

# Creating impacts in coastal communities



**11,000  
PEOPLE**

*Each year, over 11,000 people participate in Illinois-Indiana Sea Grant (IISG) extension activities and use the information they gain to make better decisions as consumers and Great Lakes citizens.*

## HOW DOES SEA GRANT IMPACT ILLINOIS & INDIANA?



**\$7.5+ MILLION  
RESEARCH FUNDING**

### **We fund and engage in research to help inform decisions on managing Lake Michigan and Great Lakes ecosystems**

- IISG-funded research revealed that microfibers (likely from clothing) are the most prevalent microplastic in southern Lake Michigan waters.
- A three-year Lake Erie study found that dead zones can spring up and disappear quickly—this new information has led to changes in annual fish surveys.
- In light of changes due to invasive species, IISG, along with Wisconsin Sea Grant, funded a series of projects to define the nearshore food web in Lake Michigan.



**\$15 MILLION  
FISH INDUSTRY**

### **We provide marketing training and support to fish farmers to help them increase efficiency and compete with lower-cost imports**

- With 11 facilities around the state, Indiana has become a leader in inland shrimp farming.
- Indiana produces 1.5 million pounds of fish per year from about 40 farmers at an estimated value of \$15 million, a five-fold increase between 2005 and 2015.
- Every year, 30 aquaculture producers and commercial fishers in Illinois and Indiana use IISG resources to make their businesses more economically and environmentally sustainable.



**143,000  
WEB VISITS**

### **We deploy and manage two buoys off the coasts of Indiana and Illinois to provide real-time data about the waters of southern Lake Michigan**

- The National Weather Service uses our buoy data to forecast wave and weather conditions, observe current conditions and inform changes in forecasts during irregular conditions.
- Boaters, anglers, paddlers and surfers use the data to assess water conditions and make decisions about personal safety. Our website ([iseagrant.org](http://iseagrant.org)) buoy pages garnered over 143,000 visits in 2017.



**300 MILLION  
GALLONS**

### **We work with partners to develop and update policies to protect water resources**

- IISG helped inform the Illinois Department of Natural Resources on water management, which led to amended Lake Michigan allocation rules and a reduction of 300 million gallons of domestic water use per day in the Chicago area.
- With Illinois being a key contributor to the Gulf of Mexico dead zone, IISG led the effort to develop and implement a strategy to reduce nutrient pollution from point and non-point sources in priority watersheds. This strategy has led to an increase in the adoption of best management practices.

## **We develop products, tools and strategies to provide access to Great Lakes and other water quality research findings**



**141  
DATA SETS**

- A new online tool, Great Lakes Monitoring, brings to light decades of agency and university water quality monitoring data—what used to take months to retrieve, now takes minutes.
- New methods provide quick understanding of terabytes of water monitoring data sets and more consistent and accurate sampling.
- Communities have access to water quality data that helps them understand the health of their resources and inform their land-use planning decisions.

## **We reach out to communities with training and support that encourages action to wisely use resources and protect the Great Lakes and other waterways**



**210,000  
POUNDS**

- Over 1 billion gallons of water are saved each year in northeastern Illinois through the adoption of natural lawn care on over 25,000 lawns.
- With Sea Grant support for community collection programs over the last 10 years, 210,000 pounds of medicine did not end up in our waterways and were disposed of properly.
- Natural lawn care adoption has reduced the amount of pesticides used in Indiana and Illinois by 24,900 pounds per year.
- Sea Grant works with an average of 20 communities per year to help plan for optimal growth—balancing economic, societal, and environmental needs.
- Seven Chicago-area communities have adopted ordinances and have taken steps to protect community water supplies.

## **We lead efforts to protect the Great Lakes and other waterways from the spread of aquatic invasive species**



**11,000  
ACRES**

- IISG helped support the development of risk assessment tools to predict which species may be invasive and help target efforts to prevent introductions.
- Through IISG-led meetings with stakeholders and researchers, both Indiana and Illinois have banned 28 invasive plants, which will slow the spread of these species in the Great Lakes and local waterways.
- Sea Grant specialists help protect 11,000 acres of water and shoreline from the economic and societal impacts of invasive species.

## **We improve Great Lakes literacy, encourage stewardship and train tomorrow's workforce**



**38,650  
STUDENTS**

- Every year, more than 300 educators learn Great Lakes science through IISG workshops and conferences, and they, in turn, introduce this knowledge to 38,650 students.
- Working with these educators, students are inspired to engage in 6-8 stewardship projects each year as a result of becoming more knowledgeable about Great Lakes and other water issues.
- In 2016, Sea Grant helped 56 college students pursue water-related careers by providing internships and fellowships and supporting their research.

## **We work closely with communities in EPA Areas of Concern as their waterways are cleaned up through the Great Lakes Legacy Act**



**\$600,000  
IMPROVEMENT**

- In northwest Indiana along the Grand Calumet River, 2 million cubic yards of sediment have been removed. IISG's efforts to educate stakeholders about the improving health of the river have led to \$600,000 of the larger economic improvement.

**I ILLINOIS**



**PURDUE  
UNIVERSITY**

[iiseagrant.org](http://iiseagrant.org)