

Environment and Natural Resources Trust Fund

2022 Request for Proposal

General Information

Proposal ID: 2022-244

Proposal Title: Bohemian Flats Savanna Restoration

Project Manager Information

Name: Adam Arvidson Organization: Minneapolis Parks and Recreation Board Office Telephone: (612) 230-6470 Email: aarvidson@minneapolisparks.org

Project Basic Information

Project Summary: This project will restore approximately 5.5 acres of compacted urban turf adjacent to the Mississippi River to a vibrant oak savanna ecosystem.

Funds Requested: \$286,000

Proposed Project Completion: December 31 2027

LCCMR Funding Category: Methods to Protect, Restore, and Enhance Land, Water, and Habitat (F)

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

Narrative

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

The 5.5-acre site lays within a gorge cut by the erosive forces of St. Anthony Falls over thousands of years. The gorge and the falls are unique to our state and the Mississippi River as a whole. Over the years, this space was utilized for housing and industrial purposes. The MPRB purchased it in the 1980s and turned it into park space. Extensive soil corrections were made in 1989 prior to the construction of West River Parkway. As a flat open space adjacent to the river, it has been an attractive area for river-related construction. Bridge projects, including the 35W bridge reconstruction in 2007 and 2008, have used the space for construction staging. The last of the major bridge projects in this area have completed.

The large construction projects have left the site in poor shape. Soils are compacted and likely contain solid debris. The site sits empty and ready for a new purpose. Minnesota has lost most of its natural habitats, less than 1% of historic prairie and savanna remain. These areas are crucial to supporting pollinators, birds, and other wildlife. This is the perfect time to invest in returning a lost landscape to our river's edge.

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.

This proposal seeks to transform a bare turf space into a vibrant savanna habitat with grasses, wildflowers, and oaks, similar to how it may have looked 200 years ago. The space will serve not only park visitors, but insects like bees and butterflies, birds, bats, and mammals like the fox and the river otter. Reestablishing a native savanna is no easy task. It takes weeks or months to prepare the soil; amending and loosening it, removing weed species that have been growing at the site for decades, and eliminating undesired seed within the soil itself are essential for success. The new native plant species must out-compete the existing weed species. This is accomplished by robust soil preparation, sowing native grass and wildflower seeds as well as an annual cover crop to shade out competing weeds, and by planting wildflower and grass plugs and oak seedlings. Regular yearly maintenance is required for the first several years while the savanna becomes established.

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 create a natural space for urban inhabitants to experience a natural environment, and will provide habitat for numerous river species, including mammals, birds, and insects and other pollinators. The Mississippi Flyway is a critical state resource. Every habitat enhancement along this migratory corridor enhances the entire corridor by providing way stations that lead to migratory success. In addition to putting a natural system in close proximity to urban residents—especially those of Cedar-Riverside, one of the most dense and diverse neighborhoods in the state—this 5-acre restoration will benefit species traveling the entire length of Minnesota.

Activities and Milestones

Activity 1: Restoration Planning

Activity Budget: \$17,000

Activity Description:

MPRB will hire an ecological restoration professional through a competitive process and work with them to prepare a restoration plan for the site. The restoration plan will become part of the construction plans for the project that will be publicly bid (Activity 2). The restoration plan will guide all construction, the process for ongoing monitoring, and long-term maintenance. Construction plans will be prepared by MPRB staff and will be based on the restoration plan.

Activity Milestones:

Description	Completion Date
Selection of Restoration Ecologist Professional	July 31 2022
Completion of Restoration Plan	September 30 2022
Completion of Construction Plans for Bidding	December 31 2022

Activity 2: Site Preparation and Construction

Activity Budget: \$260,000

Activity Description:

The construction phase will include the hiring of a construction contractor through the public bidding process. Following construction contract award by the MPRB Board of Commissioners, Permitting and Construction Mobilization will commence. The Contractor will complete the restoration under the observation of the MPRB hired consultant and MPRB staff that will oversee Construction Administration activities. Specific tasks include prescribed burns to remove unwanted plant material, erosion control measures, tilling the site with machinery, amending the soil as needed, spreading seed, installing plant plugs, installing trees, and soil protection. Soil preparation and existing plant removal will occur in multiple stages using an MPRB-approved integrated plant management strategy over the course of the growing season.

Activity Milestones:

Description	Completion Date
Construction Contract Award	March 31 2023
Construction Commencement	April 30 2023
Completion of Site Preparation	November 30 2023
Completion of Plant Installation	June 30 2024

Activity 3: Establishment and Ongoing Monitoring

Activity Budget: \$9,000

Activity Description:

A baseline plant survey will take place after germination in the first growing season after construction. The only existing plant material on site is mown turf grass so a pre-construction survey is not necessary. Mowing the site in the spring after early weeds pop up is crucial to giving the new native plants the chance to emerge and receive sunlight. Spot spraying may take place throughout the summer as needed. A spring burn on the second season will encourage native plant growth and deter non-native species and woody plants (not including the oaks). The area will be monitored for plant health and diversity for three years after construction, with annual plant surveys taking place for that same

duration. This work will be performed by the same consultant hired by MPRB under a competitive process to create the restoration plan. The information gained from these studies will be made public on the MPRB website.

Activity Milestones:

Description	Completion Date
Post-Construction Plant Survey	July 31 2024
Annual Plant Health Surveys and Ongoing Monitoring	December 31 2027

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?

Long term maintenance and management will be performed by the Minneapolis Park and Recreation Board as part of its overall natural resources maintenance programs. Such activities do include paid staff work, volunteers, and partnerships with nonprofit organizations. Maintenance and management activities are funded by the MPRB tax levy and are supported by the state and Metropolitan Council through regional parks operations and maintenance (O&M) funding. Additional work necessary after initial construction will be covered by the contractor's warranty and and will not require additional funding. Additional restoration and enhancement work after the warranty period will be funded by MPRB.

Other ENRTF Appropriations Awarded in the Last Six Years

Name	Appropriation	Amount Awarded
Invasive Carp Management Research in Lake Nokomis Subwatershed	M.L. 2016, Chp. 186, Sec. 2, Subd. 06g	\$189,000
Expanding Nature Knowledge and Experience with New Interactive Exhibits at North Mississippi Regional Park	M.L. 2018, Chp. 214, Art. 4, Sec. 2, Subd. 05h	\$500,000

Project Manager and Organization Qualifications

Project Manager Name: Adam Arvidson

Job Title: Director of Strategic Planning

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

Mr. Arvidson is MPRB's Director of Strategic Planning, in which role he is responsible for large-scale planning of public lands. He is a registered landscape architect with 20+ years of experience in the public and private sector and has worked on numerous habitat and environment projects, including several funded through LCCMR and the Lessard-Sams Council. He is currently the project manager for the MPRB's Ecological Systems Plan and is also leading the agency's effort to create new environmentally sound master plans for each neighborhood park.

Organization: Minneapolis Parks and Recreation Board

Organization Description:

With 179 park properties totaling nearly 6,800 acres of land and water, the Minneapolis Park and Recreation Board (MPRB) provides places and recreation opportunities for all people to gather, celebrate, contemplate, and engage in activities that promote health, well-being, community, and the environment. Each year, approximately 20 million visits are made to the nationally acclaimed Minneapolis park system. Its urban forests, natural areas, and waters endure and captivate. Its Grand Rounds National Scenic Byway, neighborhood parks, recreation centers, and diversified programming have made the Minneapolis park system an important component of what makes Minneapolis a great place to live, play and work.

Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineli gible	% Bene fits	# FTE	Class ified Staff?	\$ Amount
Personnel								
Design Project Manager		An MPRB registered landscape architect and project manager will hire consultants through a competitive bid process, will prepare the construction plans for bid based on the restoration plan, and will administer the construction and ongoing monitoring processes.			25%	0.2		\$10,000
							Sub Total	\$10,000
Contracts and Services								
Ecological Professional to be determined	Professional or Technical Service Contract	Selected consultant will prepare the restoration plan and will perform all biological surveys and will monitor plant health and diversity. Consultant will prepare summary reports for MPRB, which will be compiled into the project's biological report at the end of the project.				0		\$21,000
Construction Contractor to be determined	Professional or Technical Service Contract	Contractor will be selected by competitive bid and will perform all construction work, as directed by the approved construction plans. Contractor and hired sub-contractors will provide site preparation, planting, erosion control, and other construction tasks.				0		\$255,000
							Sub Total	\$276,000
Equipment, Tools, and Supplies								
							Sub Total	-
Capital Expenditures								
							Sub Total	-
Acquisitions and Stewardship								

			Sub	-
			Total	
Travel In				
Minnesota				
			Sub	-
			Total	
Travel				
Outside				
Minnesota				
			Sub	-
			Total	
Printing and				
Publication				
Fublication			Sub	
				-
			Total	
Other				
Expenses				
			Sub	-
			Total	
			Grand	\$286,000
			Total	

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				
Cash	MPRB tax levy as part of the General Fund as directed to tree purchasing and labor for planting and maintenance.	MPRB Forestry crews will be utilized for all tree planting on site, following the restoration plan and in coordination with the general site contractor. Tree purchasing will also be funded through MPRB's general fund as part of the organization's annual tree purchase.	Secured	\$75,000
			Non State Sub Total	\$75,000
			Funds Total	\$75,000

Acquisition and Restoration

Parcel List

Name	County	Site Significance	Activity	Acres	Miles	Estimated	Type of Easement or		Status of
						Cost	Landowner	Title Holder	Work
Bohemian Flats Park	Hennepin	The site has high visibility within the city and lies within the Mississippi River Critical Area. The current landscape is comprised of turfgrass on compacted urban soils.	Restoration	5	0.5	-	Public	Minneapolis Park and Recreation Board	Has not begun
Totals				5	0.5	-			

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.

All restoration activities will occur on land permanently in public ownership (owned by the Minneapolis Park and Recreation Board).

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.

Components of the restoration and management plan will include a description of current conditions, with a focus on soil type and quality (no native vegetation currently exists on the site); description of the target restoration community, an upland savanna system; a timeline for restoration; and guidance for ongoing management of the restored areas. The restoration plan will be included in the creation of construction plans for the project and will guide both construction and ongoing management. This plan will be kept both in MPRB staff project files and in the MPRB archive, as well as posted publicly on the MPRB website.

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. MPRB and its partners will fully utilize BWSR's guidance document. Because this project occurs in an urban site but envisions a savanna plant community, we expect that the recommended number of plant species will be on high end of the "Disturbed Sites" row according to the "Minimum Recommended Number of Species" matrix (p.6). The project will utilize and source seed as recommended for the project location (Ecological Section 8, Big Woods Subsection). Primary project type guidance will come from the section on native prairie reconstruction (p. 28).

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.

Long term maintenance and management will be performed by the Minneapolis Park and Recreation Board as part of its overall natural resources maintenance programs. Such activities do include paid staff work, volunteers, and partnerships with nonprofit organizations. Maintenance and management activities are funded by the MPRB tax levy and are supported by the state and Metropolitan Council through regional parks operations and maintenance (O&M) funding.

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

Prior to the commencement of construction activities, the project manager will contact the Conservation Corps of Minnesota to determine desire and availability to perform applicable work.

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.

As described in Activity 3, evaluations of plant germination and ongoing health will be performed after the first germination after construction, and then annually for three years. Analyses will focus on the long term viability of the restoration and will recommend corrections if problems arise. The three-year summary report will be made public on the MPRB website.

Attachments

Required Attachments

Map File: <u>36780f33-856.pdf</u>

Alternate Text for Map

An aerial view of the site, with the Mississippi River in the foreground and downtown Minneapolis in the background. Below this view are three images of restoration character....

Board Resolution or Letter

Title	File
Resolution 2021-149	<u>2c6e7f16-e9d.pdf</u>

Optional Attachments

Support Letter or Other

Title	File
Support letter from Mississippi Watershed Management	<u>28a48bd4-ab6.pdf</u>
Organization	
Support letter from Friends of the Mississippi River	<u>9e3790a4-224.pdf</u>

Administrative Use

Does your project include restoration or acquisition of land rights?

Yes: Restoration,

- Does your project have potential for royalties, copyrights, patents, or sale of products and assets? No
- Do you understand and acknowledge IP and revenue-return and sharing requirements in 116P.10? $$\rm N/A$$
- 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



West River Parkway

Mississippi River

University of Minnesota

Prairie/Savanna Restoration at Bohemian Flats Park





Character Imagery

