**PROJECT TITLE:** The Longspur Prairie Fund’s Urban Prairie Learning Lab

**I. PROJECT STATEMENT**

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. The “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 City of Moorhead currently has little green infrastructure, especially as it pertains to storm water management. This pilot provides a step towards solving that challenge. This project addresses issues of water quality, urban green space, pollinator conservation, urban permaculture, responsible storm water treatment, kid-friendly ecology & geo-science, and more.

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. The learning lab’s “curriculum” will be based around three features of the new rain garden: (1) the proposed micro-habitat; (2) the proposed bio-filtration basin; and (3) the proposed site-based community outreach and programming. With more of our community members living in areas defined by urban sprawl, 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.

**II. PROJECT ACTIVITIES AND OUTCOMES**

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| **Activity 1 Title: Prairie Restoration and Habitat Creation****Description:**In order to create an urban micro-prairie, the existing site will be expanded. Two asphalt parking stalls will be “reclaimed.” The current curb design will be adjusted. The new site will also accommodate a piece of sculpture that has been generously donated from a private citizen, entitled “The Cultivator,” a work of art that speaks to progress and the cultivation of bold ideas. The prairie plot will be seeded with native grasses and forbs. 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 green space fulfills current public and municipal goals of adding green spaces to existing urban neighborhoods. The site will be open to environmental study for both community members, scientists, and their students. This first activity will be considered complete when all native seeding and planting has been established. A local pollinator expert, Dr. D. Bryan Bishop, will be evaluating the viability of the site as a habitat for pollinators.**Activity 2 Title: Bio-Filtration Basin Installation and Regrading of Site****Description:**In order to establish rain garden infrastructure on the proposed site, the lot of eleven parking stalls will be demolished and regraded. A new infiltration point will be constructed in the new curb design to allow for the proposed flow line to lead to a bio-filtration basin in the restored prairie. The lot will be 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. Moorhead does not currently require stormwater bio-retention management methods to capture and treat runoff. This pilot provides an ideal vehicle through which we can educate our community as to the importance of water retention and treatment. 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. The resulting “tool kit” 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.**Activity 3 Title: Community Awareness, Outreach, and Programming** **Description:**The Longspur Prairie Fund’s first micro-prairie at the Rourke Art Museum was installed on the eastern side the Museum building. That project was funded in part by a grant from the Becker County SWCD in 2016 and demonstrated the utility of small-scale urban prairie sites for conservation education and outreach.In order to continue to raise community awareness of urban habitat creation and responsible storm water treatment, the Longspur Prairie Fund will schedule, facilitate, and encourage the following educational activities on the installed site: 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 Art Gallery + Museum; habitat workshops; water quality discussions with River Keepers, a local organization dedicated to the health of the Red River; and more. The host site, The Rourke Art Museum, will also play a valuable and unique role in offering new creative perspectives to approaching innovative conservation education through the arts. Due to the variety of possible programming, the outcomes are wide-ranging. This pilot will serve as an “activator” for our urban landscape. Outcomes will be gauged by total attendance, survey of community members served, and initiatives instigated by education at the test site. We will also track dispersal of the project “tool kit” to other cities and organizations in greater Minnesota.**ENRTF BUDGET: $** **62,943** |  |

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| **Outcome** | **Completion Date** |
| 1. Restoration of a micro-prairie to create urban habitat and serve as a learning incubator for environmental study. | September 15, 2020 |
| 2. Establishment of rain garden/bioretention stormwater system for proposed site. | September 15, 2020 |
| 3. Increased community awareness and advocacy for conservation and habitat creation, sustainable practices , and responsible stormwater treatment  | September 15, 2022 |

**III. PROJECT PARTNERS AND COLLABORATORS:**

Dr. Peter Schultz – Project Manager, Executive Director, The Longspur Prairie Fund

Cady Rutter – Administration and Logistics, Assistant Director, The Longspur Prairie Fund

Brian Leininger – Landscape Architect, Contour Design Studio: President of the Board, River Keepers

Craig Larson – Landscape Architect, Craig Larson Landscape Architects

Jonathan Rutter – Executive Director, The Rourke Art Gallery Museum

Dr. D. Bryan Bishop – Chair, Department of Biology, Concordia College

Su Legatt – Public Art Consultant

Derrick LaPoint – Executive Director, Downtown Moorhead, Inc.

Shelly Carlson – City Council Member, City of Moorhead

**IV. LONG-TERM IMPLEMENTATION AND FUNDING:**

Due to the nature of low to no maintenance costs for restored prairie, the inputs are minimal after initial start-up investment and establishment. The site is owned by City, but will be managed by the Longspur Prairie Fund and the Rourke Art Museum. The habitat and storm water treatment will be permanent benefits to the host site once established. 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.