be used singularly or in combination. They are:

- Pay-as-you-go capital outlays used primarily for renovations and preservation of state properties, highway, and mass transit improvements and environmental projects.
- General obligation bond funds, used to finance more expensive capital construction projects such as new facilities and must yield substantial benefits for the present and future generations (these funds must be authorized by the state's voters)
- Lease or lease-purchase is an alternate method of financing capital construction by allowing the State to occupy a facility and, over a defined period of time, secure ownership.



A complete listing of funding opportunities is available in the

New Jersey State for Hazard Mitigation Plan available here: <u>http://ready.nj.gov/mitigation/2019-mitigation-plan.shtml</u>



New Jersey Executive Order No. 89: On October 29, 2019, Governor Philip Murphy signed Executive Order No. 89, establishing new requirements aimed at building statewide and community resilience, including establishing a Interagency Council on Climate Resilience & Climate and Flood Resilience Program and developing a Scientific Report on Climate Change and a Statewide Climate Change Resilience Strategy.

Building Ecological Solutions to Coastal Community Hazards: A Guide for New Jersey Coastal Communities: Developed by the National Wildlife Federation and NJDEP, this report describes ecological solutions to coastal community hazards. The report encourages coastal communities to work with, rather than against, nature to increase elevation and reduce erosion and flooding risks.

New Jersey Stormwater Best Management Practices Manual: N.J.A.C. 7:8 specify stormwater management standards that are mandatory for new major development; the Best Management Practices (BMP) Manual provides examples of ways to meet the standards contained in the rule. Chapter Two of the manual explores low impact development techniques municipalities can incorporate to reduce the risk of flooding.

NJDEP's Division of Land Use Regulation: NJDEP regulates land use activities through a permit process to ensure the health and quality of streams, estuaries, coastal waters, wetlands, wildlife habitat, and drinking water. Two of these regulations include the Coastal Area Facility Review Act (CAFRA), which determines if an activity is regulated based on the activity itself and its location within the coastal zone, and The Flood Hazard Area Control Act, which regulates construction in the riparian zone. Depending upon the nature of the project, specific additional standards may apply.

5.2.3 COUNTY PLANNING AND REGULATIONS

Under the County Planning Act (a component of the Municipal Land Use Law), the Board of Freeholders may create a county planning board comprised of at least five members. If the county creates a planning board then they are also required to make and adopt a master plan. The primary purpose of the plan is to assess which and how many capital facilities are needed and the timing of that need. It is also used to facilitate development a county Capital Improvements Plan (CIP). The county master plan may also include a transportation component, specifically any issues pertaining to county roads, bridges, and transit networks. The County also needs to adopt an Emergency Operations Plan (EOP).

The planning board is required to encourage the cooperation of the municipalities in any matters that concern the master plan and to advise the board freeholders with respect to the formulation of development programs and budgets for capital expenditures. The county also reviews all subdivisions within the county and have approval over those subdivisions that affect county roads or drainage facilities. The county also reviews and approve site plans within the county that affect county roads and/or drainage facilities. The county planning board is also involved in open space, recreation, and conservation efforts. This is in addition to the preservation of farmland.

In 2015, the Monmouth County OEM coordinated an intra-county MAAs for municipalities. In the case of a Federally declared emergency, municipalities that have formally adopted the agreement are allowed

to share department services (e.g. fire, police, emergency medical services, building construction, and public works) with other participating municipalities and are eligible for reimbursement for those services by FEMA.

5.2.4 MUNICIPAL PLANNING AND REGULATIONS

The Faulkner Act, or the Optional Municipal Charter Law, provides New Jersey municipalities with four plans of government: mayor-council, council-manager, small municipality, and mayor-council administrator. This Act provides municipalities with more governmental and administrative flexibility than the traditional forms of government like city, borough, township, town, or village.

As stated above, the State, through enabling legislation, delegates the power of zoning to municipalities. In accordance with the MLUL, all municipalities are required to enact zoning ordinances that promote the health, safety, and welfare of residents. Zoning ordinances allow for local communities to regulate the use of land in order to protect the interested and safety of the general public. Zoning ordinances can be designed to address unique conditions or concerns within a given community. They may be used to create buffers between structures and high-risk areas, limit the type or density of development and/or require land development to consider specific hazard vulnerabilities. All municipalities in Monmouth County have zoning regulations.

Building codes regulate construction standards for new construction and substantially renovated buildings. At the State level, building and construction codes are administered by the New Jersey Department of Community Affairs (DCA). Local standards can be adopted that require additional

Design Flood Elevation (DFE)= Base Flood Elevation (BFE) + Freeboard resilient building design practices to address hazard impacts. For example, a municipality can require new construction and substantially damaged building to be built to the Design Flood Elevation (DFE), which is calculated by taking the base flood elevation (BFE) on the Adopted Regulatory Flood Maps and

adding required freeboard. All municipalities in Monmouth County have enforced building codes.

In addition to the required zoning and building ordinances, there are plans and regulations that local jurisdictions are required to adopt: a local EOP and a Stormwater Management Plan (SWMP), along with stormwater ordinances or an ordinance plan implementation. An EOP outlines the methods, resources, and procedures in the event of emergencies and is initiated by local emergency managers if an emergency or disaster overwhelms local emergency response capabilities. County OEM coordinates the necessary Federal, State, or County resources to address the crisis. The EOP also contains any details pertaining to the type of hazard that will need to an evacuation and how the evacuation will be executed and accomplished. Every county and municipality in New Jersey are required by law to prepare and maintain a multi-hazard EOP which is updated and certified every four years by NJOEM. SWMPs should be a component of a master/comprehensive plan and the municipality should coordinate with the appropriate soil conservation district.

The following plans and regulations when implemented may add strong capabilities for Monmouth County and its 53 municipalities.



- **Community Wildfire Protection Plan (CWWP):** not required for municipalities, however, if a municipality is to become a Firewise Community, then they will need to adopt a CWPP.
- **Community Improvements Plan (CIP):** provides a project schedule, generally short term, consisting of revenue sources and expenditures, by year, for the municipality.
- Continuity of Operations Plan (COOP): establishes procedures for maintaining the smooth operations of government during a disaster event. The COOP may also be an element within the EOP.
- Master/Comprehensive Plan: strengthens zoning ordinances by making them legally defensible. Master/comprehensive plans promote sound land use and provide a forum to address planning issues. If a municipality has established a master plan, then the municipality is required to revise and update the plan every ten years. As the frequency and severity of weather events increase, master plans are starting to include a resiliency element to address hazard mitigation and resilient construction.
- Transportation Plan: can be a component of the master/comprehensive plan or it can be a separate plan that could address circulation issues, road improvements, public transit networks, and may or may not include a bike/ped component.
- **Economic Development Plan:** provides on overview of the municipality's economy, sets policies for economic growth, and programs or strategies that improve the local economy.
- Floodplain Ordinance: ensure that all new construction or substantial improvements to existing structures located in the floodplain are mitigated against future hazards.
- **Subdivision Ordinance**: intended to regulate the development of housing, commercial, industrial or other uses, including associated public infrastructure, as land is subdivided into buildable lots for sale or future development.
- Special Purpose Ordinance: A special purpose ordinance is a form of zoning in which specific standards dependent upon the special purpose or use must be met. For example, many special purpose ordinances include basic development requirements such as setbacks and elevations. The special purpose ordinance is a useful mitigation technique particularly when implemented to reduce damages associated with flooding and coastal erosion. Special purpose ordinances identified by jurisdictions include stormwater management, erosion, floodplain, steep slope, setback ordinances and standards for roads, bridges and drainage structures.
- Growth Management Ordinances: are enacted as a means to control the location, amount, and type of development in accordance with the larger planning goals of the jurisdiction. These ordinances often designate the areas in which certain types of development is limited and encourage the protection of open space for reason such as environmental protection and limitation of sprawl. The State Policies for Comprehensive Planning given in the New Jersey State Development and Redevelopment Plan encourages coordination of growth management plans and policies with hazard mitigation and emergency response planning.

- Site Plan Review: requirements are used to evaluate proposed development prior to construction. An illustration of the proposed work, including its location, exact dimensions, existing and proposed buildings, and many other elements are often included in the site plan review requirements. The site plan reviews offer an opportunity to incorporate mitigation principles, such as ensuring that the proposed development is not in an identified hazard area and that appropriate setbacks are included.
- Emergency Response Plans: provide an opportunity for local governments to anticipate an emergency and plan the response accordingly. In the event of an emergency, a previously established emergency response plan can reduce negative effects as the responsibilities and means by which resources are deployed has been previously determined.
- **Post-Disaster Recovery Plan:** guides the physical, social, environmental, and economic recovery and reconstruction procedures after a disaster. Hazard mitigation principles are often incorporated into post-disaster recovery plans in order to reduce repetitive disaster losses.
- **Post-Disaster Recovery Ordinances:** are often produced in conjunction with post-disaster recovery plans. The ordinances are enacted after a hazard event to guide redevelopment in order to reduce future damages and mitigate repetitive loss.
- A Real Estate Disclosure Ordinance: requires individuals selling real estate to inform potential buyers of the hazards to which the property and/or structure is vulnerable prior to the sale. Such a requirement ensures that the new property owner is aware of the hazards to which the property is at risk of damage.
- Farmland Preservation Plan: a plan created by a local government to set aside and protect and preserve the region's farmland and rural character. Preserving farms near or in floodplains can reduce the built environment's risk to flooding and lower impacts on riverine systems and downstream impacts.
- Open Space Plan: a plan created by a local government to preserve open space (parks, wetlands, forests, etc.), which improves the region's ability to naturally retain stormwater. Open spaces can work to reduce the built environment's risk to flooding while providing a natural barrier to the built environment.

5.2.5 OTHER PLANNING EFFORTS

In addition to Federal, State, and County planning efforts and regulations, there are several non-profit organizations and volunteer organizations that can help assist and provide additional capacity for response. Some of these programs are described below:

- Sustainable Jersey: Sustainable Jersey is a nonprofit organization that provides tools, training and financial incentives to support communities as they pursue sustainability programs, including the Sustainable Jersey Resiliency Program, a statewide initiative to help municipalities strengthen their resiliency to the impacts of climate change.
- New Jersey Cultural Alliance or Response: the New Jersey Cultural Alliance for Response (NJCAR) works closely with NJOEM to incorporate the State's cultural resources into the



statewide Emergency Response Framework for disaster planning, risk assessment, hazard mitigation, and recovery. As a result, County and local government emergency managers can connect through NJOEM and NJCAR with managers of cultural assets in their local communities. NJCAR's primary aims are to prevent and mitigate the loss of cultural and historic resources in the event of a disaster and to serve as a statewide resource.

- National Association of Voluntary Organizations Active in Disasters: an association of organizations that mitigate the impact of disasters, provides a forum promoting communication and collaboration, and fosters more effective delivery of services to communities affected by disaster.
- Silver Jackets Program: a program that brings together Federal, State, and municipal agencies to apply shared knowledge of reducing flood risk and enhance response and recovery when an emergency event occurs. The overall goal of the Silvers Jackets is to create a state-led interagency team in every state.
- **Community Emergency Response Team (CERT):** a program through FEMA that educates volunteers about disaster preparedness through training in basic disaster response.
- Land Conservancy of New Jersey: an organization that preserves land and water resources, conserves open space, and protects the environment. The Conservancy completes a wide variety of municipal and county plans for land acquisition, recreation, and sustainable design including Flood Acquisition Plans.
- Monmouth Arts: acknowledging Monmouth Arts as the County's primary "Arts Responder," the organization helps connect the arts community to information, resources, and emergency funding in the aftermath of a disaster. The County values the importance of integrating the arts with hazard mitigation and therefore created a mitigation action as part of this HMP update to support Monmouth Arts, in addition to NJ State Council for the Arts and NJCAR, in improving disaster preparedness and response for arts, cultural and historic buildings, structures, and institutions (Mitigation Action #57_17). Being a shore community, many of the County's most precious and irreplaceable arts, historic, and cultural resources are located in vulnerable areas to future storm and flooding events. Arts Responders are a vital way communities can protect and preserve such resources before, during, and after a storm. During Sandy recovery, Monmouth Arts worked with the Federal Emergency Concrete road barrier used to restrict traffic to flood damaged areas along the beach converted into a public art, giving locals a positive message of hope in the aftermath of Superstorm Sandy.¹ During Superstorm Sandy, Two River Theater and Count Basie Theatre became recharging stations for people and electronics. Middletown Arts Center created a new program for students until the student's schools were reopened. Monmouth Art's efforts became ArtHelps, which included an Indie gogo campaign to support community arts projects in the hardest hit towns. Monmouth Arts also joined the Monmouth County Long-Term Recovery Group to ensure the arts were represented in ongoing

¹ Belmar, NJ 2013 Source: Monmouth Arts 6 - 23 Monmouth County Master Plan 6.0 Arts, Historic, & Cultural Resources 2016 Management Agency (FEMA) on behalf of cultural organizations

recovery efforts.² Presently, Monmouth Arts maintains a list of emergency preparedness resources online including first steps to recovery, government assistance options, legal help, and information for small businesses, self-employed, artists, arts organizations, schools, and teachers. As the threat from rising tides and severe weather continues to intensify, the role of Monmouth Arts as the Arts Responder in maintaining and protecting these assets from the effects of natural disasters becomes an increasingly important component to our overall community resiliency strategy.

5.2.6 WATERSHED MANAGEMENT PLANS

Monmouth County has five locally-approved Watershed Based Plans. The Deal Lake Watershed Protection Plan (WWP), adopted by the Deal Lake Commission in 2011, and the Wreck Pond Brook Watershed Restoration Plan, adopted by the Wreck Pond Brook Watershed Regional Stormwater Management Plan Committee in 2015, are entirely within Monmouth County. The Manalapan Brook Watershed Protection and Restoration Plan, adopted by the Manalapan Brook Watershed Restoration and Protection Plan Project Committee in 2011, overlaps with Middlesex County. The Metedeconk River Watershed Protection and Restoration Plan, adopted by Brick Township Municipal Utilities Authority in 2018, overlaps with Ocean County. Finally, the Raritan Basin Watershed Management Plan, adopted by NJ Water Supply Authority in 2002, which overlaps with Morris, Hunterdon, Somerset, Mercer, and Middlesex Counties. Each plan has received funding through NJDEP Section 319(h) Grants for Nonpoint Source Pollution Control, a section of the Clean Water Act. While not administered by a government body, these plans attempt to address water quality issues, stormwater management, and flooding a regional level.

The Deal Lake WPP takes a regional approach and aggressive management of stormwater runoff. One of the biggest issues facing the Deal Lake, and the tributaries the feed into the lake, is stormwater runoff and high levels of pollutants from that runoff as well as from recreation use. The municipalities that share the Deal Lake Watershed are Asbury Park City, Loch Arbor Borough, Ocean Township, Allenhurst Borough, Deal Borough, Interlaken Borough, and Neptune Township. The Deal Lake Commission was created in 1974 by those seven municipalities so the problems affecting Deal Lake could be addressed on a regional scale. As previously noted, each municipality is required to develop and submit a Municipal Stormwater Management Plan and Ordinance. These plans and ordinances, in addition to other regulatory changes, are reviewed and then incorporated into the Deal Lake WPP.

The Wreck Pond Brook Watershed Restoration Plan encompasses Wall Township, and the Boroughs of Spring Lake, Spring Lake Heights, and Sea Grit. It was identified by NJDEP as a watershed of concern, due to the bacteria levels and bathing beach standards, which results in swimming bans during once rainfall exceeds 0.1 inch. In addition to water quality levels, other areas of concern are in algal blooms, nutrient loads, sedimentation, and flooding.

The Metedeconk River is the primary water source for the Brick Township Municipal Utilities Authority which serves residents in Howell Township in Monmouth County along with residents in Ocean County.

² American for the Arts



The Watershed also encompasses portions of Freehold Township, Millstone Township, and Wall Township. The Manalapan Brook Watershed includes portions of municipalities in Monmouth County, including Englishtown Borough, Freehold Township, Manalapan Township, and Millstone Township, as well as municipalities in Middlesex County. The Raritan Basin Watershed Management Plan includes portions of Millstone Township, Manalapan Township, Marlboro Township, Freehold Borough, and Freehold Township.

5.2.7 SUMMARY OF FINDINGS

Planning Capability Findings

Michael Baker International. We Make a Difference.

In terms of Planning Capabilities, a summary of municipal finding is below, based on responses from each municipality. As previously mentioned, all 53 municipalities are required to adopt EOP and a SWMP. For some municipalities, there are additional special plans (e.g. Getting to Resilience, SRPR, Floodplain Management Plan) that the local governing body has adopted in addition to the plans listed in the Table below. To view individual Capability Assessment Worksheets, refer to the Appendices V.I–Jurisdictions. The Capability Assessment Worksheet is where each municipality also evaluated their ability to expand on and improve these existing plans.

Municipality	Hazards Addressed in Comp./ Master Plan	CIP	Economic Development Plan	COOP	Post-Disaster Recovery Plan	Transportation Plan	Community Wildfire Plan
Aberdeen Township	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Allenhurst Borough		\checkmark	\checkmark				
Allentown Borough	\checkmark			\checkmark			
Asbury Park City	\checkmark	\checkmark	\checkmark			\checkmark	
Atlantic Highlands Borough	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	
Avon-by-the-Sea Borough		\checkmark	\checkmark		\checkmark		
Belmar Borough	\checkmark		\checkmark	\checkmark	\checkmark		
Bradley Beach Borough	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
Brielle Borough		\checkmark		\checkmark			
Colts Neck Township		\checkmark	\checkmark		\checkmark		
Deal Borough		\checkmark	\checkmark		\checkmark		
Eatontown Borough	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
Englishtown Borough							
Fair Haven Borough		\checkmark					
Farmingdale Borough					\checkmark		
Freehold Borough		\checkmark		\checkmark			
Freehold Township		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
Hazlet Township		\checkmark	\checkmark				
Highlands Borough		\checkmark	\checkmark			\checkmark	
Holmdel Township		\checkmark	\checkmark		\checkmark		
Howell Township		\checkmark	\checkmark		\checkmark	\checkmark	\checkmark
Interlaken Borough			\checkmark		\checkmark		

Table 5.2 - 2 Planning Capabilities Sur	nmary Based on Responses (updated 08-28-19)
	indig based on Responses (apaated oo zo 19)

Municipality	Hazards Addressed in Comp./ Master Plan	CIP	Economic Development Plan	соор	Post-Disaster Recovery Plan	Transportation Plan	Community Wildfire Plan
Keansburg Borough		\checkmark	\checkmark		\checkmark	\checkmark	
Keyport Borough		\checkmark	\checkmark		\checkmark		
Lake Como Borough		\checkmark	\checkmark		\checkmark		
Little Silver Borough			\checkmark		\checkmark		
Loch Arbour Village		\checkmark					
Long Branch City	\checkmark	\checkmark	\checkmark			\checkmark	
Manalapan Township		\checkmark			\checkmark	\checkmark	
Manasquan Borough				\checkmark	\checkmark		
Marlboro Township		\checkmark			\checkmark		
Matawan Borough		\checkmark	\checkmark				
Middletown Township		\checkmark	\checkmark		\checkmark		
Millstone Township		\checkmark	\checkmark		\checkmark	\checkmark	
Monmouth Beach Borough		\checkmark		\checkmark	\checkmark		
Neptune City Borough		\checkmark		\checkmark			
Neptune Township		\checkmark	\checkmark			\checkmark	
Ocean Township		\checkmark	\checkmark		\checkmark		
Oceanport Borough	\checkmark	\checkmark				\checkmark	
Red Bank Borough		\checkmark					
Roosevelt Borough		\checkmark			\checkmark	\checkmark	
Rumson Borough	\checkmark	\checkmark		\checkmark			
Sea Bright Borough		\checkmark	\checkmark		\checkmark	\checkmark	
Sea Girt Borough		\checkmark		\checkmark	\checkmark	\checkmark	
Shrewsbury Borough		\checkmark	\checkmark		\checkmark		
Shrewsbury Township							
Spring Lake Borough		\checkmark	\checkmark		\checkmark	\checkmark	
Spring Lake Heights Borough		\checkmark					
Tinton Falls Borough		\checkmark			\checkmark		
Union Beach Borough	\checkmark	\checkmark		\checkmark			
Upper Freehold Township		\checkmark	\checkmark		\checkmark		
Wall Township		\checkmark	\checkmark		\checkmark	\checkmark	
West Long Branch Borough		\checkmark		\checkmark	\checkmark		

Michael Baker International. We Make a Difference.

Regulation Capability Findings

In terms of Regulation Capabilities, a summary of municipal findings is below, based on responses from each municipality. There is additional information on regulatory capabilities in each individual Capability Assessment Worksheets located in Appendices V.I–Jurisdictions. The Capability Assessment Worksheet is where each municipality also evaluated their ability to expand on and improve their existing regulations.



Table 5.2 - 3 Regulation Capabilities Summary Based on Responses (updated 08-28-19)

Michael Baker International. We Make a Difference.

Municipality	Floodplain Ordinance	Natural Hazard Ordinance	Post-Disaster Recovery Ordinance
Aberdeen Township	\checkmark	\checkmark	\checkmark
Allenhurst Borough	\checkmark	\checkmark	
Allentown Borough	\checkmark	\checkmark	
Asbury Park City	\checkmark	\checkmark	
Atlantic Highlands Borough	\checkmark	\checkmark	
Avon-by-the-Sea Borough	\checkmark		
Belmar Borough	\checkmark		\checkmark
Bradley Beach Borough	\checkmark		\checkmark
Brielle Borough	\checkmark	\checkmark	
Colts Neck Township	\checkmark	\checkmark	\checkmark
Deal Borough	\checkmark		\checkmark
Eatontown Borough	\checkmark	\checkmark	
Englishtown Borough	\checkmark		
Fair Haven Borough	\checkmark		
Farmingdale Borough	\checkmark	\checkmark	
Freehold Borough	\checkmark		\checkmark
Freehold Township	\checkmark		
Hazlet Township	\checkmark		\checkmark
Highlands Borough	\checkmark	\checkmark	
Holmdel Township	\checkmark	\checkmark	\checkmark
Howell Township	\checkmark		
Interlaken Borough	\checkmark		
Keansburg Borough	\checkmark	\checkmark	\checkmark
Keyport Borough	\checkmark		\checkmark
Lake Como Borough	\checkmark		\checkmark
Little Silver Borough	\checkmark	\checkmark	\checkmark
Loch Arbour Village	\checkmark	\checkmark	
Long Branch City	\checkmark		
Manalapan Township	\checkmark		\checkmark
Manasquan Borough	\checkmark	\checkmark	
Marlboro Township	\checkmark	\checkmark	\checkmark
Matawan Borough	\checkmark	\checkmark	
Middletown Township	\checkmark		\checkmark
Millstone Township	\checkmark	\checkmark	\checkmark
Monmouth Beach Borough	\checkmark	\checkmark	
Neptune City Borough	\checkmark		
Neptune Township	\checkmark	\checkmark	
Ocean Township	\checkmark	\checkmark	
Oceanport Borough	\checkmark		
Red Bank Borough	\checkmark		
Roosevelt Borough	\checkmark		
Rumson Borough	\checkmark	\checkmark	
Sea Bright Borough	\checkmark	\checkmark	\checkmark
Sea Girt Borough	\checkmark	\checkmark	\checkmark

Municipality	Floodplain Ordinance	Natural Hazard Ordinance	Post-Disaster Recovery Ordinance
Shrewsbury Borough	\checkmark	\checkmark	\checkmark
Shrewsbury Township	\checkmark		
Spring Lake Borough	\checkmark	\checkmark	
Spring Lake Heights Borough	\checkmark		
Tinton Falls Borough	\checkmark	\checkmark	\checkmark
Union Beach Borough	\checkmark	\checkmark	
Upper Freehold Township	\checkmark		\checkmark
Wall Township	\checkmark	\checkmark	\checkmark
West Long Branch Borough	\checkmark	\checkmark	

5.2.8 PARTICIPATION IN THE NFIP AND CRS PROGRAM

Table 5.2-4 Communities Participating in National Flood Insurance Program (NFIP) and the Community Rating System (CRS) lists all the communities in Monmouth County Participating in the NFIP and the 16 communities participating in the the NFIP CRS program. Under the CRS, communities which implement floodplain management actions that go beyond the minimum requirements of the NFIP are eligible for discounts on flood insurance premiums for properties within that community.

able 5.2 - 4 Communities Participating in National Flood Insurance Program and CRS (FEMA Communi	ity
Status Book, 8/1/2019)	-

Jurisdiction	Init FIRM Identfied	Current Effective Map	CRS Classification (If Applicable)
Aberdeen, Township of	03/18/85	06/20/18	8
Allenhurst, Borough of	03/15/79	09/25/09	Not Currently in CRS
Allentown, Borough of	09/16/81	09/25/09	Not Currently in CRS
Asbury Park, City of	02/15/79	09/25/09	Not Currently in CRS
Atlantic Highlands, Borough of	08/03/81	06/20/18	Not Currently in CRS
Avon-By-The-Sea, Borough of	03/15/79	09/25/09	6
Belmar, Borough of	05/12/72	09/25/09	б
Bradley Beach, Borough of	08/01/79	09/25/09	7
Brielle, Borough of	04/02/79	09/25/09	Not Currently in CRS
Colts Neck, Township of	04/15/82	09/25/09	Not Currently in CRS
Deal, Borough of	03/05/76	09/25/09	Not Currently in CRS
Eatontown, Borough of	09/16/81	06/20/18	Not Currently in CRS
Englishtown, Borough of	03/15/81	09/25/09	Not Currently in CRS
Fair Haven, Borough of	10/16/1979	06/20/18	Not Currently in CRS
Farmingdale, Borough of	11/26/1982	09/25/09	Not Currently in CRS
Freehold, Borough of	09/25/09	(No SFHA)	Not Currently in CRS
Freehold, Township of	07/16/76	09/25/09	Not Currently in CRS
Hazlet, Township of	12/1/1982	09/25/09	6
Highlands, Borough of	09/03/71	06/20/18	Not Currently in CRS
Holmdel, Township of	03/01/82	09/25/09	Not Currently in CRS



(п
•
0
\bigcirc
N
ω
-≺
ഗ
\mathbf{n}
S
S
7
Ζ

Jurisdiction	Init FIRM Identfied	Current Effective Map	CRS Classification (If Applicable)
Howell, Township of	01/06/83	09/25/09	Not Currently in CRS
Interlaken, Borough of	01/02/81	09/25/09	Not Currently in CRS
Keansburg, Borough of	05/16/83	09/25/09	6
Keyport, Borough of	07/02/79	09/25/09	Not Currently in CRS
Lake Como, Borough of	11/28/1980	09/25/09	Not Currently in CRS
Little Silver, Borough of	02/01/78	06/20/18	Not Currently in CRS
Loch Arbour, Village of	03/15/79	09/25/09	Not Currently in CRS
Long Branch, City of	05/05/76	06/20/18	7
Manalapan, Township of	09/15/77	09/25/09	Not Currently in CRS
Manasquan, Borough of	05/12/72	09/25/09	5
Marlboro, Township of	06/15/78	09/25/09	Not Currently in CRS
Matawan, Borough of	09/30/81	06/20/18	Not Currently in CRS
Middletown, Township of	02/15/84	06/20/18	6
Millstone, Township of	01/20/82	09/25/09	Not Currently in CRS
Monmouth Beach, Borough of	05/16/77	06/20/18	8
Neptune City, Borough of	08/11/78	09/25/09	Not Currently in CRS
Neptune, Township of	02/16/77	09/25/09	6
Ocean, Township of	10/14/1977	09/25/09	8
Oceanport, Borough of	02/16/77	06/20/18	7
Red Bank, Borough of	05/19/81	06/20/18	Not Currently in CRS
Roosevelt, Borough of	09/25/09	09/25/09(M)	Not Currently in CRS
Rumson, Borough of	12/28/1973	06/20/18	Not Currently in CRS
Sea Bright, Borough of	10/14/1971	06/20/18	6
Sea Girt, Borough of	03/05/76	09/25/09	Not Currently in CRS
Shrewsbury, Borough of	08/01/79	06/20/18	Not Currently in CRS
Shrewsbury, Township of	09/25/09	(No SFHA)	Not Currently in CRS
Spring Lake Heights, Borough of	12/15/1981	09/25/09	Not Currently in CRS
Spring Lake, Borough of	01/04/80	09/25/09	6
Tinton Falls, Borough of	04/15/82	09/25/09	Not Currently in CRS
Union Beach, Borough of	05/15/80	09/25/09	6
Upper Freehold, Township of	10/12/1979	09/25/09	Not Currently in CRS
Wall, Township of	02/16/77	09/25/09	Not Currently in CRS
West Long Branch, Borough of	01/16/81	09/25/09	Not Currently in CRS



Figure 5.2 - 1 Monmouth County CRS Municipalities, as of July 2019

SOURCE: MONMOUTH COUNTY DIVISION OF PLANNING

5.3 ADMINISTRATIVE AND TECHNICAL CAPABILITY

The ability of a local government to develop and implement mitigation projects, policies, and programs is contingent upon its staff and resources. Staffing capability can be evaluated by assessing the staffing skill set and job responsibilities. Administrative capability is described by an adequacy of departmental and personnel resources for the implementation of mitigation-related activities and committees. Technical capability relates to an adequacy of knowledge and technical expertise of local government employees or the ability to contract outside resources for this expertise in order to effectively execute mitigation activities.

Staffing Capability Findings

A summary of municipal staffing capabilities is listed below, based on responses from each municipality. More information on staffing capabilities are listed on the individual Capability Assessment Worksheets located in Appendices V.I—Jurisdictions. The Capability Assessment Worksheet is where each municipality also evaluated their ability to expand on and improve their staffing capabilities.



Municipality	Building Official	Floodplain Admin.	Emergency Manager	Planner	Engineer	Surveyor	GIS Coordinator
Aberdeen Township	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Allenhurst Borough			\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Allentown Borough	\checkmark		\checkmark	\checkmark	\checkmark		
Asbury Park City	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Atlantic Highlands Borough	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Avon-by-the-Sea Borough	\checkmark	\checkmark	\checkmark		\checkmark		
Belmar Borough	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		
Bradley Beach Borough	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		
Brielle Borough	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		
Colts Neck Township		\checkmark	\checkmark	\checkmark	\checkmark		
Deal Borough			\checkmark	\checkmark	\checkmark	\checkmark	
Eatontown Borough	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Englishtown Borough	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		
Fair Haven Borough			\checkmark	\checkmark	\checkmark		
Farmingdale Borough	\checkmark		\checkmark	\checkmark	\checkmark		
Freehold Borough	\checkmark		√	\checkmark	\checkmark		
Freehold Township	\checkmark		√	\checkmark	\checkmark	√	\checkmark
Hazlet Township			√	\checkmark	\checkmark		
Highlands Borough			√	\checkmark	\checkmark	1	\checkmark
Holmdel Township		\checkmark	√	\checkmark	\checkmark	√	
Howell Township		\checkmark	√	\checkmark	\checkmark	1	\checkmark
Interlaken Borough			√		\checkmark		
Keansburg Borough	\checkmark	\checkmark	√	\checkmark	\checkmark	√	\checkmark
Keyport Borough		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Lake Como Borough	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
Little Silver Borough		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Loch Arbour Village		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Long Branch City	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
Manalapan Township		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Manasquan Borough	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		
Marlboro Township	\checkmark	\checkmark	√	\checkmark	√	√	\checkmark
Matawan Borough			\checkmark	\checkmark	\checkmark	ļ	
Middletown Township		\checkmark	√	\checkmark	√	√	\checkmark
Millstone Township		\checkmark	√	\checkmark	√	√	√
Monmouth Beach Borough	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark

Table 5.3 - 1 Staffing Capabilities Based on Responses (updated 08-28-19)

Municipality	Chief Building Official	Floodplain Admin.	Emergency Manager	Planner	Engineer	Surveyor	GIS Coordinator
Neptune City Borough	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark
Neptune Township		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Ocean Township	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Oceanport Borough	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Red Bank Borough	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Roosevelt Borough	\checkmark		\checkmark	\checkmark	\checkmark		
Rumson Borough	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Sea Bright Borough		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Sea Girt Borough	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Shrewsbury Borough		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Shrewsbury Township		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Spring Lake Borough		\checkmark	\checkmark	\checkmark	\checkmark		\checkmark
Spring Lake Heights Borough		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Tinton Falls Borough	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Union Beach Borough	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Upper Freehold Township		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Wall Township	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
West Long Branch Borough			\checkmark	\checkmark	\checkmark	\checkmark	

Administrative & Technical Capability Findings

In addition to the capabilities identified by each municipality, local officials have access to online public mapping resources and other publicly accessible information via County, State, and Federal websites as well as other local stakeholder and academic websites. A summary of municipal administrative and technical capabilities is listed below, based on responses from each municipality. As stated in the previous section, all municipalities within the County have a Mutual Aid Agreement with Monmouth County. More information on administrative and technical capabilities is listed in each individual Capability Assessment Worksheets located in Appendices V.I—Jurisdictions. The Capability Assessment Worksheet is where each municipality also evaluated their ability to expand on and improve their administrative and technical capabilities.

Municipality	Mitigation Planning Committee	Maintenance Program	Warning Systems	Hazard Information Available	Grant Writing	Hazus Analysis
Aberdeen Township	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Allenhurst Borough					\checkmark	
Allentown Borough	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
Asbury Park City		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Atlantic Highlands Borough		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark



Municipality	Mitigation Planning Committee	Maintenance Program	Warning Systems	Hazard Information Available	Grant Writing	Hazus Analysis
Avon-by-the-Sea Borough					\checkmark	
Belmar Borough	√	\checkmark	\checkmark	\checkmark	\checkmark	
Bradley Beach Borough	√	\checkmark	\checkmark	√		
Brielle Borough			\checkmark	√	\checkmark	
Colts Neck Township						
Deal Borough					\checkmark	
Eatontown Borough		\checkmark	\checkmark	√		\checkmark
Englishtown Borough			\checkmark	√	\checkmark	
Fair Haven Borough		\checkmark			\checkmark	
Farmingdale Borough			\checkmark	\checkmark		-
Freehold Borough	√	\checkmark	\checkmark		\checkmark	-
Freehold Township	√	\checkmark	\checkmark			\checkmark
Hazlet Township		\checkmark	\checkmark			-
Highlands Borough						\checkmark
Holmdel Township			\checkmark		\checkmark	-
Howell Township		\checkmark				\checkmark
Interlaken Borough		\checkmark				
Keansburg Borough		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Kevport Borough					\checkmark	\checkmark
Lake Como Borough	√	\checkmark	\checkmark		\checkmark	
Little Silver Borough		\checkmark	\checkmark	\checkmark	\checkmark	√
Loch Arbour Village					\checkmark	\checkmark
Long Branch City	√				\checkmark	
Manalapan Township					\checkmark	
Manasguan Borough	√	\checkmark	\checkmark	√	\checkmark	1
Marlboro Township	√	\checkmark			\checkmark	√
Matawan Borough		\checkmark	\checkmark	√	\checkmark	1
Middletown Township		\checkmark			\checkmark	\checkmark
Millstone Township		\checkmark			\checkmark	\checkmark
Monmouth Beach Borough	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark
Neptune City Borough	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Neptune Township		\checkmark			\checkmark	\checkmark
Ocean Township		\checkmark	\checkmark		\checkmark	\checkmark
Oceanport Borough	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Red Bank Borough	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Roosevelt Borough	1	\checkmark	\checkmark			
Rumson Borough	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Sea Bright Borough	\checkmark		\checkmark	\checkmark		
Sea Girt Borough	1	\checkmark	\checkmark		\checkmark	
Shrewsbury Borough	1		\checkmark	\checkmark	\checkmark	\checkmark
Shrewsbury Township		\checkmark			\checkmark	\checkmark

Municipality	Mitigation Planning Committee	Maintenance Program	Warning Systems	Hazard Information Available	Grant Writing	Hazus Analysis
Spring Lake Borough			\checkmark		\checkmark	\checkmark
Spring Lake Heights Borough						
Tinton Falls Borough		\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Union Beach Borough		\checkmark	\checkmark		\checkmark	\checkmark
Upper Freehold Township			\checkmark		\checkmark	\checkmark
Wall Township	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
West Long Branch Borough		\checkmark	\checkmark		\checkmark	\checkmark

5.4 FISCAL CAPABILITY

The ability of a local government to implement mitigation activities is also associated with the funding available for policies and projects. While some mitigation actions are less costly than others, it is important that money is available locally to implement policies and projects. Funding for such initiatives is often locally based revenue and financing, as well as outside grants. Costs associated with mitigation activities range from staffing and administrative costs to the actual cost of the mitigation project. Financial resources are particularly important if communities are trying to take advantage of state or Federal mitigation grant funding opportunities that require local-match contributions. Some of the local funding option may be incorporated in a CIP plan or schedule or through various municipal fees.

A summary of municipal fiscal capabilities is listed below, based on responses from each municipality. As of March 18, 2019, municipalities are able to establish, operate, and maintain stormwater (SW) utilities by imposing user fees and issuing bonds. In addition, all municipalities have the authority to levy taxes for special purposes. Information on other Federal and State programs municipalities partake in and other funding resources are listed on each individual Capability Assessment Worksheets located in Appendices V.I–Jurisdictions. The Capability Assessment Worksheet is where each municipality also evaluated their ability to expand on and improve fiscal capabilities.

Municipality	Capital Improvements Project Funding	Local Utility Fees	Impact Fees	SW Utility Fee	Incur Debt through Private Activities	CDBG
Aberdeen Township	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Allenhurst Borough	\checkmark	\checkmark				\checkmark
Allentown Borough	\checkmark	\checkmark	\checkmark			\checkmark
Asbury Park City	\checkmark		\checkmark		\checkmark	\checkmark
Atlantic Highlands Borough	\checkmark	\checkmark	\checkmark			\checkmark
Avon-By-The-Sea Borough	\checkmark	\checkmark			\checkmark	\checkmark
Belmar Borough	\checkmark	\checkmark	\checkmark			\checkmark
Bradley Beach Borough	\checkmark	\checkmark	\checkmark			

Table 5.4 - 1 Fiscal Capabilities Based on Responses (updated 08-28-19)



Municipality	Capital Improvements Project Funding	Local Utility Fees	Impact Fees	SW Utility Fee	Incur Debt through Private Activities	CDBG
Brielle Borough	\checkmark	\checkmark	\checkmark			
Colts Neck Township	\checkmark	\checkmark				\checkmark
Deal Borough	\checkmark	\checkmark				\checkmark
Eatontown Borough	\checkmark	\checkmark				
Englishtown Borough	\checkmark	\checkmark	\checkmark			\checkmark
Fair Haven Borough	\checkmark					\checkmark
Farmingdale Borough	\checkmark	\checkmark	\checkmark			\checkmark
Freehold Borough	\checkmark	\checkmark			\checkmark	\checkmark
Freehold Township	\checkmark		\checkmark			\checkmark
Hazlet Township	\checkmark		\checkmark			\checkmark
Highlands Borough	\checkmark		\checkmark			\checkmark
Holmdel Township	\checkmark		\checkmark			
Howell Township	\checkmark	\checkmark				\checkmark
Interlaken Borough	\checkmark	\checkmark				
Keansburg Borough	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark
Keyport Borough	\checkmark	\checkmark				\checkmark
Lake Como Borough	\checkmark	\checkmark				\checkmark
Little Silver Borough	\checkmark					\checkmark
Loch Arbour Village	\checkmark					\checkmark
Long Branch City	\checkmark		\checkmark			\checkmark
Manalapan Township	\checkmark					\checkmark
Manasquan Borough	\checkmark	\checkmark				\checkmark
Marlboro Township	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Matawan Borough	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark
Middletown Township	\checkmark				\checkmark	
Millstone Township	\checkmark		\checkmark			\checkmark
Monmouth Beach Borough	\checkmark					\checkmark
Neptune City Borough	\checkmark	\checkmark	\checkmark			\checkmark
Neptune Township	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark
Ocean Township	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark
Oceanport Borough	\checkmark		\checkmark			\checkmark
Red Bank Borough	\checkmark	\checkmark	\checkmark			\checkmark
Roosevelt Borough		\checkmark				
Rumson Borough	\checkmark	\checkmark				
Sea Bright Borough	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Sea Girt Borough	\checkmark	\checkmark				\checkmark
Shrewsbury Borough	\checkmark		\checkmark		\checkmark	
Shrewsbury Township	\checkmark		\checkmark		\checkmark	
Spring Lake Borough	√	\checkmark				\checkmark
Spring Lake Heights Borough	√	\checkmark				\checkmark

Municipality	Capital Improvements Project Funding	Local Utility Fees	Impact Fees	SW Utility Fee	Incur Debt through Private Activities	CDBG
Tinton Falls Borough	\checkmark	\checkmark	\checkmark			\checkmark
Union Beach Borough	\checkmark	\checkmark	\checkmark			\checkmark
Upper Freehold Township			\checkmark			\checkmark
Wall Township	\checkmark	\checkmark				\checkmark
West Long Branch Borough	\checkmark					\checkmark

5.5 EDUCATION AND OUTREACH

Education and outreach capabilities refer to local citizen groups focused on environmental protection and emergency preparedness, ongoing public education efforts on hazard mitigation and environmental protection, safety-related school programs, private-public partnerships to address disasters, and community certifications that promote hazard mitigation. One such community certification is Firewise USA, a program that provides training to residents on how to adapt to living with wildfires and how to take action to prevent losses. Another community certification is the StormReady program, administered by the National Weather Service (NWS), which helps improve communication and safety skills between local officials and residents that ultimately help save lives and property before, during, and after storm events. The program also helps local leaders and emergency managers strengthen safety programs.

In addition to the natural disaster education and outreach programs, Monmouth County established a human-based hazard education and outreach program; Computer Crime Unit in 2001 within the Office of the Monmouth County Prosecutor. This unit conducts numerous Internet Safety Lectures a year for professional and community groups, school-aged children, educators, and administrators (Office of Monmouth County Prosecutor website).

As previously mentioned, Monmouth County facilitates a CRS User Group for all municipalities whether they are already in the NFIP CRS program or have an interest in joining the program. The user group quarterly meetings provide a forum on a regional scale to discuss municipalities approaches and common obstacles in plan implementation. Monmouth Cunty also maintains a CRS resources webpage and a High-Water Mark Story Map accessible through an online Geohub. The County participates in the Sea Grant Consortium Ocean Fun Day and distributes FEMA brochures at the annual County Fair. Monmouth County also developed the Know Your Zone campaign and High-Water Mark Sign initiatives.

A summary of local education and outreach capabilities is listed below, based on responses from each municipality. More information on the program/organization and how it relates to disaster resilience is on listed on each individual Capability Assessment Worksheets located in Appendices V.I–Jurisdictions. The Capability Assessment Worksheet is where each municipality also evaluated their ability to expand on and improve their education and outreach capabilities.



С
•
Ο
\mathbf{O}
\leq
\prec
S
S
S
10
Z
S
ME
MEN

Table 5.5 - 1 Education and Outreach Capabilities Based on Responses (updated 08-28-19)

Municipality	Local Citizen Groups	Ongoing Public Education	Safety Related School Programs	StormReady Certification	Public-Private Partnerships
Aberdeen Township	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Allenhurst Borough	\checkmark	\checkmark			
Allentown Borough		\checkmark			
Asbury Park City	\checkmark	\checkmark			
Atlantic Highlands Borough	\checkmark	\checkmark	\checkmark		\checkmark
Avon-By-The-Sea Borough					
Belmar Borough	\checkmark	\checkmark			
Bradley Beach Borough	\checkmark	\checkmark	\checkmark		
Brielle Borough	\checkmark				
Colts Neck Township					
Deal Borough					
Eatontown Borough		\checkmark			
Englishtown Borough					
Fair Haven Borough					\checkmark
Farmingdale Borough		\checkmark	\checkmark		
Freehold Borough	\checkmark	\checkmark			
Freehold Township		\checkmark	\checkmark		
Hazlet Township					
Highlands Borough					
Holmdel Township			\checkmark		
Howell Township					
Interlaken Borough					
Keansburg Borough		\checkmark			
Keyport Borough					
Lake Como Borough		\checkmark			
Little Silver Borough					
Loch Arbour Village	\checkmark	\checkmark			
Long Branch City		\checkmark			
Manalapan Township					
Manasquan Borough	\checkmark	\checkmark		\checkmark	
Marlboro Township					
Matawan Borough					
Middletown Township					
Millstone Township					
Monmouth Beach Borough		\checkmark	\checkmark		\checkmark
Neptune City Borough		\checkmark			
Neptune Township					
Ocean Township					
Oceanport Borough	\checkmark	\checkmark	\checkmark	\checkmark	

Municipality	Local Citizen Groups	Ongoing Public Education	Safety Related School Programs	StormReady Certification	Public-Private Partnerships
Red Bank Borough		\checkmark			
Roosevelt Borough		\checkmark			
Rumson Borough	\checkmark	\checkmark	\checkmark		\checkmark
Sea Bright Borough					
Sea Girt Borough		\checkmark	\checkmark		
Shrewsbury Borough		\checkmark			
Shrewsbury Township					
Spring Lake Borough		\checkmark			
Spring Lake Heights Borough					
Tinton Falls Borough	\checkmark	\checkmark	\checkmark		
Union Beach Borough					
Upper Freehold Township		\checkmark			
Wall Township	\checkmark	\checkmark			\checkmark
West Long Branch Borough					

5.6 PLAN INTEGRATION

5.6.1 REGIONAL INTERGRATION ACTIVITIES

NJDEP FRAMES

As discussed in Section 5.1 of this section, NJDEP's FRAMES project is a regional and collaborative effort that is addressing future flood vulnerability and identifying ways communities can reduce coastal flood risks. The project identified several region wide actions to adapt to rising sea levels and total water levels. They include but are not limited to; hardening public facilities, regrading streets, revising zoning ordinances to allow for increased home elevations, creating an inventory of all stormwater facilities and identifying any system-wide vulnerabilities, raising bridges, elevating the NJ Transit North Coast Line, implementing USACE plans that are already in place, begin planning for more significant land use changes, and establish a Two Rivers Coastal Commission. If approved by participating jurisdictions, the project actions were rolled into municipal mitigation actions and capability assessment as part of this Monmouth County HMP update. A link to the project website is located at the website below: https://www.nj.gov/dep/bcrp/njframes.html

Local jurisdictions participating in NJDEP FRAMES includes:

- Eatontown Borough
- Middletown Township
- Fair Haven Borough
- Highlands Borough
- Little Silver Borough
- Long Branch City
- Rumson Borough



MONMOUTH COUNTY, NEW JERSEY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

- Sea Bright Borough
- Oceanport Borough
- Shrewsbury Borough
- Ocean Township

Michael Baker International. We Make a Difference.

- Tinton Falls Borough
- Red Bank Borough
- West Long Branch

Figure 5.6 - 1 NJFRAMES Regional Map



SOURCE: NJ FRAMES REGIONAL RESILIENCE ADAPTATION ACTION PLAN

Strategic Recovery Planning Reports

Strategic Recovery Planning Reports (SRPR) emerged after Superstorm Sandy to address conditions created or exacerbated by Superstorm Sandy. The SRPRs were financed through the U.S. Housing and Urban Development (HUD) Community Development Block Grant Disaster Recovery (CDBG-DR) program and were intended to identify specific recovery and rebuilding strategies jurisdictions could take to help ensure that the community will be more resistant to damage from future storm events and encourage sustainable economic growth.

Local jurisdictions that participated in preparing SRP Reports include:

- Aberdeen Township
- Highlands Borough
- Ocean Township
- Rumson Borough
- Union Beach Borough
- Deal Borough
- Keansburg Borough
- Neptune Township
- Oceanport Borough
- Sea Bright Borough
- Keyport Borough
- Monmouth Beach Borough

Getting to Resilience

As discussed in 5.1 Overview of this section, Getting to Resilience (GTR) is a tool that if approved by the local jurisdiction, were rolled into their mitigation actions and capability assessment. GTR is intended to assist local decisionmakers in the collaborative identification of planning, mitigation, and adaptation opportunities that will reduce vulnerability to coastal storms, flooding and Sea Level Rise. GTR was envisioned to work in conjunction with the mapped information provided through the CVI and CCVAMP initiatives discussed above.

Since the development of the original GTR questionnaire, the Jacques Cousteau National Estuarine Research Reserve (JC NERR) and the Barnegat Bay Partnership has translated the GTR tool into an interactive online tool that provides information on recommended strategies where improved community resilience is warranted. The online tool was a joint effort supported by Federal funds through the EPA Climate Ready Estuaries Program. The online GTR tool goes beyond the original questionnaire and also provides information on where these recommendations overlap with other community planning tools (e.g., National Flood Insurance Program Community Ratings System).

Local jurisdictions that have participated in Getting to Resilience include:

- Sea Bright Borough
- Highlands Borough
- Atlantic Highlands Borough
- Keyport Borough
- Middletown Township
- Neptune Township Keansburg Borough



MONMOUTH COUNTY, NEW JERSEY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN Hazlet Township

We Make a Difference.

Michael Baker International.

- Monmouth Beach Borough
- Rumson Borough
- Oceanport Borough
- Ocean Township
- Little Silver Borough
- Fair Haven Borough

Rebuild by Design

In 2013, The Hurricane Sandy Rebuilding Task Force and U.S. Department of Housing and Urban Development (HUD) initiated a design competition, known as Rebuild by Design to connect researchers and designers with local businesses, policymakers, and community groups in Sandy-affected areas along the East Coast. The goal of the initiative was to redevelop communities that are environmentally and economically healthier and better prepared for future storm events. Monmouth County's Asbury Park and Bayshore Region were selected as case studies for two finalist design teams. Although the Rebuild by Design proposals are specific to Asbury Park and the Bayshore Region, several Monmouth County seaside communities with boardwalks and coastal lakes can incorporate resilient design ideas, concepts, and strategies proposed from the two design teams.

Local jurisdictions that have participated in Rebuild by Design include:

- Union Beach Borough
- Hazlet Township
- Keansburg Borough
- Asbury Park City

Coastal Community Vulnerability Assessment and Mapping Protocol (CCVAMP)

Community resilience is highly dependent upon the location of development in relation to high-hazard areas. In order for local governments to take proactive measures to adapt, mitigate, and plan for episodic events or long-term changes in the shoreline, they must first be aware of the hazards they face and the potential exposure of people, property, and resources. The CCVAMP was developed by NJDEP to assist land use planners, hazard mitigation planners, emergency managers, and other local decision-makers in the identification of their community's vulnerability to coastal hazards.

The CCVAMP defines the necessary steps to geospatially identify vulnerable land areas under present and future inundation scenarios, whether it be shallow coastal flooding due to spring tides, storm surge, or sea level rise. Through the development of inundation scenarios, coastal decisionmakers can then determine threats to infrastructure, sensitive natural resources, and special needs populations. The first step in the analysis is the development of a Coastal Vulnerability Index (CVI), which stratifies high hazard areas in coastal communities by compiling available hazard, elevation, and landscape geospatial data into an analysis that considers environmental hazards. Armed with the understanding of areas naturally predisposed to risk, coastal decisionmakers may guide future development away from high hazard areas and mitigate future losses.

5.6.2 COUNTY INTEGRATION ACTIVITIES

Planning for the protection and management of the coast, open space, and natural resources already integrates hazard mitigation into other planning mechanism and provides an excellent opportunity for continued and improved integration. Monmouth County has adopted several plans and programs since the last Monmouth County HMP in 2015.

Monmouth County Continuity of Operations Plan (2013)

Monmouth County prepared a Continuity of Operations Plan that ensures that essential functions are coordinated before, during, and after a wide range of emergency scenarios, different than and nonconflicting to Emergency Operations or Response Plan.

Monmouth-Ocean County Building Officials Association Incident Action Plan (2015)

The Monmouth County Building Officials developed an Incident Action Plan. This is an organized course of events that addresses all phases of incident within a specified time. This incident action plan is necessary for successful outcomes to occur and determine the structure's visible status from the exterior perimeter. The objective and goal of the plan is to evaluate and post every structure with one of the three placards below, at, or near the main entrance.

Monmouth County Master Plan (2016)

The Monmouth County Master Plan integrates hazard mitigation planning by framing its goals, principles, and objectives to encourage planning and mitigation measures that protect and strengthen their municipalities against the increasing threat posed by severe storm events. In Chapter 12.0 Community Resilience, the County provides several recommendations for resiliency and hazard mitigation planning, including having the Planning Division assist OEM with reviewing the County HMP update and municipal master plans and ordinances for consistency with the HMP. As a result of this recommendation, the Planning Division reviewed and provided in depth comments on this HMP update, along with posting the HMP draft on their County Website for public review (Figure 3.1-3 County Website Post for Public Review). The Monmouth County Master Plan also provided resources and information for the HMP public project website, such as the links to resiliency and hazard mitigation planning tools. The Monmouth County Master Plan adopted the 2015 HMP update as an element of the plan and continues to act as a resources and leader in planning for resiliency and hazard mitigation.

Know Your Zone (2016)

Know Your Zone is a public education campaign implemented by the Monmouth County Office of Emergency Management to inform the residents, businesses, and visitors of Monmouth County of the new hurricane evacuation zones and their vulnerability to storm surge. The campaign reflects the National Hurricane Center's (NHC) decision to separate the association of storm surge inundation from the category of storm, known as Sea Lake and Overland Surge from Hurricanes (SLOSH) models. The County used these new SLOSH model to create its own Know Your Zone Evacuation areas based on projected storm surge. An ongoing mitigation action for the County is to expand online mapping services, such as Know Your Zone, to continue public awareness of hazards in the County (Mitigation Action # 54_03).



Monmouth County Emergency Operations Plan (2017)

As noted previously, all counties and municipalities in New Jersey must prepare and adopt an EOP. The primary purpose of the EOP is to prevent or mitigate, prepare for, respond to, and recover from both manmade and natural disasters. This includes providing an organizational structure for emergency responders and managing operations within the county by coordinating available resources from county and municipal governments. The plan also augments cooperation with municipalities through mutual-aid agreements with all 53 municipalities.

Monmouth County Multi-Jurisdictional Coastal Flood Evacuation Plan (2017)

One of the greatest weather-related threats to the County's population and its structures is coastal flooding. Some of the densest communities are located within one-mile of the coast and the geographic location of the County along the New York Bight makes it more susceptible to storm surges over 20 feet. In 2009, an evacuation study was undertaken to evaluate how the existing evacuation routes could be improved and expanded to help move people away from flood zones. The Coastal Flood Evacuation Plan lists several factors that would lead to an evacuation decision. Those factors include population affected, water temperatures, time of day, forecast uncertainty, duration of surge, other weather hazards including winds and ice, and the timing with astronomical tide levels. There are four evacuation zones and the affected population is about 25% of the total County population (roughly 157,000 residents). The Evacuation Plan also provides guidelines for issuing county-wide flood warnings.

Monmouth County Office of Emergency Management Disaster Debris Management Plan (2017)

In 2017, Monmouth County became the first county in New Jersey to adopt a Disaster Debris Management Plan, receiving final FEMA approval in September 2018. The purpose of the plan is to expediate debris removal and recovery efforts in the affected area and mitigate any potential threats to life, safety, or welfare. The plan provides an organizational structure and guidelines for responsibility before a clearance event and during the removal. The Disaster Debris Management Plan also covers the responses and the recovery for all debris-causing events. As of early 2019, there were 57 approved sites for debris management; 15 county-owned and 42 municipally owned, and six applications are currently under review. Although this plan is designed to stand-alone, it aligns with the Monmouth County HMP, County EOP, and municipal EOPs. The plan will be reviewed twice a year, once in April, prior to Hurricane season, and again in September, prior to snow season, and updated if needed.

Monmouth County Short-Term Recovery Plan

The Short-Term Recovery Plan provides a framework for short-term disaster recovery for Monmouth County and its 53 municipalities. This plan also lays the foundation for long-term community recovery. The scope of this plan covers the first two weeks of incident recovery aimed at the restoration of critical services, infrastructure, and key economic drivers.

Joint Land Use Study with Naval Weapons Station Earle (2017)

In 2016, Monmouth County, Naval Weapons Station (NWS) Earle, and the 13 municipalities that surround NWS Earle, initiated a Joint Land Use Study (JLUS). NWS Earle is the largest weapons station on the East Coast and was severely damaged during Superstorm Sandy and remains vulnerable to Sea Level Rise. The objectives of the JLUS is to encourage the County and the surrounding municipalities to coordinate with NWS Earle in implementing measures that encourage new civilian development in ways that are compatible with the continued operation of the NWS; improve resiliency within WMA 12; adapt

to the adverse impacts from Sea Level Rise, both on the base and in the surrounding communities; and ensure the preservation and protection and post-storm resiliency of the Strategic Highway Network, including the Normandy Road/Rail Corridor that leads from NWS Earle Main-side to NWS Earle Waterfront.

Local jurisdictions that have participated in the JLUS include:

- Colts Neck Township
- Howell Township
- Middletown Township
- Tinton Falls Borough
- Wall Township

Raritan/Sandy Hook Bay Coastal Resilience Planning Study for Monmouth County (2019)

The Coastal Resilience Planning Study is a project continuation from the JLUS in 2017. Monmouth County, NWS Earle, and the Planning Committee selected 11 resiliency projects that could improve the sustainability and resiliency of NWS Earle facilities and navigational channels; the US Army Corps of Engineers (ACE) projects; and the Bayshore municipalities from current and future coastal hazards. These 11 resiliency projects were integrated into the HMP update as mitigation actions under the eight jurisdictions that participated in the Study. The projects include beach stabilization, wetland restoration, beach replenishment, shoreline protection, and stormwater improvements.

The eight jurisdictions that have participated in the Raritan/Sandy Hook Bay Coastal Resilience Planning Study include:

- Aberdeen Township
- Atlantic Highlands Borough
- Hazlet Township
- Highlands Borough
- Keansburg Borough
- Keyport Borough
- Middletown Township
- Union Beach Borough

5.6.3 LOCAL INTEGRATION ACTIVITIES

Section 5 outlines plans, tools, and other capabilities that the county and municipalities intend to use to promote mitigation efforts. The county and its corresponding municipalities have decided to incorporate mitigation requirements that would decrease their overall risk and vulnerability to hazard events by performing the following general tasks:

 All municipalities in Monmouth County have local Comprehensive Master Plans, which are the legal roadmap to planning for appropriate and safe land development. Particular attention will be paid in future local comprehensive master planning efforts to integrating mitigation measures, particularly for the required land use planning element. Land use planning in the coastal and bay front communities will include examining where land uses may be improved



and changed to accommodate flooding; for example, utilizing parks or other open space to accommodate drainage and stormwater. Interior municipalities plan to integrate mitigation into the land use element in ways that address the urban wild interface as well as planning buffers and breaks to mitigate the impact of wildfires. Additionally, portions of the risk assessment analysis completed for the HMP can contribute to the development of other plan elements like natural resources, infrastructure, and the environment.

- Mitigation is integrated into local floodplain management practices and will be increased through several initiatives in the mitigation strategy. Municipalities have adopted the Advisory BFE maps and intend to adopt the updated DFIRMs after they are released through the Letter of Final Determination. Mitigation is integrated into floodplain management through practices including regulating where and how building permits are issued, requiring building materials and methods that mitigate the impact of flooding on homes, and encouraging property owners to exceed requirements and build with freeboard above the BFE.
- Several municipalities will integrate mitigation into plans to increase participation in the CRS program.
- Municipalities will review dam action plans and coordinate with private dam owners to implement mitigation actions into the plans and into maintenance practices.
- Local budgets and capital improvement plans will incorporate budgets for maintenance that can mitigate the impact of storms and flooding. For instance, clean-up plans for debris in the bay will assist in mitigating flooding, trimming trees near power lines will reduce or prevent utility outages during storms, and brush clean-up will mitigate wildfire.
- Local Emergency Planning Committees will continue to mitigate the impact of Hazardous Materials through integrating mitigation into their plans, coordination and meetings.
- Local evacuation and shelter plans focus on response. However, mitigation is integrated into these plans by maintaining and improving infrastructure that provides a safe exit for evacuees, maintaining and improving critical facilities such as Emergency Operations Centers and shelters to provide safe guidance and respite during a disaster, and planning for locations for generator back-up power.

Many of the municipalities in Monmouth County have Plans that address resiliency that may not fit into the category of plans presented above. These plans include the following plans below. Mitigation Actions identified in these plans have been incorporated into this HMP update as identified by the jurisdiction.

Sea Bright, New Jersey Hazard Mitigation Plan, 2015 - Sea Bright Local Hazard Mitigation Plan aligned with the Monmouth County multi-Jurisdictional Hazard Mitigation Plan Update completed in 2015.

Borough of Rumson's Floodplain Management Plan (FMP), 2015 - Incorporated as an element of the Borough's Master Plan. It identifies and assesses flood hazards within the Borough, establishes the goals and objectives for floodplain management in Rumson, and presents a series of actions designed to minimize flooding and mitigate the impacts from flooding in the future.

Oceanport Resiliency Element of Master Plan, **2016**. Using the Resilience Framework Oceanport's Master Plan update enhances infrastructure that will benefit many different sectors, create tools for small businesses to open sooner after storms, ensure critical infrastructure comes on line sooner after a disruption in service, ensure delivery of social services is not substantially impacted, and that damaged homes are rebuilt or repaired sooner (Oceanport Borough 2016 Master Plan).

Through the planning process, participants of the plan have identified further approaches to plan integration that each jurisdiction are interested in pursuing in the future.

Jurisdiction	Guide growth and development away from high risk locations by using the risk assessment to inform future updates of community land use plans, zoning and subdivision codes and the development review process.	Modify work plans, policies or procedures to include hazard mitigation concepts/activities.	Issue directives to require departments/agencies in the community to carry out certain hazard mitigation activities.	Require the Department of Public Works to inspect and clean debris from streams and ditches more frequently.
Aberdeen, Township of	•			-
Allenhurst, Borough of				
Allentown, Borough of				
Asbury Park, City of				
Atlantic Highlands, Borough of		•	•	•
Avon-By-The-Sea, Borough of		•		•
Belmar, Borough of	•	•	•	•
Bradley Beach, Borough of	•	•	•	
Brielle, Borough of				•
Colts Neck, Township of		•	•	•
Deal, Borough of	•	•	•	•
Eatontown, Borough of		•		
Englishtown, Borough of		•		•
Fair Haven, Borough of	•	•	•	•
Farmingdale, Borough of	•	•	•	•
Freehold, Borough of	•	•	•	•
Freehold, Township of	•			
Hazlet, Township of				•
Highlands, Borough of	•	•	•	•
Holmdel, Township of	•	•	•	•
Howell, Township of	•	•	•	•
Interlaken, Borough of	•	•	•	•
Keansburg, Borough of	•	•	•	
Keyport, Borough of		•	•	•
Lake Como, Borough of	•	•	•	•
Little Silver, Borough of	•	-	-	-



Jurisdiction	Guide growth and development away from high risk locations by using the risk assessment to inform future updates of community land use plans, zoning and subdivision codes and the development review process.	Modify work plans, policies or procedures to include hazard mitigation concepts/activities.	Issue directives to require departments/agencies in the community to carry out certain hazard mitigation activities.	Require the Department of Public Works to inspect and clean debris from streams and ditches more frequently.
Loch Arbour, Village of	•			•
Long Branch, City of				•
Manalapan, Township of	•			•
Manasquan, Borough of				•
Marlboro, Township of	•			-
Matawan, Borough of	•			
Middletown, Township of				•
Millstone, Township of	•			-
Monmouth Beach, Borough of				
Neptune City, Borough of				
Neptune, Township of				
Ocean, Township of				
Oceanport, Borough of	•			-
Red Bank, Borough of	•	•		
Roosevelt, Borough of				
Rumson, Borough of	•			-
Sea Bright, Borough of				
Sea Girt, Borough of	•	•		-
Shrewsbury, Borough of				•
Shrewsbury, Township of				
Spring Lake Heights, Borough of	•		-	
Spring Lake, Borough of				
Tinton Falls, Borough of	•	•		-
Union Beach, Borough of		-		
Upper Freehold, Township of	•			
Wall, Township of				
West Long Branch, Borough of		•	•	

Jurisdiction	Perform inventories of historic sites in hazard areas in your community to identify where special treatment may be needed to protect them from specific natural hazards.	Use the risk assessment to inform future updates of the community emergency operations plan, evacuation plan, and/or post disaster recovery plan.	Implement hazard mitigation activities through existing plans and policies.	Sponsor training on best practices for hazard mitigation for local government staff.
Aberdeen, Township of		•		
Allenhurst, Borough of				
Allentown, Borough of		•	•	•
Asbury Park, City of		•		
Atlantic Highlands, Borough of	•			
Avon-By-The-Sea, Borough of		•	•	•
Belmar, Borough of	•	•	•	•
Bradley Beach, Borough of	•	•	•	•
Brielle, Borough of		•	•	
Colts Neck, Township of		•	•	
Deal, Borough of		•	•	•
Eatontown, Borough of		•	•	
Englishtown, Borough of		•	•	
Fair Haven, Borough of	•	•	•	•
Farmingdale, Borough of	•	•	•	
Freehold, Borough of	•	•	•	•
Freehold, Township of			•	
Hazlet, Township of				
Highlands, Borough of				•
Holmdel, Township of	•		•	•
Howell, Township of	•			
Interlaken, Borough of		•	•	•
Keansburg, Borough of	•	•	•	•
Keyport, Borough of		•	•	
Lake Como, Borough of	•	•	•	•
Little Silver, Borough of			•	•
Loch Arbour, Village of		•	•	•
Long Branch, City of	•	•	•	
Manalapan, Township of		•	•	•
Manasquan, Borough of	•	•	•	•
Marlboro, Township of		•	•	
Matawan, Borough of			•	

Table 5.6 - 2 Multi-Jurisdictional Plan Integration Approach Continued (2014-2019)



Jurisdiction	Perform inventories of historic sites in hazard areas in your community to identify where special treatment may be needed to protect them from specific natural hazards.	Use the risk assessment to inform future updates of the community emergency operations plan, evacuation plan, and/or post disaster recovery plan.	Implement hazard mitigation activities through existing plans and policies.	Sponsor training on best practices for hazard mitigation for local government staff.
Middletown, Township of		•	•	
Millstone, Township of	•			•
Monmouth Beach, Borough of Neptune City, Borough of			•	
Neptune, Township of	•	•	•	•
Ocean, Township of		•	•	•
Oceanport, Borough of		•	•	
Red Bank, Borough of			•	•
Roosevelt, Borough of				
Rumson, Borough of	•	•	•	•
Sea Bright, Borough of	•	•	•	
Sea Girt, Borough of	•		•	•
Shrewsbury, Borough of	•		•	
Shrewsbury, Township of			•	•
Spring Lake Heights, Borough of	•			
Spring Lake, Borough of	•	-	•	•
Tinton Falls, Borough of	•	•	•	•
Union Beach, Borough of	•			•
Upper Freehold, Township of	•	•		
Wall, Township of				
West Long Branch, Borough of	•		•	