

TWO GREAT STATES ONE GREAT LAKE

Illinois-Indiana Sea Grant (IISG) is part of a national network of 34 university-based programs that promote better understanding, conservation, and use of coastal resources. We are funded through the National Oceanic and Atmospheric Administration (NOAA), the University of Illinois, and Purdue University, but IISG also works with key organizations, institutions, and agencies in the Great Lakes region to multiply opportunities for success.

Through research, outreach, and education, we bring together scientists, educators, policy makers, community decision makers, residents, and others to work toward a healthy environment and economy in the southern Lake Michigan region.

Understanding the impact of lake levels



Recent record high and low Lake Michigan water levels reveal that high variability is a concern going forward. IISG provides resources for coastal communities to connect with regional experts and consider successful management strategies. We are co-funding lakewide research to assess the impact of water levels, waves, large storms, and human interventions on beaches and communities. And with new funding we will develop a visualization tool to help communities make informed decisions about protecting their shorelines.

Enabling safer recreation with buoy data



Lake Michigan has the highest rate of drownings in the Great Lakes due to dangerous currents and swift waves. Our water safety work includes reaching boaters and swimmers with information and resources and collaborating with water safety programs around the lake. Add to that, our three buoys provide realtime information on water conditions, enabling the National Weather Service to make more accurate forecasts—the first one was launched in 2015 near Michigan City, Indiana.

By the Numbers



\$519.5 million in economic benefits from an \$87 million

federal investment in Sea Grant in 2020



More than \$2.5 million supporting research



at 18 institutions

in Illinois and Indiana since 2018



1,027 teachers trained in Great Lakes Literacy



helping to reach
58,325
K-12 students in 2017-22



990,000
gallons of rainwater
diverted to rain gardens
in 2022



Preventing floods with rain gardens

Installing green infrastructure, including rain gardens, can help reduce flooding and protect water quality—rainwater soaks into the ground and pollutants are filtered by plant roots. Through IISG and Purdue University's Rainscaping Education Program workshops, master gardeners and other community members learn how to install rain gardens and about other green infrastructure techniques to improve community resilience. This program has now been adopted by University of Illinois Extension.



Preventing pollution in the Great Lakes

We lead the way in tackling emerging contaminants and pollution prevention in the Great Lakes region. When it comes to unwanted medicines, IISG engages directly with communities to help them establish collection programs to prevent these chemicals from ending up in local waterways or landfills. And with marine debris funding from NOAA, we are working with key partners to develop new public messaging to help reduce plastic waste throughout the Great Lakes.



Expanding aquaculture opportunities

Midwest aquaculture producers compete for customers with suppliers of low-cost imported seafood. IISG is working with other Great Lakes Sea Grant programs to support environmentally responsible, competitive, and sustainable aquaculture. Locally, through food safety and processing training, we helped fish farmers expand their markets to restaurants and groceries. Our guidance helps producers improve fish health and survival. And we support handson aquaculture experiences to improve STEM education at several underserved high schools.



