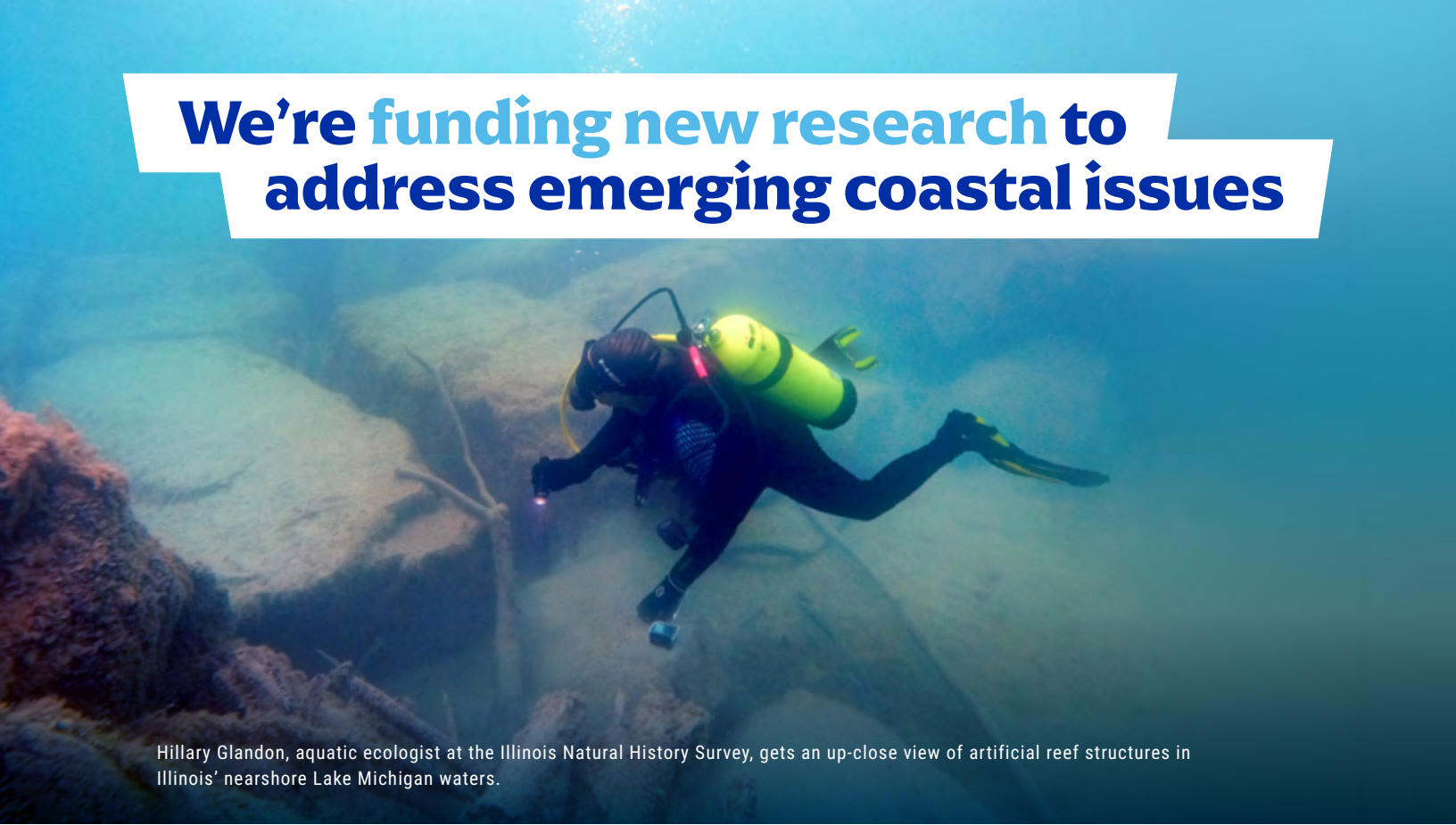


We're funding new research to address emerging coastal issues



Hillary Glandon, aquatic ecologist at the Illinois Natural History Survey, gets an up-close view of artificial reef structures in Illinois' nearshore Lake Michigan waters.

ISG IS FUNDING FIVE NEW RESEARCH PROJECTS in 2024–25 that will inform decision-making for some of the region's pressing coastal issues, including the vulnerable shorelines, the prevalence of contaminants, and water supply planning.

For each of these two-year projects, the research team will share data and results with broad audiences, whether through developing web tools, meeting with and informing key organizations or agencies, or engaging with the public.

Jason Rohr, a biologist at the University of Notre Dame, is using public datasets to better inform and estimate the environmental effects of contaminants in Lake Michigan tributaries. These water bodies are exposed to high levels of pollution from industry, agriculture, stormwater, and air pollution, which then flow into the lake. The researchers will create a web-based tool to help in addressing pollution-related hazards in the southern Lake Michigan region.

Another Notre Dame biologist, Gary Lamberti and his team will quantify PFAS distribution in the lake's tributaries in northwest Indiana to assess the primary routes of PFAS exposure to sportfish and possible connections to local anglers. Daniele De Almeida Miranda, a research professor, is leading this work as the team documents the main routes by which PFAS is transported into streams connected to Lake Michigan.

David Lampert, an environmental engineer at the Illinois Institute of Technology, is testing known contaminated waterways in the Chicago and northwest Indiana region to better understand the bioaccumulation of PFAS from sediments and groundwater into benthic organisms. This project will develop an improved understanding of PFAS transport and the risks to these organisms and coastal communities.

Scientists at the University of Illinois' Prairie Research Institute are focused on coastal resiliency, specifically, the impacts of two artificial reef complexes installed in Lake Michigan's shallow nearshore to stabilize northern Illinois shorelines. Hillary Glandon, an aquatic ecologist at the Illinois Natural History Survey, and C. Robin Mattheus, a coastal geologist at the Illinois State Geological Survey, will measure species diversity and abundance and assess lake bottom and beach changes resulting from water-level variability and storms, which may be influenced by the reef structures.

Researchers at the Illinois State Water Survey (ISWS) and the Chicago Metropolitan Agency for Planning are helping address growing concerns about water sustainability in the Chicago region. Vlad Iordache, an ISWS hydrogeologist, will lead this effort to produce interactive groundwater models and decision support systems to help the south suburbs of Chicago understand water supply risks and plan for the future. 📍