



# Environment and Natural Resources Trust Fund

2027 Request for Proposal

## General Information

**Proposal ID:** 2027-303

**Proposal Title:** Lake Sturgeon Restoration at Great Lakes Aquarium

## Project Manager Information

**Name:** Jay Walker

**Organization:** Lake Superior Authority

**Office Telephone:** (218) 740-2011

**Email:** jwalker@glaquarium.org

## Project Basic Information

**Project Summary:** Great Lakes Aquarium aims to restore lake sturgeon to the St. Louis River through a new exhibit and rearing program, encouraging community involvement in conservation activities.

**ENRTF Funds Requested:** \$130,000

**Proposed Project Completion:** December 31, 2029

**LCCMR Funding Category:** Small Projects (G)

**Secondary Category:** Fish and Wildlife (D)

## Project Location

**What is the best scale for describing where your work will take place?**

Region(s): NE

**What is the best scale to describe the area impacted by your work?**

Region(s): NE

**When will the work impact occur?**

During the Project and In the Future

## Narrative

### **Describe the opportunity or problem your proposal seeks to address. Include any relevant background information.**

Lake sturgeon are one of the Great Lakes' most iconic species. Once abundant in Lake Superior, they spawned in the St. Louis River, the lake's largest U.S. tributary. In the late 1800s, development and industry along the river threatened lake sturgeon populations. They were being overfished and faced habitat loss as feeding and spawning grounds became polluted or inaccessible after dam construction. By the early 1900s, their populations were extirpated.

Despite decades of stocking lake sturgeon and restoring their habitats, population densities and spawning ratios remain below fishery management goals. Thus, regional states and provinces have designated lake sturgeon as a Species of Special Concern or Endangered Species. Ongoing fisheries restoration initiatives continue to work towards a genetically diverse self-sustaining population through lake-wide rearing and stocking programs.

Local stocking efforts have faced challenges over the years, including the availability of consistent resources to acquire and transport stock and fingerlings. Lake sturgeon currently stocked into the St. Louis River are reared on groundwater at the Genoa National Fish Hatchery (Genoa, WI) or in a streamside trailer in Michigan. The Fond du Lac Band and MNDNR stock them in upstream and downstream locations, respectively.

### **What is your proposed solution to the problem or opportunity discussed above? Introduce us to the work you are seeking funding to do. You will be asked to expand on this proposed solution in Activities & Milestones.**

Great Lakes Aquarium (GLA) aims to advance lake sturgeon restoration through a new rearing program and grow-out exhibit, encouraging community involvement in conservation activities. This program and exhibit will reduce resource requirements of Federal, Tribal, and State partners while addressing a significant step in recovering these migratory fish to the St. Louis River – their journey home.

Rearing lake sturgeon in their natal waters can imprint them on cues in the water and help guide them back after years away in Lake Superior. St. Louis River Estuary water will be utilized in the rearing trailer and grow-out tank to mimic their natural habitat, optimizing juvenile sturgeon development and survival rates. Recent studies suggest their first two weeks of life may be particularly important for lake sturgeon imprinting.

GLA will engage the public indoors and out with lake sturgeon ecology, highlighting the importance of wildlife restoration, St. Louis River Estuary rehabilitation, and re-establishing a culturally significant population. Interpretive media and interactives aim to inspire a sense of stewardship and encourage community involvement in conservation activities. The current and historic work of Tribal and State entities will be woven throughout the exhibit and facility-wide programming for school groups and outreaches.

### **What are the specific project outcomes as they relate to the public purpose of protection, conservation, preservation, and enhancement of the state's natural resources?**

This project furthers restoration initiatives and agreements by combining the restoration of native fish populations and place-based education by: installing a St. Louis River filtration system, creating a grow-out exhibit, and managing a streamside rearing trailer. This will supply 3,500 fingerlings annually to the MNDNR and FdLB St. Louis River stocking programs and engage more than 225,000 people annually with lake sturgeon ecology, cultural significance, and conservation efforts. Biosecurity is imperative optimize sturgeon development and imprinting while abating contaminants and aquatic invasive species in the water system and stocking transport water.

## Activities and Milestones

### Activity 1: Sturgeon Rearing

**Activity Budget:** \$98,000

**Activity Description:**

This activity involves rearing 2,000 lake sturgeon for the Minnesota DNR for stocking in the Lower St. Louis River and 1,500 lake sturgeon for the Fond du Lac Band of Lake Superior Chippewa for stocking in the Upper St. Louis River. An additional 100 sturgeon will be raised for placement in the grow-out tank within the exhibit to support public education and interpretation.

Project components include hiring hatchery technicians, Hatchery Manager and procuring supplies and equipment necessary for rearing sturgeon (including rearing systems and animal diets),

**Activity Milestones:**

Description	Approximate Completion Date
Order supplies to care for sturgeon in the rearing trailer and the grow-out exhibit.	May 31, 2028
Hatchery technicians are hired and trained to care for sturgeon. 2028 Rearing Season	December 31, 2028
Hatchery technicians are hired and trained to care for Sturgeon: 2029 Rearing Season	December 31, 2029

### Activity 2: Install security fence around hatchery.

**Activity Budget:** \$32,000

**Activity Description:**

Install a 30'x60'x6 ft chain link security fence around the hatchery trailer.

**Activity Milestones:**

Description	Approximate Completion Date
Install security fence	August 31, 2027

## Project Partners and Collaborators

Name	Organization	Role	Receiving Funds
Dan Wilfond	Minnesota Department of Natural Resources	Duluth Area Fisheries Supervisor. Coordinate stocking efforts of lower St. Louis River with Sturgeon reared at Great Lakes Aquarium	No
Eric Torvinen	Fond du Lac Band of Lake Superior Chippewa; Resource Management	Fisheries Program Manager. Coordinate stocking efforts of the Upper St. Louis River with sturgeon reared at the Great Lakes Aquarium.	No
Brandon Keesler	U.S. Fish and Wildlife Service	Provide Hatchery trailer to Great Lakes Aquarium for rearing sturgeon	No

## Dissemination

**Describe your plans for dissemination, presentation, documentation, or sharing of data, results, samples, physical collections, and other products and how they will follow ENRTF Acknowledgement Requirements and Guidelines.**  
Dissemination Efforts

Great Lakes Aquarium (GLA) will actively acknowledge the Minnesota Environment and Natural Resources Trust Fund (ENRTF) in all communications and outreach related to this project. This will include:

**Exhibit Signage** – Permanent, durable signage with the ENRTF logo and attribution language will be displayed at the Lake Sturgeon exhibit and in the sturgeon rearing facility viewing area. Temporary signage with ENRTF acknowledgment will be posted during the construction phase.

**Printed and Digital Materials** – All brochures, handouts, interpretive panels, and educational resources related to the project will include the ENRTF logo and required attribution language.

**Media and Press Releases** – Press releases, interviews, and media kits will identify the ENRTF as a funding source, and GLA staff will emphasize this funding during media interactions.

**Website and Social Media** – The project will be highlighted on GLA’s website and through social media platforms with attribution language, ENRTF logo placement, and tagging of ENRTF accounts.

**Events and Public Programs** – Public presentations, tours, and educational programs related to the Lake Sturgeon project will verbally acknowledge the ENRTF’s role in making the project possible.

**Partnership Channels** – Project partners, including the Minnesota DNR and the Fond du Lac Band of Lake Superior Chippewa, will be encouraged to include ENRTF acknowledgment in their related communications.

These efforts will ensure that the citizens of Minnesota are informed about the ENRTF’s role in protecting and restoring the state’s natural resources, while also increasing public awareness and engagement in lake sturgeon conservation.

## Long-Term Implementation and Funding

**Describe how the results will be implemented and how any ongoing effort will be funded. If not already addressed as part of the project, how will findings, results, and products developed be implemented after project completion? If additional work is needed, how will this work be funded?**

The GLA operations budget will cover the continued management of capital assets associated with the facility, water system, exhibit, and interpretive media. In-kind support will be provided through cooperative agreements with the MNDNR and FdLB.

This project will establish St. Louis River rearing protocols and best practices for lake sturgeon, create a database for information sharing, produce annual rearing reports, develop training procedures for fisheries technicians, create educational interpretive media and facility-wide programming for school groups and public outreaches.

## Project Manager and Organization Qualifications

**Project Manager Name:** Jay Walker

**Job Title:** Executive Director

**Provide description of the project manager's qualifications to manage the proposed project.**

Jay Walker has served in leadership roles at the Great Lakes Aquarium for 27 years, bringing extensive experience in operations, project management, and organizational leadership. Over the course of his tenure, he has held several key positions, including Curator of Animal Care, Director of Operations, and Executive Director.

As Curator of Animal Care, Jay was responsible for the management and husbandry of the Aquarium's animal collection, overseeing staff, animal health, and habitat systems. In his role as Director of Operations, he managed contracts with a variety of service providers and vendors. He served as project manager for facility improvements, exhibit construction, and operational initiatives. This work required coordination with contractors, engineers, designers, and regulatory agencies to ensure projects were completed efficiently and in compliance with applicable standards.

As Executive Director, Jay oversees the Aquarium's overall administration and strategic direction. His responsibilities include organizational management, financial oversight, staffing, and partnerships with government agencies, foundations, and community organizations. Jay also brings significant experience in human resources practices, including staff recruitment, hiring, and team leadership.

Through his long tenure at the Great Lakes Aquarium, Jay has developed a deep understanding of the facility, its systems, and its partnerships. His combined experience in operations, project management, and organizational leadership uniquely positions him to successfully manage and oversee the proposed project.

**Organization:** Lake Superior Authority

**Organization Description:**

Lake Superior Center dba Great Lakes Aquarium (GLA) is a 501(c)(3) non-profit organization chartered by the Minnesota legislature with the mission of delivering freshwater education. Since opening its doors in July 2000, the Aquarium has drawn visitors from local communities and around the country to explore diverse animal habitats. Today, we engage more than 225,000 visitors annually with freshwater conservation education through hands-on learning, play, and animal encounters. Some of the most memorable animal encounters are at the sturgeon touchpool. This experience introduces guests to seven different sturgeon species and their worldwide conservation challenges.

With 25 years of aquatic husbandry and educational expertise, GLA brings expert knowledge and program execution in fish development, biosecurity, data management, public education, and community engagement. The Aquarium has a

proven track record of developing major exhibit projects with excellence and economy, keeping funds within the state and our community.

Mission: To engage and inspire, encouraging stewardship of wildlife and water.

Vision: Leading freshwater conservation by connecting all people to Lake Superior and the world's waters.

## Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineligible	% Benefits	# FTE	Classified Staff?	\$ Amount
<b>Personnel</b>								
Curator of Aquatics		Hatchery Manager			45%	0.4		\$35,000
Hatchery Technician 1		Care and maintenance of Lake Sturgeon hatchery			7%	0.64		\$15,000
Aquarist		Animal Care for the annual sturgeon grow-out system. Provide daily maintenance of the sturgeon grow-out system, including cleaning the tank, maintaining the filtration system, and monitoring water quality. Provide daily animal care to the sturgeon, including diet preparation and feeding.			65%	0.02		\$8,000
Hatchery Technician 1		Animal care			16%	1		\$19,000
							<b>Sub Total</b>	<b>\$77,000</b>
<b>Contracts and Services</b>								
A-1 Fence company	Service Contract	Install security fence around hatchery.				1		\$32,000
							<b>Sub Total</b>	<b>\$32,000</b>
<b>Equipment, Tools, and Supplies</b>								
	Tools and Supplies	Zooplankton hatching jars, nets, water quality tests, airstones and tubing.	Tools needed to rear sturgeon.					\$4,000
	Tools and Supplies	Brine shrimp, blood Worms, Pacifica Krill.	Diet for rearing Sturgeon over two years.					\$17,000
							<b>Sub Total</b>	<b>\$21,000</b>
<b>Capital Equipment</b>								
							<b>Sub Total</b>	-
<b>Acquisitions and Stewardship</b>								

							<b>Sub Total</b>	-
<b>Travel In Minnesota</b>								
							<b>Sub Total</b>	-
<b>Travel Outside Minnesota</b>								
							<b>Sub Total</b>	-
<b>Printing and Publication</b>								
							<b>Sub Total</b>	-
<b>Other Expenses</b>								
							<b>Sub Total</b>	-
							<b>Grand Total</b>	<b>\$130,000</b>

Classified Staff or Generally Ineligible Expenses

Category/Name	Subcategory or Type	Description	Justification Ineligible Expense or Classified Staff Request
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Non ENRTF Funds

Category	Specific Source	Use	Status	Amount
<b>State</b>				
			<b>State Sub Total</b>	-
<b>Non-State</b>				
In-Kind	Great Lakes Aquarium operational funds	Design and sight prep.	Secured	\$8,000
			<b>Non State Sub Total</b>	<b>\$8,000</b>
			<b>Funds Total</b>	<b>\$8,000</b>

**Total Project Cost: \$138,000**

**This amount accurately reflects total project cost?**

Yes

## Attachments

### Required Attachments

#### *Visual Component*

File: [9505eb84-3ba.pdf](#)

#### *Alternate Text for Visual Component*

Sturgeon Map and Images...

#### *Financial Capacity*

Title	File
Lake Superior Center 990 2024	<a href="#">f92af59a-dcb.pdf</a>

#### *Board Resolution or Letter*

Title	File
Board Resolution GLA Sturgeon Project	<a href="#">82f53adc-021.pdf</a>

### Supplemental Attachments

#### *Capital Project Questionnaire, Budget Supplements, Support Letter, Photos, Media, Other*

Title	File
1854 Treaty Authority Letter of Support	<a href="#">d7df02e8-121.pdf</a>
Fond du Lac Band of Lake Superior Chippewa Letter of Support	<a href="#">0b34f4c7-04f.pdf</a>
USFWS Letter of Support	<a href="#">450cfdbc-28c.pdf</a>

## Administrative Use

**Does your project include restoration or acquisition of land rights?**

No

**Do you understand that travel expenses are only approved if they follow the "Commissioner's Plan" promulgated by the Commissioner of Management of Budget or, for University of Minnesota projects, the University of Minnesota plan?**

N/A

**Does your project have potential for royalties, copyrights, patents, sale of products and assets, or revenue generation?**

No

**Do you understand and acknowledge IP and revenue-return and sharing requirements in 116P.10?**

N/A

**Do you wish to request reinvestment of any revenues into your project instead of returning revenue to the ENRTF?**

N/A

**Does your project include original, hypothesis-driven research?**

No

**Does the organization have a fiscal agent for this project?**

No

**Does your project include the pre-design, design, construction, or renovation of a building, trail, campground, or other fixed capital asset costing \$10,000 or more or large-scale stream or wetland restoration?**

No

**Do you propose using an appropriation from the Environment and Natural Resources Trust Fund to conduct a project that provides children's services (as defined in Minnesota Statutes section 299C.61 Subd.7 as "the provision of care, treatment, education, training, instruction, or recreation to children")?**

No

**Provide the name(s) and organization(s) of additional individuals assisting in the completion of this proposal:**

Shawna Weaver, Dir. of Learning and Engagement, and Katie Pease, Project Manager, Great Lakes Aquarium

**Do you understand that a named service contract does not constitute a funder-designated subrecipient or approval of a sole-source contract? In other words, a service contract entity is only approved if it has been selected according to the contracting rules identified in state law and policy for organizations that receive ENRTF funds through direct appropriations, or in the DNR's reimbursement manual for non-state organizations. These rules may include competitive bidding and prevailing wage requirements**

Yes, I understand