

Environment and Natural Resources Trust Fund

2021 Request for Proposal

General Information

Proposal ID: 2021-262

Proposal Title: The Longspur Prairie Fund Urban Prairie Learning Lab

Project Manager Information

Name: Peter Schultz

Organization: The Longspur Prairie Fund

Office Telephone: () -

Email: schultz@longspurprairie.org

Project Basic Information

Project Summary: The Longspur Prairie Fund proposes to establish an environmental learning lab with urban microprairie and stormwater bio-retention system components at the Rourke Art Gallery + Museum.

Funds Requested: \$82,000

Proposed Project Completion: 2023-08-31

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): NW

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

Region(s): NW

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.

The City of Moorhead currently has little green infrastructure, especially as it pertains to stormwater management. It also boasts a scarce number of sites which offer urban environmental education and stewardship where our population centers are living, working, and learning. By offering easily accessible learning sites to community members, students, and scholars, we can address key areas of conservation literacy and environmental study, such as: water quality, pollinator conservation, urban permaculture, responsible storm water treatment, kid-friendly ecology & geo-science, and more. Our proposal to address these opportunities aligns with the City of Moorhead's adoption of the Minnesota GreenStep Cities best practices in 2017, their achievement of GreenStep 3 status in 2019, and their commitment to the city's improved sustainability.

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.

Urban conservation sites can address a lack of access to educational green spaces, can improve knowledge of our native landscapes, can cultivate the understanding of our natural resources, and can inspire citizens towards environmental action. This pilot project addresses these concerns in a way that is both pragmatic and innovative. In collaboration with the City of Moorhead, MN, the Longspur Prairie Fund, a grassroots non-profit dedicated to conservation work in the Red River Valley, will establish an urban micro-prairie and a storm water bio-retention "learning lab" at the Rourke Art Gallery + Museum. The established site will serve as a pilot project for other urban prairies and rain gardens in our area. It will also serve as a learning laboratory for local scientists, urban planners, and students. A "tool kit" resulting from this project will document all steps and impacts of the new site, thus providing a "road map" for other communities interested in addressing ecological challenges in their own urban centers. The proposed learning lab site will be open to the public year-round; it will serve Clay and surrounding counties. Programming will include targeted lectures, workshops, and seminars from local and regional educators.

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?

- 1. Restoration of a micro-prairie to create urban habitat and serve as a learning incubator for environmental study.
- 2. Establishment of rain garden/bioretention stormwater system for proposed site.
- 3. Increased community awareness and advocacy for conservation and habitat creation, sustainable practices , and responsible stormwater treatment.

Activities and Milestones

Activity 1: Prairie Restoration and Habitat Creation

Activity Budget: \$24,201

Activity Description:

The reclamation of the plot as a micro-prairie accomplishes our first goal of creating the proper environs to serve as a learning incubator for environmental study. In order to realize this goal, the existing site will be expanded: Two asphalt parking stalls will be demolished and "reclaimed." The current curb design will be adjusted. Current site landscaping will be removed and soil amendments will be made to ensure optimal conditions for habitat establishment and growth. The prairie plot will be seeded with native grasses and forbs and mulched. Interpretive, decorative, and educational signage will be installed. The site will be designed by Contour Design Studio and executed by a to-be-determined contractor selected on a qualifications-based bid selection process.

This habitat creation fulfills current public and municipal goals of adding green spaces to existing urban neighborhoods. The site will be open to environmental study for community members, scientists, and their students. A local pollinator expert, Dr. D. Bryan Bishop, will be evaluating the viability of the site as a habitat for pollinators. This first activity will be considered complete when the described construction activities have been executed and the native seeding and plantings are established.

Activity Milestones:

Description	Completion Date
Existing Landscape / Hardscape Demolition and Removal	2021-08-31
Site Preparation, Soil Amendments, and Curb Installation	2021-09-30
Softscaping / Native Seed and Forb Planting	2021-10-31

Activity 2: Bio-Filtration Basin Installation and Regrading of Site

Activity Budget: \$56,552

Activity Description:

In order to establish rain garden infrastructure on the proposed site, eleven parking stalls and a section of concrete curb will be demolished and the existing underground infrastructure will be excavated. The infrastructure will be reconstructed. A new infiltration point in a modified curb design will allow for the proposed flow line to run into a bio-filtration basin in the restored prairie. The lot will be regraded, repaved, and striped. (A basic assessment of parking needs has already been completed.) The rain garden will be designed to collect and retain stormwater runoff and to maximize groundwater infiltration.

The design and vision for the site has been articulated by Contour Design Studio; it will be executed by a to-be-determined contractor selected on a qualifications-based bid selection process. A "tool kit" resulting from the project will provide local business owners and urban planners data for replicating the project on other sites. Area universities will also be invited to study the effectiveness of the management system. This pilot provides an ideal vehicle through which we can educate our community as to the importance of water retention and treatment. Moorhead does not currently require stormwater bio-retention management methods to capture and treat runoff.

Activity Milestones:

Description	Completion
	Date
Excavation of Existing Underground Infrastructure	2021-08-31
Installation of Stormwater Pipe and Infrastructure	2021-09-30
Finish Grading and Repave Parking Lot	2021-10-31

Activity 3: Community Awareness, Outreach, and Programming

Activity Budget: \$1,247

Activity Description:

To honor the innovative relationship and collaboration between the environmental learning lab and the arts non-profit host site, The Rourke Art Museum, a pair of private citizens will donate a piece of sculpture entitled "The Cultivator" to be installed on-site. The public dedication of this artwork will be the first step of community outreach for the site. To enhance community awareness of urban habitat creation and responsible stormwater treatment, LPF will schedule, facilitate, and encourage educational activities at the site, including: on-site data collection and scientific study by resident scientists, graduate students, and undergraduates; conservation education workshops for community members; plant and pollinator identification activities; school tours; urban sketching and plein-air sessions in collaboration with the Rourke; water quality discussions with River Keepers, a local organization dedicated to the health of the Red River; and more.

An urban prairie learning lab toolkit will be the resulting product of our first season of community programming and university study. Toolkit dispersal as well as total attendance and community member surveys will be used to measure the reach and quality of our programming.

Activity Milestones:

Description	Completion Date
Installation and Dedication of "The Cultivator" Sculpture	2021-09-30
First Season of Community Programming and University Study	2022-08-31
Creation of an Urban Prairie Learning Lab Toolkit	2023-08-31

Project Partners and Collaborators

Name	Organization	Role	Receiving Funds
Cady Rutter	The Longspur Prairie Fund (Assistant Director)	Administration and Logistics	Yes
Dr. Peter Schultz	The Longspur Prairie Fund (Executive Director)	Project Manager	Yes
Brian Leininger	Contour Design Studio, River Keepers (President of the Board)	Landscape Architect	Yes
Craig Larson	Craig Larson Landscape Architects	Landscape Architect	Yes
Jonathan Rutter	The Rourke Art Gallery Museum	Executive Director of the Host Site	No
Dr. D. Bryan Bishop	Concordia College (Chair, Biology)	Scientific and Educational Lead	No
Su Legatt	Legatt Design Services	Public Art Consultant	Yes
Shelly Carlson	City of Moorhead	City Council Member, Moorhead	No
Derrick LaPoint	Downtown Moorhead, Inc. (Executive Director)	Community Stakeholder	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?

Conservation and natural resource education will continue beyond the funding of the project and will be supported by the operating budget and facilitated by the staff of the Longspur Prairie Fund as a responsibility of its mission to the public. The results and findings will be reported by the Longspur Prairie Fund in its quarterly newsletters, on its website, and in its annual reports. The "tool kit" developed from the establishment of the urban prairie and bio-retention learning lab will be available as an open-source asset to the community through the LPF website.

Project Manager and Organization Qualifications

Project Manager Name: Peter Schultz

Job Title: Project Manager; Longspur Prairie Fund Executive Director

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

Dr. Peter Schultz is the Executive Director of the Longspur Prairie Fund. Under his leadership, LPF has successfully

enrolled over 800 acres of tallgrass prairie into conservation easements in central and western Minnesota; three more sites are currently under negotiation in Clay and surrounding counties. Dr. Schultz serves on the Local Technical Teams for Mahnomen and Agassiz Beach Ridge Prairie Cores for the Minnesota Prairie Conservation Plan. He is the architect of multiple annual events that promote conservation education in west-central Minnesota, including LPF's Annual Bee Hunt and LPF's Annual Tent Fest. He also oversees the LPF's Fellowships in the Natural Sciences, a program which supports individual researchers of exemplary talent whose work focusses on the prairies and wetlands of central Minnesota.

Organization: The Longspur Prairie Fund

Organization Description:

The Longspur Prairie Fund facilitates three types of projects in the High Plains. First, we actively conduct prairie and wetland restoration -- the planting of marginal farmland with native grasses, forbs, and aquascapes -- in west-central Minnesota. Second, we support research, education, and youth programming directly connected to our area's wildlife, agriculture, and ecology. Third, and finally, we develop voluntary habitat adoption strategies in partnership with local farms, businesses, churches, and industries that are passionate about sustaining the natural legacy of our region.

Mission: The Longspur Prairie Fund is dedicated to fostering the experiences, insights, and pleasures found in the native landscapes of the Red River Valley by way of advocacy, education, and conservation. We respect farmers, hunters, business owners, their properties, and their communities. We protect native plants, animals, habitats, and their ecologies. We teach the wisdom of the prairie through the arts and sciences. We restore native landscapes and preserve them for all time.

Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineli gible	% Bene fits	# FTE	Class ified Staff?	\$ Amount
Personnel								
Dr. Peter Schultz, Project Manager		Oversight and management of project execution, professional contracts, and programmatic aspects			0%	0.1		\$1,740
Cady Rutter, Administration and Logistics		Execution and management of all organizational and project filings and administration, development of public educational programming, and communication with professional contractors			0%	0.1		\$1,200
							Sub Total	\$2,940
Contracts and Services								
Contour Design Studio	Professional or Technical Service Contract	Landscape design services and construction administration services. (\$4,700 is already supported by non-ENRTF cash funds donated. The remainder of the contract is requested here.)				0		\$9,653
TBD Contractor	Professional or Technical Service Contract	All pursuant miscellaneous costs of installations on proposed site, including: asphalt demolition and removal, curb modification, earthmoving and grading, parking lot re-striping, installation of underground stormwater pipe and infrastructure, and contingencies.				0		\$43,318
Legatt Design Services	Professional or Technical Service Contract	Will provide liaison services with the City of Moorhead for all modifications and installations that require municipal approval and cooperation as the proposed site is city-owned land and includes a utilities box owned by Moorhead Public Services.				-		\$374
		,					Sub Total	\$53,345
Equipment, Tools, and Supplies								
	Tools and Supplies	Hardscape: 6" Std. Concrete Curb and Gutter (qty. 30 LF), \$960.00, Asphalt parking lot - 7" (qty 3,100 sq. ft.), \$21,700.00	Hardscape supply necessary to modify the existing site and parking lot to					\$22,660

			establish an urban prairie and		
	Tools and	Softscape: Seeding, native (qty 700 sq. ft.), \$350.00,	bioretention system. Softscape supply necessary to modify		\$1,455
	Supplies	Plugs, native grass and forbs (qty 175), \$875.00, Steel	the existing site to establish an urban		Ş1, 4 55
		Edging (qty. 20 LF), \$160.00, Rock Mulch (qty 35 sq. ft.), \$70.00	prairie and biorention system.		
	Tools and	Structural concrete piers for in-kind donated	To support the installation of a		-
	Supplies	sculpture (\$2,000 of donated non-ENRTF cash funds have been secured for this line item. No funds are requested.)	donated public art piece on-site.		
	Tools and	Site Signage - Interpretive panels (qty 2), \$800,	The interpretive panels will provide		\$1,600
	Supplies	Custom wrap for utility box on proposed site with installation (qty 1), \$1,000.00 (Office Sign Company	educational text on stormwater management and urban habitat. The		
		has pledged \$200 in-kind towards site signage. The	custom wrap will allow an existing		
		remainder is requested here.)	transformer to be integrated into the		
			vision for the design.		40
				Sub Total	\$25,715
Capital Expenditures					
				Sub Total	-
Acquisitions and Stewardship					
				Sub	-
Travel In				Total	
Minnesota					
				Sub Total	-
Travel Outside Minnesota					
				Sub Total	-
Printing and Publication					
				Sub Total	-
Other Expenses					

			Sub	-
			Total	
			Grand	\$82,000
			Total	

Classified Staff or Generally Ineligible Expenses

Category/Name Subcategory or Descriptio		Description	tion Justification Ineligible Expense or Classified Staff Request		
		Туре			

Non ENRTF Funds

Category	Specific Source	Use	Status	Amount
State				
			State Sub	-
			Total	
Non-State				
Cash	The Rourke Art Gallery + Museum, Downtown	\$2,000 will be allocated to Activity 3, Milestone 1 for structural concrete	Secured	\$6,700
	Moorhead, Inc., Longspur Prairie Fund, Minnesota Prairie Chicken Society	piers to install the donated sculpture, "The Cultivator."		
	Traine emercin society	\$4,700 will be allocated to the design and construction administration		
		services conducted by Contour Design Studio in Activities 1 and 2.		
In-Kind	Office Sign Company	To be utilized towards the cost of interpretive / educational panels for	Pending	\$200
		the site.		
In-Kind	Karla Mickelson, Kyle Meerkins (Representative of the	A piece of sculpture, entitled "The Cultivator," a work of art that speaks	Secured	\$10,000
	Artist's Estate and Co-Artist, respectively)	to progress, the cultivation of bold ideas, and to the values that this		
		project espouses will be donated to be installed on-site. This sculpture		
		will set this natural site apart from other urban habitat plots in marrying		
		environmental science and the arts and will serve an attraction for		
		community members to be invited closer and learn about the activities		
		of the site from interpretive signage.		
			Non State	\$16,900
			Sub Total	
			Funds	\$16,900
			Total	

Attachments

Required Attachments

Visual Component

File: <u>f92f5e07-975.pdf</u>

Alternate Text for Visual Component

The visual component includes renderings from Contour Design Studio for the proposed bio-infiltration basin. Includes both section and aerial views. Indicates existing site features and proposed modifications including: the proposed bio-infiltration basin, 6" perf. pipe under drain, curb cut inlet, and overflow outlet.

Financial Capacity

File: 35f32cb8-db6.pdf

Board Resolution or Letter

Title	File
Longspur Prairie Fund Letter of Resolution - LCCMR Proposal	<u>7c593654-e93.pdf</u>

Optional Attachments

Support Letter or Other

Title	File
Letter of Support - Rourke Art Gallery Museum	<u>112fab41-051.pdf</u>

Administrative Use

Does your project include restoration or acquisition of land rights?

No

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

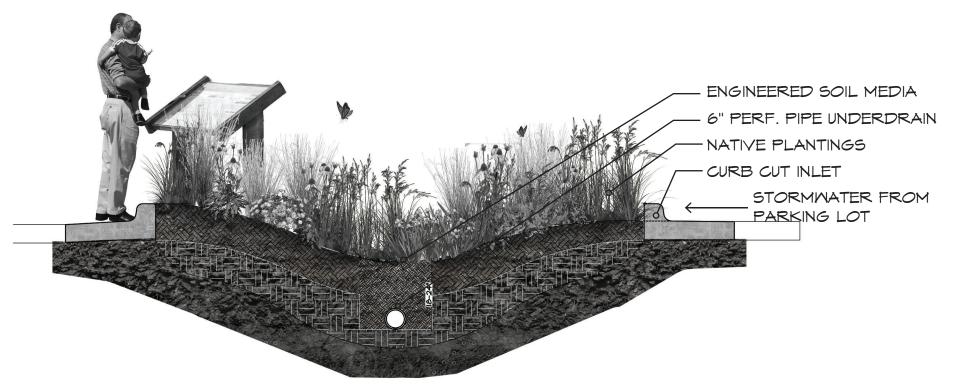
No

Does your project include research?

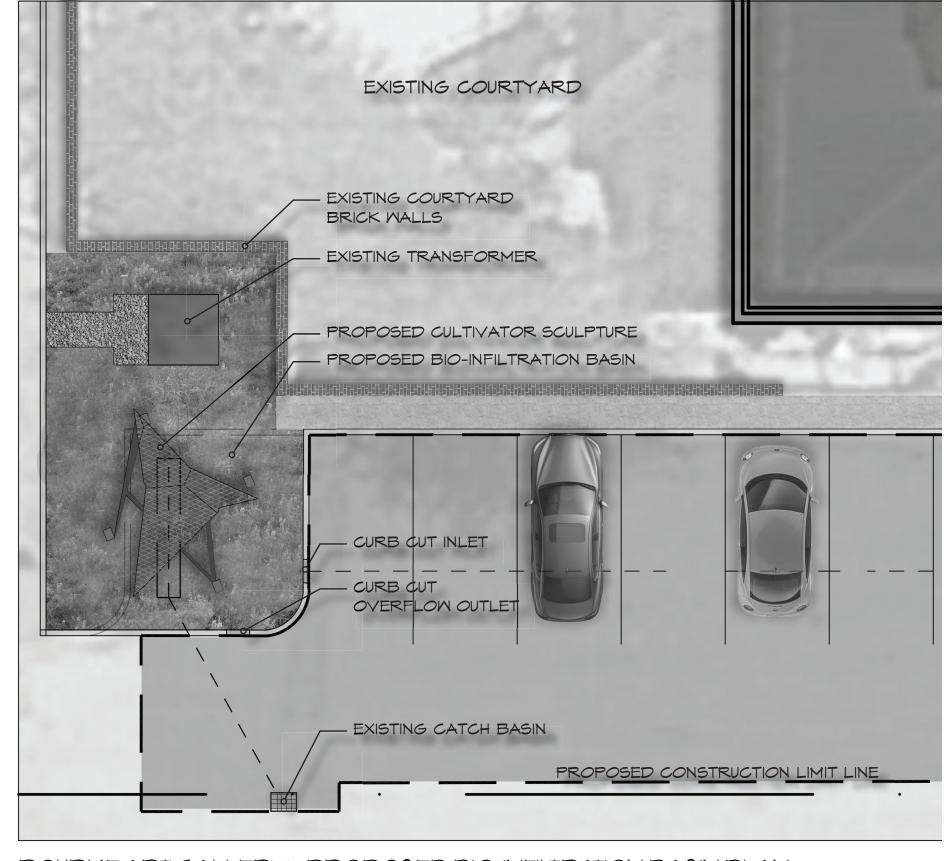
No

Does the organization have a fiscal agent for this project?

No



ROURKE ART GALLERY - PROPOSED BIO-INFILTRATION BASIN SECTION



ROURKE ART GALLERY - PROPOSED BIO-INFILTRATION BASIN PLAN