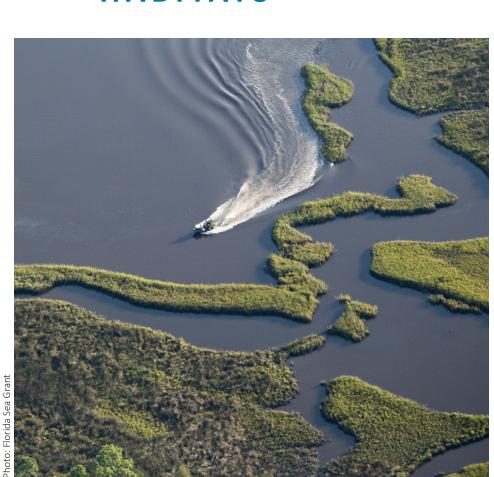
Sea Grant helps residents, natural resource managers and businesses

# PROTECT AND RESTORE

# HEALTHY COASTAL HABITATS



Sea Grant

Sea Grant

Sea Grant

Sea Grant

20,000 acres of degraded coastal

acres of degraded coastal habitats are restored by Sea Grant each year.

80%

of pollution to the marine environment comes from land.

500

ecosystem-based management tools, technologies, and information services are developed by Sea Grant annually.

95,471 miles of U.S. shoreline according

miles of U.S. shoreline according to NOAA. Maintaining healthy coastal habitats is no small task.

Coastal waters around the world account for less than 10 percent of the ocean's surface, yet contain about 50 percent of its biological productivity. Twenty percent of the world's and 95 percent of the nation's fresh water is supplied by the Great Lakes. Our nation's coastal habitats - watersheds estuaries, and shorelines - are among the most productive in the world. They provide the nation with healthy fisheries, spectacular

tourism destinations, sources for alternative energy, and clean waters that sustain people, plant and animal communities. Increasingly, homeowners, residents, businesses, communities and government must find ways that balance demand for coastal resources while protecting their ecological integrity. For 50 years, the National Sea Grant College Program has used a combination of research, education and technology transfer to solve

the problems resulting from human interaction with the nation's coastal environments. Sea Grant works across institutional barriers, helping coastal communities and businesses engage with federal, state and local entities. Collectively, the network of Sea Grant programs has helped position the U.S. as the world leader in the wise use of its coastal resources, ensuring the nation's viability along the water's edge.

## **MICROPLASTICS**



With funding from the NOAA Marine **Debris Division, Florida Sea Grant is** engaging citizens to raise awareness about microplastics in Florida waters. Sea Grant has trained over 125 volunteer leaders to implement awareness programs across the state. After completing the volunteer-led awareness program, 85 percent of participants said they now check the labels on their personal care products, 67 percent said they changed the types of personal care items, and more than 75 percent said they were trying to avoid single-use plastic items. Ninety-nine percent said they shared information about microplastics with others.

## DEEPWATER HORIZON



**Connecticut Sea Grant contributed to** the science that led the \$18.7 billion settlement over the Deepwater Horizon oil spill. The settlement funds will contribute to restoration of Gulf of Mexico ecosystems. Sea Grant participated in the NOAA-led health assessment of bottlenose dolphins in the northern Gulf of Mexico, including locations with varying exposure to oil and a reference population. Sea Grant was contracted by NOAA to help integrate findings across labs to assess injury to marine mammals through the Natural **Resource Damage Assessment** process, led by NOAA as the steward of natural resources.

## **FISHERIES**



California Sea Grant's actions enabled the successful relocation of thousands of stranded juvenile salmon during the drought of 2015, the worst on record since 1895. Endangered coho salmon in the Russian River have been the focus of extensive recovery efforts under NOAA's Habitat Blueprint Program and the NMFS Species in the Spotlight Campaign. Sea Grant staff and interns provided real-time fish distribution and stream condition data to state agencies and assisted rescue efforts on nine streams. California Sea Grant assisted officials in refining their outreach efforts to landowners on implementing emergency water conservation measures.

#### COMMUNITY



Thirteen acres of the Milwaukee Estuary Area of Concern were restored over an eight year period. The effort included removal of 171,000 yds<sup>3</sup> of sediment, which were contaminated with PCBs and other pollutants. Illinois-Indiana Sea Grant's communication efforts not only answered questions from residents about cleanup impacts but also contributed to community stewardship and a sense of ownership, a necessity for the long-term success of the project.

#### **NOAA Sea Grant**

Read more details on these stories and more by visiting <u>seagrant.noaa.gov</u> and searching under Impacts.





#### **EDUCATION**



Hawaii Sea Grant's Hanauma Bay Education Program celebrated its 25th anniversary in 2015. Since its start, the program has educated over 10 million local, regional and international visitors on ocean literacy, marine resource conservation and stewardship and logged over 160,000 volunteer hours for the effort. The program has greatly contributed to the successful restoration of beaches, coral reefs, and fish habitats.