

To: Commissioners of St. Michaels
From: Climate Change/Sea Level Rise Commission
Date: July 24, 2023
Re: Status Report on West Harbor Road/East Chew Avenue Public Slip Area Flood Mitigation

On July 13, the Climate Change/ Sea Level Rise Commission (CC/SLRC) conducted a public session to review our consultants' (GMB Architects and Engineers) study regarding sea level and stormwater mitigation around the West Harbor Road/East Chew Ave. harbor area. This was a follow-up meeting from a public Open House that was conducted on March 30 and from discussions at our June 8th CC/SLRC monthly meeting.

At the CC/SLRC meeting on June 8th several options were discussed and some dismissed. We asked the consultant to narrow the options down to two principal improvement schemes, which were presented to the public on July 13. Below is a summary of the principal issues and comments that were discussed.

The meeting started with Roy Myers presenting a short summary of the work done to date and the purpose of the meeting. A principal "given" was that any design should be to 5 feet above present mean sea level (MSL) which should give good protection to the area through 2075. Brent Jett, of GMB, then offered a power point presentation of two options for controlling sea level rise along with a series of other secondary options related to lighting, walkways, dock options, materials, and stormwater solutions. The power point presentation accompanies this memo.

1. The consultant noted existing conditions around the harbor of a generally 3-foot-high bulkhead over mean sea level, 40 boat slips, 48 parking spaces, almost 100% impervious surfaces in the area, and a lack of pedestrian friendly amenities. Docks from just south of the small boat ramp to E. Chew were noted as the oldest docks in need of rebuilding in the fairly near term.
2. Option A was presented, which maintained the existing 3-foot-high bulkhead but was then supplemented with a 2-foot-high berm behind the bulkhead. This option included a 5-foot walkway on top of the berm, with the number of parking spaces reduced from 48 to 40. The lost parking areas would be

converted to green space and planted with one of several options including bio-retention plants to help control the runoff. The watermen's shed would be eliminated to create more parking or green space.

3. Option B was presented which called for raising the bulkhead to 5 feet, a 5-foot-wide adjacent walkway, and then parking. This scheme also proposes removing 8 parking spaces and providing green areas for bio-retention. The watermen's shed would be eliminated in this scheme also. This option, as well as Option A proposed closing the small boat ramp and replacing it with kayak launch options as shown in the power point. Closing this ramp would require approval from DNR who funded it. Closing it would prevent flooding into W. Harbor Road which is a regular occurrence.
4. The presentation then showed various options as to how the improvements might be designed. These included options for the walkway (wood planking, brick pavers); parking area options (porous paving, pavers, stone filled geo-grid, porous cement); and stormwater control equipment (backflow preventers on the existing stormwater pipes, a cistern under the green area near the intersection of W. Harbor and E. Chew; and a flow regulator that might be installed at the school property around the end of Meadow). The consultant commented on the small pipe diameter of some of the existing stormwater pipes, which could also be upgraded.
5. There was discussion about whether fixed or floating docks would be preferred in the harbor. The consultant recommended fixed docks as you would have the ability to raise the piers as sea level rise demanded and the cost would be less. Access to the pier from the bulkhead would be easier. This item is an issue requiring more discussion and study. Members of the Waterway Advisory Board were invited to attend this meeting and participated in the discussion.
6. The CC/SLR Commission conducted a parking study during the last half of June through the July 4 weekend. This study is attached to this memo and shows average daily parking space usage along the harbor. It also shows that during holidays and special events (Fireworks Night), parking is or may be close to max capacity with overflow parking along the side of East Chew and West Harbor roads. The issue of how many, if any, spaces can be removed is

also subject for further discussion, but 40 spaces appeared “reasonable”, if it allows for green areas to be created to help control stormwater runoff, which is a principal concern of nearby residents.

7. The consultant noted their preference for Option B (raise bulkhead to 5 feet). It was noted a berm of the size shown has not been done to the best of everyone’s knowledge anywhere for this type of situation and it was felt to be a maintenance issue long term. No decision was made at this meeting. The discussion will be continued with a possible decision at our next meeting with GMB.
8. Other comments by the public and commission members include the following:
 - Prefer 5ft bulkhead solution, Option B
 - Think long term.
 - Need more information on stormwater management including showing more of the drainage area.
 - Some preference for Option B, but needs more time to understand.
 - Funds available now for improvements rather than phasing, which was also considered.
 - The consultant is still working on final stormwater calculations.
9. The CC/SLR Commission will meet in August to further discuss with the consultant the preferred options and will keep the COSM apprised of our progress and possible recommendations.