



## Wetlands and Coastal Dune Board Staff Report

**Agenda Title:** Wetlands Application from Bay Creek at Cape Charles Community Association to construct an aquatic barrier to deter aquatic vegetation from floating in the Chesapeake Bay from coming ashore on the North Beach of Bay Creek

**Agenda Date:** January 21, 2026

**Prepared by:** Jack Steinmayer, Zoning Compliance Officer

**Reviewed By:** Katie Nunez, Zoning Administrator

**Date:** January 14<sup>th</sup>, 2026

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**Site Address:** 113 Sunset Boulevard to 181 Sunset Boulevard

**Tax Map #** 83A1-11-73 to 83A1-11-30; and 83A1-11-M1

**Applicant:** Bay Creek at Cape Charles Community Association

**Owner:** Bay Creek at Cape Charles Community Association

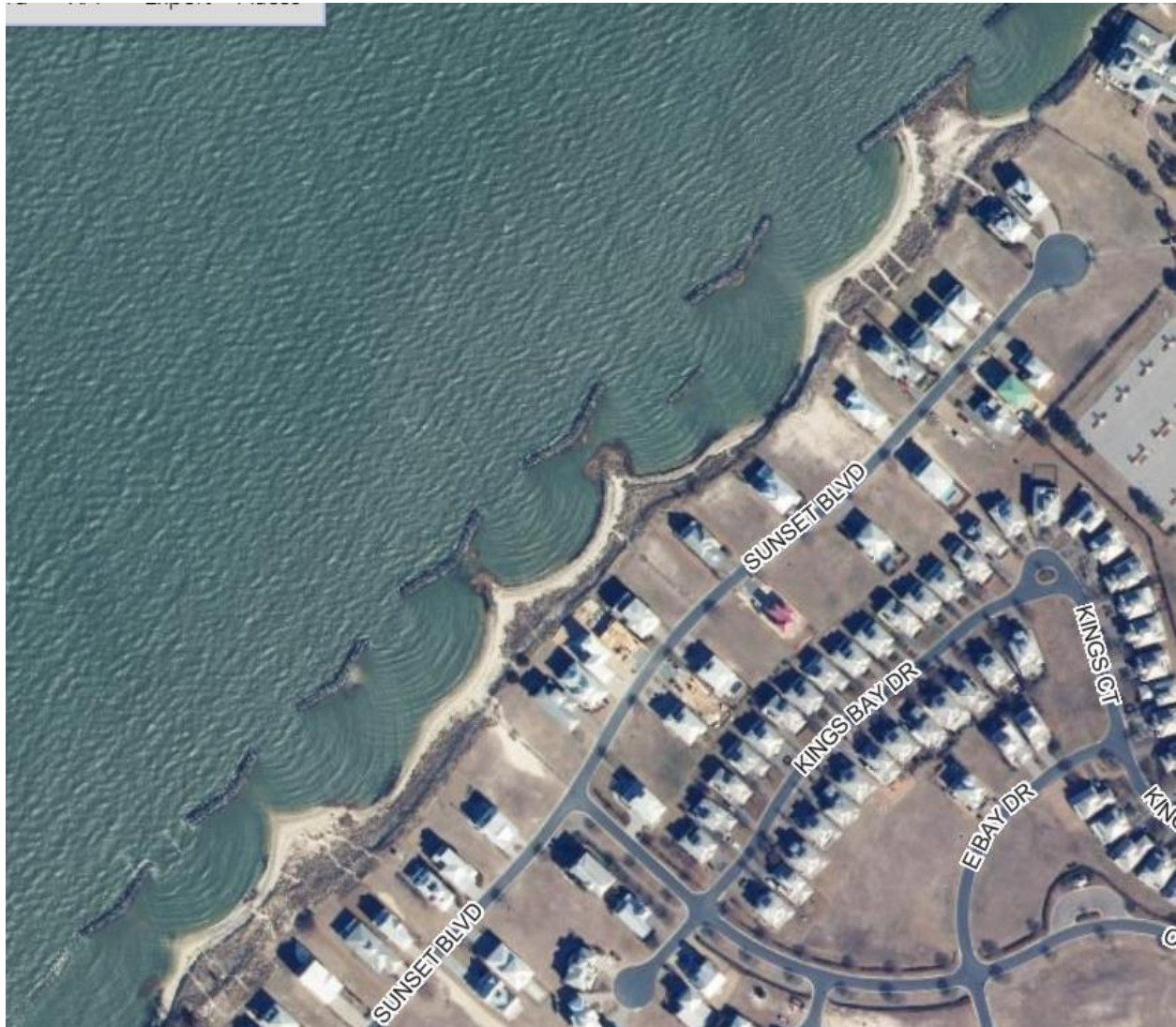
**JPA Number** 2025-2643

**Proposed Project:** Construct an aquatic barrier to deter aquatic vegetation from coming ashore on the North Beach of Bay Creek

### **Background:**

On December 30th, 2025, applicant Ed Loonam, representing Bay Creek at Cape Charles Community Association, submitted an application to the Wetlands and Coastal Dune Board to consider a proposed aquatic barrier to deter floating aquatic vegetation in the Chesapeake Bay from coming ashore on the North Beach of Bay Creek.

**Aerial Map:**



**Site Plan of Project:**

See Attachment 1

**Project Specifics (Include Detail on Structures Proposed and Impact to Wetlands (Tidal or Non-Tidal), Vegetation Disturbance, and Planting/Replanting Plan:**

The proposed project is for the implementation of an aquatic barrier to deter aquatic vegetation that is floating within the Chesapeake Bay from coming ashore on the North Beach of Bay Creek. The proposed floating barrier system will be situated between the existing breakwaters and have sufficient slack to rise and fall with the tides. The floatation barrier will be 9" in diameter, made of closed-cell high-density polyethylene rolled foam log booms, which will float atop the water and be strung up with 5/16" 304 Stainless Steel Cable (9,800 lbs. breaking strength) at the top, and 3/8" Galvanized Steel Chain (10,600 lbs. breaking strength) at the bottom. 32 oz/yd<sup>2</sup> PVC Coated Polyester Fabric or greater with UV inhibitors and Marine inhibitors, and black PVC mesh filter fabric skirt hanging from the booms and weighted with ballast 1.5 lbs./ft, 3/8" Galvanized Steel Chain; Grade 30 and manufactured in accordance with NACM (National Association of Chain Manufacturers) 90 and or ASTM (Advancing Standards Transforming Markets) 80 specifications will allow for

flow of water, sand, and wildlife into and out of the inter-tidal areas while holding back excess vegetation. A gate system will enable swimmers, kayakers, and others to pass through the barrier to access waters outside the breakwaters.

The contractor will use existing walkways and beach access to transport all project materials by boat from the open water. The materials for this project will include an ABASCO marine-grade aquatic barrier, a high-tensile-strength marine-grade aluminum 6061 T-6 ASTM Universal SlideConnector, and ASTM Locking Pins. Stainless Steel Fasteners and metal anchors will be installed at each end of the breakwaters, and wooden poles will be sunk to create the gate system, per the attached diagram.

This project would mitigate the impact on any intertidal areas due to the ability to quickly implement the barrier, as it can be placed seasonally, for severe storms, or permanently. If deemed unsatisfactory for the intended purpose, removal will be just as quick. The installation of the barrier requires no clearing, grading, or excavating, and does not involve the use of heavy machinery in the shore or buffer areas.

### **Code of Virginia Requirements:**

*Code of Virginia, Section 28.2-1308 (B): Standards for Use and Development of Wetlands; Utilization of Guidelines:*

*(B) The following standards shall apply to the use and development of wetlands and shall be considered in the determination of whether any permit required by this chapter should be granted or denied:*

*(1) Wetlands of primary ecological significance shall not be altered so that the ecological systems in the wetlands are unreasonably disturbed.*

*Code of Virginia Section 28.2-1408: Standards for Use of Coastal Primary Sand Dunes: No permanent alteration of or construction upon any coastal primary dune shall take place which would:*

- i. Impair the natural functions of the dune*
- ii. Physically alter the contour of the dune*
- iii. Destroy vegetation growing thereon unless the Wetlands Board or the Commission, whichever is applicable, determines that there will be no significant adverse ecological impact, or that the granting of a permit is clearly necessary and consistent with the public interest, considering all material factors.*

### **Zoning Ordinance Requirements**

*In deciding whether to grant, grant in modified form, or deny a permit, the board shall consider the following:*

- 1. The testimony of any person in support of or in opposition to the permit application*
- 2. The impact of the proposed development on the public health, safety, and welfare; and*
- 3. The proposed developments conformance with standards prescribed in 28.2-1308 of the Code of Virginia and guidelines promulgated pursuant to 28.2-1301 of the Code of Virginia.*

The board shall grant the permit if all of the following criteria are met:

1. The anticipated public and private benefit of the proposed activity exceeds its anticipated public and private detriment.
2. The proposed development activity conforms with the standards prescribed in 28.2-1308 of the Code of Virginia and guidelines promulgated pursuant to 28.2-1301 of the Code of Virginia. (for Wetlands) or 28.2-1408/ 28.2-1401 of the Code of Virginia (for Coastal Primary Sand Dunes)
3. The proposed activity does not violate the purposes and intent of this ordinance or Chapter 13 (28.2-1300 et seq.) of Title 28.2 of the Code of Virginia (for Wetlands) or 28.2-1408/ 28.2-1401 of the Code of Virginia (for Coastal Primary Sand Dunes).

No permit shall be granted without an expiration date established by the board. Upon proper application, the board may extend the permit expiration date. This is pursuant to *Town Code Chapter 32, Appendix F – Section 137: Expiration Date for Wetlands Permits and Appendix C – Section 1200: Coastal Primary Sand Dune Permits.*

### **Questions for the Board**

1. How is Bay Creek going to clean the accumulated debris from the barrier? And how regularly?
2. Is the barrier going to allow fish, crabs, and other animals through the barrier? In other words, how is it going to affect the local ecosystem?
3. How is Bay Creek going to notify residents of the aquatic barrier, and how are those residents going to be allowed out into the bay?
4. Is every barrier going to have an exit out into the bay, or only certain ones?
5. What would the impact be on the dunes?

### **Staff Recommendation:**

After reviewing the application town staff understands that the implementation of the aquatic barrier will have a multifaceted impact on the North Beach of Bay Creek. It will firstly keep vegetation from the Chesapeake Bay from coming ashore, and secondly, preserve and protect the sandy beach habitat that supports the local Tiger Beetle populations along the North Beach of Bay Creek, as the excessive accumulation of plant debris, transported by tidal action, is degrading the quality of the habitat. It will also allow Bay Creek to change their management practices, as currently they are burying accumulated debris on the beach, which has contributed to the establishment of invasive plant species and the continual spreading of these species into the sandy shoreline, resulting in a further reduction of suitable habitat for the Tiger Beetles.

However, after further discussion staff believes the current JPA Application is a bit nebulous and raises more questions, as seen from the questions laid out above. Furthermore, staff needs clarification from VMRC on whether or not this project would fall within the Wetlands and Coastal Dune Boards' jurisdiction.

As of now staff is not ready to make a recommendation one way or another until more information has been gathered about this project.

### **Attachments:**

1. Site Plan
2. Wetlands and Coastal Dune Board Application

### 3. JPA Application