



Research, education, outreach and stewardship along Lake Superior's coast

The Lake Superior National Estuarine Research Reserve is a member of the National Estuarine Reserve System, a network of 29 reserves across the United States designated for long-term research and education supporting innovative coastal science and management. The Reserve spans approximately 16,700 acres encompassing portions of the St. Louis River Estuary and adjacent public lands in Douglas County, Wisconsin. The University of Wisconsin–Madison Division of Extension leads the program. The research we and our partners conduct is vital to the understanding of freshwater resources and the health of the Great Lakes, which hold more than 20 percent of the Earth's surface freshwater.



In 2019, the Reserve:

-  Engaged 506 coastal decision makers in trainings
-  Reached 1,522 students through the Rivers2Lake education program
-  Provided 938 hours of professional development for teachers
-  Monitored estuary health with 3.5 million water quality data points since 2012

LAUNCHING CAREERS FOR STUDENTS

Graduate and undergraduate students get real experience in science and technology, gaining career skills that last a lifetime.



Risa Askerooth

Western Washington University
Environmental Science,
Terrestrial and Freshwater Ecology

After studying the health of a newly restored bay in the St. Louis River Estuary, Risa was accepted to Oregon State University's Masters of Integrative Biology program.



Victoria Bockenstedt

University of Minnesota Duluth
Environment and Sustainability

With Reserve funding, Victoria worked with partners at the U.S. Fish and Wildlife Service to analyze fish passage in streams from Duluth to the Canadian border, ensuring the sustainability of our freshwater fishery.



Sara Rybak

University of Wisconsin-Superior
Environmental Science and GIS

Sara's research abilities shined at the 2019 St. Louis River Summit when she was a student at the Fond du Lac Tribal and Community College and won our poster session. She joined our education program this fall, expanding her skills to include outreach.



Jenny Sherren

University of Minnesota Duluth
Environmental Science

Jenny led a year-long independent research study looking for a fairly new invasive, bloody red shrimp, in the St. Louis River Estuary using light traps that she built by hand. No new invasives were found, a contribution to understanding the state of the Duluth-Superior Harbor.

"You all have shown me so much...mentorship. I truly feel like I have grown as a scientist and a person because of it."

–Risa Askerooth, NOAA Hollings Scholar



2019 PROGRAM HIGHLIGHTS

Responding to a threat to public health

Forty public health officials, natural resources professionals and water scientists came together to address the potential health effects of algal blooms in Lake Superior in order to build understanding of the emerging issue and confidence around algal bloom response. To bring all the right people together, the Reserve's Coastal Training Program partnered with the Wisconsin Division of Public Health.

Generating action to address high water levels

With Lake Superior water levels washing out roads, marinas and beaches, 86 professionals attended a "Highs and Lows Workshop" in December to identify impacts in their communities. Together, they determined the expertise and funding that will improve their ability to respond in the future. A diverse team of partners, led by the Reserve and the Minnesota Coastal Program, planned this far-reaching event. One participant said, "I wasn't sure what to expect before attending, but it proved an extremely valuable learning and networking resource for my work." Meanwhile, the Reserve is monitoring coastal wetland vegetation and revealing impacts of high water levels on wetlands, wild rice and invasive species.

Dynamic STEM learning in Superior Schools

Curriculum specialists in the Superior School District noticed that students weren't learning much about the Great Lake in their backyard or the scientific research at the University just down the road. Reserve staff partnered with the district to build interactive online lessons about real research projects on the St. Louis River Estuary. Every 5th grade classroom now has access to lessons about Lake Superior algal blooms, coastal flooding and wild rice restoration, building a better sense of place and helping to build a science-literate community.

Launching anglers, hunters, students and researchers at Pokegama Bay

The Reserve partnered with the City of Superior and a diverse group of stakeholders to secure funding for the design of a new launch in the Superior Municipal Forest, a prime hunting location and stop on the newly proposed St. Louis River Estuary National Water Trail. In January 2020, the Reserve submitted a \$128,500 funding proposal that will enable Superior to build out the new design, increasing river access and providing a valuable coastal asset to the city.



LakeSuperiorReserve.org

