



Environment and Natural Resources Trust Fund

2021 Request for Proposal

General Information

Proposal ID: 2021-224

Proposal Title: High School River Bluff Pollinator Habitat Creation

Project Manager Information

Name: Betsy Daub

Organization: Friends of the Mississippi River

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Project Basic Information

Project Summary: 0.25-acres of high school and public parkland turf grass will be restored to pollinator-friendly habitat. Students will assist in restoration and maintenance, and design long-term research and monitoring projects.

Funds Requested: \$28,000

Proposed Project Completion: 2024-06-30

LCCMR Funding Category: Small Projects (H)

Secondary Category: Environmental Education (C)

Project Location

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

Region(s): Metro

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

Region(s): Metro

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.

This project is a unique partnership between Minnehaha Academy's Upper School (West River Parkway, Mississippi Gorge Regional Park), Friends of the Mississippi River, and Minneapolis Park and Recreation Board. Research shows that urban natural areas are important in providing habitat for wildlife and pollinators (Baldock et al. 2019; Narango et al. 2018). However, urban open spaces are increasingly degraded by a lack of native vegetation. Turf grass fails to provide necessary habitat for species of native pollinators whose populations are in decline. Urban public and private lands could provide significant wildlife habitat if planted to native vegetation. At the same time, youth and community education is key to fostering knowledgeable and engaged support for native habitat. Local and accessible demonstration projects showing the conversion of turf grass to native, pollinator and wildlife-friendly habitat can help educate communities about the value of urban restoration. Located along the well-used West River Parkway in the heart of the Twin Cities, this project has the potential to inform all who pass by the site: neighbors, people recreating, and commuters. Minnehaha Academy would integrate this project into science curriculum and ecology club activities, fostering environmental awareness, stewardship ethics, and research skills in future generations.

What is your proposed solution to the problem or opportunity discussed above? i.e. What are you seeking funding to do? You will be asked to expand on this in Activities and Milestones.

Minnehaha Academy and Friends of the Mississippi River propose to restore 0.25 acres of turf grass to native, pollinator-friendly oak savanna habitat. The site includes both Academy and Minneapolis Park and Recreation Board (MPRB) property. Presently, the area includes a mix of mature oak trees surrounded by regularly mowed turf grass. Located outside the doors of the high school, the site provides an opportunity to act as a living laboratory for students learning about ecology, pollinators and research methods. High school students will conduct baseline surveys of pollinators and other wildlife, assist in designing and conducting restoration activities, monitor changes over time, develop research projects, and share their efforts and outcomes with the community. FMR will provide leadership and oversight of the restoration (removal of sod, seeding and plug plantings, and maintenance). Converting this site to native habitat also reduces mowing and maintenance activities for MPRB. Because students will assist with plantings, weeding and light maintenance, no herbicides will be used in this project, which will increase the cost above that of a typical restoration. This project, however, has immense community and student education benefits, in addition to the pollinator and wildlife habitat a normal restoration project would provide.

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 will provide over 100 high school students a year with the opportunity to assist with and learn from a 0.25-acre native oak savanna restoration. Educational signage at the site will inform the general public about the value of native vegetation and urban habitat restoration, encouraging property owners to plant native vegetation. The project adds to the 37 acres within the Mississippi Gorge Regional Park that FMR has already restored, creating additional habitat connectivity along the river.

Activities and Milestones

Activity 1: High school students assist with restoration of 0.25 acres of turf grass to native oak savanna and conduct experiments.

Activity Budget: \$28,000

Activity Description:

Restore 0.25 acres of high school and Minneapolis Park and Recreation Board turf grass to native oak savanna in a demonstration project to show the value of restored urban habitat. Using mechanical methods, turf grass will be removed. Approximately 0.10 acres of school property will be restored by students through plug plantings and maintained as a demonstration and research lab. The remaining acres will be seeded to traditional native oak savanna and maintained as natural, native habitat.

Activity Milestones:

Description	Completion Date
Baseline surveys	2021-05-31
Remove turf grass and purchase seed and plugs	2021-08-31
Install demonstration garden	2021-09-30
Seed savanna mix	2021-12-31
Yearly surveys and mow and weed 3x yearly	2024-06-30

Project Partners and Collaborators

Name	Organization	Role	Receiving Funds
MaryLynn Pulscher	Minneapolis Park and Recreation Board	MPRB owns a portion of the land being restored to native oak savanna. MPRB will cease mowing this area and enter into a Memorandum of Understanding with Minnehaha Academy to keep this area as native habitat in perpetuity.	No
Nancy Cripe, Science Faculty	Minnehaha Academy Upper School	Minnehaha Academy will assist with installation and maintenance of 0.25 acres of native oak savanna habitat. Students will assist in restoration, maintenance, and monitoring, and design additional research projects using the restored area. Minnehaha Academy will sign an MOU with MPRB and FMR to maintain this area in perpetuity.	No

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 be funded?

FMR strategically focuses on areas within designated conservation corridors. We stay engaged with projects, landowners, partners and communities, ensuring continuous improvement and expansion of the habitat values at these sites, all while protecting the public investment. FMR will continue to partner with Minnehaha Academy and the Minneapolis Park Board and work with students and FMR's volunteer Gorge Leadership Team to maintain the restoration. Our future goals are to expand restoration at this site and throughout the Mississippi Gorge Regional Park.

Other ENRTF Appropriations Awarded in the Last Six Years

Name	Appropriation	Amount Awarded
Mississippi and Vermillion River Restoration of Prairie, Savanna, and Forest Habitat - Phase Ten	M.L. 2017, Chp. 96, Sec. 2, Subd. 08h	\$213,000
Metro Conservation Corridors Phase VIII - Prairie, Forest, and Savanna Restoration in Greater Metropolitan Area	M.L. 2015, Chp. 76, Sec. 2, Subd. 08e	\$276,000

Project Manager and Organization Qualifications

Project Manager Name: Betsy Daub

Job Title: Conservation Director

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

Betsy holds a Master of Science degree in Resource Ecology and Management from the University of Michigan's School of Natural Resources and Environment. She has over 25 years of experience working in the environmental/conservation field. In her capacity as FMR's Conservation Director, she leads the organization's efforts to protect and restore land in the Mississippi River watershed. Her conservation work in Minnesota includes serving on the Minnesota Forest Resources Council, leading Audubon Minnesota's Important Bird Areas effort, and with the Minnesota DNR as project manager developing the online rare species guide.

Organization: Friends of the Mississippi River

Organization Description:

Friends of the Mississippi River (FMR) is a leading citizen organization working to protect and enhance the Mississippi

River and its watershed in the Twin Cities area. We believe the tremendous ecological, cultural, scenic and recreational values of the river must be carefully tended to ensure that they continue to be shared equally by all citizens and that they endure for future generations. We accomplish these goals through three inter-related programs.

- Land Conservation: We work with public and private landowners to protect, restore and manage important natural areas along the river and its key tributaries.
- Watershed Protection: Working with citizens and local governments, we strive to draw attention to the health of local rivers, lakes and wetlands and bring citizen opinion to bear on decisions that improve water quality.
- River Corridor Stewardship: The Mississippi River cannot protect itself. We engage citizens in a variety of educational, recreational, and volunteer stewardship activities that give them the desire and the understanding to advocate on behalf of the river's public values at City Hall or the State Capitol.

Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineligible	% Benefits	# FTE	Classified Staff?	\$ Amount
Personnel								
Conservation Director		Grant and Project Manager			16%	0.06		\$1,950
Ecologist		Directing/Overseeing Project Implementation			16%	0.24		\$6,165
Bookkeeper/Accountant		manages expense data, submits invoices, all project accounting			16%	0.03		\$650
Volunteer Event Staff		Coordinates all volunteer activities at project site			16%	0.09		\$1,875
College Intern		Assist with restoration and student volunteer coordination			0%	0.03		\$300
							Sub Total	\$10,940
Contracts and Services								
TBD	Professional or Technical Service Contract	Purchase seed, plants and mulch; remove turf grass; till and install weed mat; broadcast seed; water; mow; tend planted areas				-		\$9,235
							Sub Total	\$9,235
Equipment, Tools, and Supplies								
	Tools and Supplies	2,000 plant plugs for 4,000 sq.ft demo garden; seed for 0.15 acres; 52 plant labels; mulch for 0.1 acres; weed barrier for 0.1 acres; 50 flat stones;	Plant plugs and seed are for the 0.25 acre school oak savanna restoration. Labels are for a portion of the restoration that will be a demonstration plot; mulch is also for the areas restored; stone flagging for portions of the demonstration area and to facilitate surveys; weed barrier is to prevent invasive plants from becoming established in early stages of restoration					\$7,405
							Sub Total	\$7,405
Capital Expenditures								

							Sub Total	-
Acquisitions and Stewardship								
							Sub Total	-
Travel In Minnesota								
	Miles/ Meals/ Lodging	Mileage		Travel to and from the school/MPRB site				\$420
							Sub Total	\$420
Travel Outside Minnesota								
							Sub Total	-
Printing and Publication								
							Sub Total	-
Other Expenses								
							Sub Total	-
							Grand Total	\$28,000

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
State				
			State Sub Total	-
Non-State				
In-Kind	FMR Stewardship Program staff support	FMR stewardship staff support for organizing and implementing student and community restoration events	Pending	\$810
In-Kind	In-kind student volunteer support	In-kind student volunteer and community volunteer support planting, seeding, tending restoration acres	Pending	\$15,465
			Non State Sub Total	\$16,275
			Funds Total	\$16,275

Acquisition and Restoration

Parcel List

Name	County	Site Significance	Activity	Acres	Miles	Estimated Cost	Type of Landowner	Easement or Title Holder	Status of Work
Minnehaha Academy and MPRB Restoration	Hennepin	This is an environmental education oak savanna restoration project sited along the globally significant Mississippi River Flyway and within the Mississippi Gorge Regional Park	Restoration	0.25	0	\$28,000	Public		Has not begun
				-	-	-			
Totals				0.25	0	\$28,000			

Restoration

1. Provide a statement confirming that all restoration activities completed with these funds will occur on land permanently protected by a conservation easement or public ownership.

The majority of this project is on Minneapolis Park and Recreation Board land. Adjoining it, is a small amount of Minnehaha Academy land that is also part of the restoration project to be led by students. All public lands will remain permanently protected. The school has also expressed a desire to keep their portion of the property as restored oak savanna for student research and engagement in perpetuity.

2. Summarize the components and expected outcomes of restoration and management plans for the parcels to be restored by your organization, how these plans are kept on file by your organization, and overall strategies for long-term plan implementation.

This environmental education project involves the restoration of 0.25 acres of oak savanna. FMR strategically focuses on areas within designated conservation corridors. We stay engaged with projects, landowners, partners and communities, ensuring continuous improvement and expansion of the habitat values at these sites, all while protecting the public investment. FMR will continue to partner with Minnehaha Academy and the Minneapolis Park Board and work with students and FMR's volunteer Gorge Leadership Team to maintain the restoration. Our future goals are to expand restoration at this site and throughout the Mississippi Gorge Regional Park.

3. Describe how restoration efforts will utilize and follow the Board of Soil and Water Resources "Native Vegetation Establishment and Enhancement Guidelines" in order to ensure ecological integrity and pollinator enhancement.

FMR will use and follow the Board of Soil and Water Resources "Native Vegetation Establishment and Enhancement Guidelines" to ensure ecological integrity and pollinator enhancement on our project sites. Our project incorporates these guidelines in numerous ways, including:

- Sites are selected to be strategic in providing ecological benefits for the landscape in which they are a part
- Sites are selected within identified conservation corridors in order to make landscape connections to decrease habitat fragmentation and create habitat linkages across the landscape
- Restoration efforts will incorporate plant communities appropriate to the sites to provide food and habitat for species in need, particularly pollinators
- Restoration efforts will include methods to restore and maintain species diversity, including incorporating prescribed fire and the removal of invasive plants that displace native vegetation
- Efforts are designed to restore habitat complexes and natural corridors and buffer natural areas
- The restoration of a former farm field to prairie will help retain water on the land, reduce runoff and improve adjacent Mississippi River water quality
- Efforts include removal of invasive species
- The project practices adaptive management with its focus on monitoring and assessing restoration methods and outcomes

4. Describe how the long-term maintenance and management needs of the parcel being restored with these funds will be met and financed into the future.

FMR has been strategically focused on specific areas within designated conservation corridors for over a decade. This has allowed us to stay engaged with projects, landowners, partners and communities, helping to ensure the continuous improvement and expansion of the habitat values at these sites, while protecting the public investment that has been made in them. Starting with individual parcels, our project areas have grown by orders of magnitude to protect and restore large tracts of land, ultimately creating contiguous greenway corridors. The restoration and enhancement project presented in this work program are all part of larger projects both in the sense of time and area. Because of human induced changes in the landscape, natural areas require management. While it is often the case that initial restoration and enhancement require relatively large investments initially, the costs often decrease over time as the goals for a site are met and the project enters a more maintenance level of activity, such as conducting period burns on

restored prairie. FMR is committed to conducting fundraising from both public and private sources, for the ongoing restoration and enhancement activities required at these sites over time.

5. Describe how consideration will be given to contracting with Conservation Corps of Minnesota for any restoration activities.

FMR's standard practice when contracting is to always provide the Conservation Corps of Minnesota with our Request for Proposals. We will continue this practice when contracting for restoration work for this project.

6. Provide a statement indicating that evaluations will be completed on parcels where activities were implemented both 1) initially after activity completion and 2) three years later as a follow-up. Evaluations should analyze improvements to the parcel and whether goals have been met, identify any problems with the implementation, and identify any findings that can be used to improve implementation of future restoration efforts at the site or elsewhere.

This project incorporates monitoring and evaluation at these sites. Pollinator surveys before and following restoration will help assess if restoration activities improve habitat for these organisms. Restoration outcomes will be monitored annually for multiple years following completion of the project. FMR's tradition of staying engaged at sites where we do restoration work, results in our being able to assess outcomes for many years following treatments.

Attachments

Required Attachments

Map

File: [60cacdf9-569.pdf](#)

Alternate Text for Map

Two aerial photographs show Minnehaha Academy and the proposed restoration site in relation to the Mississippi River, the Mississippi Gorge Regional Park, and other restoration sites FMR has worked on in the Gorge. The portions of the site that are school and MPRB are delineated.

Financial Capacity

File: [ff9be734-d97.pdf](#)

Board Resolution or Letter

Title	File
BoardResolutionFinal	6fb3afd1-7c0.pdf

Optional Attachments

Support Letter or Other

Title	File
Support Letter w MALH- High School River Bluff Pollinator Habitat Creation.docx	25ea6e14-170.docx
MPRB Letter of support	2dea0b53-65a.docx

Administrative Use

Does your project include restoration or acquisition of land rights?

Yes: Restoration,

Does your project have patent, royalties, or revenue potential?

No

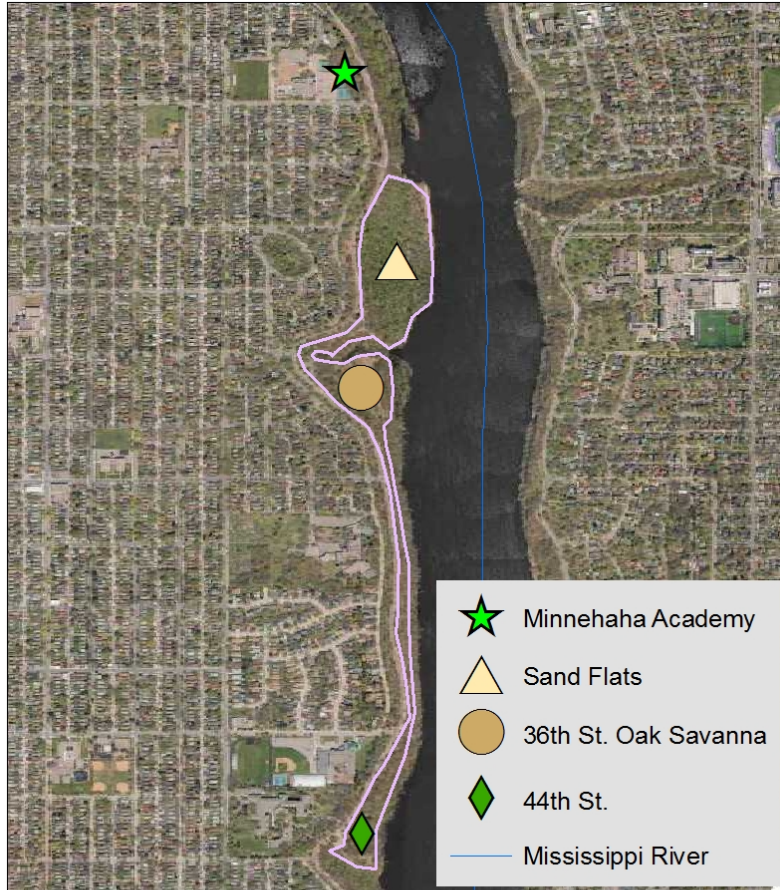
Does your project include research?

No

Does the organization have a fiscal agent for this project?

No

High School Living Lab Demonstration Project: Restoring 0.25 Acres of Oak Savanna



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 Meters



The restoration site at Minnehaha Academy adds additional habitat to the 37 acres FMR has restored in the Mississippi Gorge Regional Park

The project is a partnership between FMR, Minnehaha Academy's Upper School and the Minneapolis Park and Recreation Board (MPRB). FMR will work with students and high school science teachers to restore 0.25 acres of school and MPRB land to native oak savanna. Students will assist with restoration and conduct research and monitoring activities at the site.



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