

Coastal Program Grant Report

Minnesota Department of Natural Resources; Minnesota’s Lake Superior Coastal Program
March 7, 2025; Presented by Cynthia Poyhonen, grant coordinator

Current Funding Opportunities

- [2024-25 Small Grants for Coastal Management](#): posted, open through June 30, 2025

Recently Completed Projects

Annual Projects

Coastal Erosion Hazard Map Update – Phase 3

Project Number: 21-306-09

Grantee: Arrowhead Regional Development Commission

Final Cost: \$94,457 (Grant: \$47,200)

Project Start: 09/23/2021

Project End: 12/31/2024

Arrowhead Regional Development Commission, with the North Shore Management Board, made significant progress in refining the methodology for coastal erosion analysis, providing essential data that will support improved decision-making for coastal resource management. The application of the USGS Digital Shoreline Analysis Software (DSAS) model has demonstrated robust accuracy, which will be invaluable for the counties and landowners who rely on this data for land use planning, shoreline management, and policy decisions, especially in the context of erosion-related variance and setback determinations.

The DSAS model was validated across multiple sites in St. Louis, Lake, and Cook Counties, including a range of control, variable, and mixed erosion sites. This validation process, which incorporated both current and historical (1989) erosion datasets, highlighted the model's ability to accurately reflect erosion patterns. The input gathered from county stakeholders further aligned the model's output with observed erosion trends, ensuring the relevance of the data for local planning efforts.

One of the key outcomes was the creation of an erosion rate data layer that can inform land use decisions, especially in terms of setback lines and land ordinances. County workers involved in land-use planning will benefit from this model, as it provides them with a scientifically supported tool to assess erosion risks in real-time. This data will be crucial for managing shoreline development and guiding mitigation efforts, ultimately helping to protect coastal resources from the impacts of erosion.

The next step is to develop an online interactive map that will host the erosion rate data. This tool will either be made publicly accessible or made available for internal use by the counties, depending on the preference of local stakeholders. By providing an easily accessible, real-time tool, landowners, local governments, and other stakeholders will be able to make informed decisions about coastal management, development setbacks, and erosion mitigation strategies.



Mycorrhizal Fungi and Tree Seedling Success

Project Number: 22-306-08

Grantee: University of Minnesota Duluth

Final Cost: \$137,162 (Grant: \$65,938)

Project Start: 10/24/2022

Project End: 12/31/2024

The project known as Minnesota Million is implementing population assisted migration by taking seeds from southern populations of native trees and planting them in northern regions. One challenge posed to reforestation efforts is the long-term survival of planted seedlings due to drought, access to nutrients, getting shaded out by competing early succession plants, and browse. There is evidence to support that inoculating seedlings with mycorrhizal fungi increases both short and long-term survival rates by providing them access to essential nutrients, enhancing access to water in the soil, and increasing shoot growth. This project studied whether commercial mycorrhizal fungi products are as effective as a native soil slurry at inoculating seedlings. The principal investigator is monitoring seedlings through the spring and will write a technical paper when complete.

The results from this experiment will inform growing protocols for the Minnesota Million project and the [Farm and Forest Growers Cooperative](#) for restoration efforts along the north shore and arrowhead region of Minnesota. It provided insight to the germination, growth, and survival responses of native tree populations along the north shore of Lake Superior, from which seeds are often left out of large-scale collection efforts due to microclimates along the shore.

STAR Project

Launching a Successful Water Trail Phase IV

Project Number: 21-306-08B

Grantee: St. Louis River Alliance

Final Cost: \$12,405 (\$10,000 grant)

Project Start: 07/12/2024

Project End: 12/31/2024

The St. Louis River Alliance created a St. Louis River Estuary National Water Trail promotional video [Gichigami-ziibi | Homeland of the Anishinaabe](#), about how the public can use and protect the estuary framed around traditional and cultural knowledge. They also created 11 [navigational Water Trail loop](#) videos. SLRA will work with partners to help guide the project, provide volunteer support, and promote the videos.



Federal Award and Grant Funds Awarded

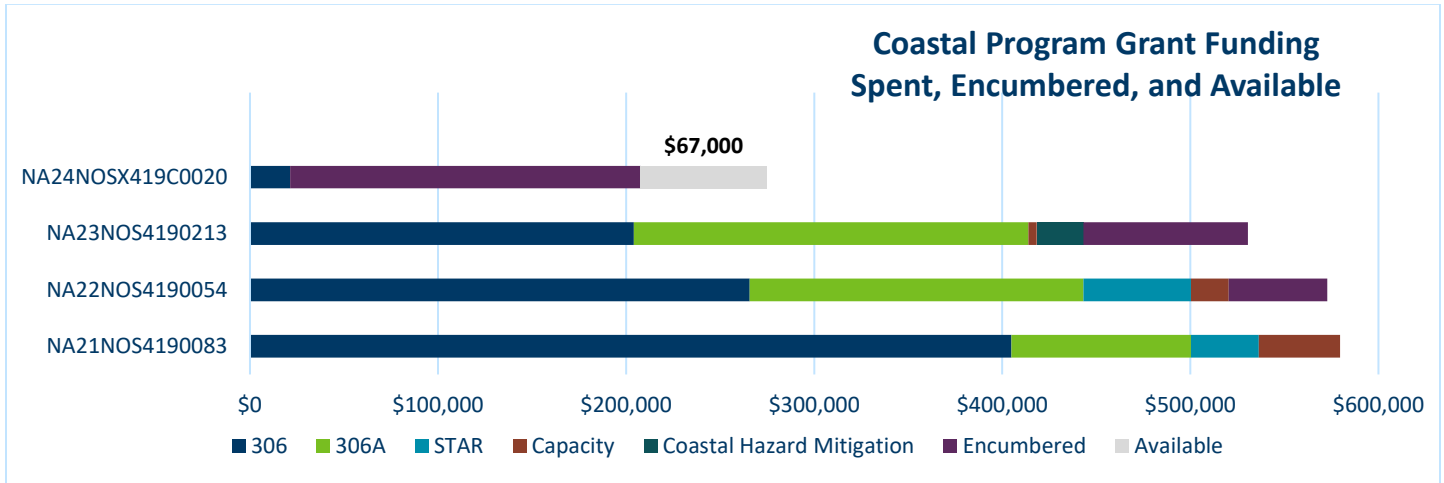
The table below shows the total federal award and amount of Annual and STAR grants awarded to date for the open NOAA Office of Coastal Management awards.

Federal Fiscal Year and Award	Total NOAA Award	Award Expiration	Annual Grants Awarded	Small Grants Awarded	Total Funds Awarded to Date
2021; NA21NOS4190083	1,122,000	06/30/2025	501,620	81,862	583,482
2022; NA22NOS4190054	1,128,000	06/30/2025	474,560	104,549	579,109
2023; NA23NOS4190213	1,158,000	12/31/2025	526,296	4,348	530,644
2024; NA24NOSX419C0020	1,158,000	12/31/2025	174,862	33,000	207,862
Total	\$4,566,000		\$1,677,338	\$223,759	\$1,901,097

Grants Reimbursed

The State has reimbursed grantees for project expenses (projects completed/in process), as shown in the chart below.

- Annual grants (306) are shown in blue, and STAR grants are shown in teal.
- Low-cost construction and land acquisition projects (306A) are in green.
- Coastal Hazard Mitigation funds (dark green) were only awarded in 2023.
- Shown in purple are all the funds under contract (i.e., encumbered), not yet reimbursed.
- Funds available (not yet awarded) is in gray.



Coastal Program Applications – Received and Funded

The table below shows the applications received and funded between July 1, 2019 and March 1, 2025.

Funding	Federal Fiscal Year	2019	2020	2021	2022	2023	2024	2025	Total
Annual	Applications Received	10	3	12	9	6	2	3	45
Annual	Applications Funded	9	2	6	7	6	2		32
STAR	Applications Received	18	12	14	10	N/A	7		61
STAR	Applications Funded	17	10	8	10	N/A	3		48
Capacity	Applications Received	4	4	5	5	19	10		47
Capacity	Applications Funded	4	4	5	5	18	10		46
TOTAL	Per Year	62	35	50	46	49	34	3	279

- Annual Applications are funded in federal fiscal year (i.e., 2024 with the NA24 award, begins July 2024).
- STAR and Capacity applications are received during federal fiscal year (i.e., 2024 applications are received between July 1, 2024 and June 30, 2025); and funded with available funds.

Coastal Program Grant Funded Projects, Updated 3/7/2025

Status	Federal Award	Project Number	Project Name	Grantee	Start Date	Expiration	Grant
Awarded	NA22	22-306A-02	Minnesota Point Boardwalk and Dune Restoration	City of Duluth	10/11/2022	06/30/2025	\$108,182
Awarded	NA23	23-306-11	North Shore Management Plan Update	ARDC	09/12/2023	12/31/2025	\$14,238
Awarded	NA23	23-306-12	Low-Cost Buoys for Smart Coastal Monitoring	University of Minnesota	09/20/2023	12/31/2025	\$94,747
Awarded	NA23	23-306A-01	Park Hill Acquisition	City of Duluth	09/22/2023	12/31/2025	\$100,000
Awarded	NA23	23-306A-03	Minnesota Point Boardwalk and Dune Restoration - Phase 2	City of Duluth	09/22/2023	12/31/2025	\$108,000
Awarded	NA23	23-306-09	Mitigating Coastal Hazards: Community Wildfire Protection Plan for Carlton County	Carlton SWCD	12/01/2023	11/30/2025	\$18,300
Awarded	NA23	23-306-09	Mitigating Coastal Hazards: Stormwater Modeling, Skunk Creek Crossings, Two Harbors	Lake County	02/02/2024	06/30/2025	\$18,300
Awarded	NA23	23-306-09	Mitigating Coastal Hazards: Stoney Point Coastal Hazard Mitigation Project	St. Louis County	01/23/2024	04/01/2025	\$18,300
Awarded	NA24	24-306-09	Park Point Recreation Area Plan	City of Duluth	10/29/2024	12/31/2025	\$75,000
Awarded	NA24	24-306-10	St Louis River and Estuary Outreach	Hamline University (CGEE)	10/01/2024	12/31/2025	\$99,862
Awarded	NA24	24-306-11A	2025 Lake Superior Youth Symposium	University of Minnesota	3/1/2025	8/31/2025	\$10,000
Pending	NA24	24-306-11B	Conservation outreach to benefit water quality	Cook SWCD	4/1/2025	9/30/2025	\$10,000
Awarded	NA24	24-306-11C	Educational Materials to Empower Landowners	Sugarloaf: The North Shore Stewardship Association	4/1/2025	9/30/2025	\$10,000
Awarded	IIJA	Task3	Coordinate the Lake Superior Headwaters Sustainability Partnership	Minnesota Land Trust	06/05/2023	11/30/2025	\$111,288
Awarded	IIJA	Task3	Develop a Land Stewardship Plan	Lake SWCD	04/23/2024	11/30/2025	\$13,000
Awarded	IIJA	Task3	Staff Training and Education on Forest Management	Cook SWCD	05/06/2024	11/30/2025	\$11,000
Awarded	IRA	Task1	Coastal Erosion Hazard Mapping Improvements	ARDC	2/11/2025	3/31/2027	\$73,500
18							\$893,717

NA – National Award (followed by the award year)

IIJA – Infrastructure Investment and Jobs Act

IRA – Inflation Reduction Act

ARDC – Arrowhead Regional Development Commission

SWCD – Soil and Water Conservation District

CGEE – Center for Global Environmental Education

Capacity Grants; active between 01/01/2025 and 03/06/2025

Federal Award	Grantee	Grant	Description
NA22NOS4190054	Superior Hiking Trail Association	\$4,500	Workshop: Staff will attend the 2025 International Trails Summit April 15-17, 2025 in Madison Wisconsin.
NA22NOS4190054	University of Minnesota, Institute on the Environment	\$4,500	Workshop: Host a two-day conference, Our Climate Futures: Opportunities for Citizen Science on a Great Lake to connect UMD faculty, staff and students with community organizations and citizens to promote equitable citizen science projects around the theme of climate change. The conference was held February 3-4, 2025 in Duluth MN.
NA22NOS4190054	Independent School District #93, South Terrace Elementary	\$4,500	Youth Education: Create a weather station program for the students, purchasing a weather station, curriculum materials, and outdoor classroom supplies.
NA22NOS4190054	Two Harbors Area Recreational Trails Alliance	\$4,500	Planning: Complete the visioning phase of a proposed mountain bike trail in the Two Harbors, Minnesota.
NA22NOS4190054	Sea Change Expeditions	\$4,064	Youth Education: Bring the Clean Cold and Clear program to six elementary schools on the North Shore during spring 2025.
NA22NOS4190054	Lake County Soil and Water Conservation District	\$4,500	Youth Education: Host the 2025 State Envirothon competition at Wolf Ridge Environmental Learning Center (Finland, MN) in May 2025; this year's theme is "Roots and Resiliency: Fostering Forest Stewardship in a Canopy of Change."
NA24NOSX419C0020	Great Lakes Aquarium	\$4,000	Youth Education: Provide funding support (mini grants) to public schools in Minnesota's coastal area for field trips to the Great Lakes Aquarium.
NA24NOSX419C0020	Lake County Soil and Water Conservation District	\$4,500	Training: The community conservationist will attend the Level III Wildland Hydrology course "River Assessment and Monitoring" August 2025, in Alta Wyoming.
NA24NOSX419C0020	Lake County	\$4,500	Technology Upgrade & Training: Purchase technology supplies for septic and wetland inspection and survey; staff will complete three related trainings.