

Putting Science to Work for Wisconsin's Coastal Communities

BY THE NUMBERS

ALL FIGURES 2019



\$50
million

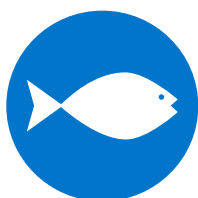
in economic impacts

294

jobs created or sustained

19

new and continuing
research projects



465

fishermen or aquaculture
industry professionals assisted

67

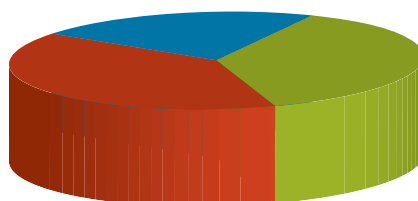
acres of habitat restored

Wisconsin Sea Grant is a locally focused, federal-state partnership supporting research, education and outreach. For **51 years**, it has been fostering the sustainable use of Wisconsin's Great Lakes.

95% of federal funds are invested in trusted, objective, science-based programming

\$1,124,141 in leveraged funds

18:1 return on federal investment



CORE SEA GRANT 40%
LEVERAGED FUNDS 22%
STATE INVESTMENT 38%

From Discovery to Application

Water, Water Everywhere The Great Lakes undergo cyclical changes in water levels. In 2019, they were in a record-high state. That means erosive waves reached higher on the shore where they battered infrastructure and ate away at bluff and dune bases, added to the frequency and severity of flooding, and created operational and safety problems at ports and harbors. Sea Grant is working with homeowners and communities on how best to protect coastal structures. It has also funded research on how to monitor bluff stability. Investigators invented a new device that tracks the mechanics of bluff movement to be able to predict — and perhaps prevent — bluff failures.



Invaders Are Coming or Already Here. Now What?

A recent report to the Wisconsin Legislature documents that the state spends about \$8.4 million annually to prevent or control invasive species, including funds coming from the federal government. The Wisconsin Department of Natural Resources had been working off a nearly 20-year-old plan to guide those prevention and control investments. In 2019, though, Sea Grant led an effort to update the plan to reflect new species and new ways in which species, such as spiny waterfleas, quagga mussels and Eurasian milfoil, are getting into waterways and spreading.

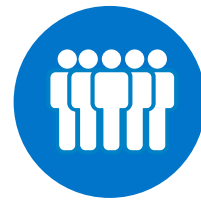
Building America's Salmon-Raising Industry

According to the National Oceanic and Atmospheric Administration, 85% percent of seafood in the U.S. is imported, resulting in a \$14 billion trade deficit. The aquaculture sector holds great promise in closing that deficit, creating domestic jobs and producing healthy and delicious seafood choices such as Atlantic salmon. Wisconsin is at the forefront of this effort thanks to a business known as Superior Fresh, which benefits from Sea Grant advice and assistance. Sea Grant researchers also received a nearly \$1.2 million federal grant to work with this company, and others in four states, to build a more robust Atlantic salmon recirculating aquaculture system industry for the nation that raises fish and salad greens within the same facility.



Understanding PFAS and Protecting Drinking Water

An emerging and challenging class of synthetic chemicals — per- and polyfluoroalkyl, known as PFAS — has been increasingly identified in Wisconsin groundwater, including drinking water sources. Troublingly, there is a lack of understanding about the contaminants' presence, staying power and cycling in the state. Despite the threat PFAS pose to people's health, there was no lab in the state that could test for them prior to Sea Grant stepping up to outfit researchers to become certified in analysis. Additionally, Sea Grant will fund new PFAS research in 2020-22 and will co-host a PFAS science summit, bringing together state and federal agencies in 2020 to ensure coordination of efforts.



41

communities that adopted practices for sustainability and/or hazard preparedness

104

university students supported

507

natural resource managers assisted

17,401

pre-K-12 students and lifelong learners reached



37

Sea Grant-supported students who got jobs in their field after graduation



seagrant.wisc.edu