

House Bill 512 Coast Smart Siting and Design Criteria – Private Construction or Reconstruction

Environment and Transportation Committee
February 3, 2021

Position: Favorable

Chairman Barve and Members of the Committee,

Maryland is the third most prone area in the Country to sea level rise, behind only Florida and Louisiana. Sea level rise, severe storms, flood events, and the damage that they bring are laying bare how necessary it is for us to have more responsible and more resilient planning of future developments. Our state has seen a total of 394 floods between 2005-2014, and about 81,000 people are at risk of coastal flooding, a number projected to rise by an additional 38,000 people by 2050¹. Many of Maryland's coastal communities are socially vulnerable and disproportionately bear the tremendous costs in property damage and disruption of life caused by sea level rise and climate change. **HB512 strengthens Maryland's resilience to the impacts of climate change by expanding the existing Coast Smart Siting and Design Criteria requirements to certain private construction projects.**

Specifically, HB512 will require any private construction or reconstruction that:

- Costs greater than \$100,000,
- Disturbs 1 acre of land or more, and
- Are located in an area designated as a Special Flood Hazard Area by the Federal Emergency Management Agency (FEMA),
- Are located in or within 3 vertical feet of the 100-year floodplain, or
- Are located in an area that as of 2019, is subject to nuisance flooding

to be constructed in compliance with Maryland's Coast Smart siting and design criteria *in order to protect against the impacts of sea level rise inundation and coastal storm surge*. This legislation will not impact any private construction or reconstruction projects costing less than \$100,000. Enforcement of this bill will be similar to other permit structures where the State will delegate the permitting authority to local governments.

HB512 requires developers to consider sea level rise and coastal flooding in the planning and development of construction projects. 23,000 properties in Maryland are at risk from tidal flooding and according to experts, sea level rise in Maryland is speeding up. Since 1950, water levels have increased 10 inches, whereas predictions out to year 2050 estimate an additional 1.6 feet of rise. This bill will protect developments in vulnerable areas by ensuring that sea level rise and coastal flooding impacts were factored into the development of a structure.

¹ States at Risk: Maryland. <https://statesatrisk.org/maryland/coastal-flooding>

HB512 encourages responsible development in areas sensitive to sea level rise. According to the National Institute of Building Science, every \$1 spent on mitigation efforts saves \$6 in future disaster costs. Investing in proper design and siting criteria upfront is a smart approach to reducing future risks while also protecting local governments from the liability of inadequately built structures impacted by sea level rise. This bill will save tax-payers and the state money in damage relief costs for damage associated with severe storms and rising sea levels.

HB512 builds upon and complements existing laws. In 2014 the Maryland legislature passed a law to establish the Coast Smart Council for the purpose of developing specific siting and design criteria to address impacts associated with sea level rise and coastal flooding on future projects. In 2018 the legislature passed another law to expand the scope of the Coast Smart Council to apply the criteria to any state and local project for which at least 50% of the project costs are funded with state funds. In 2019, the legislature passed a third law requiring counties impacted by nuisance flooding to develop a nuisance flooding plan. **HB512 builds on this pathway towards resilience planning by requiring certain development within an area subject to sea level rise or tidal flooding to incorporate the Coast Smart Siting and Design criteria.**

Measures like these depicted in HB512 are critical to minimize impacts and optimize resilience of structures to future sea level rise and coastal flooding. *Development in these sensitive areas need to be done responsibly, need to be sustainable, and need to consider the impacts of sea level rise.* Incorporating Coast Smart Design and Criteria to private development will better protect homeowners, community infrastructure, vulnerable citizens, and waterways.

This issue impacts all of Maryland, which has 3,100 miles of tidal shoreline from the Chesapeake Bay and its tributaries. The projected range of expected sea level rise within the state between 2000 and 2050 is up to 1.6 feet or higher. A 2019 report from the Eastern Shore Land Conservancy found sea level rise on the **Eastern Shore** is double the global average of a half foot in the past century². **Annapolis** experienced nuisance flooding a few days a year in the 1950s but now experiences 40 or more days per year. **Solomons, Maryland** is expected to see over a 2.5ft rise in sea level by 2100 compared to levels in 2000. Not only are our waters expected to rise, but the frequency of tropical and severe storm events are also likely to increase, resulting in higher storm surges, more frequent flooding and more potential damage to built structures. Projections estimate that a Category 2 storm following the same path as Hurricane Isabel in 2100 would result in water levels at 10.6 feet above mean sea level, compared to the measured 7.3 feet during Hurricane Isabel in 2003 in **Baltimore City**.

The latest Sea Level Rise Projections for Maryland study, completed by the University of Maryland Center for Environmental Science, notes that “**these probabilistic sea-level rise projections can and should be used in planning and regulation, infrastructure siting and**

² James Bass; Brandy Espinola and Kristel Sheesley; Jessica Grannis; and Michael Scott (2018). Mainstreaming Sea Level Rise Preparedness in Local Planning and Policy on Maryland's Eastern Shore. A report prepared for the Eastern Shore Climate Adaptation Partnership by Eastern Shore Land Conservancy. https://arch.umd.edu/sites/default/files/docs/regional-sea-level-rise-study-2019_0.pdf

design, estimation of changes in tidal range and storm surge, developing inundation mapping tools, and adaptation strategies for high-tide flooding and saltwater intrusion.³

For these reasons, the undersigned organizations urge the Committee to adopt a **FAVORABLE** report on **HB512**. Thank you for your leadership on this important matter.

Sincerely,

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Arundel Rivers Federation

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³ Boesch, D.F., W.C. Boicourt, R.I. Cullather, T. Ezer, G.E. Galloway, Jr., Z.P. Johnson, K.H. Kilbourne, M.L. Kirwan, R.E. Kopp, S. Land, M. Li, W. Nardin, C.K. Sommerfield, W.V. Sweet. 2018. Sea-level Rise: Projections for Maryland 2018, 27 pp. University of Maryland Center for Environmental Science, Cambridge, MD.
https://www.umces.edu/sites/default/files/Sea-Level%20Rise%20Projections%20for%20Maryland%202018_1.pdf