

**Community Rating System  
Activity 510 (Floodplain Management Planning)**

**Progress Report on Implementation of Credited Plan**

Date this Report was Prepared: **October 2, 2023**

Name of Community: Town of Ocean City, MD

Name of Plan: Ocean City, Maryland 2023 Hazard Mitigation Plan

Date of Adoption of Plan: March 20, 2023

5 Year CRS/HMP Expiration Date: ~~April, 22, 2027~~ / March 19, 2028

1. How can a copy of the original plan or area analysis report be obtained:  
***A copy of the adopted plan / progress report may be found on the Town website at: <https://oceancitymd.gov/oc/hazard-mitigation/> , or a copy may be requested in person at the Department of Planning and Community Development.***
2. Describe how this progress report was prepared and how it was submitted to the governing body, released to the media, and made available to the public:  
***The HMP Actions were reviewed and incorporated into the Comprehensive Plan update in 2022, reviewed and coordinated for potential grant application assistance, and updated by City departments. HMP Actions were reviewed and updated by the HMPC in August 2023. Presentation to the Mayor and City Council at a regular work session (notice provided to public and news media), and posted on the Town Website.***
3. Provide a description of the implementation of each recommendation or action item in the action plan or area analysis report, including a statement on how the project was implemented or not implemented during the previous year:  
***See Attached***
4. Discuss why any objectives were not reached or why implementation is behind schedule:  
***Annual progress is accomplished through CIP projects, grant funded projects, and department activities.***
5. What are the recommendations for new projects or revised recommendations?  
***Two new specific projects have been identified for consideration during the next FEMA FMA/BRIC grant cycle***

## 2023 MITIGATION ACTIONS

During the 2023 Plan Update, the following mitigation actions were developed.

Table 13-1 2022 Mitigation Action Items & Ratings - **2023 Annual Report Update (in bold type)**

ID #	ACTION	LOCATION/ RESPONSIBLE ENTITY	GOALS	TIMEFRAME	HAZARD
<b>Local Planning and Regulations</b>					
1	Collect 5 years of data with Nuisance Flood Plan (NFP) to identify areas at greatest/most frequent risk of flooding and proposed CIP project to assist with mitigation.	Planning & Community Development	1, 5 & 14	3-5 years	Flooding (High Tide)
<b>2023</b>	<b>Quarterly NFP reports presented to the Green Team and posted on the Town website under Flood Information. 5-year review and update in October 2025. Sub-watershed prioritization maps in process of development, GIS intern to collect first floor data in 'first to flood' areas.</b>				
2	Develop a Disaster Recovery Plan for Ocean City to guide decision making process after a major disaster.	Emergency Management	1, 11 & 12	1-2 years	All-Hazards
<b>2023</b>	<b>Draft Recovery Plan presented to City Manager for review</b>				
3	2022 Mitigation Strategies should be reviewed in reference to the Capital Improvement Plan for integration purposes. Projects that reduce risk and vulnerability to the citizens of Ocean City should be given prioritization. Resources that may be used to fund future mitigation actions include: <ul style="list-style-type: none"> <li>• Targeted funding within Capital Improvement budget.</li> <li>• CDBG funds or MDE's Comprehensive Flood Management Grant Program as non-Federal match, which will offset local match requirements.</li> </ul>	Planning & Community Development, Engineering, and City Manager	1, 3 & 5	1-2 years	All-Hazards

2023	<p><b>Alignment of CIP projects with HMP Mitigation Strategies includes new project priorities:</b></p> <ul style="list-style-type: none"> <li>• <b>Eagles Landing Golf Course Tidal Flood Remediation</b></li> <li>• <b>Route 50 Ocean Gateway Intersection Elevation</b></li> </ul> <p><b>MDEM Notice of Interest submitted for FY23 BRIC grant funding</b></p>				
4	<p>Continue 2022 Hazard Mitigation Plan integration with Ocean City 2023 Comprehensive Plan. Review hazard mapping from the Town of Ocean City 2023 Hazard Mitigation Plan Update and the 2019 Worcester County Flood Risk Map Product for potential inclusion in the 2023 Ocean City Comprehensive Plan- Comprehensive Plan Update Housing and Economic Development Elements. Compare areas slated for growth including redevelopment with hazard risk areas.</p>	<p>Planning &amp; Community Development</p>	<p>1 &amp; 3</p>	<p>1-2 years</p>	<p>All-Hazards</p>
2023	<p><b>Comprehensive Plan Update scheduled for 2024</b></p>				
5	<p>Decrease flood insurance cost for Ocean City policy holders.</p>	<p>Planning &amp; Community Development</p>	<p>2, 3 &amp; 6</p>	<p>Ongoing</p>	<p>Flash &amp; Coastal Floods</p>
2023	<p><b>CRS 5-year recertification renewed in 2022 for Class 6 Rating, Local assistance provided to policy holders for possible removal from NVT list</b></p>				
6	<p>Collaborate with Worcester County to conduct watershed assessment to include new Atlas 14 precipitation table- rainfall intensity. Assess various sources of flooding in addition or in conjunction with storm water. Evaluate upstream watershed impacts to Ocean City Bayside.</p>	<p>GIS, Engineering, Planning &amp; Community Development and Worcester County</p>	<p>1, 2 &amp; 16</p>	<p>3-5 years</p>	<p>All Flood Related Hazards</p>
2023	<p><b>Monitoring State workgroup recommendations to assure coastal standards or exemptions are adopted</b></p>				

ID #	ACTION	LOCATION/ RESPONSIBLE ENTITY	GOALS	TIMEFRAME	HAZARD
7	Review available damage reports to ensure that current codes are adequate. Specifically, for winter storm impacts (roof snow load-20psf, frost line depth- 18 inches, and winter design temperature -18). Consider updates for future Code Adoption.	Planning & Community Development, and Emergency Management	1 & 6	1-2 years	Winter Storm
<b>2023</b>	<b>Ongoing</b>				
8	Develop an Extreme Temperature Emergency Plan for Ocean City identifying triggers, surveillance, and actions.	Planning & Community Development, Emergency Management, Worcester County and WC Health Department	1, 6 & 7	1-2 years	Winter Storm
9	Continue to engage the public and decision makers in identifying hazards and climate change issues making connections to existing planning and policy efforts.	Planning & Community Development, and Communications	1, 6 & 17	Ongoing	All-Hazards
<b>2023</b>	<b>Comprehensive Plan in 2024, 5 year Nuisance Flood report in 2025 and recommendations of the Coastal Policy Resource Advisory Committee (Green Team)</b>				
10	Include additional threats, identified during the Hazard Mitigation Workshop, in the Comprehensive Emergency Operations Plan (EOP) update. Potential threats for inclusion civil unrest, marine incidents, and fire/explosion.	Fire, EMS, Police, Emergency Management, and Planning & Community Development	1 & 12	1-2 years	All-Hazards
11	Prepare a COVID-19 After-Action Report and Improvement Plan for Ocean City in conjunction with Worcester County’s Health Department.	Emergency Management, EMS, Worcester County and WC Health Department	1, 7 & 8	1-2 years	Emergency Infectious Disease
<b>2023</b>	<b>Information incorporated in 2023 HMP section on Infectious disease risk</b>				

ID #	ACTION	LOCATION/ RESPONSIBLE ENTITY	GOALS	TIMEFRAME	HAZARD
<b>Structure and Infrastructure Project</b>					
12	Further evaluate roadway flooding issues not completed in the previous planning cycle (2017-2021). Review prioritized repetitive roadway flooding areas identified in Town of Ocean City Nuisance Flood Plan. Include these areas in capital improvement plan.	Public Works	1, 5 & 14	3-5 years	All Flood Related Hazards
<b>2023</b>	<b>Pilot project to install pervious paving/French drain infiltration system in the Ocean Block to divert runoff from Coastal Highway and the northbound bus lane</b>				
13	Identify dredging projects slated for completion in the next ten years.	Public Works, City Manager, USACE	1 & 9	Ongoing	Shoreline Erosion
<b>2023</b>	<b>Identify next phase of routine canal dredging, and extend dredge fill site agreement</b>				
14	Collaborate with Worcester County to install tidal gates at WC Park and Ride within OC EMS Division.	Town of Ocean City, Worcester County, and WC Public Works	1, 5 & 10	3-5 years	All Flood Related Hazards
15	Water resource facilities identified as at-risk to flooding. Additional flood damage avoidance measures may be appropriate. Conduct site specific visits and assess alternatives where indicated.  <i>Note: In terms of new or future construction of buildings or infrastructure, refer to 4.5 NFIP Community Worksheet – Floodplain Identification &amp; Mapping on page 2-9 and Ocean City’s requirement of 3-foot of freeboards for new and substantially improved structures.</i>	Public Works	1, 8 & 10	3-5 years	All Flood Related Hazards

16	Identify public and/or critical facilities that lack grounding/surge protection devices.	Public Works	7 & 8	1-2 years	Hurricane, Sea Level Rise, Nor'easter, Winter Storm, High Winds, Thunderstorm, Flood, Tornado
17	Increase back-up capabilities for 9-1-1 Centers and EOC's with operations.	Emergency Management, Public Works, and Fire Departments	7, 8 & 10	Ongoing	All-Hazards
18	Evaluate critical facilities for potential resilience upgrades including roofs and windows. Station 3 and City Hall should be priority for these upgrades.  <i>Note: In terms of new or future construction of buildings or infrastructure, refer to 4.5 NFIP Community Worksheet – Floodplain Identification &amp; Mapping on page 2-9 and Ocean City's requirement of 3-foot of freeboards for new and substantially improved structures.</i>	Emergency Management	7, 8 & 10	1-2 years	Hurricane, Nor'easter, Winter Storm, High Winds, Thunderstorm, Tornado
19	Review Situational Awareness and Reporting tools for All-Hazards used for incident operations that lend themselves to the integration of community lifelines construct. Identify tool or modify situational reporting to incorporate lifelines. Incorporating the lifelines primarily impacts how incident information is organized and reported during response. The lifelines help characterize an incident, i.e., what is happening and why it is important.	Emergency Management	7 & 8	1-2 years	All-Hazards
<b>2023</b>	<b>Ongoing</b>				

ID #	ACTION	LOCATION/ RESPONSIBLE ENTITY	GOALS	TIMEFRAME	HAZARD
<b>Natural Systems Protection</b>					
20	Help the public to understand the new pricing methodology used in the updated National Flood Insurance Program’s Risk Rating 2.0. Share information with public to encourage the purchase and/or retention of flood insurance.	Planning & Community Development	2, 3, 5, 6, 13 & 11	Ongoing	All Flood Related Hazards
<b>2023</b>	<b>Flood Information webpage on Town website updated to include FEMA information on Risk Rating 2.0</b>				
21	Continue partnerships with U.S. Army Corps of Engineers (USACE), Maryland Department of Environment (MDE), Worcester County, & Maryland Coastal Bay Program (MCBP) for shoreline management protection.	U.S. Army Corps of Engineers (USACE) and Engineering	1, 4, 5 & 9	Ongoing	Shoreline Erosion
<b>2023</b>	<b>Town staff participation with MCBP Implementation Committee work to prepare updated 2025 CCMP, and to utilize BIL grant funds for area shoreline management protection at Northside Park</b>				
22	Continue to work with U.S. Army Corps of Engineers (USACE)/ National Park Service (NPS)/ United States Coast Guard (USCG)/Worcester County for inlet/harbor resilience measures.	U.S. Army Corps of Engineers (USACE) and Engineering	1, 4, 5, 9 & 15	Ongoing	Hurricane/ Tropical Storm, Shoreline Erosion, Sea Level Rise
<b>2023</b>	<b>Assistance provided by State delegation to renew potential for USACE Inlet Study update and cost/benefit analysis for engineering projects. Continue to monitor USFWS/NPS long range planning for proposed Barrier Island breach study.</b>				

ID #	ACTION	LOCATION/ RESPONSIBLE ENTITY	GOALS	TIMEFRAME	HAZARD
23	Convene a meeting with U.S. Army Corps of Engineers, Baltimore District (USACE) and other partners to discuss renewal of the Atlantic Coast of Maryland Shoreline Protection Project, which is authorized through 2044 to place sand on the beach of Ocean City, Maryland (MD). Due to projected severe storm activity and future conditions, discussion at this time is necessary.	U.S. Army Corps of Engineers (USACE) and Engineering	1, 4, 5, 9 & 16	Ongoing	Hurricane/ Tropical Storm, Shoreline Erosion, Sea Level Rise
<b>Education and Awareness Program</b>					
24	Public Information Campaign Pre & Post Disaster – black mold danger, impacts, and remediation.	Health Department and Planning & Community Development	3, 5, 7 & 13	Ongoing	Coastal Flood, Flash Flood, Nor'easter, Hurricane/ Tropical Storm
25	Disseminate generator safety tips such as those provided by American Red Cross's <a href="#">Safe Generator Use webpage</a> .	Fire Department and Public Relations	1, 6, 7 & 13	Ongoing	Hurricane/ Tropical Storm, Winter Storm, Thunderstorm, High Wind, Tornado
26	Continue to enhance the vulnerable population identification and planning initiatives and work with the Worcester County Health Department to develop hazard preparedness and mitigation public outreach materials including infectious disease outbreak information and health impacts targeting "At-Risk Populations".	Emergency Management, EMS, Worcester County and WC Health Department	1, 6, 8 & 13	Ongoing	Emerging Infectious Disease
27	Select Ocean City Department of Emergency Services personnel to take KO428 CERT Train-the-Trainer (Virtual Delivery) course. Currently one staff member has had this Train-the-Trainer course and conducts all CERT Training for Ocean City. This staff member is slated for retirement in 2023.	Emergency Services	6 & 10	1-2 years	All Hazards




ID #	ACTION	LOCATION/ RESPONSIBLE ENTITY	GOALS	TIMEFRAME	HAZARD
28	Provide outreach materials should be provided to residents located between 132nd and 136th Streets, which includes of 209 mobile homes. Outreach materials such as FEMA’s <i>Protecting Manufactured Homes from Floods and Other Hazards</i> .	Planning & Community Development	1, 3, 7 & 13	Ongoing	Hurricane/ Tropical Storm, Nor’easter, Coastal Flood
2023	<b>Traditional newsletter publication and distribution to all Ocean City property owners is now enhanced with active social media tools</b>	<b>Tourism Marketing, Public Information, Mayor’s Office</b>			

Table 13-14 Mitigation Project 13

<b>Hazard(s):</b>	Tidal Flood Remediation at Eagles Landing Golf Course
<b>Location(s):</b>	Worcester County, 12367 Eagles Nest Road, Berlin, MD 21811
<b>Mitigation Action Item:</b>	<p>#3 - 2022 Integration of Capital Improvement Plan with mitigation projects for resilient critical infrastructure. Projects that reduce risk and vulnerability to the citizens of Ocean City should be given prioritization. Resources that may be used to fund future mitigation actions include:</p> <ul style="list-style-type: none"> <li>• Targeted funding within Capital Improvement budget.</li> <li>• FEMA Building Resilient Infrastructure and Communities (BRIC) grant program for hazard mitigation projects</li> </ul>
<b>Background/Issue:</b>	<p>CIP Project #22-RP-001 Renovate Eagle's Landing Golf Course to address frequent tidal flooding on holes 7, 8, 9, 10, 16, 17, and 18. For holes 7,8 &amp; 9, the existing stormwater management pond in the middle of the 3 holes will be expanded, excavated and the soil removed utilized, along with a soil stockpile at the airport, to raise base elevations and reduce flood hazards</p> <p>After 32 years of operation and having hosted over one million rounds of golf, the Eagle's Landing golf course and its infrastructure are in dire need of renovation. The golf course was built on a very modest budget and has served the Town well, but to remain viable in the area golf market, attention must be given to address frequent flooding that impacts seven holes on the course.</p> <p>Saltwater flooding makes golf turf difficult to keep alive, forces course closure, reduces revenue, kills trees and damages equipment. Constant flooding also damages our brand as a leader in the OC golf marketplace. By raising the course elevation to a level of flood resiliency for the next 100 years, updating irrigation and drainage and using new turfgrass cultivars, many of our coastal flooding problems will be resolved/reduced and seven stunning new golf holes will result.</p> <p>These renovations should contribute to reduced expenses and increased revenue, provide reason for continued high customer satisfaction and retention, and help maintain Eagle's Landing's good standing in the Ocean City golf marketplace. As a quality recreational community and tourism attraction, Eagle's Landing reflects the Town of Ocean City's vision and goals, and its improvements will prove our commitment to improved quality of life for our residents and visitors.</p> <p>This property also serves as critical infrastructure for the Worcester County Mystic Harbour WWTP in West Ocean City by allowing spray irrigation at the golf course as an alternate to injection wells with beneficial management of nutrient levels for both facilities.</p>
<b>Ideas for Integration:</b>	Community Resilience Project for both Town of Ocean City to renovate an important regional recreation and open space facility, and continue to operate a spray irrigation system for the Worcester County Mystic Harbor wastewater treatment plan that allows for the removal of residential septic systems and reduces use of commercial fertilizers through nutrient management.

<b>Responsible Agency:</b>	Town Recreation and Parks
<b>Partners:</b>	Maryland Department of Environment (MDE) Worcester County
<b>Potential Funding:</b>	Building Resilient Infrastructure and Communities (BRIC) Town of Ocean City Capital Improvement – bond funding
<b>Cost Estimate:</b>	\$2,858,000
<b>Benefits: (Losses Avoided)</b>	Resilient Infrastructure for sustainable land management Enhancement of Regional Tourism and Recreational Resource Shoreline protection for Ocean City Airport to the north Beneficial Reuse of Treated Wastewater Effluent
<b>Timeline:</b>	FY24 through FY28
<b>Goals</b>	1, 5 & 8
<b>Priority:</b>	<b>High</b>

Table 13-15 Mitigation Project 14

<p><b>Hazard(s):</b></p>	<p>Roadway Flooding / Intersection Elevation of Ocean Gateway Route 50 and Philadelphia Avenue for long term climate resilience</p>
<p><b>Location(s):</b></p>	<p>Town of Ocean City</p>
<p><b>Mitigation Action Item:</b></p>	<p>#12 A - Elevate intersection at the eastern terminus of Route 50 to allow for connection to higher elevation Baltimore Avenue corridor during major storm flood events. Repetitive roadway flooding areas identified in Hazard Mitigation Plan including key intersection at one of three access points for evacuation routes and emergency access.</p>
<p><b>Background/Issue:</b></p>	<p>A boomerang-shaped area over the low-lying intersection at the foot of the Route 50 bridge coming into town at the intersection with Philadelphia Avenue is proposed to be elevated to address flooding conditions. During major storm events which typically flood local streets to the north and south of the intersection, this project would provide continued access to the Baltimore Avenue corridor at a higher elevation so that citizens and first responders can still access the designated Route 50 evacuation route.</p> 
<p><b>Ideas for Integration:</b></p>	<p>MDOT initiated project in State right of way, with opportunity for cost sharing support from grant award</p>
<p><b>Responsible Agency:</b></p>	<p>MDOT SHA Maintenance Division Town of Ocean City Public Works Transportation</p>
<p><b>Partners:</b></p>	<p>Maryland Department of Transportation State Highway Administration Worcester County</p>

<b>Potential Funding:</b>	MDOT SHA Maintenance Division FEMA Building Resilient Infrastructure and Communities
<b>Cost Estimate:</b>	\$1,200,000
<b>Benefits: (Losses Avoided)</b>	Maintains evacuation and emergency response route to Downtown Ocean City [Transportation Lifeline] during storm flooding conditions
<b>Timeline:</b>	Undetermined
<b>Goals</b>	1, 7 & 8
<b>Priority:</b>	<b>Medium</b>