



9.26 Village of Ocean Beach

This section presents the jurisdictional annex for the Village of Ocean Beach. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the Village of Ocean Beach and who in the Village of Ocean Beach participated in the planning process; an assessment of the Village of Ocean Beach’s risk and vulnerability; the different capabilities utilized in the Village of Ocean Beach type; and an action plan that will be implemented to achieve a more resilient community.

9.26.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of Ocean Beach’s hazard mitigation plan primary and alternate points of contact.

Table 9.26-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Steven Brautigam, Clerk/Treasurer Address: P.O. Box 457 Ocean Beach N.Y. 11770 Phone Number: 631-583-5940 Email: sbrautigam@villageofoceanbeach.org	Name/Title: Matthew Amin, Clerk Address: P.O. Box 457 Ocean Beach N.Y. 11770 Phone Number: 631-583-5940 Email: mamin@villageofoceanbeach.org
NFIP Floodplain Administrator	
Name/Title: Mike Mandarino, Building Inspector Address: P.O. Box 457 Ocean Beach N.Y. 11770 Phone Number: 631-583-5940 Email: bldgdept@villageofoceanbeach.org	

9.26.2 Municipal Profile

Ocean Beach was incorporated as a village in 1921. It was the location of Fire Island's first elementary school, which opened in 1918.

Per Village of Ocean Beach Chapter 164, Article VI, Comprehensive All-Hazards Code, “The village area, being situated on Fire Island, one of the barrier island of Long Island, separating the Atlantic Ocean and the Great South Bay in the Town of Islip, is placed in a geographical area which is expected to be affected by at least one tropical storm every five plus years, and at least one hurricane every 14 plus years.

The Village consists of approximately 572 homes, most of them being secondary residences.

The Governing Body consists of a Mayor and four trustees.

According to the U.S. Census, the 2010 population for the Village of Ocean Beach was 79. The estimated 2017 population was 24, a 69.6 percent decrease from the 2010 Census. Data from the 2017 U.S. Census American Community Survey indicate that 0.0 percent of the population is 5 years of age or younger and 21.0 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.26.3 Growth/Development Trends





Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction’s overall risk to its hazards of concern. Table 9.26-2 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development. The figures at the end of this annex illustrate the geographically-delineated hazard areas and the location of potential new development, where available. The recent and anticipated development depicted on these figures excludes the Suffolk County wastewater upgrades; refer to Section 4 (County Profile) for additional information on this development.

Table 9.26-2. Recent and Expected Future Development

Type of Development	2014		2015		2016		2017		2018		2019	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA	Total	Within SFHA
Single Family	114	114	134	134	125	125	148	148	127	127	95	95
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	9	9	10	10	0	0	0	0	1	1	19	19
Total Permits Issued	123	123	144	144	125	125	148	148	128	128	114	114
Property or Development Name	Type of Development	# of Units / Structures		Location (address and/or block and lot)		Known Hazard Zone(s)*		Description / Status of Development				
Recent Major Development and Infrastructure from 2015 to Present												
None identified												
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years												
None anticipated												

SFHA Special Flood Hazard Area (1% flood event)

* Only location-specific hazard zones or vulnerabilities identified.

9.26.4 Capability Assessment

The Village of Ocean Beach performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Information on National Flood Insurance Program (NFIP) compliance.
- Classification under various community mitigation programs.
- The community’s adaptive capacity for the impacts of climate change.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and



each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in Capability Assessment (Section 9.26.4). The Village of Ocean Beach identified specific integration activities that will be incorporated into municipal procedures are included in the updated mitigation strategy. Appendix G provides the results of the planning/policy document review and the answers to integration survey questions.

Planning, Legal, and Regulatory Capability

The table below summarizes the regulatory tools that are available to the Village of Ocean Beach and where hazard mitigation has been integrated.

Table 9.26-3. Planning, Legal, and Regulatory Capability

	Do you have this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible	State Mandated	Has this been integrated?	
						If no - can it be a mitigation action?	
Codes, Ordinances, & Requirements							
Building Code	Yes	Building Code, Chapter 64; Fire Prevention, Chapter 87 of the Village Code	Local	Building Department, Fire Marshall	Yes	Yes	-
Comment: The Village has adopted the New York State Uniform Fire Prevention and Building Code and International Building Code							
Zoning Code	Yes	Village of Ocean Beach Code §164 Note: Article VI. Comprehensive All-Hazards Code	Local	Building Department, Planning Board, Zoning Board, Architectural Review Board	No	Yes	-
Comment: For the purpose of promoting the health, safety and general welfare of the Incorporated Village of Ocean Beach, and in accordance with a Comprehensive Plan of the Village of Ocean Beach and the General Management Plan of the Fire Island National Seashore, this chapter is designed to lessen congestion on the walks; to secure safety from fire, flood, panic and other dangers; to promote health, general welfare and public peace and quiet; to provide adequate light and air; to provide access to solar energy and the accommodation of solar energy systems to the extent possible; to prevent the overcrowding of land; to avoid undue concentration of population; and to facilitate the adequate provision of water, sewerage, schools, parks and other public requirements.							
Subdivisions	Yes	Village of Ocean Beach Code §164	Local	Planning Board, Zoning Board	No	Yes	-
Comment: Covered in Zoning Code.							
Stormwater Management	No	-	-	-	Yes	-	-
Comment:							
Post-Disaster Recovery	No	-	-	-	No	-	-
Comment:							
Real Estate Disclosure	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent	Yes	Yes	-
Comment:							
Growth Management	No	-	-	-	No	-	-
Comment:							
Site Plan Review	Yes	Chapter 164: Zoning. Site Plan review.	Local	Planning Board, Zoning	No	Yes	-



	Do you have this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible	State Mandated	Has this been integrated?	
						If no - can it be a mitigation action?	
				Board, Architectural Review Board			
Comment: Addressed in Zoning.							
Environmental Protection	No	-	-	-	Yes	-	-
Comment:							
Flood Damage Prevention	Yes	Chapter 164 Zoning	State and Local	Building Department	Yes - BFE+2 feet for all construction in the SFHA (residential and non-residential)	Yes	-
Comment: Flood damage prevention is discussed in the Zoning Code. Higher regulatory standards – the Village uses a 41% substantial damage threshold. They are in the process of easing the setback requirements to allow for ramps/stairs needed when elevating properties.							
Municipal Separate Storm Sewer System (MS4)	Yes	Chapter 139 of the municipal code: Sewers	Local	Stormwater Management Officer	Yes	Yes	-
Comment: Chapter 139 was adopted to: <ul style="list-style-type: none"> A. To meet the requirements of the SPDES general permit for stormwater discharges from MS4s, Permit No. GP-02-02, or as amended or revised; B. To regulate the contribution of pollutants to the MS4 since such systems are not designed to accept, process or discharge nonstormwater wastes; C. To prohibit illicit connections, activities and discharges to the MS4; D. To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this article; and E. To promote public awareness of the hazards involved in the improper discharge of trash, yard waste, lawn chemicals, pet waste, wastewater, grease, oil, petroleum products, cleaning products, paint products, hazardous waste, sediment and other pollutants into the MS4. 							
Emergency Management	No	-	-	-	Yes	-	-
Comment:							
Climate Change	No	-	-	-	Yes	-	-
Comment:							
Disaster Recovery Ordinance	No	-	-	-	No	-	-
Comment:							
Disaster Reconstruction Ordinance	No	-	-	-	No	-	-
Comment:							
Waterfront Consistency Review	Yes	Chapter 162 of the municipal code	Local	Planning Board	No	Yes	-
Comment: The purpose of this chapter is to provide a framework for agencies of the Village of Ocean Beach to consider the policies and purposes contained in the Village of Ocean Beach Local Revitalization Program when reviewing applications for actions or direct agency actions located in the coastal area and to assure that such actions and direct actions are consistent with said policies and purposes.							
Planning Documents							
Comprehensive Plan	No	-	-	-	No	-	-



	Do you have this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible	State Mandated	Has this been integrated?	
						If no - can it be a mitigation action?	
Comment:							
Capital Improvement Plan	Yes	Capital Improvement Plan	Local	Administration	No	Yes	-
Comment:							
Disaster Debris Management Plan	Yes	Suffolk County Multi-Jurisdictional Debris Management Plan	County, Local	Suffolk County FRES	No	Yes	-
Comment: This NYS and FEMA approved comprehensive Multi-Jurisdictional Debris Management Plan was developed through the cooperative efforts of Suffolk County and each of the ten (10) Towns, working together in conjunction with partners from private, state and federal agencies.							
Floodplain or Watershed Plan	No	-	-	-	No	-	-
Comment:							
Stormwater Plan	In Progress	July 14, 2020	Local	Administration	No	No	No
Comment: Plan to be completed shortly.							
Open Space Plan	No	-	-	-	Yes	-	-
Comment:							
Urban Water Management Plan	Yes	Through DOH	State	DOH	No	Yes	-
Comment:							
Habitat Conservation Plan	No	-	-	-	No	-	-
Comment:							
Economic Development Plan	No	-	-	-	No	-	-
Comment: Economic development is being considered within the NYRCRP							
Shoreline Management Plan	Yes	LWRP, 2010	Local	Administration	Yes	Yes	-
Comment: Revitalize the village waterfront with an emphasis on water quality and economic redevelopment							
Community Wildfire Protection Plan	No	-	-	-	No	-	-
Comment:							
Forest Management Plan	No	-	-	-	No	-	-
Comment:							
Transportation Plan	No	-	-	-	No	-	-
Comment:							
Agriculture Plan	No	-	-	-	Yes	-	-
Comment:							



	Do you have this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible	State Mandated	Has this been integrated?	
						If no - can it be a mitigation action?	
Other (this could include a climate action plan, tourism plan, business development plan, etc.)	Yes	Local Waterfront Revitalization Plan (LWRP) 2009 Consistency Review, and Local Waterfront Revitalization Plan (LWRP) Bayfront Recreation District is part of the LWRP	Local	Planning Board	No	Yes	-
Comment:							
Response/Recovery Planning							
Comprehensive Emergency Management Plan	Yes	Suffolk County Comprehensive Emergency Management Plan (2018)	Suffolk County and Associated Jurisdictions	Suffolk FRES	Yes	Yes	-
Comment: The County Comprehensive Emergency Management Plan (CEMP) describes the emergency obligations of County government and its capability and capacity to undertake emergency assignments or acquire those resources necessary to support its emergency mission. The Concept of Operations of the CEMP describes the management of emergencies within the National Incident Management System (NIMS) and details emergency management programmatic efforts to accommodate present standards.							
Strategic Recovery Planning Report	Yes	2015	Local	Administration	No	Yes	-
Comment:							
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-	Yes	-	-
Comment:							
Post-Disaster Recovery Plan	Yes	2015	Local	OBPD	No	Yes	-
Comment:							
Continuity of Operations Plan	Yes	2015	Local	Village	No	Yes	-
Comment:							
Public Health Plan	Yes	County Plan	County	DOH	No	Yes	-
Comment:							
Other	No	-	-	-	No	-	-
Comment:							

Table 9.26-4. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Response Yes/No; Provide further detail
Development Permits. If yes, what department?	Yes, Building Inspector.
Permits are tracked by hazard area. For example, floodplain development permits.	Yes.



Indicate if your jurisdiction implements the following	Response Yes/No; Provide further detail
Buildable land inventory If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	The Village is considered built out.

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Ocean Beach.

Table 9.26-5. Administrative and Technical Capabilities

Resources	Available? (Yes or No)	Department/ Agency/Position
Administrative Capability		
Planning Board	Yes	Planning Board
Mitigation Planning Committee	Yes	Waterfront Revitalization Plan is being updated. LWRP
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Warning Systems / Services (reverse 911, outdoor warning signals)	Yes	Fire sirens, electronic notification system, commercial district has cameras. Website.
Maintenance programs to reduce risk	Yes	Stormwater and tree trimming
Mutual aid agreements	Yes	Fire Departments and Suffolk County.
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Contracted - Land Use, H2M
Engineers or professionals trained in building or infrastructure construction practices	Yes	Building Inspector, Contracted - H2M
Planners or engineers with an understanding of natural hazards	Yes	Contracted -Land Use
Staff with expertise or training in benefit/cost analysis	Yes	H2M
Professionals trained in conducting damage assessments	Yes	NFIP Floodplain Administrator and hired consultants.
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Contracted - Land Use, H2M
Scientist familiar with natural hazards	Yes	Contracted - Land Use, H2M
NFIP Floodplain Administrator (FPA)	Yes	Building Inspector is designated NFIP FPA; Currently served by Brad Hammond
Surveyor(s)	Yes	Contracts
Emergency Manager	Yes	Mayor and Police
Grant writer(s)	Yes	H2M
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Village of Ocean Beach.



Table 9.26-6. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Generally not eligible
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes, user fees and tax
Impact fees for homebuyers or developers of new development/homes	Yes, permitting fees
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	Environmental Facilities Corps. Received grant funding for stormwater upgrades and new well.

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Ocean Beach.

Table 9.26-7. Education and Outreach Capabilities

Indicate if your jurisdiction has the following resources	Yes/No; Please describe
Public information officer or communications office?	All staff
Personnel skilled or trained in website development?	Yes
Hazard mitigation information available on your website; if yes, describe	Yes, the website includes information on various hazards including sea level rise’s impact on flooding.
Social media for hazard mitigation education and outreach; if yes, briefly describe.	No
Citizen boards or commissions that address issues related to hazard mitigation; if yes, briefly describe.	Downtown Revitalization Committee works with the LWRP.
Other programs already in place that could be used to communicate hazard-related information; if yes, briefly describe.	No
Warning systems for hazard events; if yes, briefly describe.	Fire sirens, electronic notification system, commercial district has cameras. Website.
Natural disaster/safety programs in place for schools; if yes, briefly describe.	No schools in the village
Other	No

Community Classifications

The table below summarizes classifications for community programs available to the Village of Ocean Beach.

Table 9.26-8. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	NP	-	-



Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Building Code Effectiveness Grading Schedule (BCEGS)	NP	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	Unavailable	Unavailable
NYSDEC Climate Smart Community	NP	-	-
Storm Ready Certification	NP	-	-
Firewise Communities classification	NP	-	-
Other	NP	-	-

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). In other words, it describes a jurisdiction’s current ability to adjust to, protect from, or withstand a hazard event. This term is often discussed in reference to climate change; however, adaptive capacity also includes an understanding of local capacity for adapting to current and future risks and changing conditions. The table below summarizes the adaptive capacity for each hazard and the jurisdiction’s rating.

Table 9.26-9. Adaptive Capacity of Climate Change

Hazard	Adaptive Capacity (Capabilities) - High/Medium/Low*
Coastal Erosion	High
Cyber Security	Medium
Disease Outbreak	Medium
Drought	Medium
Earthquake	Medium
Expansive Soils	Medium
Extreme Temperature	Medium
Flood	High
Groundwater Contamination	Medium
Hurricane	High
Infestation and Invasive Species	Medium
Nor’Easter	Medium
Severe Storm	High
Severe Winter Storm	High
Shallow Groundwater	Medium
Wildfire	Medium

- *High Capacity exists and is in use
- Medium Capacity may exist; but is not used or could use some improvement
- Low Capacity does not exist or could use substantial improvement
- Unsure Not enough information is known to assign a rating

The Village of Ocean Beach has access to resources to determine the possible impacts of climate change upon the Village and is supportive of integrating climate change in policies or actions. In order to integrate climate change into current policies/plans or actions (projects/monitoring) within the Village of Ocean Beach, the Village has elevated sidewalks. The Village has a new building policy which includes information about fire sprinklers, lot size and land use in a flood zone.



9.26.5 National Flood Insurance Program

This section provides specific information on the management and regulation of the regulatory floodplain.

NFIP Floodplain Administrator (FPA)

Brad Hammond, Building Inspector

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of Ocean Beach.

Table 9.26-10. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties
Village of Ocean Beach	449	983	\$48,810,971	153

Source: FEMA 2020

Notes: According to FEMA statistics as of 7/13/2020

RL Repetitive Loss

Flood Vulnerability Summary

The Village of Ocean Beach is located on the barrier island between Great South Bay and the Atlantic Ocean. While the Village does not keep cumulative records, it is estimated 400 homes along with the entire business district on the bay front sustained flood damage from Hurricane Sandy. Substantial Damage determinations are made by the NFIP Floodplain Administrator through physical inspections. The Village does not have cumulative records of the number of properties that have been mitigated. Past mitigation project have been funded by private funding, flood insurance, grant funding, and ICC.

Resources

The community FDPO identifies the building inspector as the local NFIP Floodplain Administrator, currently Louis Santora, for which floodplain administration is an auxiliary duty. Duties and responsibilities of the NFIP Administrator are educating the public on code requirements of New York and FEMA regarding flood zones and elevating homes, permit review, inspections, damage assessments, and record-keeping. GIS services are provided by the Town of Islip if needed. Substantial improvement of an existing structure is determined by a 50% threshold on construction or rehabilitation. A certified floodplain manager is on staff.

The Village has access to resources to determine future flooding conditions from climate change. At this time, the floodplain management staff does not need additional assistance or training but notes that public reluctance to comply presents a barrier to success.

Building permits are required to state whether or not the work being done is as a result of flood damage. This is the method implemented to track properties that have sustained flood damage.

In the Village of Ocean Beach, the following educational and/or outreach activities related to the NFIP:

- Pamphlets on counter at Village office for public to peruse and take,
- phone calls or meetings with the public NFIP FPA regarding flood risk concerns,
- Posting information to Village website as it becomes available.



Compliance History

The Village of Ocean Beach joined the NFIP on May 21, 1977, and is currently an active member of the NFIP. The current effective Flood Insurance Rate Maps are dated September 25, 2009. The community is currently in good standing in the NFIP and has no outstanding compliance issues. The most recent Community Assistance Visit (CAV) took place on September 20, 2017.

Regulatory

The community's Flood Damage Prevention Ordinance (FDPO), found at Chapter 90 of the local code, and was last updated on July 11, 2009.

Floodplain management regulations and ordinances exceed FEMA and New York State minimum requirements by enforcing 41% Substantial Damage threshold in lieu of 50%.

Community Rating System

The Village of Ocean Beach does not participate in the Community Rating System but is interested in joining the program.

9.26.6 Integration with Other Planning Initiatives

As this HMP update is implemented, the Village of Ocean Beach will use information from the plan as the best available science and data for natural hazards. The capability assessment presented in this annex identifies codes, plans, and programs that provide opportunities for integration. The Suffolk County and local action plans developed for this HMP update actions related to plan integration, as well as progress on these actions, will be reported through the progress reporting process described in Volume I. New opportunities for integration also will be identified as part of the annual progress report.

Existing Integration

It is the intention of this municipality to incorporate hazard mitigation planning and natural hazard risk reduction as an integral component of ongoing municipal operations. The following textual summary and table identify relevant planning mechanisms and programs that have been/will be incorporated into municipal procedures, which may include former mitigation initiatives that have become continuous/on-going programs and may be considered mitigation "capabilities":

- **Land Use Plans:** Maintain the Comprehensive Plan and waterfront revitalization plan to minimize risk in hazard areas. Updates will include a review of the HMP to ensure that hazard areas are identified in the respective plans.
- **Zoning, Building Regulation and Code Enforcement:** The Village of Ocean Beach has adopted Article VI. Comprehensive All-Hazards Code to their Chapter 164, Zoning Code. The purpose of the Article is to "establish standard and procedures relating to land use and building regulations, and necessary to address all-hazards, including flooding, coastal and floodplain management, stormwater management, coastal erosion and wind that incorporates standards more restrictive than those require by state and/or federal law."
- **Building Code, Ordinances, and Enforcement** – review planned development against the hazard areas identified in the HMP during zoning and subdivision reviews.
- **Emergency Response Plan** – the village developed and adopted an Emergency Response Plan in order to outline in detail the functions and responsibilities of each village department during a large scale natural or man-made emergency, so that response to emergencies lessens the severity of a disaster on property and the population. This plan includes many pre-event actions that both mitigate disaster losses, and directly supports recovery efforts.



- **Public Education and Outreach** – Public education and outreach in the Village includes monthly meetings with public invited, the village website, liaison to the Ocean Beach Association, and direct mailings.
- **Land Use Planning:** A higher resolution flood zone map would be a useful tool to have and make implementing the floodplain management program easier in the Village of Ocean Beach. The Village has 6 flood zones and very small lots. A clearer picture would allow for more sound management.

Opportunities for Future Integration

- The Village is examining whether to join the Community Rating System program. The Village has numerous repetitive loss properties and high flood risk but is committed to flood mitigation and feels the program may be very beneficial.

9.26.7 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes

Evacuation of the Village of Ocean Beach takes place in correspondence with the Fire Island Ferries. Within 24 hours of a storm or other hazard event, Fire Island Ferries transports residents one-way, free of charge, to their terminal located at 99 Maple Avenue, Bay Shore, NY.

Sheltering

The Village of Ocean Beach does not have any shelters. Instead, the Village relies on the Town of Islip and the Suffolk County OEM for sheltering.

Temporary Housing

The Village of Ocean Beach has not identified appropriate locations for the placement of temporary housing following a disaster event. However, the Village has established temporary housing for post-disaster staff. The Village will work with Suffolk County to identify appropriate locations (2020-Ocean Beach-010).

Permanent Housing

The Village of Ocean Beach is built out and does not have locations identified for the relocation of new houses or construction of new homes when structures in the Special Flood Hazard Area need to be relocated or demolished.

9.26.8 Hazard Event History Specific to the Village of Ocean Beach

Suffolk County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The Village of Ocean Beach's history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Suffolk County. Table 9.26-11 provides details regarding municipal-specific loss and damages the Village of Ocean Beach experienced during hazard events. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.



Table 9.26-11. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
February 8 – 9, 2013	Severe Winter Storm and Snowstorm (FEMA DR-4111)	Yes	Low pressure that formed along the northern Gulf coast by the morning of Thursday, February 7, 2013 moved northeast to near Cape Hatteras by the morning of Friday, February 8, 2013 . The low then rapidly intensified while moving northeast to a position east of Cape Cod by the morning of Saturday, February 9, 2013, producing very heavy snowfall and blizzard conditions across central and eastern Long Island on February 8th and 9th, and winter storm conditions across the rest of southeast New York.	Although the County was impacted, the Village did not report major damages or impact.
November 20, 2016	Strong Wind	No	Strong winds occurred behind a deepening area of low pressure.	A wind gust up to 51 mph was measured near Ocean Beach at 5:00 pm. Southwest Suffolk resulted in \$50K in property damage.
March 14 – 15, 2017	Severe Winter Storm and Snowstorm (FEMA DR-4322)	Yes	On Tuesday, March 14th, rapidly deepening low pressure tracked up the eastern seaboard resulting in damaging winds in Suffolk County.	Although the County was impacted, the Village did not report major damages or impact.

Notes:

- EM Emergency Declaration (FEMA)
- FEMA Federal Emergency Management Agency
- DR Major Disaster Declaration (FEMA)
- N/A Not applicable

9.26.9 Hazard Ranking and Jurisdiction-Specific Vulnerabilities

The hazard profiles in Section 5 (Risk Assessment) of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes critical facility and community lifeline flood exposure, and the hazards of greatest concern and risk to the Village of Ocean Beach. For additional vulnerability information relevant to this jurisdiction, refer to Section 5.

A gradient of certainty was developed to summarize the confidence level regarding the input used to populate the hazard ranking. A certainty factor of high, medium or low was selected and assigned to each hazard to provide a level of transparency and create increased understanding of the data used to support the resulting ranking. The following scale was used to assign a certainty factor to each hazard:

- High—Defined scenario/event to evaluate; probability calculated; evidenced-based/quantitative assessment to estimate potential impacts through hazard modeling.
- Moderate—Defined scenario/event or only a hazard area to evaluate; estimated probability; combination of quantitative (exposure analysis, no hazard modeling) and qualitative data to estimate potential impacts.
- Low—Scenario or hazard area is undefined; there is a degree of uncertainty regarding event probability; majority of potential impacts are qualitative.





Critical Facilities

New York Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 500-year flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities and community lifelines located in the 1-percent and 0.2-percent floodplain. It also summarizes if the facility is already mitigated in compliance with NYS standards (i.e., to the 0.2-percent annual chance event or worse-case scenario), or if a new mitigation action is proposed in the plan update.

Table 9.26-12. Potential Flood Losses to Critical Facilities

Name	Type	Exposure			Complies with NYS Standards	Addressed by Proposed Action
		1% Event		0.2% Event		
		A-Zone	V-Zone			
None identified at this time						

Source: Suffolk County 2020; FEMA 2009

Notes: x = Facility is located in the floodplain boundary.

*Community Lifeline

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Suffolk County as a whole. Therefore, each Village of Ocean Beach ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential hazards for the Village of Ocean Beach. The Village of Ocean Beach has reviewed the county hazard risk/vulnerability risk ranking table and provided input to its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the Village of Ocean Beach indicated the following:

- The Village changed the hazard ranking for earthquake from medium to low.
- The Village changed the hazard ranking for severe storm from medium to high.
- The Village changed the hazard ranking for severe winter storm from medium to high.



Table 9.26-13. Hazard Ranking

Coastal Erosion High	Cyber Security Medium	Disease Outbreak Medium	Drought Low	Earthquake Low	Expansive Soils Low
Extreme Temperature Medium	Flood High	Groundwater Contamination Medium	Hurricane High	Infestation and Invasive Species Medium	Nor'Easter High
Severe Storm High	Severe Winter Storm High	Shallow Groundwater Low	Wildfire Medium		

Identified Issues

The Village of Ocean Beach has identified the following vulnerabilities within their community:

- Per Village of Ocean Beach Chapter 164, Article VI, Comprehensive All-Hazards Code, “The village area, being situated on Fire Island, one of the barrier island of Long Island, separating the Atlantic Ocean and the Great South Bay in the Town of Islip, is placed in a geographical area which is expected to be affected by at least one tropical storm every five plus years, and at least one hurricane every 14 plus years...the Village is entirely situated within mapped flood and coastal erosion hazard areas and, for the small size of the village, has seven different flood hazard zones and a coastal erosion hazard zone within the village’s jurisdiction and is also situated within the Fire Island National Seashore, a fragile, environmentally sensitive barrier island estuary.”
- The entire Village is extremely low-lying. Groundwater is typically 2’ below ground surface or less.
- The Village experiences ½’ of flooding throughout the Village on extreme high-tides.

9.26.10 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2014 HMP. Actions that are carried forward as part of this plan update are included in the updated mitigation strategy table (Table 9.26-15). Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.



Table 9.26-14. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2020 HMP or Discontinue 2. If including action in the 2020 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Cost	Damages Avoided; Evidence of Success	
VOB-1	Assess and prioritize options to retrofit, acquire, or relocate structures located in hazard-prone areas, and support implementation as funding becomes available. Implementation is further supported by county-led initiatives identified below.	Coastal Erosion, Earthquake, Flood, Hurricane, Infestation, Nor'Easter, Severe Storm, Wildfire	Village of Ocean Beach, Village Clerk/Treasurer; H2M, P.C.		In Progress; Village owned structures have been addressed. 60+ houses have been raised since 2014.	Cost		1. Include in 2020 HMP 2. 3.
						Level of Protection		
						Damages Avoided; Evidence of Success		
VOB-2	Assess and prioritize options to elevate residences in flood hazard areas, and implement as funding becomes available.	Coastal Erosion, Earthquake, Flood, Hurricane, Infestation, Nor'Easter, Severe Storm	Village of Ocean Beach, Village Clerk/Treasurer; H2M, P.C.		In Progress	Cost		1. Include in 2020 HMP 2. Combine with VOB-1 3.
						Level of Protection		
						Damages Avoided; Evidence of Success		
VOB-3	Sandy HMGP LOI #148 - Assess and prioritize options to construct new drinking water supply wells, including a safe rooms to protect operators during emergencies, and implement as funding becomes available.	Earthquake, Flood, Hurricane, Nor'Easter, Severe Storm, Wildfire, Winter Storm	Inc. Village of Ocean Beach: Paul Granger, Vice President		Complete; 3 brand new wells, water lines replaced, and safe room replace. 3 rd funded by USACE. To be started in the fall. Will be able to service outside of village boundaries. Wells monitored by	Cost		1. Include in 2020 HMP 2. 3 rd well 3.
						Level of Protection		
						Damages Avoided; Evidence of Success		



Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2020 HMP or Discontinue 2. If including action in the 2020 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
					DOH and inspected.			
VOB-5 (Sandy HMGP LOI# 701)	Installation of Flood Doors at Sewage Treatment Plant	Flood, Hurricane, Nor'Easter, Severe Storm	Village of Ocean Beach, Village Clerk/Treasurer: Steven Hearl, P.E., Project Manager, H2M, P.C.		Complete	Cost		1. Discontinue 2. 3. Complete
						Level of Protection		
						Damages Avoided; Evidence of Success		
VOB-6 (Sandy HMPG LOI # 702)	Modifications to the Wastewater Treatment Chlorination System	Flood, Hurricane, Nor'Easter, Severe Storm	Village of Ocean Beach, Village Clerk/Treasurer: Steven Hearl, P.E., Project Manager, H2M, P.C.		Complete	Cost		1. Discontinue 2. 3. Complete
						Level of Protection		
						Damages Avoided; Evidence of Success		
VOB-7	Provide Valves on Drain at Sewage Treatment Plant	Flood, Hurricane,	Village of Ocean Beach, Village		Complete	Cost		1. Discontinue 2.



Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2020 HMP or Discontinue 2. If including action in the 2020 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Level of Protection	Damages Avoided; Evidence of Success	
(Sandy HMGP # 703)		Nor'Easter, Severe Storm	Clerk/Treasurer: Steven Hearl, P.E., Project Manager, H2M, P.C.			Level of Protection		3. Complete
						Damages Avoided; Evidence of Success		
VOB-8 (Sandy HMGP LOI #705)	Raise Top of Sludge Holding Tank at Sewage Treatment Plant	Flood, Hurricane, Nor'Easter, Severe Storm	Village of Ocean Beach, Village Clerk/Treasurer: Steven Hearl, P.E., Project Manager, H2M, P.C.		No Progress. Engineers and FEMA determined was not necessary.	Cost		1. Discontinue
						Level of Protection		2. Engineers and FEMA determined was not necessary.
						Damages Avoided; Evidence of Success		3.
VOB-9 (Sandy HMGP LOI# 1033)	Raise Motor Control Centers at Sewage Treatment Plant	Flood, Hurricane, Nor'Easter, Severe Storm	Village of Ocean Beach, Village Clerk/Treasurer: Steven Hearl, P.E., Project Manager, H2M, P.C.		Complete	Cost		1. Discontinue
						Level of Protection		2. Complete
						Damages Avoided; Evidence of Success		3.
VOB-10 (Sandy HMGP LOI #1333)	Raise Electric Service Transformer for Sewage Treatment Plant	Flood, Hurricane, Nor'Easter, Severe Storm	Village of Ocean Beach: Steven Hearl, P.E., Project Manager, H2M, P.C.		Complete	Cost		1. Discontinue
						Level of Protection		2. Complete
						Damages Avoided;		3.



Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2020 HMP or Discontinue 2. If including action in the 2020 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Evidence of Success		
VOB-11	Install back-up power generation for all critical facilities.	Earthquake, Flood, Hurricane, Nor'Easter, Severe Storm, Wildfire, Winter Storm	Village of Ocean Beach, Village Clerk/Treasurer; H2M, P.C.		Complete; Wastewater Treatment Plant generator, hooked in new well and safe house. Ferry terminal has mobile generator which can be used at multiple locations. Community Center. Fire Department.	Cost		1. Discontinue 2. 3. Complete
VOB-12	Assess and prioritize options to repair and improve docks, and implement as funding becomes available.	Earthquake, Flood, Hurricane, Nor'Easter, Severe Storm, Wildfire, Winter Storm	Village of Ocean Beach, Village Clerk/Treasurer; H2M, P.C.		Complete; Docks rebuilt.	Cost		1. Discontinue 2. 3. Complete
						Level of Protection		
						Damages Avoided; Evidence of Success		
VOB-13	Assess and prioritize options to protect the bayside shoreline, and implement as funding becomes available.	Flood, Hurricane, Nor'Easter, Severe Storm	Village of Ocean Beach, Village Clerk/Treasurer; H2M, P.C.		In Progress; bulkheads were replaced. One bulkhead needs to be replaced. Will	Cost		1. Include in 2020 HMP 2. Includes bulkhead and cement skin on docks; Bulkhead: \$600,00; Whole Project: \$1.9M 20% Village match, Administration
						Level of Protection		



Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2020 HMP or Discontinue 2. If including action in the 2020 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
					start in fall through NY DOT Grant.	Damages Avoided; Evidence of Success		3.
VOB-14	Assess and prioritize options to protect emergency access routes, and implement as funding becomes available.	Coastal Erosion, Flood, Hurricane, Nor'Easter, Severe Storm	Village of Ocean Beach, Village Clerk/Treasurer; H2M, P.C.		In Progress; elevated 70% of sidewalks. 30% still to be completed. Ferry terminal and basin were updated.	Cost		1. Include in 2020 HMP 2. 3.
						Level of Protection		
						Damages Avoided; Evidence of Success		
VOB-15	Support and participate in county led initiatives (see Section 9.1) intended to build local and regional mitigation and risk-reduction capabilities (see Section 9.1), specifically: <ul style="list-style-type: none"> Mitigation Education for Natural Disasters (natural hazard awareness and personal scale risk reduction/mitigation public education and outreach program) Build Local Floodplain Management and Disaster Recovery 	All Hazards	Suffolk County, as supported by relevant local department leads,		Ongoing Capability	Cost		1. Discontinue 2. 3. Ongoing Capability
						Level of Protection		
						Damages Avoided; Evidence of Success		



Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if complete)	Next Steps 1. Project to be included in 2020 HMP or Discontinue 2. If including action in the 2020 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	<p>Capabilities (enhanced floodplain management, and post-disaster assessment and recovery capabilities)</p> <ul style="list-style-type: none"> • Jurisdictional Knowledge of Mitigation Needs of Property Owners (improved understanding of damages and mitigation interest/activity of private property owners) • Create a Multi-Jurisdictional Seismic Safety Committee in Suffolk County (build regional, county and local capabilities to manage seismic risk, both pre- and post-disaster) <p>Alignment of Mitigation Initiatives through all levels of Government (effort to build State and Federal level recognition and support of the County and local hazard</p>						



Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2020 HMP or Discontinue 2. If including action in the 2020 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
						Cost	Level of Protection	
	mitigation planning strategies identified in this plan).							
VOB-16	Work with County and PSEG (formerly LIPA) to identify roads within the municipality that are considered “critical”, and to be the first priority for clearing after an event involving downed power lines.	Severe Storm; Severe Winter Storm; Hurricane; Nor’Easter	PSEG, County		Ongoing Capability	Cost		1. Discontinue 2. 3. Ongoing Capability
						Level of Protection		
						Damages Avoided; Evidence of Success		





Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of Ocean Beach has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2014 HMP:

- The Village has a new building policy which requires fire sprinklers in all construction.
- The Village has raised Village buildings and electric which were flood damaged.
- The Village has purchased generators for numerous critical facilities.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Ocean Beach participated in a mitigation action workshop in June 2020 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

Table 9.26-15 summarizes the comprehensive-range of specific mitigation initiatives the Village of Ocean Beach would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6 (Mitigation Strategy), fourteen criteria are used to evaluate and prioritize each proposed mitigation action. A numeric factor is assigned (-1, 0, or 1) to each criterion to provide a relative indication of the opportunities and constraints of each action. A numerical sum of the input provides the basis of the prioritization of actions wherein each action is assigned a category of Low, Medium, or High to indicate an implementation hierarchy. A High priority action indicates the jurisdiction will prioritize its implementation and apply for funding, if needed, as opportunities become available during the plan period of performance. This does not prevent the jurisdiction from implementing other ranked actions; however, this provides a snapshot of implementation priority at the time of this plan update.

Table 9.26-16 provides a summary of the evaluation and prioritization for each proposed mitigation initiative. Refer to the action worksheets at the end of this annex for more details on the high-ranked hazards identified first for implementation.



Table 9.26-15. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2020-Ocean Beach-001	Repetitive Loss Mitigation	1, 2	Flood, Severe Storm	<p>Problem: Frequent flooding events have resulted in damages to buildings in the Village. While Village owned properties have been mitigated, residential properties are still at risk and these properties have been repetitively flooded as documented by paid NFIP claims.</p> <p>Solution: The Village will conduct outreach to 60 flood-prone property owners, including RL/SRL property owners and provide information on elevation of structures. The Village will then collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement elevating residential homes in the flood prone areas that experience frequent flooding (high risk areas).</p>	No	None	3 years	NFIP Floodplain Administrator, supported by homeowners	\$6 Million	Eliminates flood damage to homes and residents	FEMA HMGP and FMA, local cost share by residents	High	SIP	PP
2020-Ocean Beach-002	Construction of New Drinking Water Well	1, 8	Drought, Groundwater Contamination	<p>Problem: The Village has worked to update the drinking water system over the past several years with the construction of 2 new wells and safe room replacement. The Village needs a third well to have a secure water supply and also service nearby areas</p>	Yes	None	Within 6 months	Administration	\$7 Million	Drinking water supply protected	USACE	High	SIP	PP



Table 9.26-15. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				outside of the Village boundaries. Solution: The Village will construct a third well. All wells will be monitored by DOH and inspected regularly.										
2020-Ocean Beach-003	Protect the Bayside Shoreline	2, 4	Coastal Erosion, Flood	Problem: The Village has worked to protect the bayside shoreline through replacement of bulkheading. The Village has one section of bulkhead that requires replacement and docks require new skins. Solution: The Village will replace the bulkhead and reskin the docks using concrete.	No	None	Within 6 months	Administration	\$1.9 million	Shoreline and docks secured	NY DOT grant, local match	High	SIP	PP
2020-Ocean Beach-004	Elevate Access Routes	1, 7, 8	Flood	Problem: The Village has elevated 70% of Village sidewalks to allow pedestrians use during minor flooding events. 30% of the sidewalks need to be completed, focused in the downtown region at the Bay Walk on the north side of the bayside. This area presents a difficult challenge as raising sidewalks is likely to impact local businesses. Solution: The Village will conduct a feasibility assessment to determine how sidewalks can be raised in the downtown area. The Village will	No	None	Within 5 years	Administration	TBD by feasibility assessment	Access routes protected from flooding to prevent disruption of business and aid in evacuation.	HMGP, CDBG, Municipal budget	High	SIP	PP



Table 9.26-15. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2020-Ocean Beach-005	Stormwater System Improvements	2	Flood, Severe Storm	<p>then complete raising of sidewalks based on the identified strategy.</p> <p>Problem: The Village experiences flooding during times of heavy rainfall. The downtown area is most heavily impacted at the Bay Walk on the north side of the bayside. The Village Fire Department also requires stormwater improvements to maintain access.</p> <p>Solution: The Village will construct a new stormwater system. Improvements are likely to include a new outfall pipe and larger diameter pipes to handle greater volumes of water.</p>	Yes	None	Within 2 years	Administration	\$12.5 million	Reduction in stormwater flooding	EFC	High	SIP	SP
2020-Ocean Beach-006	Sewer Collection System Upgrades	2, 8	Flood, Severe Storm, Groundwater Contamination	<p>Problem: The Village Wastewater Treatment Plant has undergone major improvements. However, the collection system leading to the Plant requires major upgrades and replacements. Overflow of the sewer system may lead to infiltration of the stormwater system. Flooding increases the risk of the system being overrun.</p> <p>Solution: The Village will conduct a full assessment of the sewer collection system and</p>	No	May require permitting	Within 5 years	Administration	TBD by assessment	Reduction in sewage spill risk, reduction in flood contamination risk	CDBG, EFC	High	SIP	SP



Table 9.26-15. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				complete the necessary upgrades and assessments needed in the system.										
2020-Ocean Beach-007	Village Emergency Office	7, 8	All hazards	<p>Problem: The Village needs a satellite office for continuity of operations. The Village has a 20 year lease with the County for land to service this need.</p> <p>Solution: The Village will purchase and install an emergency office at Yaphank.</p>	Yes	None	1 year	Administration	\$150K	Continuity of operations	Municipal budget	High	SIP	ES
2020-Ocean Beach-008	Coastal Erosion Monitoring	4, 5	Coastal Erosion	<p>Problem: Coastal erosion is a recurring issue in the Village.</p> <p>Solution: The Village will support a County-wide erosion monitoring program and establish an Inter-municipal Agreement for beach maintenance with the County, Town, and neighboring Villages.</p>	No	None	3 years	Administration, SWCD	TBD	Erosion monitoring and maintenance established.	Municipal budget, County	High	LPR, NSP	NR
2020-Ocean Beach-009	Join the CRS program	1, 2, 6	Flood	<p>Problem: The Village has high flood risk and has experienced repetitive loss.</p> <p>Solution: The Village will secure up to date NFIP data and determine if entry into the CRS program is financially appropriate. If deemed appropriate, the Village will join the program and work to increase the ability of the floodplain management program.</p>	No	None	1 year	FPA, Administration	Staff time	Increased floodplain management	Municipal budget	High	LPR	PR



Table 9.26-15. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2020-Ocean Beach-010	Temporary Housing	1, 7	All Hazards	<p>Problem: The Village lacks locations for temporary housing</p> <p>Solution: The Village will work with Suffolk County to identify regional locations for the placement of temporary housing.</p>	Yes	None	Within 6 months	Suffolk County, Village Administration	Staff time	Temporary housing locations established	Municipal budget	High	LPR	ES

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

- CAV Community Assistance Visit
- CRS Community Rating System
- DPW Department of Public Works
- EHP Environmental Planning and Historic Preservation
- FEMA Federal Emergency Management Agency
- FPA Floodplain Administrator
- HMA Hazard Mitigation Assistance
- N/A Not applicable
- NFIP National Flood Insurance Program
- OEM Office of Emergency Management

Potential FEMA HMA Funding Sources:

- FMA Flood Mitigation Assistance Grant Program
- HMGP Hazard Mitigation Grant Program
- PDM Pre-Disaster Mitigation Grant Program

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes  Critical Facility located in 1% floodplain

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.



- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

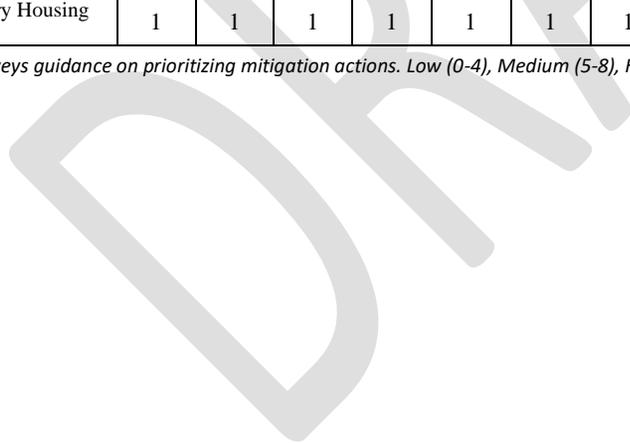
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Table 9.26-16. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community	Total	High / Medium / Low
2020-Ocean Beach-001	Repetitive Loss mitigation	0	1	1	1	1	1	0	1	1	0	1	0	1	1	10	High
2020-Ocean Beach-002	Construction of new drinking water well	1	0	1	1	1	1	1	1	1	1	1	1	1	1	13	High
2020-Ocean Beach-003	Protect the bayside shoreline	0	1	1	1	1	1	1	1	1	1	1	1	1	1	13	High
2020-Ocean Beach-004	Elevate access routes	1	0	1	0	1	1	0	1	1	1	1	0	1	1	10	High
2020-Ocean Beach-005	Stormwater System Improvements	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2020-Ocean Beach-006	Sewer Collection System Upgrades	1	1	0	1	1	1	0	1	1	1	1	0	1	1	11	High
2020-Ocean Beach-007	Village emergency office	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2020-Ocean Beach-008	Coastal erosion monitoring	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
2020-Ocean Beach-009	Join the CRS program	1	1	0	1	1	1	1	1	1	1	0	1	1	1	12	High
2020-Ocean Beach-010	Temporary Housing	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).





9.26.11 Proposed Mitigation Action Types

The table below indicates the range of proposed mitigation action categories.

Table 9.26-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	2020-Ocean Beach-008, 2020-Ocean Beach-010	2020-Ocean Beach-003, 2020-Ocean Beach-007	2020-Ocean Beach-008			2020-Ocean Beach-003		2020-Ocean Beach-008		2020-Ocean Beach-007, 2020-Ocean Beach-010
Cyber Security	2020-Ocean Beach-010	2020-Ocean Beach-007								2020-Ocean Beach-007
Disease Outbreak	2020-Ocean Beach-010	2020-Ocean Beach-007								2020-Ocean Beach-007, 2020-Ocean Beach-010
Drought	2020-Ocean Beach-010	2020-Ocean Beach-002, 2020-Ocean Beach-007				2020-Ocean Beach-002				2020-Ocean Beach-007, 2020-Ocean Beach-010
Earthquake	2020-Ocean Beach-010	2020-Ocean Beach-007								2020-Ocean Beach-007, 2020-Ocean Beach-010
Expansive Soils	2020-Ocean Beach-010	2020-Ocean Beach-007								2020-Ocean Beach-007, 2020-Ocean Beach-010
Extreme Temperature	2020-Ocean Beach-010	2020-Ocean Beach-007								2020-Ocean Beach-007, 2020-Ocean Beach-010
Flood	2020-Ocean Beach-009, 2020-Ocean Beach-010	2020-Ocean Beach-001, 2020-Ocean Beach-003, 2020-Ocean Beach-004, 2020-Ocean Beach-005, 2020-			2020-Ocean Beach-009	2020-Ocean Beach-001, 2020-Ocean Beach-003, 2020-Ocean Beach-004			2020-Ocean Beach-005, 2020-Ocean Beach-006	2020-Ocean Beach-007, 2020-Ocean Beach-010



Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
		Ocean Beach-006, 2020-Ocean Beach-007								
Groundwater Contamination	2020-Ocean Beach-010	2020-Ocean Beach-002, 2020-Ocean Beach-006, 2020-Ocean Beach-007				2020-Ocean Beach-002			2020-Ocean Beach-006	2020-Ocean Beach-007, 2020-Ocean Beach-010
Hurricane	2020-Ocean Beach-010	2020-Ocean Beach-007								2020-Ocean Beach-007, 2020-Ocean Beach-010
Infestation and Invasive Species	2020-Ocean Beach-010	2020-Ocean Beach-007								2020-Ocean Beach-007, 2020-Ocean Beach-010
Nor'Easter	2020-Ocean Beach-010	2020-Ocean Beach-007								2020-Ocean Beach-007, 2020-Ocean Beach-010
Severe Storm	2020-Ocean Beach-010	2020-Ocean Beach-001, 2020-Ocean Beach-005, 2020-Ocean Beach-006, 2020-Ocean Beach-007				2020-Ocean Beach-001			2020-Ocean Beach-005, 2020-Ocean Beach-006	2020-Ocean Beach-007, 2020-Ocean Beach-010
Severe Winter Storm	2020-Ocean Beach-010	2020-Ocean Beach-007								2020-Ocean Beach-007, 2020-Ocean Beach-010
Shallow Groundwater	2020-Ocean Beach-010	2020-Ocean Beach-007								2020-Ocean Beach-007, 2020-Ocean Beach-010
Wildfire	2020-Ocean Beach-010	2020-Ocean Beach-007								2020-Ocean Beach-007, 2020-Ocean Beach-010

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.





9.26.12 Staff and Local Stakeholder Involvement in Annex Development

The Village of Ocean Beach followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many Village of Ocean Beach departments, including: Village Clerk/Treasurer. The Clerk/Treasurer represented the community on the Suffolk County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes who participated and in what capacity. Additional documentation on the Village of Ocean Beach’s planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.26-18. Contributors to the Annex

Name	Title/Entity	Method of Participation
Steven Brautigam	Treasurer	Primary POC, attended plan participant meetings, provided impact data, contributed to the mitigation strategy
Matthew Amin	Clerk	Secondary POC, attended plan participant meetings, provided impact data, contributed to the mitigation strategy
Mike Mandarino	Building Inspector	NFIP Floodplain Administrator

9.26.13 Hazard Area Extent and Location

Hazard area extent and location maps have been generated for the Village of Ocean Beach that illustrate the probable areas that may be impacted within the municipality. These maps are based on the best available data at the time of the preparation of this plan and are considered to be adequate for planning purposes. The maps have only been generated for those hazards that can be clearly identified using mapping techniques and technologies, and for which the Village of Ocean Beach has significant exposure.



Figure 9.26-1. Village of Ocean Beach Hazard Area Extent and Location Map 1

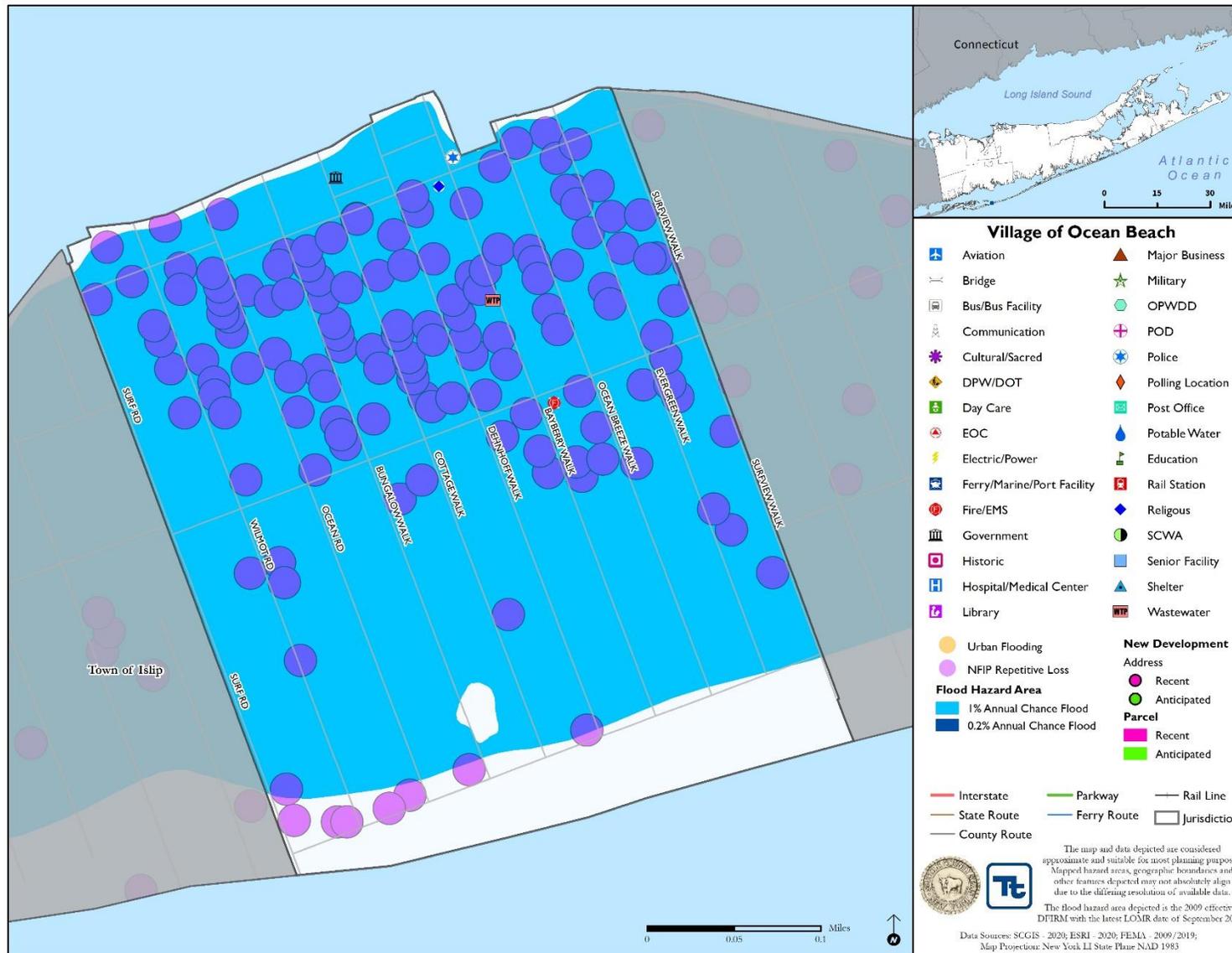




Figure 9.26-2. Village of Ocean Beach Hazard Area Extent and Location Map 2

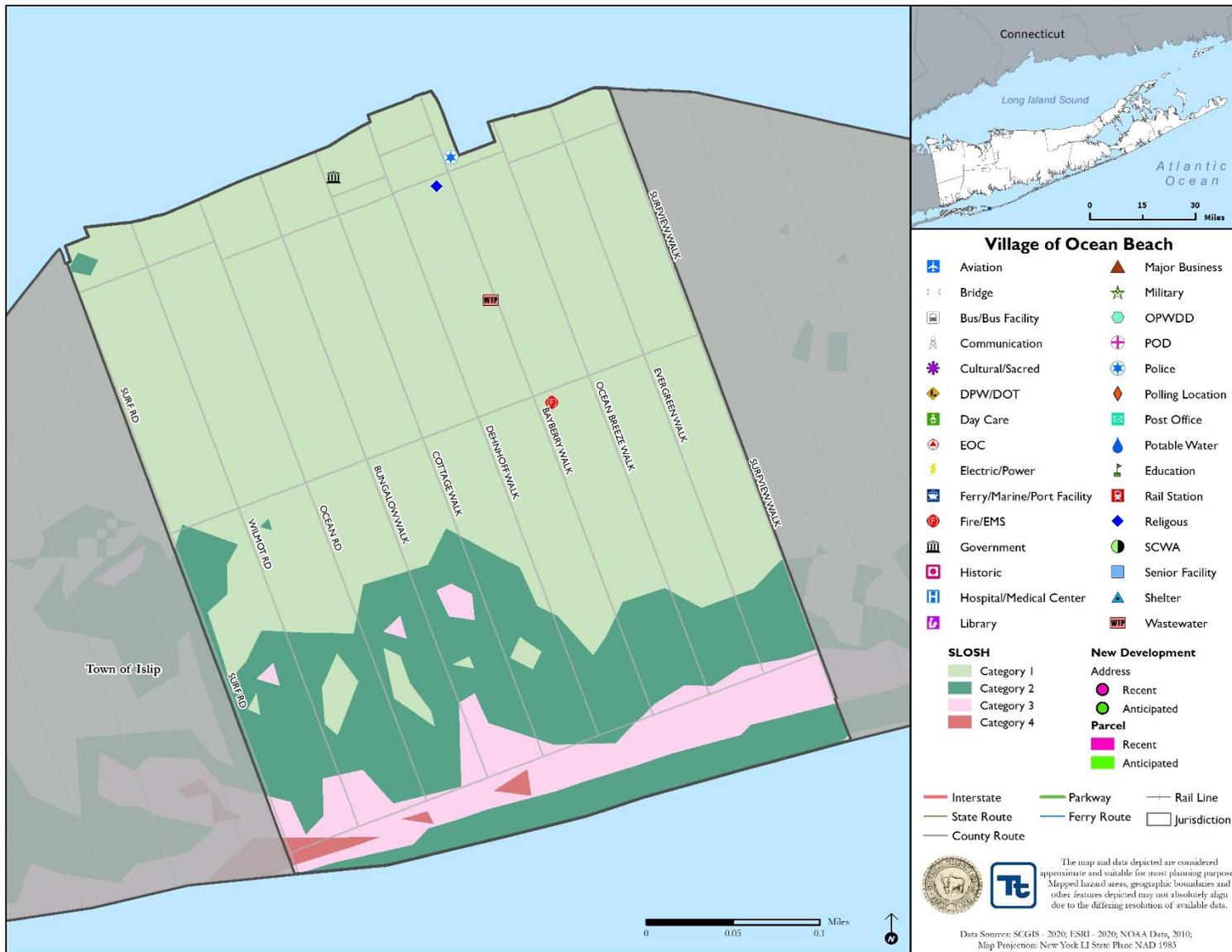




Figure 9.26-3. Village of Ocean Beach Hazard Area Extent and Location Map 3

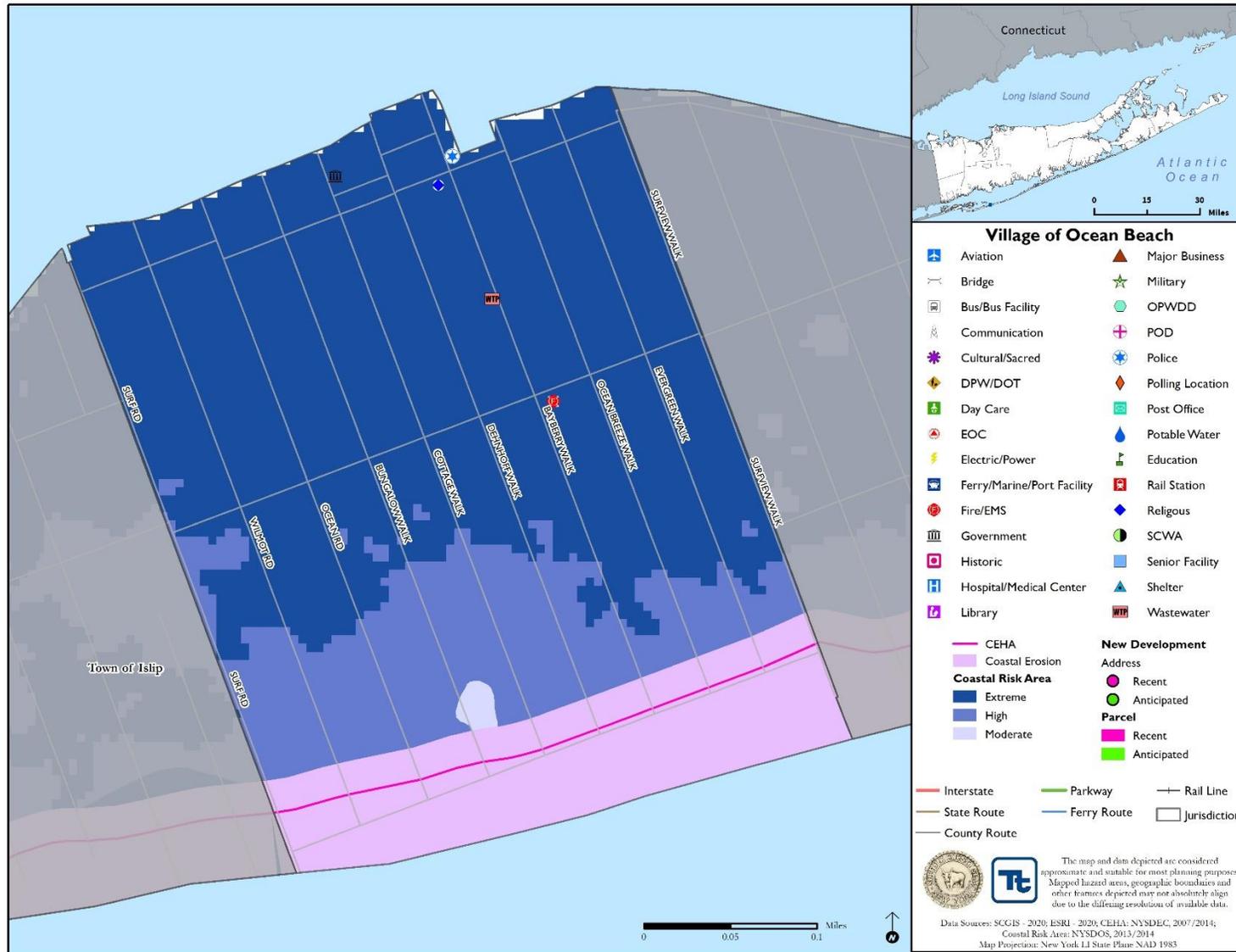




Figure 9.26-4. Village of Ocean Beach Hazard Area Extent and Location Map 4

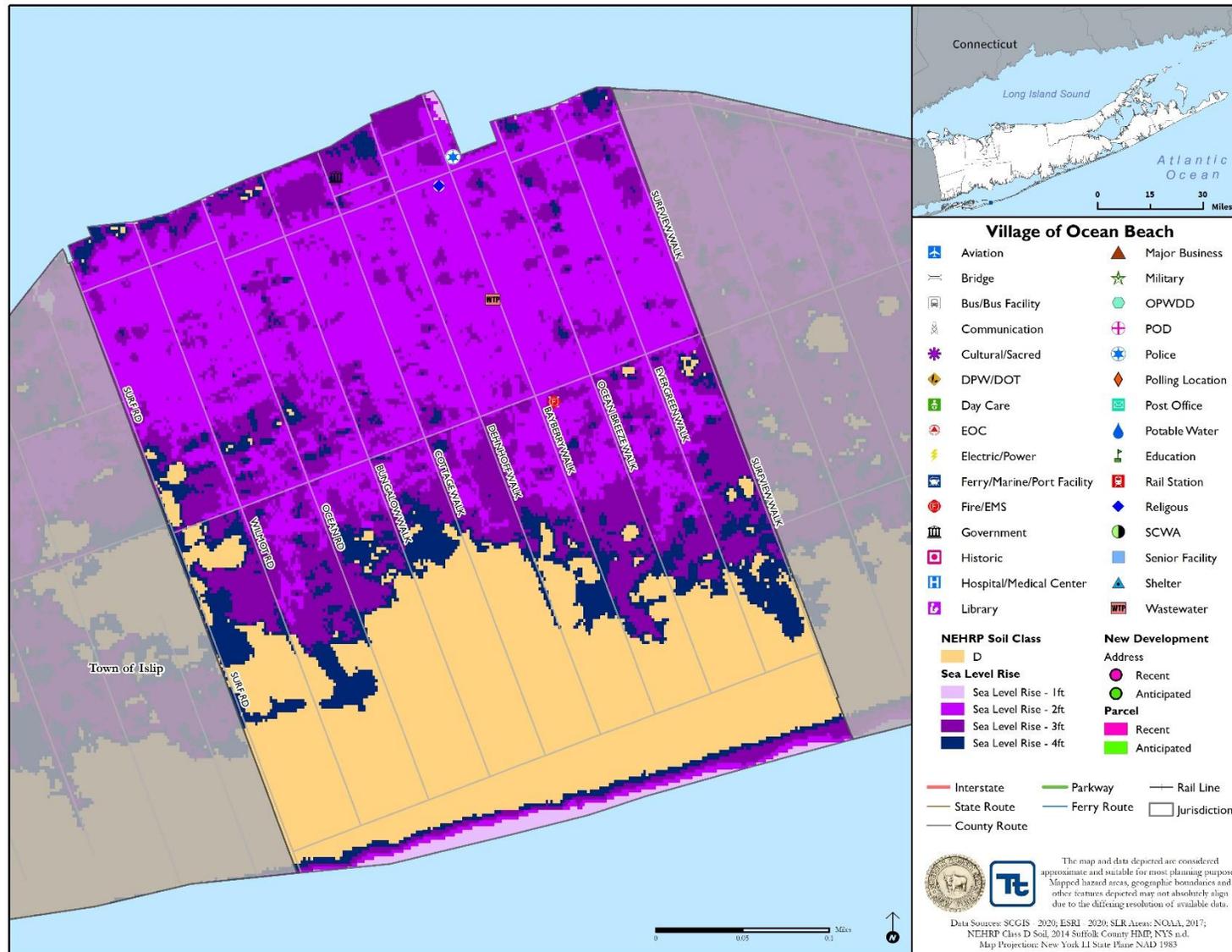
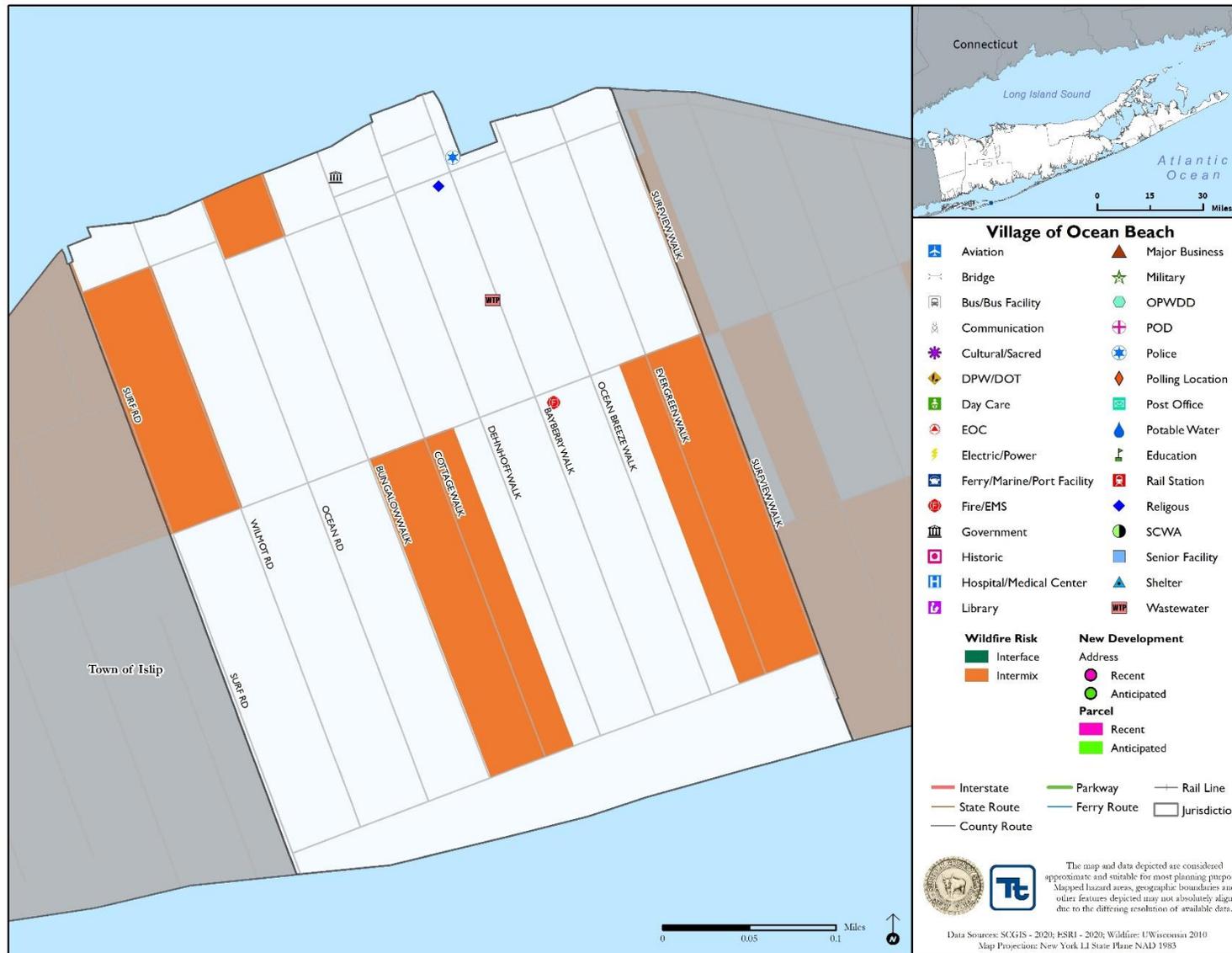




Figure 9.26-5. Village of Ocean Beach Hazard Area Extent and Location Map 5





Action Worksheet			
Project Name:	Repetitive Loss mitigation		
Project Number:	2020-Ocean Beach-001		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm		
Description of the Problem:	Frequent flooding events have resulted in damages to buildings in the Village. While Village owned properties have been mitigated, residential properties are still at risk and these properties have been repetitively flooded as documented by paid NFIP claims.		
Action or Project Intended for Implementation			
Description of the Solution:	The Village will conduct outreach to 60 flood-prone property owners, including RL/SRL property owners and provide information on elevation of structures. The Village will then collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement elevating residential homes in the flood prone areas that experience frequent flooding (high risk areas).		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	1% annual chance flood event + freeboard (<i>in accordance with flood ordinance</i>)	Estimated Benefits (losses avoided):	Eliminates flood damage to homes and residents
Useful Life:	30 years (residential)	Goals Met:	1, 2
Estimated Cost:	\$6 Million	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	6-12 months
Estimated Time Required for Project Implementation:	Three years	Potential Funding Sources:	FEMA HMGP and FMA, local cost share by residents
Responsible Organization:	NFIP Floodplain Administrator, supported by homeowners	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Buyouts	\$500,000 per property	Costly. Village not interested in this alternative.
	Elevate roads	\$500,000	Elevated roadways would not protect the homes from flood damages
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Evaluation and Prioritization		
Project Name:	Repetitive Loss mitigation	
Project Number:	2020-Ocean Beach-001	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	
Property Protection	1	Properties removed from high-risk flood areas.
Cost-Effectiveness	1	Cost-effective project
Technical	1	Technically feasible project
Political	1	
Legal	1	The Village has the legal authority to conduct the project.
Fiscal	0	Project will require grant funding.
Environmental	1	
Social	1	
Administrative	0	
Multi-Hazard	1	Flood, Severe Storm
Timeline	0	
Agency Champion	1	NFIP Floodplain Administrator, supported by homeowners
Other Community Objectives	1	
Total	10	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Elevate Access Routes		
Project Number:	2020-Ocean Beach-004		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood		
Description of the Problem:	The Village has elevated 70% of Village sidewalks to allow pedestrians use during minor flooding events. 30% of the sidewalks need to be completed, focused in the downtown region at the Bay Walk on the north side of the bayside. This area presents a difficult challenge as raising sidewalks is likely to impact local businesses.		
Action or Project Intended for Implementation			
Description of the Solution:	The Village will conduct a feasibility assessment to determine how sidewalks can be raised in the downtown area in conjunction with stormwater improvements. The Village will then complete raising of sidewalks based on the identified strategy.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	TBD by feasibility assessment	Estimated Benefits (losses avoided):	Access routes protected from flooding to prevent disruption of business and aid in evacuation.
Useful Life:	20 years	Goals Met:	1, 7, 8
Estimated Cost:	TBD by feasibility assessment	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	TBD by feasibility assessment
Estimated Time Required for Project Implementation:	Within 5 years	Potential Funding Sources:	HMGP, CDBG, Municipal budget
Responsible Organization:	Administration	Local Planning Mechanisms to be Used in Implementation if any:	Stormwater Management
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Raise all sidewalks	N/A	Cannot raise all sidewalks due to business elevations
	Levee around downtown area	\$millions	Costly, no space available.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Elevate access routes	
Project Number:	2020-Ocean Beach-004	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Project will protect evacuation access for pedestrians
Property Protection	0	
Cost-Effectiveness	1	
Technical	0	The project may not be technically feasible due to limitations placed by adjacent structures to sidewalks
Political	1	There is public support for the project
Legal	1	The Village has the legal authority to complete the project.
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	
Timeline	0	Within 5 years
Agency Champion	1	Administration
Other Community Objectives	1	
Total	10	
Priority (High/Med/Low)	High	