# DEPARTMENT OF NATURAL RESOURCES

# Minnesota's Lake Superior Coastal Program

# Projects selected for funding July 1, 2021 through June 30, 2022

### **Overview**

The Minnesota Department of Natural Resources (DNR) solicits applications for Minnesota's Lake Superior Coastal Program (MLSCP; <u>Coastal Program</u>) grant funded projects. The projects must protect Minnesota's Lake Superior coastal resources and/or support their sustainable use. Program funding is provided by the Office for Coastal Management, through the U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA). The national <u>Coastal Zone Management Program</u> provides the basis for protecting, restoring, and responsibly developing our nation's diverse coastal communities and resources.

### The Coastal Program offered three funding opportunities:

- Annual 15-month projects, to start September 2022; up to \$100,000 per project.
- **★** STAR 6-month projects, to start quarterly; up to \$10,000 per project.
- Societation Section Conference Support for training and education; up to \$4,500 per non-competitive request.

Between July 1, 2021 and June 30, 2022, 22 grants totaling approximately \$575,000 were awarded, leveraging almost \$1 million in grantee matching contributions for a total impact of \$1.5 million.

Collectively, the 22 projects receiving grants will:

- Study or prevent invasive species in Lake Superior.
- Restore a section of stream and create restoration plans for others.
- Address needs of our coastal forests.
- Provide education for coastal managers.

The <u>Governor's Council</u> for Minnesota's Coastal Program reviews, scores, and recommends applications for funding. The Commissioner of the DNR selects the projects to submit to NOAA for approval. These grant funds help local communities, agencies, and organizations working in the state's coastal area balance protection of the coastal resources with providing places for people to live, work, and play.



# **Coastal Community Development**

The following projects will help communities manage development along the Lake Superior coast in a sustainable way.

### ★ City of Silver Bay Urban Stormwater Management, Assessment, and Planning

Grantee: Lake County Soil and Water Conservation District

Grant Amount	\$10,000
Matching Funds	\$42,700
Estimated Project Cost	\$52,700

Project partner: City of Silver Bay

Goals: Inventory and assess the City of Silver Bay stormwater infrastructure, flooding, and water quality issues, and develop a comprehensive list of applicable best management practices and low impact design standards; use this information to develop a Stormwater Management Plan.

### ★ SHTA Trail Protection Plan Development

Grantee: Superior Hiking Trail Association

Estimated Project Cost	
Matching Funds	
Grant Amount	\$10.000

Goals: Create a Trail Protection Plan, a guide to the preservation of ownership and sustainable land use, within the Superior Hiking Trail corridor; a roadmap to future planning and decision making.

### Town of Duluth: MS4 Training

Grantee: Town of Duluth

Grant Amount	\$1,575
Matching Funds	\$160
Estimated Project Cost	\$1,735

Goal: Complete a minimum of three trainings for the Township's MS4 certification.



Knowing these things, managers are able to avoid conflicts and plan for the future.



# **Coastal Hazards**

Protect lives and property in the coastal area by minimizing risk from natural hazards such as storms, flooding, and erosion.

The Coastal Program did not grant any Coastal Hazard projects this year.

# **Coastal Habitat**

The following projects will protect the coastal areas' natural resources and habitats.

### **★** 2022 Natural Areas Conference

Grantee: Natural Areas Association

Grant Amount	\$10,000
Matching Funds	\$146,980
Estimated Project Cost	\$156,980

Goals: Host the 2022 Natural Areas Conference (NAC22), titled Superior Visions: Navigating Complexity Amid Constant Change, in September. Gather up to 350 natural areas land managers and scientists from North America in Duluth with limited, virtual access to the plenary and selected breakout presentations. Include track on the preservation, protection, and restoration of the North Shore of Lake Superior that will include presentations from experts and field workshops.

#### **Didymo Impacts on Coaster Brook Trout**

Grantee: Science Museum of Minnesota

Grant Amount	\$99,349
Matching Funds	\$107,722
Estimated Project Cost	\$207,071

Project partners: DNR Fisheries, the 1854 Treaty Authority, Cook County SWCD, Grand Portage National Monument, and Minnesota Sea Grant.

Goals: Building upon the ongoing research, examine the didymo impacts to critical Coaster Brook Trout tributary spawning habitat for Lake Superior by 1) describing the extent within four river networks to which blooms form, 2) characterizing instream nutrient storage and trophic changes (i.e., algae, macroinvertebrates, & fish communities) for stream reaches with and without didymo, and 3) amplifying the results through concurrent research and outreach (e.g., social media, press, citizen science, and education).

# Great Lakes Forest Inventory Remote

### Sensing Workshop

Grantee: Minnesota Forestry Association

Grant Amount	\$4,150
Matching Funds	\$850
Estimated Project Cost	. \$5,000

Project partners: University of Minnesota, Lakehead University, Minnesota DNR

Goal: Host a Remote Sensing Workshop for the Great Lakes Forestry Inventory. The workshop will be held in the Grand Marais area.

This project is delayed until 2023.

# Habitat Management in the St. Louis River Estuary: Data, Partnerships, Research

Grantee: Regents of the University of Minnesota

Estimated Project Cost	\$4,950
Matching Funds	\$450
Grant Amount	\$4,500

Goal: Host the Habitat Management in the St. Louis River Estuary: Identifying Existing Data, Partnerships, and Emerging Research Needs virtual workshop in April 2022.

#### ★ Launching a Successful Water Trail III

Grantee: St. Louis River Alliance

Grant Amount	\$9 <i>,</i> 988
Matching Funds	\$5,000
Estimated Project Cost	. \$14,988

Goals: with partners, continue to implement the Master Plan by creating a detailed 5-Year Action Plan tool, a Promotional Communications Plan, and a 2nd Edition Navigational Map Production.

### Miller Creek: Restoration of a Ditched Trout Stream

Grantee: South St. Louis Soil and Water Conservation District

Grant Amount	\$95,000
Matching Funds	\$255,798
Estimated Project Cost	\$350,798

Goal: Restore Tributary 1 of Miller Creek (Duluth) and expand the scope of a stream restoration project being implemented with DNR and federal funds. In all, this project will restore over 6,000 feet of stream channel form, sinuosity and aquatic habitat and reconnect the stream to the floodplain, ultimately addressing Miller Creek's water temperature and biological impairments.

# Mycorrhizal Fungi and Tree Seedling Success

Grantee: Regents of the University of Minnesota

Grant Amount	\$71,224
Matching Funds	\$71,224
Estimated Project Cost	\$142,448

Project partners: Northeast Regional Sustainable Development Partnership, The Nature Conservancy

Goals: Study the extent to which soil biota (specifically mycorrhizal fungi) increase tree seed germination and juvenile seedling growth and survival. Inform forest restoration and assisted migration projects throughout the state, and specifically the coastal area.

# Source Forest Collaborative AGOL Training/Workshop

Grantee: Sugarloaf: The North Shore Stewardship Association

Matching Funds	
Estimated Project Cost	\$2,096

Goal: Host two virtual ArcGIS online (AGOL) trainings, Spring 2022, for the North Shore Forest Collaborative.

### ★ Restoring Jolicoeur Creek Connectivity

Grantee: Fond du Lac Band of Lake Superior Chippewa

Grant Amount	\$10,000
Matching Funds	\$2,000
Estimated Project Cost	\$12,000

Goals: Complete survey work and the geomorphological assessment needed to create Phase I engineering design plans for the restoration of Jolicoeur Creek a brook trout stream.

### Waterless Boat Cleaning Station for Silver Bay Marina Public Water Access to Prevent the Spread of Aquatic Invasive Species

Grantee: Lake County Soil and Water Conservation District

Grant Amount	.\$20,868
Matching Funds	.\$20,868
Estimated Project Cost	\$41,736

Goals: Purchase and install a CD3 Wayside Solar unit at the public boat launch in Silver Bay. Provide recreationists with the tools they need to clean, drain, and dry their watercraft and trailers, which are primary sources of AIS spread.

The Unit is a waterless boat cleaning station with wet/dry vacuum, air blower, and cleaning implements. The Unit is ADA compliant and provides tools that allow individuals with disabilities to clean their equipment.

# **Coordination and Public Involvement**

Collect, analyze, and share information that leads to better coastal land and water management by government and citizens.

### Lake Superior Multimedia Gallery

Grantee: Sugarloaf: The North Shore Stewardship Association

Estimated Project Cost \$	12,500
Matching Funds	
Grant Amount	\$7 <i>,</i> 500

Project partners: Hamline University's Center for Global Environmental Education (CGEE)

Goals: Develop a customized Sugarloaf Cove Edition of CGEE's Lake Superior's North Shore Multimedia Gallery™ exhibit kiosk program. Focus on the area's geology, ecology, land-use history and terrestrial invasive species; include Indigenous voices and perspectives, including those from the Grand Portage Band of Lake Superior Chippewa.

### ★ Talmadge River Restoration Feasibility Study

Grantee: South St. Louis Soil and Water Conservation District

Estimated Project Cost \$	512,960
Matching Funds	.\$2,960
Grant Amount	510,000

Goal: With the Duluth Retriever Club and a consultant, study how to best route the Talmadge River around the current, in-line pond; to decrease water temperatures, increase oxygen levels and improve habitat in the Talmadge River, while maintaining the recreational purposes of the pond.

## **Public Access**

Create or enhance public access to Minnesota's coast and Lake Superior.

### Identifying Drowning Hotspots in the St. Louis River Estuary

Grantee: Regents of the University of Minnesota

Grant Amount	\$51,395
Matching Funds	\$51,395
Estimated Project Cost	\$102,790

This is a joint project with the University of Wisconsin-Madison, with funding from the Wisconsin Coastal Program.

Project partners: Harbor Safety Workgroup, Minnesota Sea Grant.

Goal: Prevent future drownings in the St. Louis River Estuary by characterizing, forecasting, and increasing public awareness of drowning hotspots and conditions in the estuary. Analyze historical data, collect real-time data from water monitoring stations and citizen science, and develop and execute an outreach and education strategy.

### **Minnesota Point Boardwalk and Dune**

#### Restoration

Grantee: City of Duluth

Estimated Project Cost	\$211,076
Matching Funds	\$111,076
Grant Amount	\$100,000

Goals: Replace two deteriorated boardwalks that provide ABA beach access across the Minnesota Point sand dunes in two locations, Lafayette Community Center and Park Point, reusing the salvaged Ipe lumber from the Lakewalk (destroyed by Lake Superior). Replant the disturbed beach grass.

# Water Quality

The following projects will safeguard and restore water quality in Lake Superior and area streams.

### ★ Identifying Potential Green

### **Infrastructure Sites**

Grantee: St. Louis County

Grant Amount	\$10,000
Matching Funds	.\$3,000
Estimated Project Cost	\$13,000

Goals: Identify potential locations for installation of green infrastructure stormwater treatment along St. Louis County roads. The proposed project will use a combination of GIS, professional expertise, and site visits to identify and begin to assess and prioritize specific sites.

### ★ Kingsbury Creek Salt Storage Relocation

Grantee: City of Proctor

Grant Amount	.\$10,000
Matching Funds	.\$42,529
Estimated Project Cost	\$52,529

This project was withdrawn prior to start.

Goal: Design an environmentally friendly sand/salt storage facility. The current location is adjacent to Kingsbury Creek. The move should improve the creek's water quality, removing the potential of contamination from sand and salt.

### Nearshore And Devils Track Watershed Water Monitoring

Grantee: Cook County Soil and Water Conservation District

Grant Amount	\$28,542
Matching Funds	\$28,600
Estimated Project Cost	\$57,142

Project partners: Devil Track Lake Homeowners Association, Science Museum of Minnesota Goals: Collect water data at six near shore sites within the city limits of Grand Marais and compare to the five years of monitoring data.

Implement a plan to monitor the Devils Track Watershed, utilizing citizen scientists. Train volunteers and collect data at multiple sites throughout the watershed. Upload all water monitoring data to the MPCA's EQuiS database.

# ★ Preventing Agricultural Pollution through Beginner Farmer Training

Grantee: Friends of the Finland Community

Estimated Project Cost	
Matching Funds	\$540
Grant Amount	\$2,700

Goals: through the Finland Food Chain, research sustainable agriculture practices that reduce water pollution and develop this research into a curriculum that can be used in farmers training programs. Develop a one-page fact sheet that can be distributed to farms and land/resource managers.

### River Morphology - Level 2

Minnesota Department of Natural Resources

Funding Amount ......\$4,500

Goals: The DNR clean water specialist working in the coastal area will attend training on basic fluvial geomorphology concepts and assessment methods as well as build on the Natural Channel Design methodology introduced in the level one training.

