SEA GRANT PROMOTES

SUSTAINABLE DEVELOPMENT

Sea Grant helps coastal and Great Lakes communities preserve their natural resources and marine economies for future generations.





20,770 jobs created or sustained in 2015

534
communities implemented sustainable development practices / policies

4,033
resource managers used ecosystem-based management tools

National Sea Grant program summary metrics, 2016

Sea Grant assists communities to sustain and build:

- Resilience and adaptations to storm surges and other coastal hazards
- Healthy coastal **ecosystems** by improving water quality
- **Jobs and businesses** in aquaculture and seafood

Sea Grant programs advance progress in these areas by supporting research, education, extension, and outreach. For example, we advise local communities, planners, and leaders how to improve **land use planning** and collaborations with **citizens**.

ASSISTING COMMUNITY PLANNING



After the Solstice flood of 2012 devastated Duluth, Minn., Minnesota Sea Grant helped the city and surrounding communities plan to reduce the damage from future storms. Social scientists teamed up with civil engineers to interview community planners and emergency response personnel. A database of vulnerable infrastructure was created to map roads, bridges, and dams where flood-related failures occurred. Duluth adopted stronger regulations and is pursuing green infrastructure options for managing stormwater.

Photo: USC Sea Gran

Photo: Minnesota Sea Grant

MANAGING STORMWATER TO IMPROVE CHESAPEAKE BAY



Maryland Sea Grant Extension specialists advised local officials and helped train community leaders to carry out projects to reduce stormwater runoff, improving water quality in the Chesapeake Bay. The specialists worked with partners to establish four Watershed Stewards Academies that train volunteers to initiate these projects. More than 300 people have been certified as master watershed stewards. They completed more than 100 stormwater site assessments and helped install over 60,000 square feet of stormwater management practices.

PRESERVING WORKING WATERFRONTS



After Hurricane Rita damaged the waterfront of Delcambre, La., Louisiana Sea Grant assisted the community's recovery. University faculty members and landscape architecture students met with Delcambre residents and developed a redevelopment plan for the waterfront and surrounding area. The plan led to a \$3.4 million federal community development grant and other funding to build a 14-acre waterfront site including a boat launch, seafood market, and public fishing pier.

PREPARING FOR COASTAL FLOODING



University of Southern California Sea Grant helped more than 30 Southern California communities improve local planning to deal with coastal flooding and erosion. Experts helped develop models of sea level rise and coastal storms scaled at the local and regional level. Municipal leaders received training to increase use of the best available science in planning efforts. In a related effort, more than 100 citizen scientists have been recruited to regularly take photos to identify locations and populations vulnerable to sea level rise.

WHAT IS SEA GRANT?

The National Sea Grant College Program works to enhance the practical use and conservation of coastal, marine, and Great Lakes resources in order to create a sustainable economy and environment. Sea Grant is a federal-state-university partnership. Learn more about our work at seagrant.noaa.gov.



NOAA Sea Grant

Read about Sea Grant's work in sustainable development at http://bit.ly/SG-sustainable or at http://seagrant.noaa.gov



