



SB306 Chesapeake and Atlantic Coastal Bays Critical Area Protection Program - Climate, Equity, and Administrative Provisions

Education, Energy and Environment Committee:

Chair: Senator Brian Feldman; Vice-Chair: Senator Cheryl Kagan

Testimony from:

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Chair Feldman and members of the Education, Energy, and Environment Committee thank you for allowing me to provide this testimony on background and in support of SB306 on behalf of the University of Maryland Center for Environmental Science (UMCES).

Since its founding in 1925, UMCES has been leading the way toward better management of Maryland's natural resources and the protection and restoration of the Chesapeake Bay. It's often referred to as "the university of the environment for the state of Maryland."

With more than 3,000 miles of shoreline and 72% of the state's population living and working along the coast, Maryland's coastal communities face a particular set of risks from the impacts of a changing climate. Climate change is causing increasingly frequent and severe storms, hotter summers, warmer winters, rising sea levels, and changes in precipitation patterns. Critical areas, particularly shorelines, can provide buffering against storm surges, and green infrastructure can slow stormwater runoff, reducing the impact heavy rains have on communities.

The goal of SB306 is for the Critical Area Commission to take climate change and resiliency as well environmental justice and equity into consideration when making decisions, among other administrative changes. My testimony largely focuses on the importance of considering climate change and resiliency in its decision-making process.

Maryland's coastline is literally on the front-line of the impacts from climate change such as sea level rise, storm surge, and coastal and precipitation flooding. UMCES' [Sea-Level Rise Projections \(2023\)](#) found that sea level along Maryland's shores will very likely rise a foot between 2000 and 2050—as much as it did over the whole of the last century—and could even rise as much as a foot and a half. Whether the sea level rise is that much or greater will largely be determined by how much and how soon global society is able to reduce its greenhouse gas emissions.

For the last decade, the State of Maryland has invested in and made progress toward adaptation and resiliency. The [Maryland Coastal Adaptation Report Card](#) was developed through a collaboration between the Adaptation and Resiliency Work Group (ARWG) of the Maryland Commission on Climate Change (MCCC) and University of Maryland Center for Environmental Science. A suite of adaptation and resiliency indicators for this report were established using thresholds based on stakeholder expertise. The Coastal Adaptation Report Card gives a snapshot of current status in Maryland's coastal zone, and establishes a framework for measuring future progress. The report card features 15 indicators - such as flood mapping, plans for nuisance flooding and green infrastructure, as well shoreline erosion.

The tools to develop predictions that are being applied to understanding the rate and impact of climate change are getting more accurate and can be used on smaller scales. For example, storm surges caused by extreme weather can now accurately identify vulnerable areas on a street-by-street scale by combining field tools associated with weather and water gauges and powerful computer models.

Finally, it is important to recognize that the impacts of climate change will disproportionately impact those who can least afford the changes. That is a key reason why it is crucial for the Critical Area Commission to consider environmental justice and equity into its decision making process.

UMCES supports SB306 and seeks the Committee's favorable report.