



*Inspire our community.*  
*Sustain our Great Lakes.*



# Strategic Plan 2020-22

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**CFRE**  
**Lake Superior State University**  
**650 W Easterday Ave**  
**Sault Ste. Marie, MI 49783**

## GOAL 1. CFRE contributes to LSSU's financial sustainability

- 1.1 Develop a sustainable financial model to support CFRE operations and growth for the next 5 years
- 1.2 Support growth in university enrollment through student recruitment and retention



The CFRE Fish Hatchery is a student-run hatchery that provides valuable student training in fish culture and has created an economically important Atlantic Salmon fishery in the Great Lakes.

- 1.3 Grow grant and contract activity to support CFRE
- 1.4 Increase giving to CFRE
- 1.5 Identify and grow alternative revenue sources
- 1.6 Strengthen collaborations internally and externally to expand opportunities for revenue sources
- 1.7 Maintain facilities so that they are energy efficient, environmentally sustainable, state-of-the-art, and reduce operation costs



Groundbreaking of the Richard and Theresa Barch Center for Freshwater Research and Education (left) and construction progress in fall 2020 (right). The new facility will open in fall 2021 and serve as a resource hub for students, scientists, and the community.



## **GOAL 2. CFRE is a model for real-world, transformational undergraduate education in freshwater science and stewardship.**

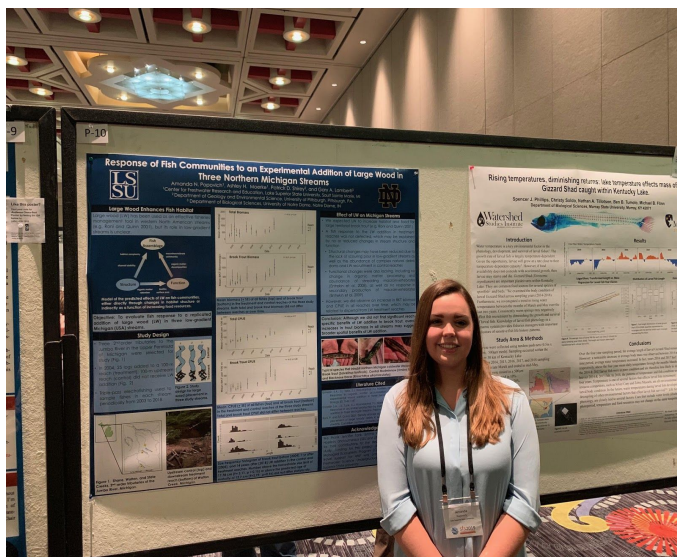


CFRE engages students in hands-on training in the classroom and working side-by-side with scientists on research projects.

- 2.1** Provide innovative hands-on training opportunities for undergraduates in freshwater science
- 2.2** Provide undergraduate research opportunities
- 2.3** Engage students in formal and non-formal teaching roles, including k-12 classrooms and community outreach
- 2.4** Develop and offer innovative freshwater science curricula

## **GOAL 3. CFRE is an internationally recognized research program in freshwater science that engages LSSU personnel, undergraduate students, and external partners, and builds on our unique location within the Great Lakes.**

- 3.1** Increase research activity related to freshwater science with a primary focus on the Great Lakes basin
- 3.2** Increase professional activity, to build collaborations and skill sets that support current and future research initiatives regionally, nationally, and internationally



Students working with CFRE researchers have opportunities to present their research and network at regional and national scientific conferences.

- 3.3 Maintain and expand capacity in freshwater research areas that build on our unique location and facilities, or address emerging issues in freshwater science
- 3.4 Disseminate and promote CFRE research activity and initiatives

**GOAL 4. CFRE creates freshwater stewards through Great Lakes-based education programs for K-12 students and other community members that engages undergraduate students and builds on our unique location.**



CFRE k-12 programs provide opportunities to introduce young students to Great Lakes science and highlight LSSU offerings.

- 4.1 Engage k-12 students in Great Lakes-based programming
- 4.2 Engage k-12 teachers in Great Lakes-based programming
- 4.3 Engage community members in Great Lakes stewardship activities throughout the year





CFRE Freshwater Stewardship Corps creates opportunities to engage LSSU students and staff, along with the community, in activities such as this river clean up, that build stewardship for water resources.

- 4.4 Develop and maintain interactive and current displays in the Discovery Center that highlight Great Lakes issues/topics in our region and engage the public of all ages
- 4.5 Engage undergraduates in k-12 and community engagement programs

## GOAL 5. CFRE is a resource and information hub on Great Lakes science, education, and community engagement for campus and the upper Great Lakes region.



CFRE's MiWaterNet is a regional network of affordable water sensors that provide real-time data on water quality and hydrology across wadeable streams throughout northern Michigan. MiWaterNet works with high school students throughout the Eastern Upper Peninsula to create citizen scientists.

- 5.1** Maintain a suite of equipment and facilities and make available to support Great Lakes science and education
- 5.2** Provide educational information and services for k-12 and the community on-site and off-site
- 5.3** Disseminate information on CFRE resources to k-12 and community members
- 5.4** Provide regional expertise on freshwater science issues

## **GOAL 6. CFRE's leadership maximizes operational efficiency and promotes collaboration, innovation, and diversity in research, education, and community engagement.**

- 6.1** Develop a culture that values excellence, acknowledges accomplishments, and supports job satisfaction
- 6.2** Create a culture that is inclusive and promotes diversity in our organization and activities, and recognizes that healthy waters are important for all people
- 6.3** Have clear procedures in place for efficient and safe operations of all facilities and equipment
- 6.4** Develop policies and procedures related to community use of CFRE resources and community participation in CFRE activities
- 6.5** Develop policies and procedures to establish, incentivize, and support CFRE Affiliate Faculty and Research Associates

