RESILIENT COASTAL COMMUNITIES

Maryland Sea Grant receives financial support from Congress through the National Sea Grant College Program within the National Oceanic and Atmospheric Administration, as well as, support from the University System of Maryland and other external grants and contracts.

Meeting Maryland’s Coastal Communities’ Resilience Needs

Maryland Sea Grant (MDSG) and our coastal partners want to help coastal communities become more resilient to weather and climate hazards by supporting their efforts to improve risk assessment and adaptation planning, innovate in resilience design, implement adaptation projects, and address long-standing economic and social inequities. We work to advance scientific research needs by identifying research and social science gaps; collaborating with communities to tackle climate change and COVID-19 challenges; and assisting socially vulnerable populations who are disproportionately affected by weather and climate effects.

Our Work

Working with key partners in academia, federal and state government, non-governmental organizations, and industry, MDSG has:

- Hosted the Chesapeake Bay Sentinel Site Cooperative (CBSSC), an interagency group of ecosystem-based study sites across the Chesapeake Bay that work together to measure the impacts of sea level rise and inform management decisions on a regional scale. The CBSSC recently produced the award-winning short film “Turning the Tide” to showcase the importance of marsh monitoring has on community resilience.
- Worked with climate scientists and MDSG Extension agents, to collaborate with Morgan State University architecture students and faculty to support a multidisciplinary studio class for graduate students, as part of a design competition hosted by the Coastal and Estuarine Research Federation.
- Delivered a three-part webinar series for Maryland coastal residents on coastal flooding and climate change. The MDSG Extension climate specialist covered topics including local climate change trends, causes and consequences of coastal flooding, and strategies for reducing flood impacts.
- Collaborated with state agencies to place three fellows in one-year positions at Maryland Department of the Environment, Maryland Environmental Services, and University of System of Maryland to work on climate change issues.
Funded Research in Resilience

MDSG funds applied research that has the potential to impact the policies and management of the Chesapeake and Maryland Coastal Bays and our coastal communities. Here is a snapshot of some of our funded resilience projects. For more information on these and other projects, please visit our website.

**Assessing the Impact of Freshwater Salinization Syndrome on Mobilization of Nutrients and Metals in Urban Streams and Rivers**
Sujay Kaushal, University of Maryland, College Park (UMCP)

**Ecological and Environmental Implications of Sea Level Rise on Shallow Methane-gas in the Patuxent River Estuary**
Laura Lapham, University of Maryland Center for Environmental Science, Chesapeake Biological Laboratory

**Assessing the Ecohydrological Performance of Stormwater Green Infrastructure Treatment Trains at the Subwatershed Scale in Montgomery County, MD**
Mitchell Pavao-Zuckerman & Matthew Wilfong (fellow), UMCP

**Assessing the Effectiveness of the Anacostia River Tunnel in Reduction of Eutrophication**
Caroline Solomon, Gallaudet University

Maryland Sea Grant is a federal-state partnership program that is part of the University System of Maryland. Our offices are located in College Park, Maryland, and are administered by the University of Maryland Center for Environmental Science. Our Sea Grant Extension faculty are administered by the University of Maryland, College Park and located in offices around the state. The National Sea Grant Program is a network of 34 university-based programs in coastal and Great Lakes states as well as Puerto Rico and Guam.

www.mdsg.umd.edu

Contact Us

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