

Partnership Overview

NATIONAL OCEAN SERVICE



Sea Grant enhances the efforts of the National Ocean Service by providing local coordination to implement national programs and tools.

PROVIDE FORECASTS TO THOSE WHO NEED IT MOST

Fishing along the Oregon coast is a high-risk occupation with job-related mortality rates more than 59 times higher than that of the average U.S. worker. Access to improved ocean condition forecasts could increase fishing success and decrease exposure to dangerous conditions. Researchers with Oregon Sea Grant and Oregon State University in partnership with the Integrated Ocean Observing System conducted 12 in-depth interviews with members of the commercial fishing community, to develop a detailed understanding of how Oregon coast fishermen use ocean information to make commercial and safety decisions. The interviews were analyzed and results used to inform the design of an online platform—Seacast—to provide ocean condition



Accurate forecast information can ease the economic and personal risks of fishing in Oregon waters.

forecasts from Oregon State University researchers in a form most useful to commercial fishermen. Volunteer fishermen are providing feedback on the tool's usefulness.

730

Trainings to improve resilience
(2015 reporting cycle)

570

Communities implemented
sustainable development practices
and polices (2015 reporting)

19,600

Acres of degraded ecosystems
restored
(2015 reporting cycle)

IMPLEMENT COMMUNITY RESILIENCE

Five Sea Grant Programs received nearly one third of NOAA's recently announced \$9 million in community resilience grants. Sea Grant programs in South Carolina, Washington, Hawaii, Virginia, and the Gulf of Mexico region have established partnerships and ongoing efforts in the areas of community resilience. Projects vary by region and all build on expert transfer of scientific information to

community stakeholders, two aspects core to Sea Grant's model of responding to community needs with targeted science, outreach, and communication. In Hawaii, Sea Grant and partners will work with communities in Hawai'i to develop new tools for understanding risk and vulnerability to coastal hazards and climate change and support stakeholder resilience planning, policy development,

and decision-making. In the Gulf of Mexico region the funds will help 10 Gulf of Mexico coastal communities enhance their overall resilience to future hazards through pilot projects using new and updated information and tools. Sea Grant programs in the Gulf will provide regional coordination as well as opportunities for collaboration on resilience efforts and sharing lessons learned.



Sea Grant partners with the NOS Marine Debris program on regional projects to remove derelict fishing gear.



The Office of Response and Restoration partners with Washington Sea Grant to host NOAA Science Camp each summer.



Sea Grant supports Regional Coordinators for the five Sentinel Site Cooperatives. Surveying at a study site in the Chesapeake Bay Cooperative is shown.

COLLABORATE TO INFORM COASTAL PLANNERS

Sea Grant extension agent and coastal management specialist Nicole Faghin focuses on alternative shoreline stabilization, coastal resiliency, and working waterfronts issues in Washington. She is a planner and lawyer by training and gives expert advice to her stakeholders. She matches coastal communities and professionals with the tools they need to support healthy marine

ecosystems while sustaining their local economy. Some of the needs of these groups include training on specific skills. Nicole has a close working relationship with Cathy Angel, Coastal Training Program (CTP) Coordinator at Padilla Bay National Estuarine Research Reserve. Nicole and Cathy have developed many training programs together and often co-teach classes. Nicole serves on the

CTP advisory board as a voice for the stakeholders she supports. Nicole values the complementary niches she and Cathy occupy; it's a collaborative approach. This strong partnership between Sea Grant extension agents and Coastal Training Program coordinators is common around the country.



"I would be less effective [at my job] if there was no local Coastal Training Program. Organizing classes and workshops for professionals is no small feat. We work hand in hand on many programs annually."

-Nicole Faghin, Coastal Management Specialist, Washington Sea Grant

CONNECT REMOTE COMMUNITIES TO LIVE-SAVING DATA

The Republic of the Marshall Islands is composed of numerous low lying atolls that are vulnerable to coastal storms, high wave events, and sea level rise. Precise data on elevations and reliable data on historical events is limited. There is also a lack in capacity for producing effective flood maps and to link early warning to inundation extent, both for immediate disaster management planning and for managing seasonal outlooks by sector. Hawaii Sea Grant extension agent Karl Fellenius has been serving as the Pacific Islands Ocean Observing System

(PacIOOS) liaison for the Marshall Islands, the primary point of contact for the US National Geodetic Survey in the Pacific, and the secondary point of contact for the NOAA Regional Climate Services in the Pacific region. Based on the agent's suggestion, data from the PacIOOS wave buoy and NOAA's Wavewatch III wave spectra model were integrated into an inundation index forecast for Majuro atoll; the agent also carried out on-the-ground validation of the PacIOOS inundation index for four inundation events. The agent

participated in two inundation/coastal erosion dialogues conducted by the NOAA Regional Climate Services in the Marshall Islands and Vanuatu, which resulted in the development of draft dashboard indicators for predicting impacts by sector. The agent also helped facilitate additional training opportunities on geodetics for the local GIS users group, assisted with the completion of a geodetic baseline via the US National Geodetic Survey, and supported the collection of national geospatial data for storage in a central location.



NOAA Sea Grant
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