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Climate Change/Sea Level Rise Commission
Regular Meeting
Thursday, February 9, 2023, at 5pm

CALL TO ORDER –Meeting opened at 5:03 pm.

Present: Roy Myers, Doug Rollow, Jonathan Clarke, Andrew Thaler, Town Administrator Rob Straebel, Town Planner Steve Ball and Town Staff Kris Kakabar and Member William Boicourt present via zoom. Guest speaker: Anna Johnson, Coastal Engineer with Bayland Consultants. Four in-person public attendees and two via zoom.

Minutes

Mr. Myers recommended to hold for approval until next meeting after updates made.

Public Comment:

None.

Items from CC/SLR Commission for discussion:

Mr. Myers provided overview of prior meetings with Bayland and GMB regarding the reasoning for basing sea level rise (SLR) at four feet for the two grants. He suggested we relook at the possibility of planning for five feet of SLR.

Bayland Grant for San Domingo Creek Discussion - Anna Johnson, Coastal Engineer with Bayland, will Review Sea Level Rise projections for the San Domingo Creek Study

Anna Johnson discussed planning elevations for flood protection projects based on SLR and extreme storm events into the future. Estimates will be conservative. Inquiring today as to which situations, and associated elevations they should be planning and designing for in San Domingo Creek Study.

Areas of note were:

1. Planning document to address all areas impacted by flooding from San Domingo Creek (plan for the worst-case scenario).
2. Concept design for top tier project (design for medium level flooding scenario). Less conservative with SLR and storm projections secondary to cost and practicality of implementation.

A presentation was provided by Anna Johnson on tidal water levels, storm surge levels, flooding thresholds, flood days/year table and SLR projections into 2050, probability analysis based on NOAA data. She is awaiting 2023 updated data. Bayland thinks we should plan for higher likely range of 1.7 feet of SLR, design to +5 feet as it will help prevent a large amount of the nuisance flooding issues in 2050 and only major flood events will overtop the structure and flood at five feet. Design will include adaptive management for the future and more refined cost-benefit estimates.

Commission, staff, and public discussions commenced to obtain better clarification of the data presented and impacts of SLR with increases at 4 versus 5 feet and impact of risk-tolerance.

Mr. William Boicourt made a presentation to review the differences between the Cambridge and Annapolis Tide Gauges and differences in SLR projections for the San Domingo Creek and Miles River Harbors.

Mr. Boicourt looked at San Domingo Creek and the main harbor and provided insight beyond 2050 for St. Michaels. Projections from 2019-2021 were used to plan for 1.2 (2050) and 2+ feet (2075), 50% estimates from the University of MD Report. Our future projections vs. Annapolis', should take into account the eastern shore has higher tidal ranges caused by the earth's rotation. Data tables show 93 occurrences at 3 feet and 4 occurrences at 4 feet in 2050, and 126 at 4 feet in 2075. Takeaway: Data shows that 4 feet provides some protection in 2050, but 5 feet buys significant protection from nuisance flooding occurrences between 2050 to 2075.

Commission, staff, and public discussions commenced to obtain better clarification of the data, inclusion of critical areas, and cost-benefit analysis addressed in the study for the determination of building to 2050 at 4 vs 5 feet. After discussion, the CC/SLRC unanimously supported Baylands recommendation to build to five feet for their San Domingo Creek Study.

Mr. Myers will present feasibility to GMB for 5 versus 4-foot build and write a letter to the Commissioners to summarize findings and recommendations. Town Planner, Steve Ball has submitted a semi-annual report to the critical areas, notifying them of these studies and will continue ongoing updates.

Ms. Johnson requested to use Mr. Boicourt's graphs, which present a powerful depiction for her project. Mr. Boicourt explained that for guaranteed continuity and access at the new CBMM Welcome Center was planned for 9 feet per FEMA based flood elevation (6 feet in the harbor and then increasing another 3 feet in the harbor to obtain state funding).

Bayland concept design will consider critical area requirements and not propose options that would be unpermitted. However, mitigation updates may be required by State Agencies. Community involvement session will occur around April 2023.

Discussion of tide staff installations for San Domingo Creek

Tide staffs in the main harbor are set for mean sea level (MSL) to track flooding events. Recommendation included to place tide staffs in San Domingo Creek along the same guidelines. Bench marking and surveying knowledge will be utilized for tide staff placement on San Domingo Creek by Bill Boicourt and Andrew Thaler.

Public Comment

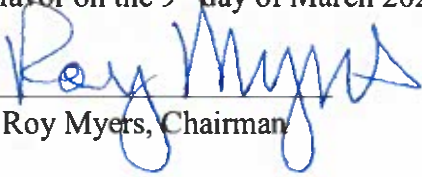
None.

Adjournment

Mr. Myers made a motion to adjourn the meeting. Seconded by Mr. Rollow and carried through on a vote of 5-0.

The meeting adjourned at 5:59pm.

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


Roy Myers, Chairman