

# **APPENDIX B:**

## **MITIGATION ACTION ITEMS**

### **STATUS REPORT**

## MITIGATION ACTION ITEMS 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 action items and projects 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/projects.

Each action item/project within this status report included the following information:

- Action/Project Title
- Progress Report Period (2017-2021)
- Action/Project Background
- Responsible Entity
- Partners

Hazard Mitigation Planning Committee (HMPC) members were tasked with providing the following information for each action item, to the best of their ability:

- Contact Name/Information
- Current Project Status (e.g., Completed, Canceled, Delayed, or On Schedule)

Additionally, HMPC members were asked the following four questions for each action item:

1. What was accomplished for this project during this reporting period?
2. What obstacles, problems, or delays did the project encounter?
3. If incomplete, is the project still relevant? Should the project be changed or revised?
4. Other Comments?

A total of twenty-four (24) action items were evaluated as part of the plan update process; six (6) of these action items were ranked as “high priority” in the previous plan. Members of the Hazard Mitigation Planning Committee provided important feedback regarding the progress of these action items/projects.

Based on this feedback, the following was determined: eight (8) projects are “completed”, five (5) projects are “on schedule” to be completed, and nine (9) projects are “delayed” for various reasons, including such reasons as lack of funding, lack of public support, or changes in staff.

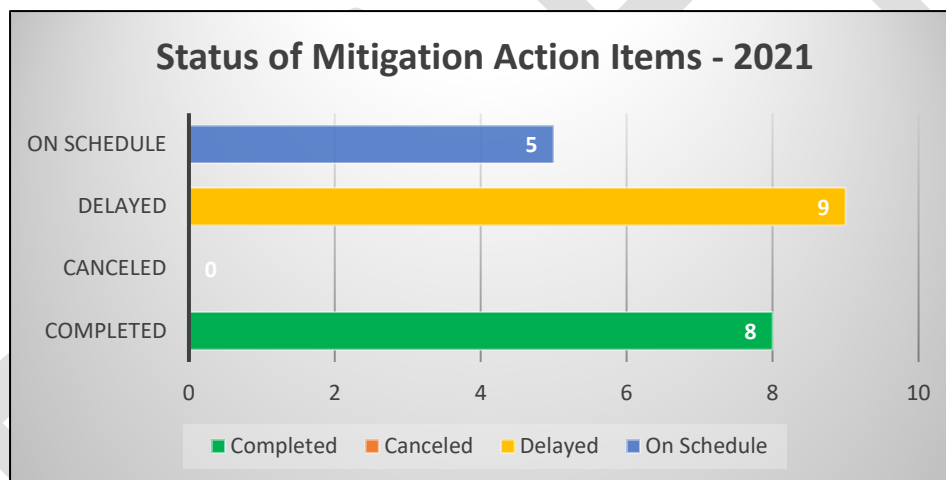
Mitigation Action Progress Report Form #1		
Action/Project Title:	#1 - Flood Mitigation Non-Substantial Improvements for Businesses	
Progress Report Period:	Start Date: 2017	End Date: 2021
Action/Project Background:	<p>Proposed improvements are “non-substantial” if the costs of all improvements are less than 50% of the market value of the building. Although owners are not required to bring the existing building into compliance, elevation is the best way to reduce vulnerability. There are many other things owners can do to reduce future flood damage:</p> <ul style="list-style-type: none"> <li>• Use flood resistant material, for example tile, closed-cell wall insulation, and polyvinyl wall coverings.</li> <li>• Raise air conditioning equipment, heat pump, furnace, hot water heater, and other appliances on platforms.</li> <li>• Install electrical outlets higher above the floor.</li> <li>• Move ductwork out of crawlspaces.</li> <li>• Retrofit crawlspaces with flood openings.</li> <li>• Fill in below-grade crawlspaces/utility space.</li> <li>• Raise windowsills and entryways above Base Flood Elevation (BFE) for stores located in floodplains.</li> </ul>	
Responsible Entity:	Business Owners Talbot County Department of Planning and Zoning	
Partners:	Insurance Agencies	
Contact Name:		
Contact Information:	Phone:	Email:
Project Status:	<input type="radio"/> Project Completed <input type="radio"/> Project Canceled <input type="radio"/> Project Delayed <input type="radio"/> Project on Schedule Anticipated Completion Date:	
<b>Summary of Project Progress for this Report Period</b>		
1.	What was accomplished for this project during this reporting period?	
2.	What obstacles, problems, or delays did the project encounter?	
3.	If incomplete, is the project still relevant? Should the project be changed or revised?	
4.	Other Comments	

Figure B-1: An example of the fillable status update form provided to HMPC members to gather feedback.

The projects identified as “completed” are listed below. Over half (four out of six) of the **high priority** projects were designated as “completed”; these projects are identified in **red**.

- ✓ **Project #7 – Open Space Preservation**
- ✓ **Project #8 – Flood Awareness/Public Education**
- ✓ Project #9 – Public Outreach Sessions
- ✓ Project #12 – Public Education and Awareness in Hazard Prone Areas
- ✓ Project #14 – Mitigate Pump Station Risk to Overflow
- ✓ **Project #16 – Repetitive Roadways Flooding Issues**
- ✓ **Project #19 – Establish a Business Liaison in the Emergency Operations Center for economic recovery**
- ✓ Project #23 – Increase Community Rating System (CRS) Score

The HMPC determined that the nine (9) projects designated as “delayed” in addition to the five (5) projects that were identified as being “on schedule” are to be carried forward into the current Plan Update. These items were reviewed and refined to reflect current conditions within Talbot County for the Plan Update. The graph below further illustrates the present status of the 2017 Action Item based upon stakeholder feedback.



The table on the following pages provides full status details for each action item. The table includes the following information, provided by stakeholders:

1. Who responded? (e.g., department or town)
2. Status (Completed, On Schedule, Delayed, or Cancelled)
3. What was accomplished?
4. What were the obstacles or delays?
5. Is this still relevant or does it require any revisions?
6. Other Comments

An important note is that some projects were designated with a different status depending upon the entity that responded. For example, *Project #7 – Open Space Preservation* was deemed “completed” by the Town of Oxford but “delayed” by the Department of Planning and Zoning. These differences in status are noted throughout the table. Areas where no information was provided are marked with “-”.

Action Item	Responder(s)	Status	Accomplishments	Obstacles or Delays?	Relevancy/Revision?	Other Comments
#1 – Flood Mitigation Non-Substantial Improvements for Businesses	Planning and Zoning	<b>Delayed</b>	CRS Outreach includes homeowner and business education.	More could be done. However, the elimination of a full-time Floodplain Coordinator position eliminates the potential to do more.	The project is still relevant.	-
#2 – Disaster Recovery Planning for Economic Development	Emergency Services	<b>Delayed</b>	-	-	-	Not much of this was accomplished during this project period. Some agencies such as the Chamber of Commerce, Planning and Zoning, and Economic Development provide this information, but a big initiative was not completed. Currently, Economic Development is working on a business recovery/response product using maps and data to aid businesses during disasters.
#3 – County Schools Flood Evacuation Destinations	Emergency Services	<b>Delayed</b>	None.	Change of staff in TCPS operations during project period	Yes, still relevant.	-
#4 – Environmental Education and Resilience Opportunity	Emergency Services	<b>Delayed</b>	None.	-	Yes, still relevant.	-
#5 – Design Resilience into Capital Investments	Town of Oxford	<b>On Schedule</b>	All construction is to be designed to BFE plus 3' per Floodplain requirements.	The correct TCPS staff was not assigned or integrated into this project.	-	Would like to amend regulations to require BFE +3 in all areas of town, including outside of Floodplain for both government capital improvements and private improvements.
#6 - Flood Prevention & Stormwater Management Best Practices	Dept. of Public Works	-	-	-	-	-
#7 – Open Space Preservation	Town of Oxford, Planning and Zoning	<b>Completed/ Delayed</b>	Projects are ongoing and continually updated. The scope is broad and the area to be covered is large (virtually surrounding the County). However, the Planning and Zoning Department contracted with Maryland Environmental Service, Michael Baker	Obstacles common to the Eastern Shore and other rural areas are limited staff and funding.	The project is still relevant and very important.	Completed for the Town of Oxford.  Delayed for County, Planning and Zoning.

Action Item	Responder(s)	Status	Accomplishments	Obstacles or Delays?	Relevancy/Revision?	Other Comments
			<p>International and Smith Planning and Design to update the County's Green Infrastructure Plan. The Plan includes several site-specific pilot projects to address issues of shore erosion, sea level rise and periodic flooding. Pilot projects include a Tilghman living shoreline project, a Knapps Narrows project and proposed barrier islands that address shore erosion on the peninsulas. Oxford, one of the most fragile towns, has had the most success with installing natural shoreline and structural improvements. Easton has also made improvements to several tributaries to the Tred Avon.</p>			
#8 – Flood – Public Education/Awareness	Emergency Services, Town of Oxford, Planning and Zoning	Completed/ Delayed	<p>Oxford – Successful application to the CRS program at Class 7.</p> <p>DES – A Talbot County Story Map was created specifically regarding flooding (education, mitigation, and recovery)</p> <p>Planning – In June of 2018, Talbot County was awarded a grant through the Maryland DNR's Community Resiliency Grant Program to produce an online multi-media story map that is interactive and accessible to public. Talbot County also partnered with the Eastern Shore Climate Adaptation Partnership CRS Work Group in the creation of a Program for Public Information campaign designed to distribute CRS flood safety messages and assist in the design of the County's entire flood protection outreach program. Informational brochures on flood risks and property protection are also provided to the public through events, the libraries within several County offices, and the Flood Information content on the County's website. Information brochures and library reference materials were updated and reformatted in content.</p>	Planning – No comment.	<p>DES – Still relevant. Need to revisit story map roll out.</p> <p>Planning – No comment.</p>	<p>Oxford – Completed.</p> <p>DES – Unsure on ESCAP status on creating public information material group. I thought that was in the works but unsure if products were ever created.</p> <p>Planning and Zoning – Completed.</p>
#9 – Public Outreach Sessions	Emergency Services, Public Works, Town of Oxford, Planning and Zoning	Completed/ On Schedule	<p>Talbot GIS – there have been several outreach efforts including an Interactive Flood Risk map and an ESRI story map. These tools provide detailed information on location and expected impacts. Both sites are routinely updated in both technology and content.</p>	<p>Talbot GIS – The Department of Emergency Services should be added to this Mitigation Action as a partner.</p> <p>DES – Only issue is setting realistic expectations amongst</p>	<p>Talbot GIS – These outreach efforts are ongoing year to year with periodic updates and improvements on appearance, content, and technological updates.</p> <p>DES – still relevant.</p>	<p>Talbot GIS – Flood Risk map: <a href="http://maps.talbgov.org/Html5Viewer2/Index.html?">http://maps.talbgov.org/Html5Viewer2/Index.html?</a></p> <p>DES – Completed.</p>

Action Item	Responder(s)	Status	Accomplishments	Obstacles or Delays?	Relevancy/Revision?	Other Comments
			<a href="http://maps.talbotgov.org/Html5Viewer2/Index.html">http://maps.talbotgov.org/Html5Viewer2/Index.html</a>  DES – The Department of Emergency services did and continues to do public outreach sessions covering this information throughout the year in many communities within Talbot County	residents of the reality of flooding within the county.		
#10 – Mass Communication	Emergency Services	Delayed	Unsure if a formal plan was created. Would like to revisit Jim Bass' intention with this. We have put together informal means of messaging (externally and internally/public reaching out to us during events)	-	Yes, still relevant	-
#11 – Public Outreach Plan	Emergency Services	On Schedule/ Delayed	DES – We currently do this during flooding events, but a formalized message template and timeline of messaging is not set. Very interested in continuing this.	-	DES – Yes, still relevant	DES – Delayed.
#12 – Public Education and Awareness in Hazard Prone Areas	Emergency Services	Completed	Mailings sent out in 2019 prior to hurricane season with flood messaging. Know your zone campaign for those in flood prone areas. Public outreach sessions to communities and businesses within flood prone area.	COVID - public outreach broader on social media instead of at community HOA and club meetings.	Yes, still relevant	-
#13 – Communication Infrastructure	Emergency Services, Public Works, Easton Utilities	On Schedule	Talbot County hired the consulting firm CTC Technology and Energy to assist in solutions to improve high speed broadband in the county. This effort led a partnership between Talbot County and Easton Utilities to apply for a USDA Re-Connect grant. On the second grant application the partnership was awarded \$13.1 million and with the addition of local funds the total project cost will be about \$17.5 million and provide gigabit service to about 3,500 homes and businesses.	The partnership was not able to provide 100% high speed broadband coverage for all the unserved or underserved portions of the county. We are working on solutions for the more remote isolated communities. Funding was also an issue.	This project is still relevant, but the project will take several years to complete (~ 5 years).	Easton Utilities press release: <a href="https://eastonvelocity.com/connecttalbot/connectalbot-press-release/">https://eastonvelocity.com/connecttalbot/connectalbot-press-release/</a>
#14 – Mitigate Pump Station Risk to Overflow	Easton Utilities, Town of Oxford, Public Works	Completed/ On Schedule	Oxford – Complete upgrade to the Oxford WWTP with facilities built at or above the 500 year/BFE plus 3'  PW – Flood mitigation by stream restoration project for pump station at 403 Bay St, Easton. Funding designated by MDE for relocation of pump station 1131 S. Washington St, Easton.	Oxford – Many obstacles, problems, and/or delayed were encountered during the life of the project.  PW – Funding.	PW – The station at 9076 Chapel Road has never flooded since it was built in 1990. The project should be changed to add two other stations in Easton: 1131 S. Washington Street and 403 Bay Street.	Oxford – Pump Stations can take in flood waters if tidal water reaches a high enough level and the pumps are unable to keep up. (Isabel and Sandy)  PW – On Schedule/Ongoing
#15 – Well Head Protection	Health Department	On Schedule	Wall construction permits have been issued in flood prone areas of the County with extended well Height terminals to prevent flooding.	Well replacements are dependent on age of existing well. Existing wells not brought up to current flood zone	Well head protection is always important to protect our aquifers.	-

Action Item	Responder(s)	Status	Accomplishments	Obstacles or Delays?	Relevancy/Revision?	Other Comments
				requirements in a timely fashion.		
#16 – Repetitive Roadways Flooding Issues	Town of Oxford	Completed	Causeway Retention Ponds: Construction of a series of Retention Ponds to reduce street flooding from both tidal and stormwater. Funded through MD DNR Chesapeake and Atlantic Coastal Bays Trust Fund	-	-	State Road remains an issue. Possible mitigation is being reviewed in other areas of town. Studies have been done and information is available.
#17 – Update County Code for Well Head Elevation	Planning and Zoning	Delayed	The project was not accomplished during the reporting period. The County's floodplain management ordinance only requires that new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems.	-	The project is still relevant.	-
#18 – Culvert Mitigation	Dept. of Public Works and Roads Dept.	-	-	-	-	-
#19 – Establish a Business Liaison in the Emergency Operations Center for economic recovery	Emergency Services	Completed	Cassandra Vanhooser has been an integrated partner to our EOC and in the past 18 months really developed a strong relation with the business community and our EOC partners. This includes bringing her Economic Development Board, Chamber of Commerce President, and other stakeholders to the table to talk about integrated response and messaging in our community before, during, and after events.	-	Still relevant. Would like to beef up the integration maybe with a one-pager of more formalized partnership (examples of actions to take depending on the event, annual meeting with DES and the businesses to talk about mitigation and recovery, etc.)	-
#20 – Pillar and overall stakeholder groups to continue to meet annually	Emergency Services	Delayed	There was one formal meeting.	Change of staff in Emergency Management.	Yes. Would like to set an annual meeting or tie this into another committee's quarterly meeting to keep this on the forefront of stakeholder's minds.	-
#21 – Power Generators at Essential Facilities	Emergency Services	Delayed	We have discussed this many times but never started a project for a specific building.	Completing an inventory of what buildings (critical infrastructure) have what generator capabilities and identify gaps.	Yes, still relevant.	-
#22 – Restore barrier islands to provide protection for Talbot County's shorelines from wave action	Emergency Services, Town of Oxford	On Schedule /Delayed	Oxford – Design for a Living Shoreline with small marsh islands to reduce wave energy along the Strand Shoreline.	Oxford – Garnering public support for a major change.	Oxford – Waiting on State/Fed permit approval.	Oxford – State and Federal funding secured for construction. Anticipated completion date: 2022-2023  DES – Delayed, unsure if this project is occurring.

Action Item	Responder(s)	Status	Accomplishments	Obstacles or Delays?	Relevancy/Revision?	Other Comments
#23 – Increase Community Rating System Rating	Emergency Services, Planning and Zoning	<b>Completed</b>	<p>DES – Our CRS rating improved during our last submission.</p> <p>Planning – Talbot County's CRS rating went from a Class 8 to a Class 7.</p>		<p>DES – Yes, still relevant. Hoping to tie this Action Item in with the ESCAP public outreach plan to create messaging/templates regionally that everyone could use to help improve flood messaging.</p> <p>Planning – The effort to receive the higher rating was accomplished when the Department had a full-time floodplain coordinator. This position was eliminated and combined with the Zoning Coordinator position. Maintaining the CRS rating may be very difficult without the full-time position.</p>	-
#24 – Mitigate Flood Prone Properties	Emergency Services, Planning and Zoning	<b>Delayed</b>	<p>Planning – On May 10, 2016, Talbot County Government executed a grant contract with the Maryland Historical Trust (MHT) to: 1) complete Maryland Inventory of Historic Properties (MIHP) Survey District Forms for the water-oriented villages of Neavitt, Newcomb, Royal Oak and Tilghman Island for those structures in the 500-year floodplain, 2) complete approximately Hazard Mitigation Forms for individual structures located within the floodplain, and 3) complete flood risk assessments and specific mitigation recommendations in each of the four villages for those surveyed structures. More in-depth flood risk assessments and specific mitigation recommendations were then completed for 25 of the most vulnerable properties to protect each property from flooding, expedite recovery from a flood event, and to allow the property to be usable for the maximum amount of time possible. The in-depth assessment included recommended structural and non-structural hazard mitigation actions for specific building types while maintaining their cultural integrity.</p>	<p>Planning – The project identified the most flood-prone areas in the four villages and their impact to historic structures. However, once the project was complete, there was no follow-up communication or education with the surveyed properties.</p>	<p>Planning – The project focus on mitigation of historic or contributing properties, not acquisition and demolition by the County. Acquisition and demolition of vulnerable properties may not be feasible. Consideration should be given to whether the mitigation action should involve targeted outreach and education,</p>	<p>DES – Unsure if this project is occurring within other departments</p>

Red: Projects are rated as high priority.