

THE COMMISSIONERS OF ST. MICHAELS
300 MILL STREET
P.O. BOX 206
ST. MICHAELS, MD 21663

Settled 1670-1680
Incorporated 1804

Telephone: 410.745.9535
Facsimile: 410.745.3467

Climate Change/Sea Level Rise Commission
Special Meeting: Community Input/Feedback Session:
West Harbor Road/East Chew Avenue Flood Mitigation Study
Thursday, August 10, 2023, at 5pm

Call to Order – Meeting opened at 5:00 pm. Pledge of Allegiance.

Present: Roy Myers, Dennis Glackin, John Marrah, Dr. William Boicourt, Dr. Andrew Thaler, Doug Rollow, Jon Clarke and Town Administrator Rob Straebel, Town Planner Steve Ball and Town Staff Vickie Sharp. Guest Attendees: Sasha Land, (DNR), Anna Johnson, PE, CC-P, Project Engineer (BayLand Consultants & Designers, Inc.). Public attendees: via zoom and in person.

Minutes:

Mr. Myers requested a motion to approve the Climate Change/Sea Level Rise minutes from July 13, 2023, motion made by Mr. Glackin, seconded by Mr. Marrah, and carried on a vote of 7-0.

Public Comment:

None.

Overview:

Mr. Myers opened the meeting for the San Domingo Creek and Westside Stormwater and Flood Mitigation Study - Mitigation Strategies Discussion with the community by introducing Anna Johnson, Project Engineer with BayLand Consultants & Designers, Inc. Anna Johnson has performed a comprehensive study and mitigation strategies for this area to present today. Anna has reviewed the data for sea level rise (SLR), the once every ten-year tidal surge and the flooding impacts expected in 2050. The homes mentioned in this report have already been flooded and are in the 100-year floodplain and it is encouraged that these homes obtain, if not already, flood insurance as these homes are already at risk. Anna has developed a preliminary draft of these strategies to present today. She will collect our feedback from today's meeting, revise this draft version and will further distribute. The Climate Change/Sea Level Rise Commission (CC/SLRC) will use this information to later determine which project area to take to a 30% construction design plan (no decision will be made today). A summary of this data will be composed to present to the Commissioners.

Overview, Presentation, and Discussion:

Anna Johnson, PE, CC-P, Project Engineer for this study with BayLand Consultants & Designers, Inc.

Ms. Johnson welcomed the attendants, instructing them that this will be a discussion and input meeting addressing the Prioritization Table of High Priority Areas, which ranks the six assessment areas in order of

vulnerability and infrastructure they are protecting and the mitigation strategies for coastal and stormwater flooding.

Of the six areas, Grace Street may possibly be the top choice because the county's pump station, electric sub-station, and infrastructure are located here, along with the most homes that flood. Second priority was likely to be Back Creek Park (infrastructure for the boating community and watermen who make their living), followed by West Chestnut and Tilden Road, Canton St. near Gloria Street, St. Michaels Nature Trail, and Thompson Street.

Coastal flooding alternative strategies include earthen berm with a living shoreline, which acts like a green levy (pg32); hybrid berm and living shoreline; gray infrastructure sea walls and bulkhead; impermeable rock berm; and self-regulating tide gate, (which opens and closes naturally). Town personnel do not need to manually control this type of gate. If there is rainfall at the same time as a storm surge and both water levels are high (hurricane event), flow continues until tide is too high and closes the gate.

Question: Can this cause flooding from rainfall in the estuary area?

Ms. Johnson responded that the high tide would make it unable to drain anyway, so a tide gate will not exacerbate stormwater flooding. If there is an elevated water level in the estuary it cannot drain anyway because the tidewater condition is too high.

Stormwater mitigation strategies include storm drain infrastructure improvements of upsizing pipes and raising culvert elevations; a pump station; installing underground storage vaults; and implementing green infrastructure (bio-retention facilities, vegetative swells, riffle pool system, and submerged gravel wetlands).

Question/Answer Period:

A self-regulating tide gate is a demonstrated technology. Ms. Johnson agreed to investigate the location of the closest site for viewing and to inform the COSM how this has been previously performed. All structurally built items require some maintenance but unknown as to how much.

The option to build a berm around Grace St. as a fallback option, seems that it would be difficult to build, and you would need to consider back flow issues by tying into higher ground. Stormwater flow must be considered for all these design options and how to redirect the water if you build a berm. The tide gate itself will not impact the stormwater like the other options which will require some type of method to displace the backed-up water around the "berm" by another means.

The committee discussed the presentation and various mitigation options and priorities.

A draft implementation plan was then discussed, based on three timeframes. The immediate (0-10 years) implementation in Back Creek Park living shoreline and the tide gate at St. Michaels Natural Trail Bridge. Short-term plans (in 5-10 years) could include upsizing of the Grace St. culvert, repairs to the West Chestnut and Tilden St. Area retention pipe outfall and replace the pipe and seven inlets along the stormwater infrastructure of the St. Michaels Nature trail. Long-term implementation (in 10-15 years) may include revisit monitoring the flood risk and implement a strategy for the future and nourishment of living shorelines next to Back Creek Park area and building a tide gate.

Estimated prices for the immediate implementation projects are \$2,820,000 (if a tide gate is included) and the short-term implementation project is \$238,500. Long-term is too far to predict at this time.

Dr. Boicourt stated that we have sea level rise projections and can project the design and how much sea level rise we need to protect for toward 2050. We will need additional charts to determine how much flooding and frequency there will be in 2060. At that time, we would need more cash flow to further evaluate this and how to accommodate remediation for these new calculations.

Public Comment included:

- We should contact other areas who have used tide gates and assess the effectiveness for tidal surge and comparable information in these areas to base our decision upon before deciding on any of these strategies.
- For singular events there are recommendations that are adequate. But we need to look at the entire Town and measure this as one huge project that can have a beneficial respect to the entire Town.
- A stormwater management area could be implemented in the Environmental concern property area. There is a lot of Governors' grant money for improving water quality in the Chesapeake Bay.

Mr. Myers said that for the flow of water from Marengo St. down to Tilden St. and West Chew Ave. it would require a retention pond and pump to move the water up to the Environmental Concern property. The committee discussed this issue.

Steve Ball, Town Planner, provided an update on the EC property activities. The property is agreed to be under purchase and an RFP for a master plan for the entire property with no preconceived conditions for the property has been sent out. This is going to be a charette process open to the community to develop a master plan for this process. Program Open Space Grants have some strict conditions for their grant funds. The Town received proposals from 9 firms for this RFP, with the firm Mahan Rykiel of Baltimore being selected to negotiate the contract for this RFP. There has been discussion for options to this property as there are established buildings at this location and the Town residents will have a say in this process, nothing has been pre-determined at this time.

Summary:

Mr. Myers summarized requests and clarification work needed to BayLand:

- Consider flood mitigation for the EC site.
- Find areas where they have utilized the similar self-regulating tide gate for comparison purposes and funding strategies they used.
- Utilize our input today to develop a revised version of the project priorities and actions.
- Provide us with information on what we should expect from the design schematics for the top two potential areas.

Additional Public Comment:

Recent rainfall event caused flooding on the main Talbot Street in St. Michaels. Another resident mentioned similar occurrence on West Maple. What is the size of our pipes under Talbot Street and what size do we plan to increase to. Town Administrator, Rob Straebel, said that the sizing and capacity of storm water pipes for Talbot St. can be considered by SHA (State Highway Administration) as it is a state owned road.

Announcements

Meeting scheduled next Tuesday, August 15, 2023 with Mr. Jett, GMB, to present the stormwater plans at 4:00pm. Review preference review sheet for this meeting.


Harbor line map is 1983 is incorrect, please disregard.

Adjournment

Mr. Marrah made a motion to adjourn the meeting. Seconded by and carried through on a vote of 7-0.

The meeting adjourned at 6:42pm.

Minutes approved as submitted by 6-0 vote in favor on the 9th day of November 2023.



Roy Myers, Chairman