

**Environment and Natural Resources Trust Fund
2019 Request for Proposals (RFP)**

Project Title:

ENRTF ID: 227-F

Mississippi Gorge Restoration Study

Category: F. Methods to Protect, Restore, and Enhance Land, Water, and Habitat

Sub-Category:

Total Project Budget: \$ 503,295

Proposed Project Time Period for the Funding Requested: June 30, 2021 (2 yrs)

Summary:

American Rivers seeks funding to conduct a detailed study to remove two dams in the 8-mile Mississippi River Gorge between St Anthony Falls and the Minnesota River confluence.

Name: Olivia Dorothy

Sponsoring Organization: American Rivers

Title: Associate Director, River Restoration

Department: _____

Address: 3018 22nd Ave
Rock Island IL 61201

Telephone Number: (217) 390-3658

Email odorothy@americanrivers.org

Web Address www.americanrivers.org

Location

Region: Metro

County Name: Hennepin, Red Lake

City / Township:

Alternate Text for Visual:

The image depicts an artist rendition of the Gorge rapids from Lake St and map of Minneapolis-St Paul highlighting the Mississippi Gorge and the denoting the two dam locations.

_____ Funding Priorities	_____ Multiple Benefits	_____ Outcomes	_____ Knowledge Base
_____ Extent of Impact	_____ Innovation	_____ Scientific/Tech Basis	_____ Urgency
_____ Capacity	_____ Readiness	_____ Leverage	_____ TOTAL _____%
_____ If under \$200,000, waive presentation?			



PROJECT TITLE: Mississippi Gorge Restoration Study

I. PROJECT STATEMENT

American Rivers (AR) seeks funding to build on Minnesota's rich environmental legacy by restoring eight miles of the iconic Mississippi River in Minneapolis and bringing back fish and wildlife that were exiled a century ago. A recent internal U.S. Army Corps of Engineers (Corps) review found that, despite the active hydropower, it is likely no longer in the country's economic interest to continue to operate and maintain Lock and Dam 1 and Lower St Anthony Falls Lock and Dam. As such, the Corps is requesting proposals from interested parties to dispose of the infrastructure. It is probable the Corps will recommend a plan to Congress to deauthorize and relinquish ownership of the locks and dams. Time is of the essence if we want to avoid missing out on this opportunity. The Corps' decision-making timeline is a short two years, and it is crucial that removal of these structures and the benefits to fish, wildlife and water quality be adequately evaluated.

Within the next year, we hope to complete a reconnaissance study that will provide us with a scope of work and initial cost-estimates for dam removal. With LCCMR support we will build on this study to investigate the engineering, social and legal challenges to removing these dams. This work will inform our future efforts, including the establishment of a non-profit trust to take ownership of the dams - a model American Rivers and partners used on the Penobscot River in Maine to acquire and remove two active hydropower dams of similar size to those in the Mississippi Gorge.

Both the National Park Service has stated that studying dam removal and river restoration is critical to understanding this opportunity. The time is ripe to take a bold step toward a new vision of the Gorge that ends the environmental damage of a 150-year-old industrial plan, restores the natural flow and character of the river, rehabilitates habitat for fish and wildlife, and promotes compatible recreation and business opportunities.

II. PROJECT ACTIVITIES AND OUTCOMES

ACTIVITY 1: Conduct technical study to determine the feasibility of removing the two dams

DESCRIPTION: Dam removals are complex construction projects that require significant analysis and planning to understand the costs, benefits, and potential scientific/engineering challenges. The analysis will ensure that any decisions made will improve, and not degrade, habitat, water quality, and surrounding infrastructure.

ENRTF BUDGET: \$298,863

Outcome	Completion Date
<i>1. Hydraulic model, sediment quality and quantity management assessment, and river channel geomorphic assessment</i>	<i>December 2019</i>
<i>2. Reports on invasive species management, habitat restoration need/opportunities, and potential geomorphic impacts from dam removal</i>	<i>March 2020</i>
<i>3. Report on need/approaches to protect surrounding infrastructure (bridges, utilities, etc.)</i>	<i>June 2020</i>
<i>4. Report on dam structure removal approach including equipment access, soil testing, water management, and demolition material disposal</i>	<i>October 2020</i>

ACTIVITY 2: Evaluate the socio-political climate and legal questions in removing the two dams

DESCRIPTION: There are several legal and social issues that must be assessed in considering removal. For example, in 2017, the dams produced 17MW of energy. This could be replaced by expanding other hydropower facilities in the area, or by swapping it out with another green energy source – 17 MW is equivalent to a 71-acre solar farm or a 9-turbine wind farm. However, locations and potential investors would need to be identified. We



Environment and Natural Resources Trust Fund (ENRTF)
2019 Main Proposal

will also evaluate other issues that were identified at our June 2017 Open House such as questions around recreational opportunities and impacts as well as permitting requirements and property transfer issues.

ENRTF BUDGET: \$137,644

Outcome	Completion Date
<i>1. Reports on opportunities for improved recreational access, approaches for retiring hydropower licenses and replacing hydropower with other green power production</i>	<i>December 2020</i>
<i>2. Reports on environmental/historic regulatory plan, potential permitting challenges, and property transfer challenges</i>	<i>February 2021</i>

ACTIVITY 3: Develop a timeline and cost estimate for removing the two dams

DESCRIPTION Based on the outcomes above, our consultants will develop a summary report detailing the analyses and summarizing the technical challenges to removing the dams. The report will include a potential timeline for removing the dams, as well as an estimate of the full costs of removing the dams, protecting surrounding infrastructure, and restoring river habitat.

ENRTF BUDGET: \$66,788

Outcome	Completion Date
<i>1. Final technical report detailing issues, project costs, and construction timeline</i>	<i>April 2021</i>

III. PROJECT PARTNERS:

A. Partners receiving ENRTF funding A. Partners receiving ENRTF funding

Name	Title	Affiliation	Role
N/A			

B. Partners NOT receiving ENRTF funding

Name	Title	Affiliation	Role
Douglas Shaw	Associate State Director	The Nature Conservancy	Public Outreach
Nathan Van Wylen	Designer	MSR Design	Restoration vision
Jill Crafton	Board of Directors, MN	Izaak Walton League	Public Outreach

IV. LONG-TERM- IMPLEMENTATION AND FUNDING:

This feasibility study will guide our partner team, the state, cities, and federal agencies on how to move forward with the dam removals. Funding from the McKnight Foundation supports AR's engagement with the Corps on their infrastructure study process and we expect to continue receiving those funds beyond the duration of this grant. We have also submitted applications to the Bush and Mortenson Foundations to support community engagement and additional feasibility work. Our existing McKnight Foundation support will be leveraged to move this project from a feasibility study to an on-the-ground river restoration project. Additional funds must be secured from federal, state, and private sources to remove the dams and restore the Mississippi River in later project phases based on the outcomes of this feasibility study.

V. TIME LINE REQUIREMENTS:

The path to dam removal is long and there are several critical decision-points between now and our estimated removal date of 2030. The timeline will largely depend on Congressional appropriations and other actions. At the moment, we anticipate the Corps will announce their initial findings that the two dams are no longer in the national interest to continue operating and maintaining in Spring 2018. American Rivers is in the process of securing funds to complete a proposal to remove the dams for the Corps to consider ahead of their recommendation to Congress in 2020. The interim reports and final study funding by LCCMR will guide our proposal and inform the Corps' decision.

2019 Proposal Budget Spreadsheet

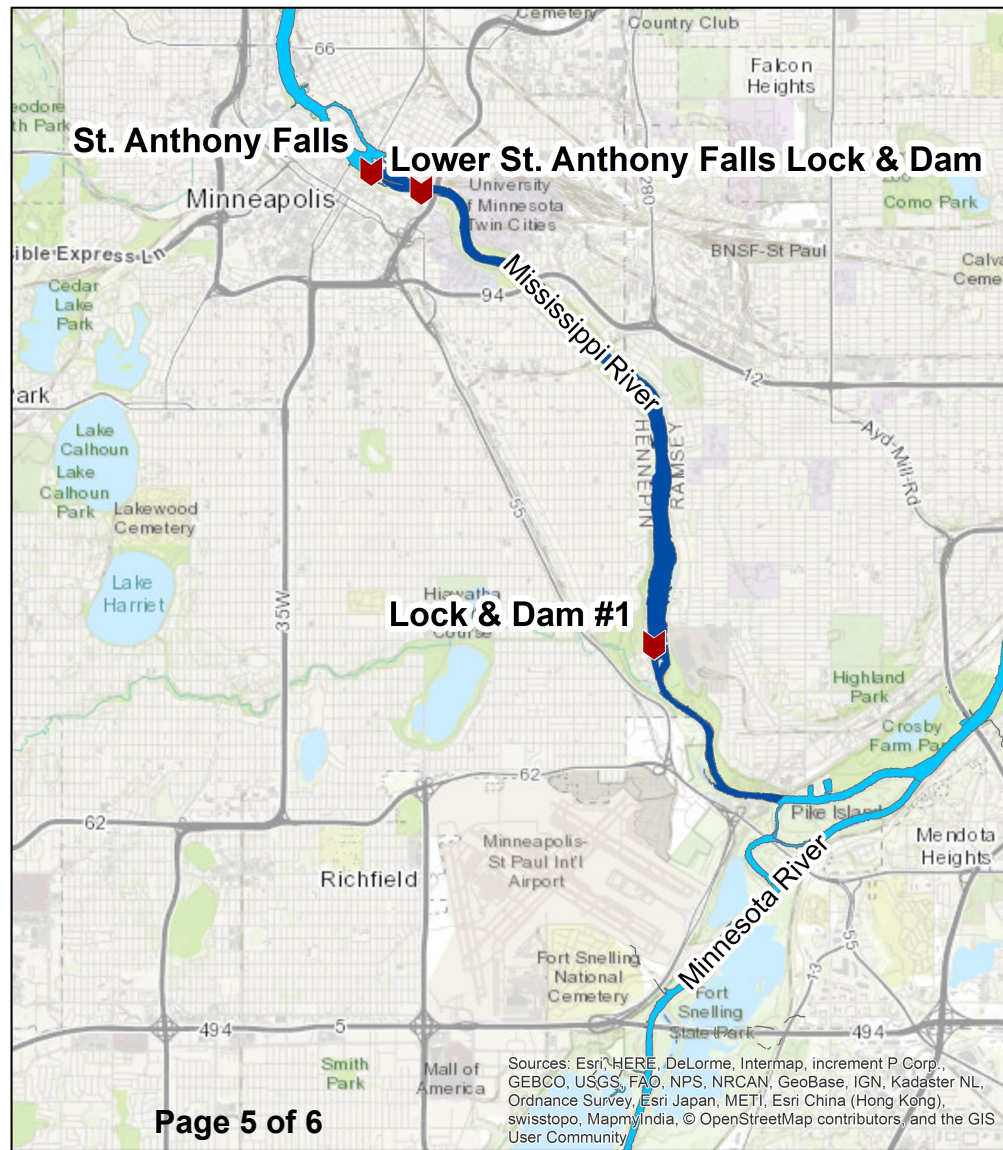
Project Title: *Restore the Gorge Feasibility Study*

IV. TOTAL ENRTF REQUEST BUDGET 2 years

BUDGET ITEM (See "Guidance on Allowable Expenses")	AMOUNT
Personnel: Olivia Dorothy, Associate Director, River Restoration - 2% FTE for 2 years Brian Graber, Senior Director, River Restoration - 0.4% FTE for 2 years For both positions, 70% is salary and 30% is benefits	\$ 4,118
Professional/Technical/Service Contracts: Qualified river restoration consulting firm providing feasibility study engineering and river science services. American Rivers will competitively bid all consulting services for the project if awarded funds.	\$ 499,177
Equipment/Tools/Supplies:	\$ -
Acquisition (Fee Title or Permanent Easements):	\$ -
Travel:	\$ -
Additional Budget Items:	\$ -
TOTAL ENVIRONMENT AND NATURAL RESOURCES TRUST FUND \$ REQUEST =	\$ 503,295

V. OTHER FUNDS *(This entire section must be filled out. Do not delete rows. Indicate "N/A" if row is not applicable.)*

SOURCE OF FUNDS	AMOUNT	Status
Other Non-State \$ To Be Applied To Project During Project Period: McKnight Foundation: \$64,800 pending Bush Foundation: \$80,638 pending	\$ 145,438	<i>Pending</i>
Other State \$ To Be Applied To Project During Project Period: N/A	N/A	N/A
In-kind Services To Be Applied To Project During Project Period: N/A	N/A	N/A
Past and Current ENRTF Appropriation: N/A	N/A	N/A
Other Funding History: McKnight Foundation (covers majority of salary & benefits for this project): \$64,800 secured Bush Foundation: \$119,362 pending Mortenson Family Foundation: \$20,000 pending	\$ 204,162	<i>Secured and Pending</i>



05/08/2018

John Koepke, Samuel Geer, and Michael Keenan, Faculty of the Department of Landscape Architecture,
University of Minnesota and Principals @ Urban Ecosystems LLC

PROJECT MANAGER QUALIFICATIONS AND ORGANIZATIONAL DESCRIPTION

American Rivers, the nation's leading river conservation organization, has an extensive record of success in implementing on-the-ground projects, increasing local capacity, and cultivating new constituencies for the removal of dams that no longer serve a purpose.

American Rivers has been working to safeguard rivers for people and wildlife since 1973. Together with more than 250,000 supporters, we have worked to protect and restore more than 150,000 miles of rivers, gained federal Wild and Scenic status for more than 12,000 miles of rivers, brought rivers back to life by helping communities remove or re-operate over 1,100 dams, safeguarded public health by working to eliminate sewage and stormwater pollution in our waterways, provided scientific and legislative expertise to benefit rivers and clean water, and delivered advocacy training and leadership to the nation's growing river conservation movement. Our success is the result of combining national advocacy with field work in key river basins to deliver the greatest impact; engaging in valuable partnerships and working closely with local river advocates, businesses, and others to forge solutions; and leveraging donations to deliver the highest return on investment.

For the past 20 years, American Rivers' River Restoration Program has led the nation at bringing rivers back to life by removing dams. We manage dam removal projects, provide technical project assistance, build dam removal capacity at the state and federal levels, and have trained thousands of professionals to be able to manage dam removal projects. We know that dam removal is never just about removing a dam—it's about restoring habitat within and alongside the river, so wildlife and communities can thrive. It's about restoring fish migration and habitat, recreating access to spawning and rearing grounds, while freeing flows to keep stream temperatures cool and reduce algal blooms. It's about protecting the cultural, tribal, ecological, and recreational values of fisheries. It's about the economic vitality of communities that rely on recreational tourism, swimming, floating, and boating. Finally, it's about health and safety, removing dangerous obstacles that drown swimmers and boaters, and are liabilities with a risk of catastrophic structural failure as they age. There are so many benefits gained from removing a dam and restoring a river, but none can be accomplished without community support, a solid plan, and funding.

Our project manager, Olivia Dorothy, is the acting director of the Upper Mississippi River Priority Basin Program. Olivia focuses on reforming the management of the Mississippi River, including the operation of federal locks and dams. She facilitates the Nicollet Island Coalition, a group of environmental, taxpayer, and conservation organizations focused on restoring a sustainable Upper Mississippi River through federal policy reform. This work requires her to engage directly with the three Upper Mississippi River Corps District offices. Prior to working at American Rivers, Olivia worked on similar issues at the Izaak Walton League of America. Olivia has a Bachelor of Science in Natural Resources and Environmental Sciences and a Master of Art in Environmental Studies from the University of Illinois.

Olivia will be assisted on this project by Brian Graber, American Rivers most experienced dam removal expert. Brian is the Senior Director of our River Restoration Program and has 20 years of experience managing dam removal projects and training others around the country to remove dams. Brian is a Trustee on the Board of the Penobscot River Restoration Trust, a completed project in Maine that included two dam removals very similar to the dams in the Mississippi River Gorge.