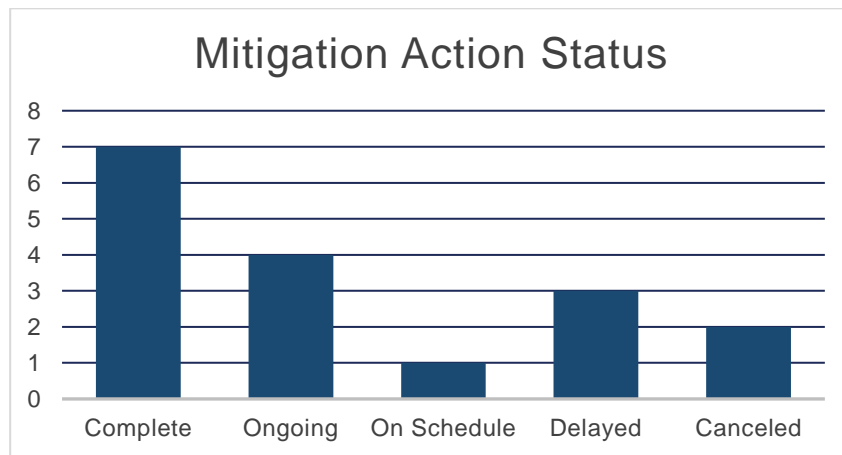


Mitigation Action Item Status Report

The purpose of hazard mitigation action items and associated projects is to reduce or eliminate long-term risk to people and property from hazards and their effects. During the 2017 Plan Update process, mitigation action items were developed. As part of this Plan Update, a mitigation action item status report was created to determine the present status of these action items.

A total of seventeen (17) mitigation action items were evaluated as part of the plan update process; five (5) of these action items were ranked as “high priority” in the previous plan. Members of the Hazard Mitigation Planning Committee (HMPC) provided important feedback regarding the progress of these mitigation action items. Based on this feedback, the following was determined: seven (7) action items are “completed,” four (4) action items are “ongoing,” one (1) action item is “on schedule,” three (3) action items have been “delayed,” and two (2) action items have been “canceled.” The graph below further illustrates the present status of the 2017 mitigation action items based upon stakeholder feedback.



The mitigation proaction items identified as “completed” are listed below. One of the high priority mitigation action strategy was designated as “completed”; this mitigation action is identified in red.

- **Action Item #2 - Bayside Flooding at 65th Street**
- **Action Item #6 - Severe Weather Alert and Awareness**
- Action Item #7 - Dune Grass Management Plan (& Native Plants)
- Action Item #8 - Warning System Upgrade
- Action Item #10 - Secure Area of 33rd Street
- **Action Item #11 - Storm Surge Prevention**

The HMPC will determined if mitigation actions/strategies identified as being “incomplete” will be carried forward into the current Plan Update. The table on the following pages provides full status details for each mitigation action strategy.

Mitigation Project Action Item #1

Project Title:	ROADWAY FLOODING
Project Background:	Roadway Flooding During Heavy Rain Events (Southbound) Coastal Highway @ Roadway 100 to 91st & 130-136th (Road Elevations and Drainage Issues) Standing Water, History of Flooding. Storm Drains located on straight need to be increased in size or multiple storm drains installed.
Responsible Entities:	MD State Highway Administration Town of Ocean City
Project Status:	✓ Ongoing Note: Clean out activities have occurred this planning cycle as well as upgrades to stormwater infrastructure.

Status Update Captured in Previous Progress Report

According to the 2021 HMP Progress Report, a coordinated project was underway with SHA to complete stormwater inlet and pipe cleanout on state and local roads. Town street repaving projects regularly replace and upgrade stormwater infrastructure under a phased implementation program. New CIP projects include Worcester Street, 5th Street stormwater outfall systems.

Mitigation Project Action Item #2

Project Title:	Bayside Flooding at 65th Street
Project Background:	65th/Bayside Flooding, Heavy Rain (Public Works Complex) – Elevate Street, Improve Drainage.
Responsible Entities:	MD State Highway Administration Town of Ocean City
Project Status:	✓ Project Completed

Status Update Captured in Previous Progress Report & Nuisance Flood Plan

According to the 2021 HMP Progress Report and 2020 Nuisance Flood Plan, 65th Street was elevated, and stormwater improvements were completed in 2018 and the Public Safety/Public Works Campus was completed on 3/22/2021.

Mitigation Project Action Item #3

Project Title:	Property Protection - Transformers
Project Background:	Flood Water Caused Damage to Transformers Resulting in Extended Periods of Power Loss. Higher Elevation or Relocate Transformers. Shoreline improvements and Elevation of Genset Transformer to Northside Park.
Responsible Entities:	Ocean City Convention Center Ocean City Public Works
Project Status:	✓ Ongoing

Status Update Captured in Previous Progress Report

The 2021 HMP Progress Report included this action item with the Action Item #3:

“Water and Wastewater station improvements with emergency generator backups”

The status provided in the report for these action items: Town of Ocean City policy to replace city owned bulkheads with elevation at or above FEMA Base Flood Elevation. Delmarva Power continues to complete reliability improvement projects in Town. Ongoing utility infrastructure upgrades.

Mitigation Project Action Item #4

Project Title:	Protection from Lightning Strikes
Project Background:	Lightning Arrestor System – Install Grounding Devices on Towers. Install Surge Protection Devices on Outreach to Condo. Information for Public Safety on Beach Patrol.
Responsible Entities:	Ocean City Emergency Management
Contact Name:	Bob Rhode
Contact Email:	brhode@oceancitymd.gov
Project Status:	✓ Project Completed

Status Update provided by the Department of Emergency Services

1. What was accomplished for this project during this reporting period?

All water towers/radio towers and the wastewater treatment plant are bonded and/or grounded. The entire wastewater treatment plant has lightning protection. Condos are required to have surge protection. The Beach Patrol conducts tailgate sessions with the public weekly to review safety procedures during a lightning event.

Mitigation Project Action Item #5

Project Title:	Virus Outbreak
Project Background:	Protective Measures: Clothing, Education, Monitoring
Responsible Entities:	Ocean City Emergency Management
Project Status:	✓ Ongoing

Status Update Captured in Previous Progress Report

According to the 2021 HMP Progress Report, COVID-19 response continued with local vaccination stations. Education information on about COVID-19 and additional resources are available on the Town of Ocean City’s website – [Coronavirus \(COVID-19\)](#) page. Additional COVID-19 information is available on the [OceanCity.com](#) website. COVID-19 monitoring for Ocean City is conducted by Worcester County’s Health Department.

Mitigation Project Action Item #6

Project Title:	Severe Weather Alert and Awareness
Project Background:	Rapidly developing weather event notification (such as, lightning and wind) to people outside on beach, boardwalk, golf courses, and city parks.
Responsible Entities:	Beach Patrol Police Department Communications
Contact Name:	Lt. James Grady
Contact Email:	jgrady@oceancitymd.gov
Project Status:	✓ Project Completed

Status Update Captured in Previous Progress Report

According to the 2021 HMP Progress Report, alerts are provided by Emergency Management staff with National Weather Service reports. The use of social media has increased to provide alerts and awareness.

Additional Status Update provided by Police Department

1. Are there any other mechanisms being used to distribute severe weather alerts or awareness?
Yes, weather related alerts and updates are provided in a timely manner by the Town of Ocean City Emergency Services Department.

Mitigation Project Action Item #7

Project Title:	Dune Grass Management Plan (& Native Plants)
Project Background:	Continual inspection and replacement of dune grass and vegetation, fertilization, and application of minerals, etc., as needed.
Responsible Entities:	Ocean City Public Works - Beach and Parks Department
Project Status:	✓ Project Completed

Status Update Captured in Previous Progress Report & Website

According to the Town of Ocean City's Project Updates [site](#), Worcester County and Ocean City accepted responsibility for operation and maintenance of the completed Atlantic Coast of Maryland Storm Protection Project. The project consists of the Beach Replenishment program, dunes, dune crossovers, dune planting and fencing along with the seawall along the boardwalk. The site states as of January 4, 2022, the Beach Replenishment is completed.

In addition, the 2021 HMP Progress Report states that this project is an ongoing program managed by Town Environmental Engineer with assistance from volunteer network on annual basis.

Mitigation Project Action Item #8

Project Title:	Warning System Upgrade
Responsible Entities:	Ocean City Fire Department
Contact Name:	Bob Rhodes
Contact Email:	brhode@oceancitymd.gov
Project Status:	✓ Radio System Upgrade Project Completed

Status Update Captured in Previous Progress Report

According to the 2021 HMP Progress Report, Ocean City Communications upgraded the radio system. The radio system is operational for interoperability in event of disaster.

Mitigation Project Action Item #9

Project Title:	Extreme Temperatures: Heat Warnings
Project Background:	Heat warnings for 3 or more days of extreme temperature events.
Responsible Entities:	Ocean City Emergency Management
Project Status:	✓ Ongoing

Status Update Captured in Previous Progress Report

According to the 2021 HMP Progress Report, Beach Patrol provides safety warning and advisories, while National Weather Services (NWS) alerts by an email blast.

Mitigation Project Action Item #10

Project Title:	Secure Area of 33rd Street
Project Background:	Investigate Methods to Prevent Breach
Responsible Entities:	Ocean City Public Works
Project Status:	✓ Project Completed

Status Update Captured in Previous Progress Report

According to the 2021 HMP Progress Report stated that this area has been strengthened by incremental new development construction to code.

Mitigation Project Action Item #11

Project Title:	Storm Surge Prevention
Project Background:	Mitigation using inlet dredging and beach nourishment/dune construction to minimize storm damage.
Responsible Entities:	USACE Town of Ocean City – Engineering MD DNR
Project Status:	✓ Project Completed

Status Update Captured in Previous Progress Report & Website

According to the Town of Ocean City’s Project Updates Site, a multi-year Dredge Master Plan has been developed based on the Canal Priority and the goal of dredging canals in relatively close geographical proximity to each other in each year in order to maximize efficiency and keep costs down. Work began on the canals included in the plan in 2014. It is estimated that \$500,000 per year will be needed to complete this initial plan. As of August 2021, a new Design, Survey, and Permitting RFP is underway to define the 5-Year Canal Dredging Plans for 2022–2027.

In addition, the 2021 HMP Progress Report include the following action with this project:

“Seawall Repair - 8,056 linear feet steel sheet pile recoating with structural repairs, excavation and backfill”

The report provided the following status for these projects: Next Phase Beach and berm system restoration including 4 years of advance nourishment by the USACE begins in the fall of 2021. Other ongoing USACE projects: OC Inlet, Inlet and Coastal Bays, Inlet Projects, and ASIS Restoration. Seawall maintenance and repair contract for 21/22 off season.

Mitigation Project Action Item #12

Project Title:	Continue Hazard Mitigation Plan Integration with other Ocean City planning documents.
Project Background:	The Ocean City Comprehensive Plan is undergoing an update in 2016-17. Information from the Hazard Mitigation Plan should be integrated into the City Comprehensive Plan Update. In addition, 2016 mitigation strategies should be reviewed in reference to other City planning documents, such as the Capital Improvement Plan and the Transportation Plan. As appropriate, mitigation strategies-actions and projects should be incorporated into City planning documents and ordinance updates, as a matter of standard operation procedure for updating planning documents. In addition, amend Zoning Ordinance to include the new FEMA DFIRM within Chapter 38-FLOODS, Article II, Section 38-31 –Definitions and rules of construction. Finally replace flood zone language within ordinance to reflect July 2015 FEMA DFIRM.
Responsible Entities:	Ocean City Planning & Community Development
Contact Name:	Bill Neville
Contact Email:	bneville@oceancitymd.gov
Project Status:	<ul style="list-style-type: none"> ✓ Project on Schedule Anticipated Completion Date: December 2023 with Comp Plan

Status Update provided by Ocean City Planning & Community Development

1. What was accomplished for the project during this reporting period?
 FEMA RiskMAP and State Model Ordinance adopted in Town Code Chapter 38-Floods on July 16, 2015, Comprehensive Plan Update approved on March 5, 2018 with integration recommendations on pages 2-23, 3-28, 5-23, etc., Worcester County LiMWA letter of map revision approved with modified risk boundary along bayside shoreline, Preparation of Nuisance Flood Plan, Adopt minimum 1 foot freeboard requirement in Downtown areas in compliance with CRS program standards.
2. What obstacles, problems, or delays did the project encounter?
 None.
3. If incomplete, is the project still relevant? Should the project be changed or revised?
 Yes, continue with each plan update
4. Other Comments
 - Incorporate new HMP resilience strategies into next Comp Plan update
 - Propose redevelopment design guidelines and code revisions for HMP mitigation
 - Emergency Management/Recovery Plan to build on FEMA 'lifelines' approach

Mitigation Project Action Item #13

Project Title:	Decrease flood insurance cost for Ocean City policyholders.
Project Background:	Earn Community Rating System (CRS) points. Submit the 2017 Ocean City Hazard Mitigation Plan for CRS audit under the 500 Series-Activity 500: Repetitive Loss Strategy and Activity 510: Floodplain Management Planning.
Responsible Entities:	Ocean City Planning & Community Development
Contact Name:	Bill Neville
Contact Email:	bneville@oceancitymd.gov
Project Status:	<ul style="list-style-type: none"> ✓ Project Delayed Anticipated Completion Date: <u>2023 following HMP Update</u>

Status Update provided by Ocean City Planning & Community Development

1. What was accomplished for the project during this reporting period?
CRS cycle review completed in 2021 with verification of Class 6, requested post-cycle review of revised RL analysis and strategies for additional point credit following HMP Update.
2. What obstacles, problems, or delays did the project encounter?
HMP Appendix for RL/SRL properties was not reviewed/did not receive CRS credit during previous cycle, RL outreach strategies and implementation of grant/elevation projects are not a good fit for Ocean City.
3. If incomplete, is the project still relevant? Should the project be changed or revised?
Yes, participation in the CRS program and reducing flood insurance costs for Ocean City policyholders is still relevant. Activity 500 and 510 may not be the best implementation tools.
4. Other Comments
 - Risk 2.0 has reset the framework for 'decreased flood insurance cost'
 - FEMA goal of increased flood insurance policies would benefit from additional data when available
 - Need to identify mitigation measures which can modify Risk 2.0 analysis, communicate to property owners
 - Clear communication regarding current risk evaluation methods versus evaluation of 'future conditions'

Mitigation Project Action Item #14

Project Title:	Conduct a focused flood hazard analysis and planning document.
Project Background:	Obtain FEMA grant funding to complete a Flood Mitigation Plan, focusing on both severe repetitive loss and repetitive loss areas that were designated as part of the Hazard Mitigation Plan Update.
Responsible Entities:	Ocean City Planning & Community Development
Contact Name:	Wayne Pryor
Contact Email:	wpryor@oceancitymd.gov
Project Status:	✓ Project Canceled

Status Update provided by Ocean City Grants Coordinator

1. What was accomplished for the project during this reporting period?

No action on a Flood Mitigation Plan/SRL and RL strategies. Framework of these community actions do not match current planning models (Nuisance Flood Plan identification of 'first to flood' areas based on elevation not RL/SRL areas. Staff levels not adequate to develop and administer a Flood Mitigation Plan.

2. What obstacles, problems, or delays did the project encounter?

Active and high value redevelopment economy has encouraged private investment in replacement of older structures with new construction meeting current codes and standards. Local matching funds and local administration requirements have limited the viability of individual RL/SRL grant applications.

3. If incomplete, is the project still relevant? Should the project be changed or revised?

Possibly. Propose to revise project action to partner with Worcester County on new watershed study pre-requisite for FEMA mitigation grants.

Mitigation Project Action Item #15

Project Title:	Prioritize repetitive loss areas 1 and 2 for hazard mitigation, see Appendix A: NFIP & CRS.
Project Background:	Repetitive Loss Areas 1 and 2 should be prioritized for hazard mitigation. The three (3) severe repetitive loss properties has been given top priority as a mitigation action item and is rated as a “High” priority within the 2016 Mitigation Strategies portion of the Plan. Additionally, an annual outreach project targeting repetitive loss and severe loss properties has also been included as a “High” priority.
Responsible Entities:	Ocean City Planning & Community Development
Contact Name:	Bill Neville
Contact Email:	bneville@oceancitymd.gov
Project Status:	<ul style="list-style-type: none"> ✓ Project Canceled Anticipated Completion Date: <li style="text-align: center;">TBD following 5-year review of NFP in 2025

Status Update provided by Ocean City Planning & Community Development

1. What was accomplished for the project during this reporting period?
 - Adoption of Nuisance Flood Plan in December 2020
 - Completion of Phase 1,2 and 3 of Storm Drain Outfall Check Valve Project
 - 417 Bering Road home elevation project completed May 2018
 - Staff reports presented to Mayor and City Council regarding code-based framework for flood mitigation
2. What obstacles, problems, or delays did the project encounter?

Available staffing, RL/SRL criteria are not used to prioritize projects due to the non-site-specific approach to mapping areas. No major property losses during planning period to support cost/benefit analysis
3. If incomplete, is the project still relevant? Should the project be changed or revised?

Possibly.
4. Other Comments
 - Finding a method to prioritize areas for expenditure of public funds toward hazard mitigation needs to address multiple criteria other than RL/SRL which is a private investment decision.
 - TOC public outreach program and availability of an optimized flood risk mapping tool (FloodIQ) was side tracked when First Street Foundation replaced FloodIQ with the simplified and exaggerated FloodFactor tool.
 - Currently evaluating and developing in-house staff capability with GIS tools

Mitigation Project Action Item #16

Project Title:	Damage Report and review of current Code
Project Background:	Review available damage reports to ensure that current code (Roof Snow Load – 20 psf, frost line depth – 18 inches, and winter design temperature -18) is adequate to mitigate winter storm impacts.
Responsible Entities:	Ocean City Planning & Community Development
Contact Name:	Jake Doub
Contact Email:	JDoub@oceancitymd.gov
Project Status:	<ul style="list-style-type: none"> ✓ Project Delayed Anticipated Completion Date: <u>2023 next I-Code adoption</u>

Status Update provided by Ocean City Planning & Community Development

1. What was accomplished for the project during this reporting period?
 - Guidance for flat roof installation/inspection requirements for re-roof permits
 - Response to increased interest in structural foundation inspections following Florida building collapse
2. What obstacles, problems, or delays did the project encounter?
 - Ongoing review of damage assessment/after action reports
 - Lack of State guidance or mandate for high rise condominium foundation inspections
3. If incomplete, is the project still relevant? Should the project be changed or revised?

Yes, improved evaluation of FEMA reimbursements over 10-year period to determine most effective mitigation measures and projects.
4. Other Comments
 - Proposed review of critical foundation standards along the ocean block to allow for a variety of foundation conditions and depths.
 - Evaluate strategies for mitigation based on Town self-insured claims/payments.
 - Confirm and document 'best practices' for FEMA storm damage reimbursement process for in house instruction with staff turnover/retirements

Mitigation Project Action Item #17

Project Title:	Review high risk properties including repetitive loss properties identified in the planning document for potential mitigation projects.
Project Background:	The plan outlines several divisions that are at high risk to flood specifically Division 1 and Division 3. In addition, the two designated repetitive loss areas identified within Appendix A of the Plan should reviewed and prioritized for potential mitigation projects.
Responsible Entities:	Ocean City Planning & Community Development
Contact Name:	Bill Neville and Gail Blazer
Contact Email:	bn Neville@oceancitymd.gov and GBlazer@oceancitymd.gov
Project Status:	<ul style="list-style-type: none"> ✓ Project Delayed Anticipated Completion Date: <u>Ongoing, 5-year NFP review</u>

Status Update provided by Ocean City Planning & Community Development

1. What was accomplished for the project during this reporting period?
 - Annual reports for CRS compliance regarding implementation of HMP projects.
 - Implemented 2 HMP grant projects: stormwater outfall gate valves, house elevation.
 - Continued funding of public street infrastructure/stormwater improvements, storm drain cleaning. Ongoing private investment of incremental house and commercial reconstruction projects.
2. What obstacles, problems, or delays did the project encounter?

Continued review of high-risk flooding areas, and RL areas should be reviewed and prioritized for potential mitigation projects.
3. If incomplete, is the project still relevant? Should the project be changed or revised?

Yes, this should be one filter to review proposed project ideas developed during the HMP update in 2022
4. Other Comments
 - Current RL property data has been hard to obtain
 - ISO removal of mitigated properties is incomplete and hard to coordinate with a change to FEMA organizational structure