



# 2018-19 ANNUAL REPORT HIGHLIGHTS

Oregon Sea Grant generated nearly

**\$27.6 MILLION**

in direct and indirect economic benefits

OSG engaged

**159,940 PEOPLE**

in informal educational opportunities

OSG staff and trainees reached

**32,000**

preschool through 12th-grade students

Volunteers at the OSG-run public wing of the Hatfield Marine Science Center and citizen scientists contributed

**10,144 HOURS**

OSG funded **86**

products, technologies, educational materials and models

**28** college students funded by OSG earned degrees

**20** graduates funded by OSG landed jobs related to their degrees within two years of graduating

*(data are from February 2018-January 2019)*



## ONLINE TOOL FORECASTS OCEAN CONDITIONS

Fishermen now have access to a map-based, interactive online ocean forecasting tool called [Seacast](#), thanks in part to Oregon Sea Grant. An OSG-supported student solicited fishermen's feedback on the tool. Based on fishermen's requests, web developers made the site easier to use and added data fields that included bottom temperature and salinity. In 2018, the data and design from [Seacast found a new home on the website](#) of the Northwest Association of Networked Ocean Observing Systems.



## NEW COURSE TRAINS TOUR GUIDES

Oregon Sea Grant co-developed an [online course](#) that helps outdoor recreation guides enhance customers' experiences and their own professional credentials. Guides come away with knowledge about Oregon's coastal towns, rivers and mountains and its timber, dairy and fishing industries. Twenty-five guides had completed the course as of June 2019.



## SALT MARSHES STAY AHEAD OF RISING SEA

With funding from OSG, scientists found that [six salt marshes](#) in Oregon have been gaining height at a rate that has outpaced sea level rise. This bodes well for the marshes' ability to survive and store carbon amid a changing climate.



## STUDENTS LEARN TO CONDUCT RESEARCH AT SEA

More than 100 high school and college students and educators learned how to [conduct research at sea](#) thanks to 12 cruises organized by OSG in 2018. They collected plankton, identified organisms in seafloor sediment, tracked whales and detected green sturgeons. The cruises were part of OSG's efforts to increase students' interest in science, technology, engineering and math and prepare them for jobs in these fields.



## STUDENT HELPS BREWERY MAKE ITS WASTEWATER CLEANER

An [OSG-supported intern](#) helped Portland's Widmer Brothers Brewing reduce the processed grain and yeast in its wastewater. As a result, the brewery won an award from the National Pollution Prevention Roundtable. OSG's sustainability internships aim to help Oregon companies conserve water and energy, keep waste out of landfills and waterways, reduce their carbon footprint and save money.



## SALINITY MONITOR HELPS CRABBERS

OSG-supported researchers installed a [salinity monitoring station](#) in Yaquina Bay. The station provides data to let crabbers know what the salinity is in the bay so they can avoid pumping low-salinity water into their crab holding tanks and prevent potential losses of crabs and income. Fishermen can view the real-time salinity on an online ocean forecasting system that OSG helped create.



## GROUP WORKS TO REDUCE WHALE ENTANGLEMENTS

An [OSG-facilitated group](#) consisting of fishermen, scientists, managers and nonprofits is working to reduce incidents of whales getting tangled up in crabbing gear. The group developed recommendations for fishermen and state regulators to minimize entanglements, and it asked fishermen for feedback on various management options. This collaborative effort resulted in the Oregon Dungeness Crab Commission funding research to better understand where whales are off the Oregon coast and to identify areas and times of low and high entanglement risk.



## TRAININGS HELP AQUARIUM FISH INDUSTRY

OSG helped create workshops to teach U.S. retailers, wholesalers and importers [how to care for fish and other animals in aquariums](#). The workshops covered fish anatomy and physiology, water quality, biosecurity and common approaches to identifying and controlling diseases. More than 250 people attended the workshops.