



Center for
Global
Environmental
Education
HAMLINE UNIVERSITY

Lake Superior North Shore Education and Outreach Initiative

- *Multimedia Gallery™* exhibit kiosks
 - *Pocket Gallery™* smartphone app
 - *Waters to the Sea®* K-12 learning program
-

Celebrating Natural and Cultural Heritage



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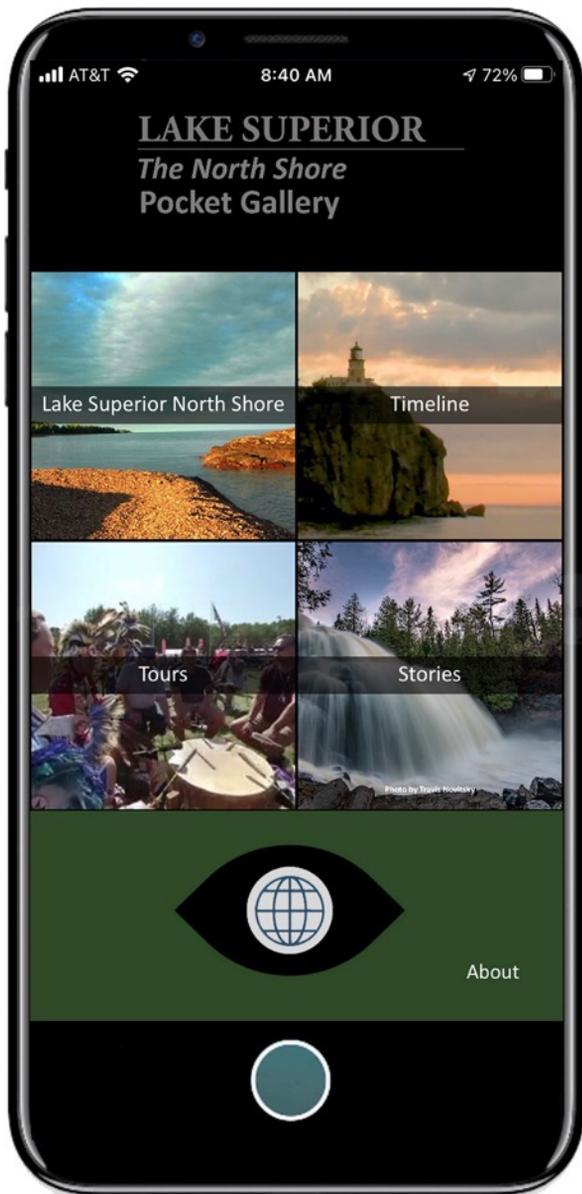
Photo by Travis Novitsky

An Extraordinary Education and Outreach Opportunity

Place-based multimedia storytelling that engages general and K-12 audiences

Welcome to a multifaceted initiative that celebrates the spectacular environments and rich history of Minnesota's Superior shore. The Lake Superior North Shore Education and Outreach

Initiative's three elements work together to deepen appreciation and inspire stewardship of the region's incomparable lands and waters with residents and visitors.



**Lake Superior North Shore
Pocket Gallery™ Smartphone app**



**Lake Superior North Shore
Multimedia Gallery™ Kiosks**



**Waters to the Sea®
Web-based K-12 Learning Program**

Museum-Quality Multimedia Kiosks at Key Public Venues



Multimedia Gallery™ kiosks are deployed in multiple sizes to fit different settings.

FEATURE OVERVIEW

Multimedia Gallery™ exhibit kiosks play dozens of stunning videos, immersive 360 videos, 360-landscape panoramas, image galleries, and richly detailed interactive maps.



Click to explore the online version of the **Multimedia Gallery™** program

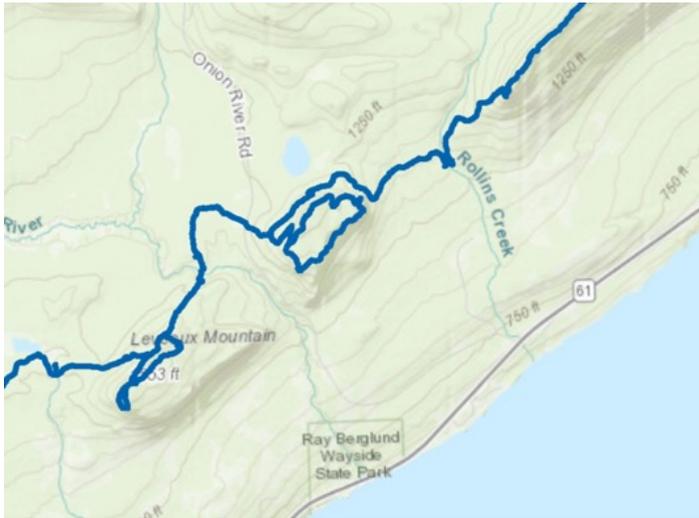


Gallery kiosks draw users of all ages.

Our legacy of multimedia kiosk installation and management has impacted millions of users with award-winning educational content.

The **Multimedia Gallery™** exhibit kiosk program's interactive format engages more than 100,000 annual users along the length of the Mississippi River, on the Atlantic Coast, and throughout Hawai'i. Venues include National Parks, National Wildlife Refuges, National Marine Sanctuaries, major museums, and top-tier hotels.

Dynamic Maps, Immersive 360 Multimedia



Explore place-based stories from Duluth to Grand Portage about a wide range of topics, from Indigenous star knowledge to ecosystems, from shipwrecks to waterfalls.

Map information includes special features, such as the Superior Hiking Trail (visible at left).

Media stories can also be found by media type and through an interactive topical index.

TAKE A DEEP DIVE

Immersive 360 videos and 360 landscape panoramas take users to places and reveal perspectives beyond reach, including waterfall descents and slot canyon explorations.



QR codes on Gallery kiosks promote and enable users to download the *Pocket Gallery™* app.

Exhibit Kiosk Placements at Prime Public Venues



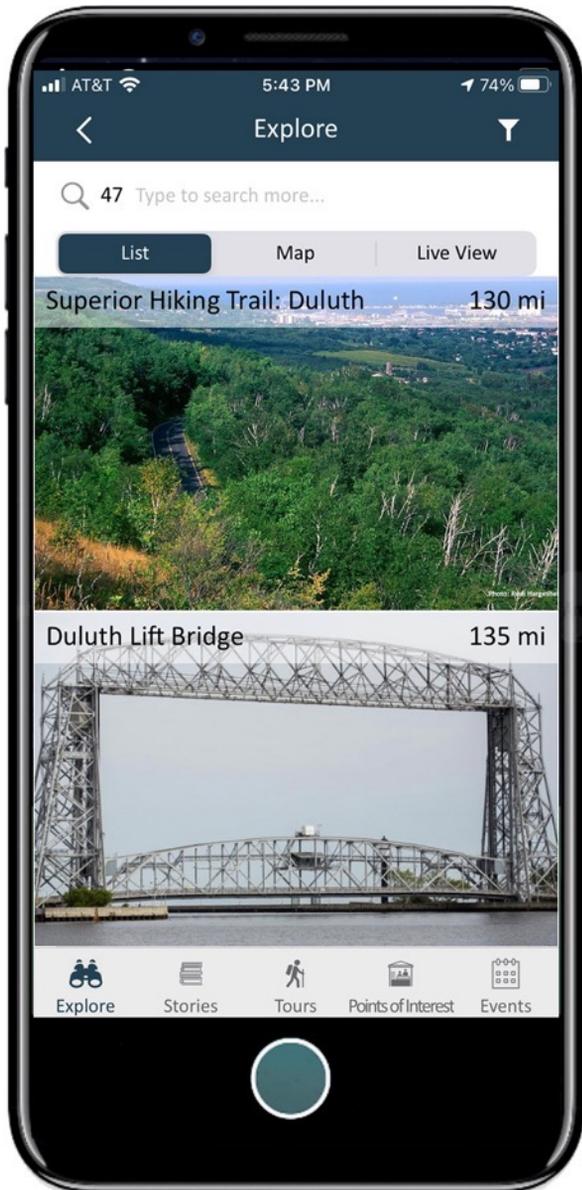
CARE AND FEEDING A FLEET OF STATE-OF-THE-ART KIOSKS

Keeping a large network of kiosks across the U.S. mainland and throughout Hawai'i fully operational only happens through refined software and hardware design and constant oversight. Daily Internet monitoring allows us to collect detailed user data, install program updates, and troubleshoot any problems, often before kiosk hosts are even aware of them.

- **Multimedia Gallery™** exhibit kiosks don't require Internet connectivity to operate; all content plays from kiosk hard drives.
- Kiosks use powerful off-the-shelf PCs that can be readily replaced.
- Our ultra high-resolution touchscreen displays are made by top manufacturers.
- Highly secure kiosk designs assure safe operations.

A Place-Based Multimedia Guide in Your Pocket

A free learning and planning tool *plus* pocket interpretive guide



Click to download the free
Pocket Gallery™ iPhone app

You *can* take it with you! The incomparable places that make Minnesota's Lake Superior Shore a premiere destination come vividly to life in the **Pocket Gallery™** smartphone app.

Explore the same engaging rich multimedia found in our **Multimedia Gallery™** kiosks through an intuitive, easy-to-use handheld experience.

This powerful storytelling tool is the ultimate arm-chair learning and planning resource *plus* location-aware pocket guide.

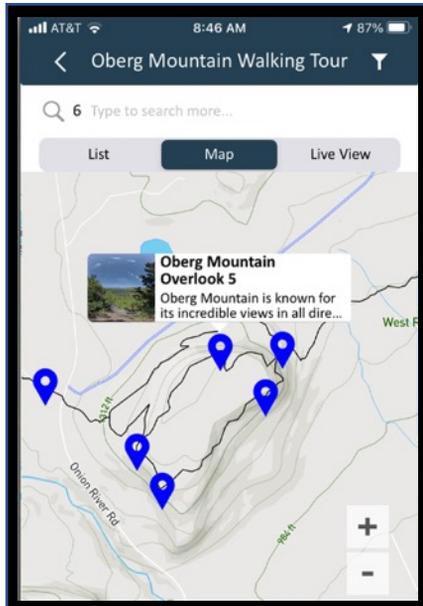
FEATURE OVERVIEW

- Full multimedia capabilities: video, interactive 360 video and 360 panoramas, stunning captioned image galleries
- Turn-by-turn directions and maps guide you to all locations
- Location-aware walking and driving tours
- Natural-history and cultural event calendars
- Regional history timeline
- Augmented reality feature uses your smartphone camera to locate and play media stories that interpret nearby points of interest

The **Pocket Gallery™** uses a proven template developed in the Hawaiian Islands for place-based cultural and environmental interpretation.

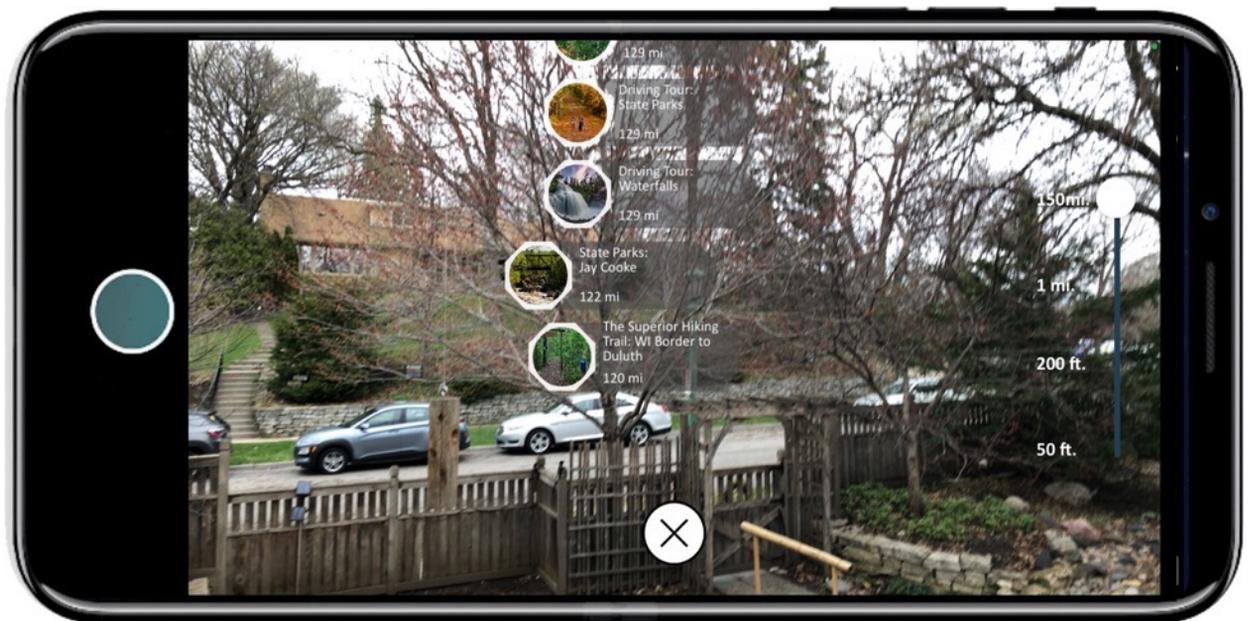
Tours and Augmented Reality Functions

A location-aware interpretive guide in your pocket

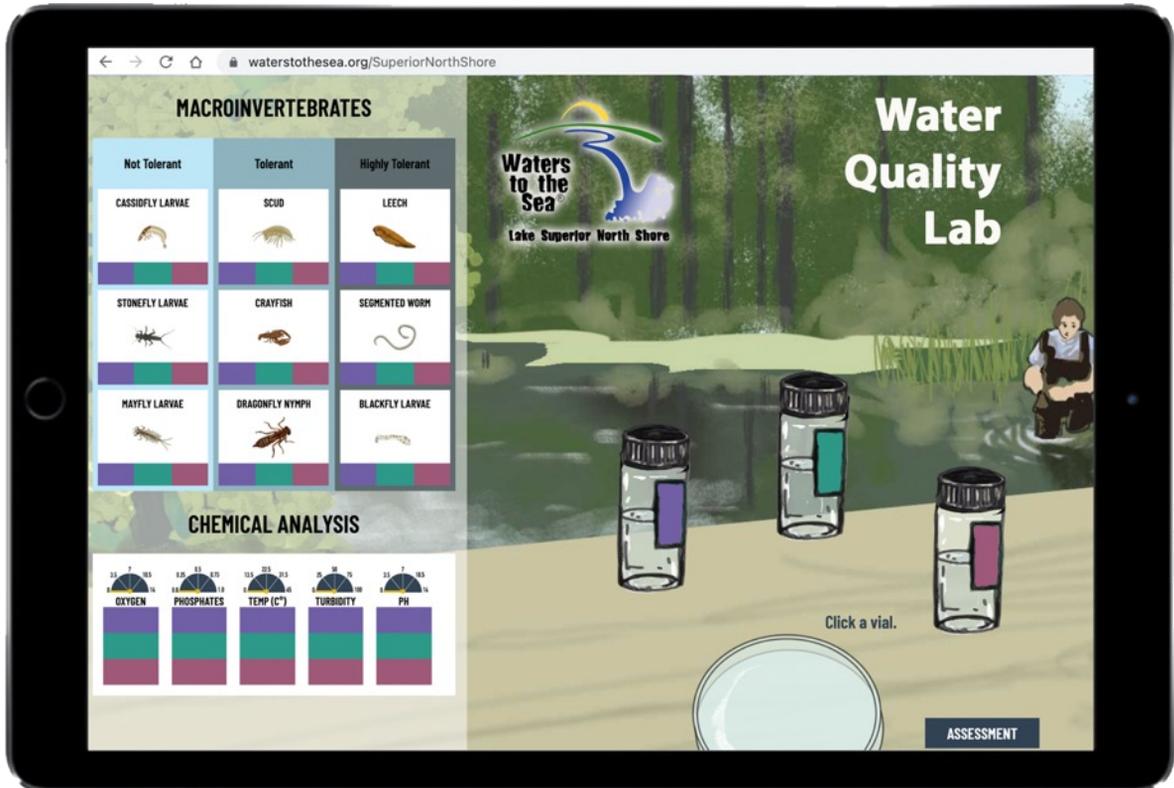


Driving and Walking tours link Points of Interest (left). By knowing your location, the **Pocket Gallery™** presents relevant media as you approach sites on each tour. Tours explore the North Shore's spectacular waterfalls, locate overlooks on walking trails, and guide you to historic sites in North Shore communities.

The LIVE VIEW augmented-reality function (below) turns your smartphone camera into a location-discovery tool. Icons representing Points of Interest appear in the camera view finder as close as 50 feet and as distant as 150 miles away (users set distance parameters). Touching icons opens media content for each Point of Interest.



Proven Multimedia Resources for Students and Teachers



The virtual water-quality lab is one of dozens of ***Waters to the Sea***[®] learning modules.



Click to explore the ***Waters to the Sea***[®] online program.

Supported by ***Sea Change Expeditions*** and ***Climate Generation***, CGEE's ***Waters to the Sea***[®] program brings the region's natural and cultural history into classrooms. Stewardship projects engage with key North Shore environmental issues .



Mark and Katya Gordon of ***Sea Change Expeditions*** conduct classroom visits, traveling the North Shore in *Amicus II*, their 40' steel cutter. Resources and student projects addressing climate change are augmented with support from Climate Generation. Pollution prevention and storm-water stewardship are promoted through CGEE's nationally acclaimed **[Adopt-a-Drain](#)** program.

About the Center for Global Environmental Education

The Center for Global Environmental Education (CGEE) was founded in 1990 as part of Hamline University's School of Education. Our first project, connecting millions of teachers and students around the globe during Arctic explorer Will Steger's 1990 International Trans-Antarctica Expedition, has been followed by decades of internationally acclaimed innovation in environmental education. We are committed to a multifaceted approach to teaching and learning with K-12 teachers, students, and general audiences that integrates digital technologies, hands-on experience, and community service.



U.S. Fish and Wildlife Service Gallery kiosk installation.

CGEE's media production capacities include interactive multimedia development for web and computer kiosks; museum-grade exhibits for interpretive centers, museums, and public events; broadcast video and radio production; media campaigns focused on behavior change; and the development of curricular and print resources for learning and outreach.

Our programs include in-depth multimedia learning experiences such as the ***Waters to the Sea***® online K-12 learning program (winner of an Interactive Panda award at Bristol, England's Wildscreen Festival, the world's largest and most prestigious environmental media festival). Our celebrated television documentaries include the Emmy-nominated ***Chased by the Light: A Photographic Journey with Jim Brandenburg*** and ***The Mighty Mississippi*** PBS documentary and online field trip, winner of a National Educational Television Association award.

CGEE's media productions provide organizations worldwide with proven educational resources that use state-of-the-art communication technologies to connect diverse audiences with environmental issues and solutions.

FOR MORE INFORMATION

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