

Wednesday February 15, 2023

TO: Brian Feldman, Chair of Senate Education, Energy and the Environment Committee; and Committee Members
FROM: Michelle Dietz, The Nature Conservancy, Director of Government Relations; and Caitlin Kerr, The Nature Conservancy, Conservation & Climate Policy Analyst
POSITION: Support SB 417 Environment - State Wetlands - Shoreline Restoration

The Nature Conservancy (TNC) supports SB 417 offered by Senator Elfreth. TNC is a global conservation organization working to conserve the lands and waters on which all life depends. In Maryland, our work focuses on delivering science-based, on-the-ground solutions that secure clean water and healthy living environments for our communities, reducing greenhouse gas emissions and increasing resilience in the face of a changing climate. We are dedicated to a future where people and nature thrive together.

Sea levels in the Chesapeake Bay have risen about a foot in the last century—an alarming rate at more than twice the global average. With more than 7,000 miles of Atlantic and Chesapeake Bay shoreline, Maryland’s communities are already dealing with sea level rise. In addition to sea level rise, the most significant threats we are currently experiencing are due to erosion, changes in precipitation – including increased flash flood and storm surge frequency, increased temperatures, and saltwater intrusion. By 2050, models project that we could see an average of two feet of sea-level rise; twice the rise rate seen in the last century. But in the face of these impacts, nature can help. Along Maryland’s coasts, tidal wetlands act as the first line of defense against storms and rising seas. Wetlands are known to protect biodiversity, and their value in serving as a natural defense against coastal storms is increasingly being recognized.

SB 417 seeks to advance nature’s important role in building resiliency along Maryland’s coastlines. By ensuring that resilient coastlines are built in Maryland’s most at-risk areas, SB 417 will protect coastal infrastructure through utilizing nature-based shoreline restoration methods to improve resilience. Also known as living shorelines, natural features such as marsh grasses, submerged aquatic vegetation and native oysters will be prioritized to protect personal property from erosion while increasing coastal resiliency, maintaining land and water habitats’ connectivity, and improving coastal habitats’ overall quality.

At TNC, we have seen how nature can protect shorelines across the Chesapeake Bay. In a 2018 study with the Maryland Department of Natural Resources and George Mason University, TNC looked to quantify how natural coastal features can reduce the impact of waves resulting from storm surges. The study collected data from tidal sensors on a Deal Island marsh; we found that the first few feet of tidal marsh reduced wave height by up to 90 percent. This striking statistic shows how vital nature is in providing protection to coastlines. By reducing wave strength, marshes in the Chesapeake Bay can protect coastlines from erosion and more frequent flooding. Investing in living shorelines such as marshes, seagrasses, and oyster reefs can allow Maryland’s coastal communities and habitats to better adapt to climate change impacts and build resilience.

As climate change exacerbates storms, flooding and erosion, hundreds of millions of those peoples’ lives and livelihoods will be at an even greater risk. Across Maryland, coastal flooding currently threatens 81,000 people and, with predicted rise, an additional 38,000 will be in jeopardy by 2050. Sea level rise puts people, property, infrastructure, and critical natural resources at risk with staggering costs. Nature makes communities more resilient to climate change; healthy living shorelines with marshes, sand dunes, and oyster reefs absorb storm surges and blunt winds, which greatly reduce risk to people and infrastructure. By prioritizing nature, we can build a more resilient and adaptable Maryland coastline.

The Nature Conservancy commends Senator Elfreth for introducing this bill, which will strengthen our coastlines by prioritizing nature and build a more resilient Maryland.

Therefore, we urge a favorable report on SB 417.