

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, the University of Illinois, and Purdue University, but IISG also works with key organizations, institutions, and agencies in the 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.

Addressing the Threat of Emerging Contaminants



We lead the way in tackling contaminants of emerging concern and pollution prevention in the Great Lakes region. IISG-funded research found microplastics in every major river flowing into the lake and in the fish as well. Other projects have assessed potential impacts of microplastics on aquatic organisms. When it comes to unwanted medicines, we engage directly with communities to help them establish collection programs to prevent these chemicals from ending up in local waterways or landfills.

Planning for Chicago Water Resources



Along with the Chicago Metropolitan Agency for Planning (CMAP), IISG helped develop and integrate water, wastewater, and stormwater management guidance into the 2018 update to the 30-year northeastern Illinois comprehensive plan. The plan influences how the seven

counties and 284 communities in the Chicago region grow—guiding funding, regulations, and planning options. Water resource strategies benefit over 8 million residents by ensuring planning for abundant and high-quality water resources is put into action.

By the Numbers



63,070

**K-12 students reached
in 2016-18**



225,000

**pounds of medicine
collected since 2008**



**300 million
gallons of water
saved daily in
Chicago**



320,000
gallons of rainwater
diverted to rain gardens
in 2018



2.5 million
buoy data points
since 2012



88,000
acres of coastal habitat
protected, enhanced,
restored in 2016-18



9,200
workshop participants
in 2016-18

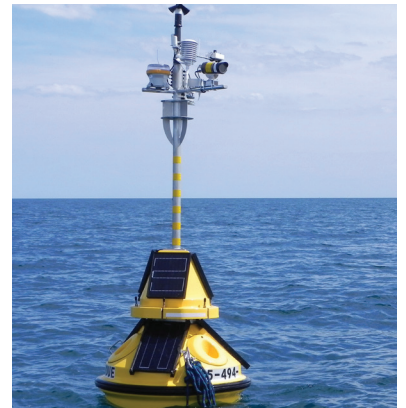
Reducing Flooding through Green Infrastructure

Green infrastructure, in the form of rain gardens, green roofs, and permeable pavement, offers an efficient and ecological way to reduce runoff and flooding after large storm events. IISG researchers mapped soil types in a Chicago suburb to help with its green infrastructure placement. The results of this work will comprise a toolkit for other communities. IISG has also developed guidance and workshops to help Illinois and Indiana communities install and maintain rain gardens.



Making the Lake Safer with Buoy Data

IISG maintains two real-time monitoring buoys in the nearshore waters of southern Lake Michigan—near Michigan City, Indiana since 2011, and near Wilmette, Illinois since 2015. Starting in 2018, we also helped deploy, provide support, and house data for for two more buoys in Waukegan and Winthrop Harbors in Illinois. Boaters and anglers have come to depend on buoy data to assess lake conditions, as have yacht clubs, sailing schools, and the National Weather Service.



Improving Aquaculture Efficiency

Illinois and Indiana aquaculture producers compete for customers with suppliers of imported seafood, which comes at a much cheaper price. Local producers need the most up-to-date knowledge and technology to help ensure the profitability of aquaculture businesses. IISG visited aquaculture and aquaponics operations of all sizes in Illinois and Indiana. Through IISG guidance, several farmers have improved their processes, identified production bottlenecks, changed fish feed formulations, and improved capacity.

