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Climate Change/Sea Level Rise Commission
Regular Meeting
Thursday, November 9, 2023, at 4pm

CALL TO ORDER –Meeting opened at 4:00 pm. Pledge of Allegiance.

Present: Roy Myers, Dennis Glackin, Dr. Andrew Thaler, John Marrah, Doug Rollow, Dr. William Boicourt, Town Planner, Steve Ball, and Town Staff, Kris Kakabar. Guest Presenter: Anna Johnson, BayLand. Public attendees: two in person and two via zoom.

Minutes

Mr. Myers requested a motion to approve the Climate Change/Sea Level Rise minutes from August 10, 2023, August 24, 2023, September 14, 2023, and October 12, 2023. Moved by Dr. Boicourt, seconded by Dr. Thaler and carried on a vote of 6-0.

Public Comment:

No public comments.

Items from CC/SLR Commission for discussion:

BayLand Presentation by Anna Johnson – Review of Draft Report & Discussion of 30% Design:

Anna Johnson, BayLand Project Engineer, has compiled the proposed revisions to the last Progress Draft and will be presenting the official draft updates today. Overview of her implementation plan began with nine projects and six activities, which were broken down into levels of implementation immediate (0-10years), short-term (10-20years), and long term and monitoring (20+years) and will take us to 2050. Mr. Ball suggested shortening the time frame implementation periods. Ms. Johnson explained that some areas may take a longer time to obtain funding, grants, and permits, hence her time frame reflects when the project should be completed.

The first project is to remove the bulkhead at Back Creek Park, which is in an engineering failed state for structure/support and safety and implementing a living shoreline. Estimated costs for this project total around \$204,000. Going to +5 in this area is not as beneficial at the present time as initially considered. The living shoreline will tie into the current living shorelines on both sides after removing the failing bulkhead.

The second project is installation of a self-regulating tide gate at the St. Michaels Nature Trail Bridge, preventing storm surges from progressing farther than the tide gate. This one project would resolve coastal flooding for 5 of 6 vulnerable areas along San Domingo Creek. The Town wishes to separate this into two phases, beginning with a feasibility assessment and preliminary design, which will cost about \$20,000. The total implementation cost (design and construction) will be around \$2,424,000.

Short-term Implementation Projects include: (Costs proposed are relative to 2023)

- 1) Install a larger culvert at Grace Street as the current will not pass the volume of the 2050 stormwater flooding. \$84,000
- 2) W. Chestnut and Tilden St. retention area pipe outfall improvements. \$81,000
- 3) Stormwater infrastructure replacement along St. Michaels Nature Trail - short term flooding will become more persistent. Replace it with larger diameter pipes and 7 inlets. \$199,200
- 4) Raising the boating infrastructure at Back Creek Park in the future to prevent flooding of the piers as it is just below +3 feet NAVD88. DNR paid for this pier approximately 5 years ago, so it needs to go through a lifespan usage before replacing. The possibility was posed to raise the stringers and re-deck at higher pilings instead, possibly at a much lower cost. \$708,000

Long-term Implementation Projects include: 2045-time frame – monitoring and planning stage so no cost associated with this.

- 1) Canton street flooding impact will occur during the 2050 storm surge events only. Recommend maintenance and repairs as damage occurs.
- 2) Living Shorelines along Back Creek Park will need nourishment to keep up with the sea level rise.

Questions and Discussion:

Mr. Rollow – If we are preserving Back Creek Park as a recreational area, we should coordinate the planning process with the adjacent shoreline on the Environmental Concern Property to look at the entire 8-9 acres as one continuous unit. I have an issue with the use of berms in recreational areas.

Steve Huntoon – 122W.Chestnut St. – The request to post report on website, ahead of meetings in the future. Sketch of where the bulkhead (bowing bulkhead is by Waterman's Wharf, page 44) and tide gate location (by the Nature Trail) will be.

Mr. Glackin – Page 53 Can you include what the issues would be if the tide gate mitigation is not implemented. Page 40 of the Alternative analysis shows the risk-tolerance acceptance. Can you reference back to the pages to assist other readers with the impacts within the report to tie this in for the first-time reader. Mr. Rollow suggested inserting the reference information in section 9.1.2 on page 53.

Mr. Ball – Grace St. if the culvert is placed prior to the tide gate on the project list does it add any protection. Ms. Johnson stated it will not as it is for storm water protection.

Mr. Myers – Include the \$20,000 proposal in the Option 2 application and may share it with the Commissioners.

Ms. Johnson provided clarification for pages 9-11, why a high risk-tolerance is used, as there is not enough critical infrastructure in the area which would allow for more practical solutions. The Storm surge +5 elevation was chosen to the 10-year return surge period in 2050, this also correlates with FEMA's 100year storm today.

Dr. Boicourt – The SLR is less a concern, the impact of how we picked this is more important. The choice of the 10yr vs 100yr storm: we need to take Ms. Johnson's argument about storm surge and make it strong to explain situational vs catastrophic results into politically acceptable terms. Ms. Johnson will consider how to reinforce this in the report to the Commissioners.

Summary: Ms. Johnson will add a statement in the tide gate section to emphasize all the areas this will benefit. 30% design sketch plans next week, and the final report will be ready before Thanksgiving.

2 Sketch Plan Options at 30% Design by Anna Johnson.

Option 1: Prepare for 2050 solution to +5 is the dark green contour- this alternative would have more significant impact at the immediate time and a higher price tag for this option but would make the Town ready for 2050. The cost is approximately 3-4 times more expensive than option 2.

Option 2: Baylands' recommendation currently. This option moves seaward a little. The bulkhead will be cut to the level of tie-in at +3-3.5 elevation. This option will preserve the trees, kayak launch, and the walkway to the water and second kayak launch and up about 6 feet from the current bulkhead. Planting recommendations will be similar to the current vegetation in the area. Funding is more readily available for this option.

Mr. Myers requested a vote to approve Option 2 as the recommended option to move forward from the CC/SLRC. The vote was 6-0 in favor of Option 2.

A DNR Outcome 3 grant request is in the process for this area and will be submitted on December 14, 2023. Anna Johnson is aiming to get the 30% design to us by November 17, 2023, to aid the Town in moving forward with their concept of the grant.

Distribution of GMB Draft Concept Plan Renderings:

Concept plans were shared with CC/SLRC tonight but were not presented at the COSM meeting on November 8, 2023. Mr. Glackin, Mr. Myers, Steve Ball, Rob Straebel, and Sasha Land (DNR) have edited the report to incorporate the extra details required for this report to explain the process of the flood data and design more adequately. Casey Rauch (Town Engineer) was provided a copy of the proposal to review as a second opinion for functionality. Rauch's concerns were related to utilizing 7 individual pipes and pumping areas versus a large cistern with a high-tech robust pump, pipe, and backup generator. Mr. Marrah inquired if Mr. Jett presented the Town with the percentages of flow coming out of each pipe area, which would explain the scenario and mitigation analysis. Dr. Boicourt would like the volumetrics of water behind the berm; how can we size the pumps in the cistern without this information? What is the quantification of storm water mitigation your solution will resolve? These concerns will be shared with Brent Jett, GMB Engineer and Stephen Marsh, of GMB, for them to further address. Special meeting with the COSM in December.

Review of Meeting with DNR Relative to Outcome 3 Grants:

Mr. Myers reported that he requested permission from the COSM at last evening's meeting to proceed with a DNR Outcome 3 Grant for the living shoreline and Outcome 2 Grant for \$20,000 study for further assessment of a tide gate at San Domingo Creek. This was approved and Mr. Ball, Town Planner, is beginning the process for this grant.

DNR Waterway Infrastructure Fund (WIF)

Carla Fleming, manager, is meeting with us on November 16, 2023, along with a few of her co-workers. She oversees the docks/boat ramps. DNR would allow the closure of the small boat ramp and suggests placing a kayak launch, and the bulkhead replacements. Mr. Rollow offered the CC/SLRC to visit his newly designed bulkhead which will allow for incremental increases to 4foot, as an alternative design process.

MDEM update – Harbor walk around:

Casey and Annapolis Landscaping who are performing the study at Honeymoon Bridge. They will provide us with this plan in the next few weeks.

Public Comment

None.

Discussion Items

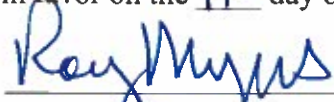
None.

Adjournment

Mr. Myers requested a motion to adjourn. Mr. Rollow made a motion to adjourn the meeting. Seconded by Mr. Marrah and carried through on a vote of 6-0.

The meeting adjourned at 5:49pm.

Minutes approved as submitted by 5-0 vote in favor on the 14th day of December 2023.



Roy Myers, Chairman