



Borough of Mantoloking

NFIP Flood Mitigation Planning Committee

Status of Flood Mitigation Plan

**Downer Avenue
Mantoloking, NJ 08903**

2022 Annual Report for the Flood Mitigation Plan

Representatives of the Borough's Flood Committee met on December 1, 2022 to discuss the Borough's Flood Mitigation Plan and the Ocean County Multi-Jurisdictional All Hazards Mitigation Plan to review the progress of the goals and objectives presented in same.

To ensure the governing body and the general public is aware of the progress of the Flood Committee, this report will be distributed to Mayor and Council, posted on the Borough's website and notification will be provided in the local newspaper that this report has been prepared and is available at Borough Hall. Both of the original Plans can be viewed at the Borough's website and at Borough Hall.

Provided below is a summary of the meeting and a brief explanation of the activities discussed/conducted:

A. Ocean County Multi-Jurisdictional All Hazards Mitigation Plan

- The purpose of this All Hazard Mitigation Plan is to develop a FEMA-approvable all hazard mitigation Plan that aids in the reduction or elimination of risk caused by hazards, or disaster, such as floods, hurricanes, etc that would deem the Borough eligible for various FEMA grants/assistance;
- The 2018 Multi-Jurisdictional All-Hazard Mitigation Plan was formally approved by FEMA on September 16, 2019 and officially adopted by the Borough on November 19, 2019 – Resolution No. 2019-149;
- Review status of the associated projects (Attachment).

UPDATE 2022:

An update of the activities associated with the 2018 Multi-Jurisdictional All-Hazard Mitigation Plan is attached.

B. Review the Strategies/Goals of the Plan

- The Plan has adopted Strategies/Goals from the Unified National Program for Floodplain Management. These Goals include:
 1. Modify human susceptibility to flood damage and disruption by avoiding

- hazardous, uneconomic, or unwise use of floodplain;
- 2. Modify the impact of flooding by assisting individuals and communities to prepare for, respond to, and recover from floods;
- 3. Mitigate flooding through projects that control flood waters;
- 4. Preserve and restore the natural resources and functions of the floodplains by maintaining and reestablishing floodplain environments in their natural state.

C. In Depth Review of the Objectives/Activities Conducted During 2022

- 1. Modify human susceptibility to flood damage and disruption by avoiding hazardous, uneconomic, or unwise use of floodplain.
 - 1a. Upgrade all new and redeveloping construction in conformance with adopted CRS repetitive loss reduction program.

This program would enforce pile installations and first floor flood resistance elevations to mitigate future flood damage, inclusive of rebuilding, elevating, or even demolition and property purchases, if feasible.

UPDATE 2022:

As in previous year's, there was further in-depth discussion relating to the issues of returning to the two-foot freeboard above the Base Flood Elevation (BFE) which the Borough regulated to prior to the events of Super Storm Sandy. The Borough reduced the freeboard requirement to one foot (1') to address concerns for the public for the increase in building and first floor heights affiliated with the reconstruction efforts affiliated with the storm event.

This topic continues to be debated whether to implement the increase in height or maintain the current regulation of one-foot due to various concerns associated with increased height. There was again concern that with the increase in height there may be further hardships placed on the homeowner when dealing with substantial improvements/damages requirements as the effected structures would need to comply with the higher freeboard. It was also discussed that having a modified freeboard may impact real estate transactions as a home constructed at the previous freeboard would not be compliant with the higher freeboard standard and potentially impacting future sales.

As such, it was decided to examine the elevations of homes constructed since Super Storm Sandy to the existing BFE to determine if an increase is justified. The State mandated one foot (1') freeboard shall be maintained until a potential change is implemented.

- 1b. Continue to conform to all requirements adopted under the National Flood Insurance Program inclusive of all implemented building code regulations for development or redevelopment.

As the years progress, the Borough continuously strives to be in full conformance with the NFIP. The Borough also allocates funds to achieve these tasks.

UPDATE 2022:

The Borough continues to be in accordance with NFIP and building code regulations including compliance with design standards for structures located within Coastal A flood zones.

2. Modify the impact of flooding by assisting individuals and communities to prepare for, respond to, and recover from floods.
 - 2a. Conform to and implement the CRS program mitigation measures in a planned systematic approach.

Implement the CRS program in accordance with yearly identifiable tasks which will allow Borough wide flood mitigation and achieve associated NFIP flood insurance premium reductions in a cost-effective manner. Under this program a Repetitive Loss Reduction Plan will be prepared, along with improving the addressable siren system, public address system and emergency broadcast system, acquisition of an aquatic or flood response vehicle, increase identification of emergency evacuation route and flood preparedness plan.

UPDATE 2022:

The Borough continues to implement and enforce CRS mitigation measures in a planned and systematic approach in efforts to reduce costs/damage affiliated with flooding.

The Borough Police Department has prepared their Emergency Operations Plan in accordance with the regulating agencies requirements and it has been approved by both the Ocean County and State Agencies. The Department will maintain an evacuation plan that implements a route where residents South of Herbert Street will evacuate utilizing the Mantoloking Bridge (County Route 528) and residents North of Herbert Street will evacuate via State Highway Route 35 North to Bridge Avenue. This updated information has been disseminated to the local residents via mailers and the Department's website. During an actual emergency, this evacuation route will again be released by the Borough's Mantoloking Ready emergency response system which will reach Borough residents through an email and text/phone message.

- 2b. Encourage public awareness and education by various means of communication with its residents and property owners.

Mantoloking realizes the first step in reducing property and personal losses is to inform every property owner of the flood hazard area that they reside in. All Mantoloking residents have been informed by a flyer mailed to them to make them aware that the property they own is in a special flood hazard area and that, historically, the Borough floods during storms. The public display in Borough Hall has a collection of information for property owners which cover flood preparedness, protecting a building from flooding, flood prevention, flood plain management, retrofitting and natural and beneficial functions of flood plains.

UPDATE 2022:

The Borough continues to implement a very detailed approach to ensure the public is aware and educated on the hazards affiliated with flooding events. With a percentage of the population being part time residents, it is important that the information be released in many different platforms to ensure the information is received. The Committee reviewed these measures to encourage public awareness and education to mitigate loss due to flooding events and decided to maintain the program. These activities are very important in aiding the public as the informative literature is updated regularly.

Property owners are provided with detailed information of the hazards within the Borough, flood insurance, protection from the hazard, building responsibly, and protecting natural floodplains through receipt of the “Flood Protection and Coastal Storm Safety for the Borough of Mantoloking” flyer that is disseminated twice a year via mail, through the Borough’s official Facebook Page, a non-emergency email blast, various brochures that are made available at public events, website postings, and radio messages. Documentation is also made available at the Borough Hall and the Local Public Library in the Bay Head Branch of the Ocean County Library system.

A “Welcome Package” is prepared and provided to all new families who purchase property within the Borough. With renting activities occurring within the Borough, this information is also provided to the owner for distribution to the renter(s) to ensure the knowledge is transferred. In an effort that the most up-to-date information is provided in this flyer, the flyer is continuously updated.

Information is also distributed to realtors and rental agents within the area requesting that potential buyers and renters are to be advised that the property is within the Special Flood Hazard Area and that flood insurance and flood awareness is required. It was also suggested that when a Deed is transferred, the flyer should be provided to the new owners as well.

Other methods to provide a constant means of relating information to the public encouraging awareness included: the posting of the informative brochure to the Borough’s blog site that includes an email blast of the posting; release of flood mitigation messages in the Borough’s periodical Mantoloking

Reporter; a non-emergency radio message on the Borough's 1670 AM radio station; and the Borough's newest messaging system "Mantoloking Ready" which provides information via email, text, and phone.

The Borough's website is constantly updated to include this information for viewing by the general public and is advertised as well.

3. Mitigate flooding through projects that control flood waters

3a. Develop rainwater conveyance facilities to meet 25 year storm event loading in non-critical areas in accordance with floodplain management regulations.

Work under this task will be implemented in conjunction with the Borough's roadway reconstruction program that considers raising the elevation of roads to resist flooding. Presently, the Borough has an identified phased roadway program. The first phase of the present program is on file with the Borough Engineer. In addition, as each phase of the program is developed, any specific non-critical rainwater conveyance problems that can be remedied in conjunction with this program, as brought to light by public or private complaint, are included.

UPDATE 2022:

The Borough cleans the storm sewers on an annual basis and maintained schedule.

Roadways continue to be improved based on the amount of funds available to the Municipality and the associated cost benefit. As the roads are paved, the drainage systems are upgraded as well to mitigate against flooding. The Borough has completed the roadway/drainage system improvement project located on Barnegat Lane near its northern municipal boarder and has submitted application to the NJDOT Local Aid Department for a roadway improvement program along sections of Arnold Street and Bay Avenue. The Borough will continue to implement its roadway reconstruction program as funds become available.

- 3b. Develop Atlantic Ocean flood protection features to meet a 100 year coastal storm flood resistance level.

100 year coastal flood resistance is anticipated to be completed with the conclusion of the anticipated NJDEP/USACE/Mantoloking project, which will enhance the Atlantic oceanfront beach and dune system. Enhancement work, until this project is completed, has been conducted as standard operating procedure under the Borough's beach and dune maintenance program.

UPDATE 2022:

Steel Sheet Pile Dune Restoration Project:

The 3.5 mile steel sheet pile project commenced construction in June 2014 and was completed in March 2015.

USACE Beach fill – Initial Construction – Manasquan Inlet to Barnegat Inlet, Ocean County, New Jersey:

The Beach fill and Dune Storm Protection Project spanned Northern Ocean County from Manasquan Inlet to the North End of Island Beach State Park and improved the beach and dune system to meet a 100-year coastal storm flood resilience level. The project initial construction has been completed and is scheduled for its 4 year cycle beach nourishment in 2023. The Borough, along with the USACE will continue to monitor the status of the improvements.

3c. Develop back bay bulkhead system to meet a 25 year coastal storm flood level

Back bay bulkheads must be elevated to the 25-year storm level to prevent flooding of the Borough from the back bay area (protection of near this magnitude already exists on the ocean frontage).

Elevation of back bay bulkheads cannot be completed immediately, as 95% of these are privately owned and would be a very costly undertaking. Accordingly, the Borough is reviewing adopting an Ordinance which requires bulkheads to be raised as they come up for replacement. Since the average life of a bulkhead is 30 years, and the fact that some are new, the project may take over 30 years to become fully implemented.

Through review of the stillwater elevations for the municipality, it was determined that the 25-year stillwater back bay flood level will be approximately Elevation 3.88 NAVD88 (5.0 NGVD 29).

(Note- as provided in the December 20, 2000 FEMA Flood Insurance Study)

UPDATE 2022:

With the prevention of ocean flooding being addressed with the completion of the USACE Beach fill, the Committee determined that actions addressing back bay flooding should now be moved forward. With the bulkhead system as the main barrier in preventing flooding from the back bay it was decided by the Committee to prepare uniform regulations for the construction/renovation of this system where a specific elevation/height would be mandated by which the structure would be constructed to. By increasing the height to a more uniform elevation that is consistent throughout the Borough, a more reliable system would be achieved resisting the flood waters from the bay. Bulkheads are an integral component for flood damage and the replacement of them to a regulated system will aid in the overall goal of resilience. During 2022 a draft ordinance was prepared and will be reevaluated in 2023 for possible adoption.

3d. Review application of modular pump station systems to relieve flooding in Mantoloking Bayside areas

25-year storm conveyance systems in critical areas (sanitary sewer pump station, NJ American Water Well and Pump Station Site*, Borough Hall, etc.) would require the implementation of storm water pumping systems to overcome the disabling of gravity systems due to storm elevated water levels in back bay areas. The implementation of this project was evaluated as part of the NJDOT Route 35 upgrades.

(*NOTE: This critical facility within the bay side area is privately owned.)

UPDATE 2022:

Through the improvements of Route 35 by the NJDOT, two (2) storm water pump stations were installed within the Borough by the NJDOT to manage drainage of Route 35: one (1) at Lyman Street and one (1) at Downer Avenue.

In efforts to address local flooding, the Borough requested permission from the NJDOT to connect their municipal storm sewer pipping directly to the State's system located on Downer Avenue to alleviate storm drainage affiliated in the surrounding area. This request is still under consideration as the State and Borough continue to work with each other on this matter.

The Borough continues to review the potential utilization of pump stations to address municipal storm water conveyance. Due to the cost for the construction and maintenance of these systems, installation of pump stations will have to be reviewed in further detail prior to implementation.

3e. Implementation of back bay backflow check valve program.

This project requires the continued analysis and evaluation of Borough and State outfall systems, formulation of appropriate replacement locations and installation of check valves as required.

UPDATE 2022:

19. The Borough's back flow check valves are continually monitored, maintained, and updated/repared as needed. This year, new valves were installed at the Borough's Northern municipal border near Clayton and Barnegat Avenues. Check valves with newer technology continue to be installed throughout the Borough replacing those that are either broken or are outdated. The means to appropriate the funds needed to address the replacement of the check valves has been established as funds are being set aside to conduct this activity. The Borough will continue to review this activity and update or modify the system components accordingly.

4. Preserve and restore the natural resources and functions of the floodplains by maintaining and re-establishing floodplain environments in their natural state.
 - 4a. Adopt and support NJDEP Coastal Protection Plan and appropriate moneys as necessary to implement same

In order to assure adoption and the availability of matching funds to put the NJDEP/Mantoloking Coastal Protection Plan and project in place in accordance with Item #3 above, the Borough is presently working on reliable funding sources to support this program and which will allow the Borough to adopt and execute the required agreements to implement the plan.

UPDATE 2022:

The initial construction of USACE Beach fill Project complete, the project has moved into its authorized 50 year maintenance program consisting of periodic beach renourishment and miscellaneous dune and appurtenance repair. With initial 4 year cycled nourishment scheduled for commencement in 2023, the Borough has obtained the necessary funds to support its cost share for the nourishment activities. The Borough has executed the State Aid Agreement with the NJDEP to participate in the nourishment project.

In response to the Borough's search for stable funding sources for the project's 50 year maintenance program costs, the Borough has received a commitment from Ocean County to split the local Municipal project cost share on a 50/50 basis for the scheduled 2023 beach renourishment project.

4b. Evaluate all dune systems and augment improvements to same.

This project goal requires implementation over a longer term period, in conjunction with additional engineering and computer analysis followed by physical augmentation of the dune system in conjunction with the Richard Stockton College Coastal Resource Center (CRC). Phase 1 of the project entails the dune computer analysis; Phase 2, dune augmentation in critical areas; Phase 3, mass dune system augmentation where necessary accompanied by planting and fence work. Project development to be implemented as follows:

General Update: The initial CRC program was made moot due to the completion of the far more extensive USACE beach and dune project.

UPDATE 2022:

To ensure that the beach and dune system is maintaining its function between nourishment cycles, The Borough's annual dune monitoring program has been enacted. This program will be completed by members of the Borough's Recreation Committee where the entire dune system is inspected, and improvements will be suggested accordingly. This activity will be completed annually.

The Borough implemented a dune fertilization program to enhance the stabilization of the dune system and its dune grass vegetation. This program will help maintain and develop the vegetation installed under the beach fill project. Since the vegetation is established and is progressing well, the Borough will be conducting one (1) fertilizer application in the fall season. It is suggested that this activity will continue annually. In addition, the Borough has requested that sections of the dune vegetation system that have experienced die-out be replaced under the up-coming beach nourishment project.

- 4c. Continuation of monitoring and study by Richard Stockton College*, Coastal Research Center, on beach and dune erosion and beach and dune performance

With the ever changing shoreline, due to ocean currents and seasonal storms, the dunes are monitored to ensure the needed protection is present.

(*Note: Richard Stockton College is now Stockton University)

UPDATE 2022:

Stockton University monitors and surveys the movement of sand while producing an annual year-end report evaluating the beach and dune system to determine the overall sand losses and condition of the system. The report is a source of information to confirm the beach fill's performance other than what data is compiled by the USACE and can be utilized by the Borough in the event there is a specific localized problem in the Borough that needs to be addressed. Also, after severe storm events, an additional evaluation can be conducted to determine the damage sustained. The 2022 Annual Report has been received and distributed to Borough Council and Borough professionals and it will be posted to the Borough's web site.

The committee determined that this is important information that should be maintained and is to be continued on an annual basis.

5. Discuss Any Additional Programs or Projects to be Included in the Plan;

Over the course of the year the Committee will continue to monitor the success of various projects and actions that are necessary to aid the objectives and goals of this Program.

Mitigation Action Table

Action	Jurisdiction	Name	Action Category	Description	Hazards Addressed	Priority	Responsible Party	Potential Funding	Cost Estimate	Timeline	2022 Annual Update
Action 6.4.26-1:	Mantoloking Borough	Elevation of 396 homes in Mantoloking Borough	Structure/Infrastructure Project (Property Protection)	Elevation project for 396 homes to build to higher standards and elevation that will mitigate impact of flood related hazards while maintaining residents in community	Coastal Erosion; Flood, Flash Flood, Ice Jam; Hurricane, Tropical Storm, Nor'easter	High	Mantoloking Borough (Emergency Services)	HMA, For 25% local match, in-kind services, Community Development Block Grant (CDBG-DR) and NFIP Increased Cost Compliance (ICC).	\$31,680,000	1 year	Ongoing
Action 6.4.26-3:	Mantoloking Borough	Wind/Water Retrofit - wind proofing and waterproofing of all (4) critical facilities	Structure/Infrastructure Project (Property Protection)	Complete wind proofing and waterproofing of all critical facilities to protect critical community services during flood and wind storm related hazards	Flood, Flash Flood, Ice Jam; Hurricane Tropical Storm, Nor'easter; Tornado, Windstorm	High	Mantoloking Borough	HMA, FEMA, State	\$7,500,000	5 years	Ongoing
Action 6.4.26-5:	Mantoloking Borough	Facility to store backup generator fuel in case power is out for a long time and conversion of generators to dual fuel use	Structure/Infrastructure Project (Property Protection)	Develop facility to store backup generator fuel to mitigate utility interruption including during storm related hazards	Coastal Erosion; Flood, Flash Flood, Ice Jam; Hurricane, Tropical Storm, Nor'easter	High	Mantoloking Borough	HMA, FEMA, FMA, RFC, CDBG-DR flood	\$100,000 (facility for backup fuel storage); \$200,000 (converting generators to dual fuel use)	5 years	Ongoing
Action 6.4.26-6:	Mantoloking Borough	Elevation of the following critical facilities: Sewer pump station, water pump station, police department, fire department, public works building, JCP&L power station	Structure/Infrastructure Project (Property Protection)	Update and elevate the pump station to maintain access to critical community resources during flooding related hazard	Coastal Erosion; Flood, Flash Flood, Ice Jam; Hurricane, Tropical Storm, Nor'easter	High	Mantoloking Borough (Emergency Services)	HMA, For 25% local match, in-kind services, Community Development Block Grant (CDBG-DR) and NFIP Increased Cost Compliance (ICC).	\$	1 year	Ongoing
				Note: 2021 The JCP&L substation has been improved by dry proofing with sand-bag barriers. Public Works Garage and Fire Department are not required to be elevated due to vehicle access while all other equipment/utilities have been elevated.			Note: The Borough will only be responsible for mitigating the critical facilities that are owned by the Municipality. The Borough will request that the owners of the private facilities mitigate their structures accordingly .				
Action 6.4.26-7:	Mantoloking Borough	Upgrade the emergency shelter to provide shelter for long-term stays	Structure/Infrastructure Project (Property Protection)	Upgrade the emergency shelter to provide shelter for long-term stays to assist community members in disaster that require evacuation	All	High	Mantoloking Borough	Mantoloking Borough, HMA, FEMA, CDBG-DR, State	\$	5 years	Ongoing
Action 6.4.26-8:	Mantoloking Borough	Dune mitigation - includes textiles, stone replacement, and steel sheeting to protect dunes	Natural Systems Protection	Maintain and improve dunes and maintain natural beach habitat and bay habitat to mitigate flood related hazards	Coastal Erosion; Flood, Flash Flood, Ice Jam; Hurricane, Tropical Storm, Nor'easter	High	Mantoloking Borough	Mantoloking Borough, HMA, FEMA, USACE	\$8,000,000	5 years	Completed
Action 6.4.26-9:	Mantoloking Borough	Warning System	Education and Awareness Program	Appropriate improvements to ensure the system is current to ensure	All	High	Mantoloking Borough	Mantoloking Borough, DEP, USACE, HMA	\$750,000	5 years	Ongoing

Note 2022 - The OEM has trained additional staff to operate this system.

Action	Jurisdiction	Name	Action Category	Description	Hazards Addressed	Priority	Responsible Party	Potential Funding	Cost Estimate	Timeline	2021 Annual Update
				information/warning is provided in the most expedited manner.							
Action 6.4.26-12:	Mantoloking Borough	Local flood mitigation plan	Local Plans and Regulations	Maintain flood mitigation plan. If it is determined that same goals set forth in flood mitigation plan are accomplished by hazard mitigation plan then flood mitigation plan may be retired in time	Coastal Erosion; Flood, Flash Flood, Ice Jam; Hurricane, Tropical Storm, Nor'easter	High	Mantoloking Borough Emergency Services	Mantoloking Borough, HMA, CDBG-DR, State	N/A	5 years	Ongoing
Action 6.4.26-13:	Mantoloking Borough	Develop an alternative evacuation plan <i>Note 2022 - The Borough Police Department has prepared their Emergency Operations Plan in accordance with the regulating agencies requirements and it has been approved by both the Ocean County and State Agencies.</i>	Local Plans and Regulations	Improve evacuation plan based on lessons learned from recent evacuations, including updates to alternative routes and re-entry guidance	All	High	Mantoloking Borough (Emergency Services)	HMA, FEMA, State	\$	5 years	Ongoing
Action 6.4.26-14:	Mantoloking Borough	Drainage - Cleaning of all critical sewer pipes and drainage facilities; street cleaning of debris and drainage issues; I&I protection of sewer system	Structure/Infrastructure Project (Property Protection)	Clean of all critical sewer pipes and drainage facilities, street cleaning of debris and drainage issues, and I&I protection of sewer systems	Coastal Erosion; Flood, Flash Flood, Ice Jam; Hurricane, Tropical Storm, Nor'easter	High	Mantoloking Borough	Mantoloking Borough; HMA, FEMA	\$2,500,000	5 years	Ongoing
Action 6.4.26-15:	Mantoloking Borough	Vegetation - Dune grass replanting	Natural Systems Protection	Plant dune grass to strengthen the ability of the dune to stay in place and protect community from flood related hazards	Coastal Erosion; Flood, Flash Flood, Ice Jam; Hurricane, Tropical Storm, Nor'easter	High	Mantoloking Borough	Mantoloking Borough, HMA, Local Boy Scouts	\$600,000	5 years	Ongoing
Action 6.4.26-16:	Mantoloking Borough	Dredging/drainage improvements of the "back bay" area; deposits of sand and silt were deposited into the area causing flooding	Natural Systems Protection	Complete dredging/drainage improvements in bay to mitigate flooding	Coastal Erosion; Flood, Flash Flood, Ice Jam; Hurricane, Tropical Storm, Nor'easter	High	Mantoloking Borough	Mantoloking Borough, DEP, USACE, HMA	\$	5 years	Ongoing
Action 6.4.26-17:	Mantoloking Borough	Continue to participate in the CRS Program; increase participation to next level	Education and Awareness Program	Continue participation in CRS program and consider upgrading to the next class level to complete pro-active floodplain management and assist residents with flood insurance costs	Coastal Erosion; Flood, Flash Flood, Ice Jam; Hurricane, Tropical Storm, Nor'easter	High	Mantoloking Borough	Mantoloking Borough, HMA, FEMA	Staff time to fulfill CRS requirements	5 years	Ongoing
Action 6.4.26-18:	Mantoloking Borough	Storm Ready program	Education and Awareness Program	Join and maintain Storm Ready to mitigate storm related hazards	All	High	Mantoloking Borough	NWS, Mantoloking Borough	N/A	5 years	Ongoing
Action 6.4.26-19:	Mantoloking Borough	Maintain Reverse 911 System	Education and Awareness Program	Maintain reverse 911 system to assist in communication for all hazards	All	High	Mantoloking Borough Police Department	Mantoloking Borough; HMA, FEMA	N/A	5 years	Ongoing

Note 2022 - The communication system is has been designated as Mantoloking Ready.

Mitigation Action Table

Action	Jurisdiction	Name	Action Category	Description	Hazards Addressed	Priority	Responsible Party	Potential Funding	Cost Estimate	Timeline	2021 Annual Update
Action 6.4.26-22:	Mantoloking Borough	Incorporate Resiliency into the community's Master Plan	Local Plans and Regulations	Incorporate Resiliency into the community's Master Plan as its own element or incorporated throughout the entire plan	All Hazards	High	Mantoloking Borough	Mantoloking Borough, HMA, CDBG-DR		5 years	Ongoing
Action 6.4.26-23:	Mantoloking Borough	Conduct an Engineering Study to determine proposed bulkhead improvements within the community.	Structure/Infrastructure Project	Conduct an Engineering Study to determine proposed bulkhead improvements within the community.	Coastal Erosion; Flood, Flash Flood, Ice Jam; Hurricane, Tropical Storm, Nor'easter	High	Mantoloking Borough	Mantoloking Borough, HMA, CDBG-DR		1 years	Ongoing
Action 6.4.26-24:	Mantoloking Borough	Adopt a Bulkhead Ordinance <i>Note 2022 - During 2022 a draft ordinance was prepared and will be reevaluated in 2023 for possible adoption.</i>	Local Plans and Regulations	Adopt a Bulkhead Ordinance that is consistent with the NJDEP Bulkhead model ordinances on elevation of bulkheads.	Coastal Erosion; Flood, Flash Flood, Ice Jam; Hurricane, Tropical Storm, Nor'easter	High	Mantoloking Borough	Mantoloking Borough, HMA, CDBG-DR		5 years	Ongoing
Action 6.4.26-25:	Mantoloking Borough	Install Bulkheads at street ends along the bay side of the island.	Structure/Infrastructure Project	Install Bulkheads at street ends along the bay side of the island to prevent flooding.	Coastal Erosion; Flood, Flash Flood, Ice Jam; Hurricane, Tropical Storm, Nor'easter	High	Mantoloking Borough	Mantoloking Borough, HMA, CDBG-DR		5 years	Ongoing
Action 6.4.26-26:	Mantoloking Borough	Conduct an Outreach to support CRS	Education and Awareness Program	Conduct an Outreach program to further community engagement and risk communication of flooding for the CRS program.	Coastal Erosion; Flood, Flash Flood, Ice Jam; Hurricane, Tropical Storm, Nor'easter	High	Mantoloking Borough	Mantoloking Borough, HMA, CDBG-DR		5 years	Ongoing