

Coastal Program Grant Report

Minnesota Department of Natural Resources; Minnesota's Lake Superior Coastal Program
January 11, 2024; Presented by Cynthia Poyhonen, grants specialist

[Recently Completed Projects](#) (Annual and STAR)

[Coastal Program Grant Funded Projects](#), Updated 1/10/2024

Current Funding Opportunities

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

Federal Award and Grant Funds Awarded

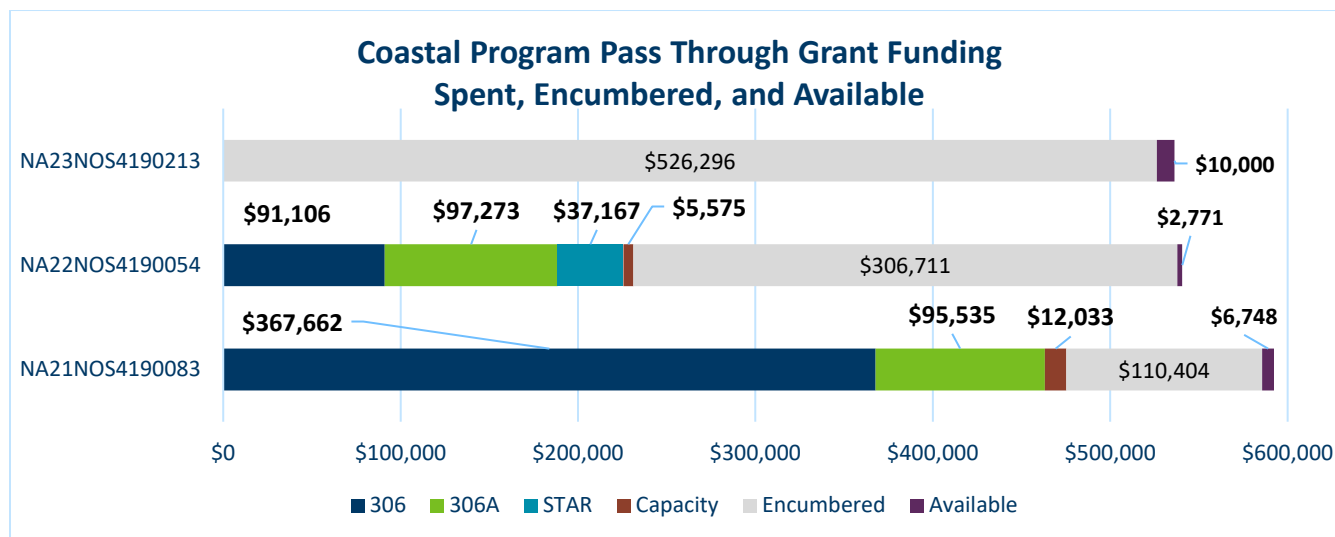
The table below shows the total federal award and amount of Annual and STAR grants awarded to date for the three open NOAA Office of Coastal Management awards.

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	06/30/2024	501,620	74,014	575,634
2022; NA22NOS4190054	1,128,000	06/30/2025	466,378	73,271	539,649
2023; NA23NOS4190213	1,158,000	12/31/2024	453,096		453,096
Total	\$3,408,000		\$1,421,094	\$147,285	\$1,568,379

*Three STAR grant projects are currently with NOAA for review: \$14,515 for NA21 (two projects to start January 2024); \$10,000 for NA22 (to start on July 1, 2024).

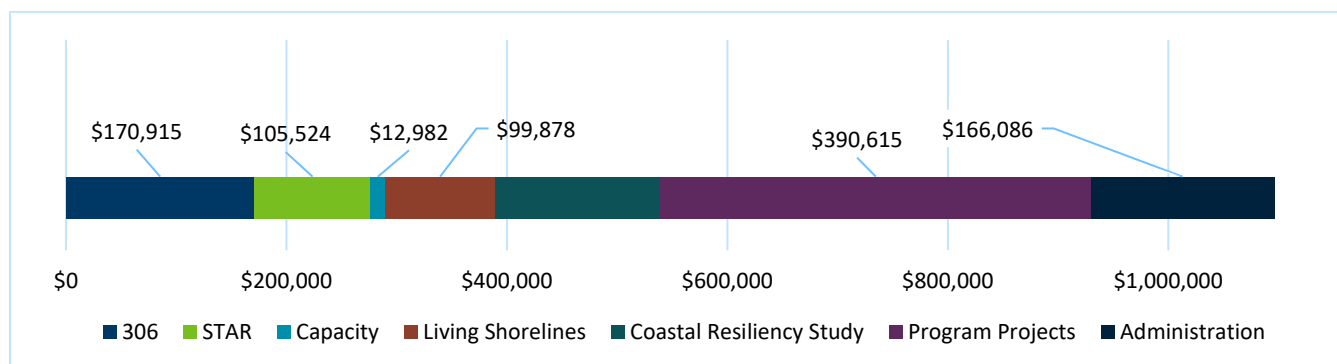
Grants Reimbursed

The State has reimbursed grantees for project expenses (projects completed/in process), as shown in the chart below. Low-cost construction and land acquisition projects are '306A' (in green). Shown in gray are all the funds under contract (i.e., encumbered), not yet reimbursed. Funds available (not yet awarded) is in purple.



NA20NOS4190088

The 2020 Federal Award (NA20NOS4190088) expired June 30, 2023. The Coastal Program passed through \$289,420.82 to sixteen local projects; funded the “Adapting Living Shorelines to the Great Lakes: Design and Engineering for Living Shoreline Pilot Sites on Minnesota State Shorelands, Phase 3” project and the [Great Lakes Coastal Resiliency Study](#); and provided support to our local communities and resource managers. Program projects included support for the Great Lakes hardened shorelines assessment, monthly Climate Conversations, assisting with the collection and publication of the coastal LiDAR, and facilitating or participating on over 20 workgroups and committees with coastal focus. This includes, but is not limited to, the Great Lakes Integrated Sciences and Assessment Center (GLISA) funded project, “Preparing Duluth Community Sectors for a Changing Climate”, Coastal Hazards of Superior (CHAOS) Community of Practice, the 3D Geomatics committee, and the City of Duluth’s Natural Resources Management Program Plan development committee.



Recently Completed Projects

Annual Grants

Silver Bay Public Access Boat Cleaning Station

Grantee: Lake County Soil and Water Conservation District

Project Start: 09/07/2022

Project Number: 22-306-09

Final Cost: \$41,790.69 (Grant: \$20,868)

Project End: 11/30/2023

The Lake County Soil and Water Conservation District (SWCD) purchased and installed a waterless boat cleaning station, a CD3 Wayside Solar unit, at the Silver Bay public marina. The Wayside Solar unit is an easy-to-use, self-serve station that is available to boaters free-of-charge 24 hours a day. The attached tools include a marine brush, vacuum, grabber tool, plug wrench (to remove boat plug), blower, and marine LED lights. Lake SWCD evaluated the unit, and users with observation, surveys, and data collected by the unit. They also promoted the unit in [social](#) and [traditional](#) medias. In its first year, about 232 users used the different tools approximately 456 times.



Photo of the wayside solar unit at the Silver Bay Marina.

Miller Creek: Restoration of a Ditched Trout Stream

Grantee: South St. Louis Soil and Water Conservation District
Project Start: 09/07/2022

Project Number: 22-306A-01
Final Cost: \$451,646.45 (Grant: \$95,000)
Project End: 11/30/2023

South St. Louis Soil and Water Conservation District restored over 6,100 feet of ditched stream channel in Miller Creek and Miller Tributary 1 with both state and federal funds. Miller Creek is a designated trout stream that is listed as impaired for water temperature. The project resulted in a new stream channel is almost twice as long as the former ditch and converted 3,700' of low-quality stream habitat to over 6,100' of high-quality habitat with large wood, suitable substrate, and a diversity of stream features. The new stream channel is also significantly narrower and deeper than the former ditch, which is expected to lower stream temperatures. Constructing an appropriately sized stream channel allows larger floods to spread out on the floodplain, dissipating stream energy, filtering out pollutants, recharging ground water, and depositing fine sediment. They built oxbow ponds to improve floodplain flood storage capacity and increase deep-water habitat at the project site. They reintroduced native plant communities to the site to improve ecosystem function and stream shading while providing a long-term source of large woody debris to Miller Creek.

From the Grantee: Coastal Program funding was critical to address the degradation of Tributary 1 and thus restore the ecological and physical function of the entire project area.

Drone aerial image of Tributary 1 after project completion – November 2023.



STAR Grants

Grand Marais Stormwater Model Update

Grantee: City of Grand Marais
Project Start: 04/06/2023

Project Number: 22-306-06B
Final Cost: \$12,037 (Grant: \$9,174)
Project End: 09/30/2023

The City of Grand Marais contracted with EOR, who updated the model to include several highly impactful projects from the last 5 years, including Highway 61 reconstruction, 5th Avenue reconstructions, 2nd Avenue

Raingarden, and 8th Avenue Stormwater Pond. EOR then used the updated model to evaluate stormwater improvements and run climate change scenarios. EOR also trained two city staff members with three 2-hour trainings using the model and video conferencing with the model creators.

Culvert Assessment in the Duluth Urban Watershed

Grantee: South St. Louis Soil and Water Conservation District
Project Start: 07/25/2023

Project Number: 22-306-06F

Final Cost: \$13,056.22 (Grant: \$10,000)

Project End: 12/31/2023

South St. Louis SWCD identified and assessed over 130 stream-road crossings that hadn't yet been inventoried. They targeted crossings within the Knowlton Creek and Kingsbury Creek watersheds as well as other knowledge gaps for the other 14 Duluth trout streams such as unnamed or unmapped tributaries. They then assessed identified culverts in the field using standardized DNR stream crossing methods. They entered the collected data in the state database and used the data to rank the culverts to highlight which culverts should be prioritized for replacement. Once approved, users can download the data via the [statewide culvert inventory suite](#) at the MN Geospatial Commons.

Coastal Program Applications – Received and Funded

The table below shows the applications received by the Coastal Program between July 1, 2019 and January 10, 2024.

- Annual Applications are funded in federal fiscal year (i.e., 2023 funded with the NA23 award, begins July 1, 2023).
- STAR and Capacity applications are received during federal fiscal year (i.e., 2023 applications are received between July 1, 2023 and June 30, 2024); and funded with available funds.

Funding	Federal Fiscal Year	2019	2020	2021	2022	2023	2024	Total
Annual	Applications Received	10	3	12	9	6	2	42
Annual	Applications Funded	9	2	6	7	6		30
STAR	Applications Received	18	12	14	10			54
STAR	Applications Funded	17	10	8	10			45
Capacity	Applications Received	4	4	5	5	10		28
Capacity	Applications Funded	4	4	5	5	10		28

Coastal Program Grant Funded Projects, Updated 1/10/2024

Status	Federal Award	Project	Project Number	Project Name	Grantee	Start Date	Expiration	Grant
Completed	NA22	306	22-306-07	Didymo Impacts on Coaster Brook Trout	Science Museum of Minnesota	09/07/2022	11/30/2023	\$99,349
Completed	NA21	STAR	21-306-08A	Nagaajiwanaang: Where the Water Stops	Hamline University (Center for Global Environmental Education)	08/02/2023	12/31/2023	\$9,948
Completed	NA22	STAR	22-306-06D	Stormwater Planning for Knife River, MN	Lake County SWCD	08/03/2023	12/31/2023	\$10,000
Completed	NA22	STAR	22-306-06E	1st Ave Stormwater Pond Feasibility Study	City of Grand Marais	07/26/2023	12/31/2023	\$10,000
Awarded	NA21	STAR	21-306-06C	Superior Hiking Trail Master Plan: Informing the Future of Minnesota's Premier Footpath	Superior Hiking Trail Association	10/01/2023	03/31/2024	\$10,000
Awarded	NA21	306	21-306-09	Coastal Erosion Hazard Map Update - Phase 3	ARDC	09/23/2021	05/31/2024	\$47,200
Awarded	NA22	306	22-306-10	Nearshore and Devils Track Watershed Water Monitoring	Cook County SWCD	09/01/2022	05/31/2024	\$28,542
Awarded	NA22	306	22-306-11	Identifying Drowning Hotspots in the St. Louis River Estuary	Regents of the University of Minnesota	11/22/2022	05/31/2024	\$51,395
Awarded	NA21	306	21-306-12	Demonstration of a Mobile Stormwater Lab	Regents of the University of Minnesota, NRRI	11/24/2021	06/30/2024	\$86,435
Awarded	NA22	306	22-306-08	Mycorrhizal Fungi and Tree Seedling Success	Regents of the University of Minnesota	10/24/2022	11/30/2024	\$71,224
Awarded	NA22	306A	22-306A-02	Minnesota Point Boardwalk and Dune Restoration	City of Duluth	10/11/2022	12/31/2024	\$108,182
Awarded	NA23	306	23-306-10	Documentary: A Sea Change for Lake Superior	Hamline University (Center for Global Environmental Education)	09/04/2023	11/30/2024	\$98,727
Awarded	NA23	306	23-306-11	North Shore Management Plan Update	ARDC	09/12/2023	11/30/2024	\$14,238
Awarded	NA23	306	23-306-12	Low-Cost Buoys for Smart Coastal Monitoring	Regents of the University of Minnesota	09/20/2023	11/30/2024	\$94,747
Awarded	NA23	306A	23-306A-01	Forest Hill Acquisition	City of Duluth	09/22/2023	11/30/2024	\$100,000
Awarded	NA23	306A	23-306A-02	Native Plant Restoration along Agate Bay Shoreline	Lake County SWCD	09/08/2023	11/30/2024	\$37,384
Awarded	NA23	306A	23-306A-03	Minnesota Point Boardwalk and Dune Restoration - Phase 2	City of Duluth	09/22/2023	11/30/2024	\$108,000
Awarded	IIJA	IIJA	Task3	Coordinate the Lake Superior Headwaters Sustainability Partnership	Minnesota Land Trust	06/05/2023	11/30/2025	\$46,288

Status	Federal Award	Project	Project Number	Project Name	Grantee	Start Date	Expiration	Grant
Awarded	NA23	C-Haz	23-306-09	Mitigating Coastal Hazards: Poplar River Flood Damage Scoping and Mitigation Plan	Cook SWCD	10/06/2023	03/31/2024	\$18,300
Awarded	NA23	C-Haz	23-306-09	Mitigating Coastal Hazards: Community Wildfire Protection Plan for Carlton County	Carlton SWCD	12/01/2023	11/30/2024	\$18,300
Pending	NA23	C-Haz	23-306-09	Mitigating Coastal Hazards: Stormwater Modeling, Knife River & Two Harbors	Lake County		11/30/2024	\$18,300
Pending	NA23	C-Haz	23-306-09	Mitigating Coastal Hazards: Stoney Point Coastal Hazard Mitigation Project	St. Louis County		11/30/2024	\$18,300
23								\$1,104,859

Capacity Grants; active between 10/01/2023 and 01/10/2024

Federal Award	Grantee	Grant	Description
NA21NOS4190083	City of Beaver Bay	\$4,500	Technology Upgrade: The City will acquire a cloud-based GIS system, migrate existing GIS data into the platform and create maps and apps to allow staff to manage utility information (water/sanitary sewer/stormwater) collaboratively and from the field, as well as provide an internal and public city GIS portal to publicly advertise information, such as city zoning.
NA21NOS4190083	Pike Lake Area Wastewater Collection System	\$4,500	Technology Upgrade: PLAWCS will upgrade their ArcGIS Online account from a basic mapping system to system of operations and asset management by adding workflows, layers, and applications to allow for maintenance and inspection records to be captured and documented from any device.
NA21NOS4190083	Independent School District #94	\$2,500	Youth Education: High School students at Cloquet Area Alternative Education Program (CAAEP) will participate in an active field research-based Ecology class. The students will be making observations, collecting data, and reflecting on past and future impacts throughout the St. Louis River Watershed and how those impacts effect the environment and the people living in it.
NA21NOS4190083	University of Minnesota	\$4,435	Workshop: Minnesota Sea Grant (MNSG), in partnership with Wisconsin Sea Grant (WISG) and the Dredging Subcommittee of the Harbor Technical Advisory Committee (HTAC), will plan and implement a regional workshop to identify and prioritize beneficial uses for dredged material in the Port of Duluth-Superior for the next ten years. This workshop will be held in January 2024.
NA21NOS4190083	University of Minnesota	\$4,500	Workshop: The University will host AIS Detector training in the Duluth area. Community members will learn aquatic invasive species (AIS) identification, regulations, reporting, and monitoring to become more active in detection, education, outreach, and management. Participants will complete online modules and attend an in-person workshop in June 2024. The training also offers a professional development opportunity for resource managers interested in aquatic invasive species issues.

Federal Award	Grantee	Grant	Description
NA21NOS4190083	Lake County Soil & Water Conservation District	\$2,500	Youth Education: Lake County SWCD is one of the hosts for the 2024 State Envirothon, to be held in May at Wolf Ridge Environmental Learning Center. High school students from all over the state will travel to the Lake Superior basin and test their knowledge on coastal issues.
COMPLETED			
NA21NOS4190083	Lake County	\$3,546.05	Technology Upgrades: Over summer 2023, Lake County Environmental Services replaced aging GPS and construction septic system site inspection equipment. The fulfilled request for technology upgrades has enabled more efficient and accurate data collection, compliance assurance, and end of year reporting for county staff. They completed 10 new septic system inspections with the new technology. (Submitted match: \$726.85)
NA21NOS4190083	University of Minnesota, Sea Grant	\$3,087	Workshop: Minnesota Sea Grant hosted the 2023 Lake Superior Cooperative Science and Monitoring Initiative (CSMI) reporting workshop in October 2023. Over 100 participants attended each day from Lake Superior Partnership agencies and researchers participating in CSMI activities. During the workshop, 31 researchers gave presentations on CSMI results or projects relevant to the management of Lake Superior. The presentations were divided into four sessions: Chemical Contaminants, Nutrients and Bacterial Pollution, Other Conditions, Microplastics and Cumulative Stress, and Habitat and Species. (Submitted match: \$450)
NA21NOS4190083	DNR	\$1,850	Workshop: The DNR's LAMP Coordinator and Lake Superior Manager traveled to Chicago for the State's forum of the Great Lakes Restoration Initiative (GLRI) in November 2023. They provided information to several federal agencies on state priorities for GLRI.
NA21 and NA22	Department of Natural Resource	\$2,750	Climate Action/Workshop: The Coastal Program paid the registration for 10 local (coastal based) DNR employees, from Ecological and Water Resources, Fish and Wildlife, and Parks and Trails to attend the 2023 Midwest Climate Resilience Conference in Duluth, October 2023.