This departmental bill requires the use of nonstructural shoreline stabilization methods in tidal wetlands except in areas designated by Maryland Department of the Environment mapping as appropriate for structural shoreline stabilization measures and in areas where a property owner can demonstrate to MDE that such measures are not feasible, including areas of excessive erosion, areas subject to heavy tides, and areas too narrow for effective use of nonstructural shoreline stabilization measures. MDE must adopt regulations in consultation with the Department of Natural Resources. The regulations must include a waiver process that exempts a person from the bill’s requirements on a demonstration to MDE’s satisfaction that nonstructural measures are not feasible for the person’s property.

Fiscal Summary

State Effect: Although the bill could result in an increase in requests for technical and financial assistance, DNR currently anticipates that it could handle any increase in workload with existing budgeted resources. Based on information provided by MDE, the bill is not anticipated to have a significant impact on State expenditures for regulated shore erosion control projects. No effect on revenues.

Local Effect: Potential increase in local expenditures for shore erosion control projects.

Small Business Effect: MDE has determined that this bill has minimal or no impact on small business (attached). Legislative Services generally concurs with this assessment, but notes that, based on information provided by DNR, construction costs for nonstructural shore erosion control projects are generally about 20% higher than construction costs for structural alternatives. (The attached assessment does not reflect amendments to the bill.)
Analysis

Current Law: State tidal wetlands law authorizes waterfront property owners to make improvements to protect the shoreline against erosion. Such improvements are not required by statute to be nonstructural in nature. Current tidal wetland regulations, however, provide an order of preference for shore erosion control measures that must be considered for those measures that require a tidal wetlands permit or license, as follows:

- no action and relocation of structure;
- nonstructural shoreline stabilization, including beach nourishment, marsh creation, and other measures that encourage the preservation of the natural environment;
- shoreline revetments, breakwaters, groins, and similar structures designed to ensure the establishment and long-term viability of nonstructural shoreline stabilization projects;
- shoreline revetments;
- breakwaters;
- groins; and
- bulkheads.

Background: Current shore protection practices range from “hard” techniques, such as bulkheads, retaining walls, and riprap, to more soft alternatives such as living shorelines that combine marsh plantings with sills, groin fields, or breakwaters. Where site conditions are appropriate, living shorelines are the preferred method of shore protection because in addition to protecting the shoreline, they also trap sediment, filter pollution, and provide important habitats for both aquatic and terrestrial wildlife. According to MDE, nonstructural shore protection alternatives are typically suitable along stretches of shoreline eroding at less than two feet per year. Structural shore erosion control methods may be necessary in areas with high rates of erosion; however, MDE advises that only about 10% of the Chesapeake Bay’s tidal shoreline is eroding at a rate of more than two feet per year.

In its January 2008 interim report, the Maryland Commission on Climate Change recommended that the State begin to actively address the impacts on the natural environment of shore erosion induced by sea level rise. In Maryland, shoreline management is currently facilitated through a network of programs in MDE and DNR and also through local critical area programs and erosion and sediment control activities. In its interim report, the commission recommended a unified approach to shoreline management. Specifically, the commission recommended that the State resolve management conflicts presented by the current statute and regulatory practice of permitting shore protection alternatives based on the order of preference.

The commission further recommended that the State establish a rebuttable presumption that every site is capable of supporting a soft shoreline stabilization technique and that it is the responsibility of the applicant to prove that a different technique is necessary to protect the property from erosion. According to MDE, even with the preference established in regulation, MDE has had difficulty convincing property owners to use soft shoreline techniques.
DNR’s Shore Erosion Control Program provides technical assistance relating to shore erosion control activities. Examples of technical assistance include ● evaluating sites, assessing problems, and recommending solutions; ● determining alternative methods of protection and weighing their trade offs; ● identifying cost, maintenance, and regulatory requirements; and ● providing general contracting and project management services.

According to DNR, nonstructural shore erosion control projects typically cost about 20% more than structural shore erosion control projects. However, a number of programs provide financial assistance for nonstructural shoreline stabilization activities, including DNR’s Shore Erosion Control Program, MDE’s Small Creeks and Estuaries Program, and MDE’s Linked Deposit Program. Financial assistance is also offered through the Chesapeake Bay Trust and various federal programs and nonprofit organizations.

Local Expenditures: Shore erosion control projects conducted by local governments are regulated by MDE, meaning the bill could impact local expenditures for those projects. Because the extent to which this bill alone will affect the type of shore erosion control projects undertaken is unknown, any such impact cannot be reliably estimated. Although a very limited survey conducted by MDE indicates that in some cases, nonstructural projects could end up costing less than structural projects, DNR advises that in general, construction costs for nonstructural projects are about 20% higher than construction costs for structural projects.

MDE advises that in 2006, local projects accounted for only 1.3% of regulated projects.

Additional Information

Prior Introductions: None.

Cross File: None.

Information Source(s): Maryland Department of the Environment, Department of Natural Resources, Kent County, Montgomery County, Prince George’s County, Washington County, Maryland-National Capital Park and Planning Commission, Department of Legislative Services