

Q & A FROM May 29, 2026

THE TOWN OF FENWICK ISLAND INFRASTRUCTURE COMMITTEE

BAYSIDE RESILIENCY PLANNING & FLOOD MITIGATION STRATEGIES FORUM: PART 1

EXISTING CONDITIONS

- Do we know which of the drains are connected to each other and how they work with each other? Yes, a new survey was done in 2024 and maps are available.

TITLED: EXISTING DRAINAGE SYSTEMS

- Does the town know road heights and conditions ? Yes, road surveys across the whole town are ongoing as a part of a 10 year maintenance plan, implemented in 2023.
- Where does/will the storm water runoff relative to Rt 1 Coastal Highway? Improvements to the drainage system/s are part of the long term design, helping to address ponding

ROADS

- Will roads be improved and raised ? Road raising on the bayside is a key part of the solution to ensure public safety and evacuation. The basic design recommendation is to raise the crown of the road, tapering the surface so the edges only increasing 1-2 inches. This method gains 4-5 inches in the center of the road, for better clearance during flooding events. Visit an example in South Bethany at York Road.
- Is it possible to raise my lot at an opportune time vs waiting for the roads? Each condition to connect with the public road is different. In some cases, lot elevation will provide water mitigation. In conjunction with a bulkhead or a berm (as on canals), and possibly adding swales, etc. using the practices of getting water into the ground.

BULKHEADS

- What is the impact of private property owners on having to raise their bulkheads or build other protection ? Will the NAVD 88 +4' be The Town recommendation. The engineering recommendation is to protect properties to 4'0" above NAVD88 (the technical term for normal sea level). This is based on historical high tides and forecasts due to sea level rise. This is the current recommendation, based on the engineering study conducted in 2025. Town staff is using this guidance.

- What does MHHW mean? **Mean Higher High Water (Higher High Tide Event)**. It is used in forecasting the target we need to protect against.
- As a newer homeowner how do I determine if my bulkhead needs to be raised? **The town has a survey of many of the bulkheads in town and the average heights are approximately 2' above NAVD88. So there may be a need to add 2' if it wasn't replaced in recent years. Property owners can contact town staff for more information.**
- What is the useful life of bulkheads? **Depending on the design, engineers and contractors suggest a life of approximately 20 years. Bulkheads are usually built out of wood or vinyl sheet. Deteriorated bulkheads will need to be replaced, as is required by existing town code.**
- Existing ramps? **Ramps are part of the perimeter barrier protection, and the top of the ramp will need to meet the 4' target elevation level for tidal flood mitigation.**

OTHER TOOLKIT DEFINITIONS

- What tool in the kit will help address the water back up to the storm drains which also floods the streets (prevent storm water from backing up and surcharging the inlets and causing flooding)? **Tidal valves are part of both flood prevention and the storm drain system. They are installed throughout the Town. Where many of the the storm drains goes into the canal, through the bulkheads, valves have been installed at the "outfall" aka, the end of the pipe. Tide valves prevent water from coming back up, when the tide comes up. Those valves are closed all the time until you get rain, and the water pressure pushes the valve open, however, that can only happen when the tide goes down below the outfall. When it rains and the tide is up, the water cannot move until the tide goes down, providing space for the water to exit. For this reason, trying to get storm water into the ground, via swales, bioretention, rain barrels, rain gardens are ALL part of the solution.**
- **Berms vs bulkheads** **Berms use sandbags or Hesco barrier systems to create the barrier. The useful life of the HESCO system is approximately 25 years. HESCO barriers are containers filled with sand and lined with geo textile fabric will provide a very strong foundation.**
- **Lot elevation ? Is implemented by using fill– Road raising should be considered before implementation . See the question above regarding road raising.**

- Swales and Infiltration trenches? These can be installed in conjunction with rain gardens and rain barrels to retain water within properties
- Wave attenuating devices (WADs). These provide a defensive method to break up wave energy. Constructed from concrete they are also used as artificial reefs. If your property is facing the bay, the engineers have recommended the use of this wind mitigation method. We are beginning to learn the permitting process , however, if it is similar to dock permitting, it may be complicated. (See map at rear of the room).
TITLED: TARGET BARRIER ZONES

ORDINANCES DEALING WITH BULKHEADS AND LOT ELEVATION

- How feasible is passing code modification requiring bulkhead incremental height increases? Ie: by 2027 All owners on canals must raise bulkhead by adding less than 2' . As time progresses it could be repeated as needed. Specification of bulkheads designs, including tidal valves on private property, will be determined by the Charter and Ordinance (C&O) committee when discussion and recommendation begin. Enforcement would be similar to building code enforcement.
- Has there been any thought to making builders raise the bulkheads when tearing down and building a new home? On West Atlantic about half the homes have been rebuilt since 2021 alone. When the C&O committee moves forward, the determination on tear down/new build rules and compliance with bulkhead heights will be addressed. It will probably be consistent with other building codes which are enforced when property owners undertake substantial changes to their properties.
- Ordinance for height of structures based on the crown of the road and will The Town deal with that? Current ordinances govern building height, and the base level is crown of the road. The impact of a raising the crown several inches will have a minor impact, and the C&O committee will consider that in possible building height changes as a separate issue from flood prevention ordinances.

COORDINATION

- How do we best coordinate individual plans for lot elevation with the town? We all have conversations with neighbors when building fences or doing landscaping. If intending to do something (replace or raise bulkheads) coordinate with your neighbors as there may be a cost benefit for group pricing, using the same contractor and saving on mobilization costs.

- In order to coordinate with our neighbors, will the town provide the elevation of each property relative to the NAVD 88 reference? That's a good suggestion. During permitting on any projects under current code, the town staff can educate property owners in the option and possibly inform owners on permits underway in nearby properties.
- What is a good example of a lot elevation that considered neighbors and town plans? 1311 Bora Bora St is an example of new lot elevation with a neighbor whose lot hasn't changed. When the neighbor improves their house, it will make sense to raise their lot. (see the picture in the PowerPoint presentation).
- More broadly, how do individual residents in high priority areas proceed vs. talking about this in the abstract and avoid moving ahead in a haphazard way? This is our first conversation on this level, however, there are many factors to consider. As individual property owners, you know your properties the best. You know where, how and when the inundation occurs. Do you currently have a bulkhead? Can you add rain barrels? Do you need to consider swales to hold storm water or swales between properties? Does it make sense to install a rain garden?

As a council and community we do not have answers to all these questions. The IC committee has been working to educate the community and now have options in the tool kit for all of the property owners to implement on their properties. The conceptual design will come together like a puzzle over time. Neighbors working together will fill in the puzzle to create a safer environment for all of us.

COSTS AND CONSTRUCTION

- Is coordination still available on local, regional and national levels? Fenwick Island was approved for a FEMA grant in 2024 which was cancelled at the federal level in April, 2025. Good news, it's been somewhat reinstated and we have applied once again for FEMA money. Further good news is there is still local and state funding available for private owners, especially their focus on municipalities and homeowners associations, for living shorelines and rain gardens at the individual level.

- How do we estimate costs? In the town records, permits can provide historical records on recent bulkhead costs, e.g. a standard 45' lot. We are beginning to work with the engineers on standard unit costs for items in the toolkit.
- Who is a good contractor? Contractors names become available when permits are issued.