Environment and Natural Resources Trust Fund

M.L. 2023 Draft Work Plan

General Information

ID Number: 2023-136

Staff Lead: Michael Varien

Date this document submitted to LCCMR: December 19, 2022

Project Title: Pollinator Enhancement and Mississippi River Shoreline Restoration

Project Budget: $187,000

Project Manager Information

Name: Josh Pennington

Organization: Department of Military Affairs

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Project Reporting

Reporting Schedule: April 1 / October 1 of each year.

Project Completion: September 30, 2024

Final Report Due Date: November 14, 2024

Legal Information

Legal Citation:

Appropriation Language:

Appropriation End Date: June 30, 2025

Narrative

Project Summary: This restoration project will restore native prairie, support pollinator plantings, and stabilize a large section of streambank along the Mississippi River.

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

There have been many reports of significant declines in populations of native pollinating insects. Numerous causes of pollinator declines have been identified, including: loss of habitat, poor diet due to limited diversity and abundance of floral resources (nectar and pollen). The riverbank along the Mississippi River is an incredible habitat for many terrestrial and aquatic species. This project will restore habitat along the river banks and in high visibility areas with educational opportunities that seek to encourage additional support and habitat development. This project will support living landscapes beneficial to pollinator and other wildlife species and demonstrate leadership in changing a culture from manicured lawns to establishing pollinator habitat that sustain ecological systems.

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

This project seeks to restore an eroding section of riverbank along the Mississippi River with an emphasis on native flowering vegetation to support pollinators. In addition, turf grass and evergreen shrubs will be replaced in high visibility areas within Camp Ripley with native flowering shrubs and forbs. Educational outreach and signage will occur as in-kind match to support changing a culture to enhance habitat for pollinators.

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 restoration has a direct benefit to several species of pollinators and increases water quality along the Upper Mississippi River. Pollinator species that this project will support include the dusted skipper, monarch butterfly, two-spotted skipper, Leonard's skipper, yellow-banded bumble bee, golden northern bumble bee, and American bumble bee. This is in direct support of goals identified in Minnesota's Wildlife Action Plan 2015-2025 to ensure the long-term health and viability of species that are rare, declining, or vulnerable to decline by maintaining and enhancing resilient habitats that species in greatest conservation need depend on.

Project Location

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

Region(s): Central

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

Region(s): Central

When will the work impact occur?

During the Project

Activities and Milestones

Activity 1: River bank Restoration

Activity Budget: $115,000

Activity Description:
A professional service contract for construction of riverbank stabilization project will be bid using State contracting mechanisms in order to prevent further erosion of the site. Native flowering forb and grass seed mixes along with flowering shrubs will be stipulated for use on the project site and extra plant seed will be ordered to be broadcast into the grassland directly adjacent to the riverbank site to enhance this grassland as part of ongoing pollinator enhancement efforts.

Activity Milestones:

Description	Approximate Completion Date
Procure on site materials for wood bench and root wad placement.	August 31, 2023
Award technical service contract for stream bank stabilization and plantings	September 30, 2023
Plant native forbs, grasses and shrubs on site	October 31, 2023

Activity 2: Prairie restoration site preparation, planting and maintenance.

Activity Budget: $70,000

Activity Description:
Site preparation for three grassland sites will be conducted by Department of Military Affairs conservation program staff using currently owned equipment. Activities will include spraying with a glyphosate product to remove current non-native vegetation; prescribed fire to remove thatch; soil scarification to encourage seed contact. Site preparations for the main entrance and the Valhalla cabin entrance pollinator gardens will be conducted by Camp Ripley Grounds department staff and will include the removal of degraded evergreen shrubs, landscape rock and overgrown turf grass. Planting of native shrubs and forbs will also be carried out by camp Ripley grounds staff with assistance from Camp Ripley conservation staff and volunteers during earth day and national public lands day events. Only seed and plants will be purchased for this project.

Activity Milestones:

Description	Approximate Completion Date
Conduct site preparations	September 30, 2023
Conduct pollinator Garden Site prep	September 30, 2023
Broadcast sites with native seed mix	October 31, 2023
Plant shrubs and forbs in polinator gardens	May 31, 2024
Monitor grassland enhancements using prairie reconstruction initiative protocols	July 31, 2024
Maintain vegetation height at <12" by mowing to encourage germination of native forbs	August 31, 2024
Continue mowing to encourage forb germination through 2025	September 30, 2024
Site monitoring to continue indefinitely	September 30, 2024

Activity 3: Outreach and public engagement

Activity Budget: $2,000

Activity Description:
Camp Ripley Environmental staff will develop and place educational signage to be placed in high traffic areas to educate

users of Camp Ripley about the benefits of pollinator habitat enhancements. Signage will include ENRTF graphics. Some areas of the overall project are included in educational tours for our current outreach efforts to school groups. Approximately 2500 people per year take part in these outreach efforts. ENRTF will be highlighted as funding source for projects in all presentations and outreach materials.

Activity Milestones:

Description	Approximate Completion Date
Use partnerships with local schools and colleges along with volunteers for plantings	September 30, 2023
Place educational signage	June 30, 2024
Incorporate new pollinator gardens and prairie plantings into current outreach programs	June 30, 2024

Project Partners and Collaborators

Name	Organization	Role	Receiving Funds
Morrison Soil and Water Conservation District	SWCD	Coordination and project support	No
Minnesota Department of Natural Resources	Division of Forestry, Fisheries and Wildlife	Design and collaboration	No
Minnesota Department of Natural Resources	Division of Ecological and Water Resources	Collaborator	No

Dissemination

Describe your plans for dissemination, presentation, documentation, or sharing of data, results, samples, physical collections, and other products and how they will follow ENRTF Acknowledgement Requirements and Guidelines.
All volunteer planting opportunities are advertised on the National Public Lands Day website and are coordinated through the U of M. Other volunteer efforts associated with the planting projects are advertised to Camp Ripley staff and are reported in the Camp Ripley Environmental program annual Conservation Program Report. ENRTF will be acknowledged in the printed annual report.

Long term monitoring data are published in the Camp Ripley Environmental program annual Conservation Program Report and carried out in coordination with MNDNR Ecological and Water Resources staff.

The stream bank restoration is being carried in coordination with the Morrison SWCD and will be captured in their reporting and will be published in the Camp Ripley Environmental program annual Conservation Program Report. ENRTF will be acknowledged in the printed annual report.

Interpretative signage placed on grassland restorations and stream bank stabilization will be updated to include ENRTF logo.

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 work be funded?
Results will be monitored by the Camp Ripley environmental staff. Monitoring reports will be included in then annual updates to the Integrated Natural Resource Management Plan. Any additional work will be carried out by the Camp Ripley environmental staff in coordination with the Camp Ripley grounds department.

Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineligible	% Benefits	# FTE	Classified Staff?	$ Amount
Personnel								
							Sub Total	**-**
Contracts and Services								
Minnesota Native Landscape	Professional or Technical Service Contract	MNL provides planning and design details & specifications highlighting the scope, products, and workmanship needed to successfully complete ecological restoration projects for pollinator enhancements.				-		$10,000
TBD	Professional or Technical Service Contract	Streambank Stabilization				-		$115,000
							Sub Total	**$125,000**
Equipment, Tools, and Supplies								
	Tools and Supplies	Pollinator enhancement seed	The 4 acres of prairie restoration sites will use a short dry prairie seed mix from a distributor within 150 miles of the restoration site. The shrub and pollinator specific plantings will also be acquired by Camp RIpley Staff.					$15,000
	Tools and Supplies	Plugs for streambank stabilization	Pollinator specific plugs (acquired by Camp Ripley) will be planted after streambank stabilization project occurs.					$2,000
	Tools and Supplies	Pollinator shrubs and plugs	Flowering shrubgs and plugs will be aquired by Camp Ripley and planted in highly visible areas along the main entrance of Camp Ripely and other high traffic areas.					$43,000
	Tools and Supplies	4 acres of fescue	Herbicide will be purchased by Camp Ripley to treat fescue on restoration sites					$1,000

							Sub Total	**$61,000**
Capital Expenditures								
							Sub Total	**-**
Acquisitions and Stewardship								
							Sub Total	**-**
Travel In Minnesota								
							Sub Total	**-**
Travel Outside Minnesota								
							Sub Total	**-**
Printing and Publication								
	Printing	Educational Signage for restoration sites	Educational signage will be included in prairie plantings near high visible area along the main gate and visitor centers. one of the prairie restoration sites is adjacent to the White Pine Nature trail that is commonly used by groups visiting Camp Ripley. This sign will include information about the specific plants, pollinators, and the funding used to make it happen.					$1,000
							Sub Total	**$1,000**
Other Expenses								
							Sub Total	**-**
							Grand Total	**$187,000**

Classified Staff or Generally Ineligible Expenses

Category/Name	Subcategory or Type	Description	Justification Ineligible Expense or Classified Staff Request

Non ENRTF Funds

Category	Specific Source	Use	Status	$ Amount
State				
			State Sub Total	**-**
Non-State				
In-Kind	National Guard Bureau-Special Cooperative Agreement	Labor	Secured	$15,000
Cash	National Guard Bureau-Special Cooperative Agreement	Equipment and Supplies	Secured	$10,000
In-Kind	Morrison Soil and Water Conservation District	Engineering design of streambank stabilization	Secured	$10,000
Cash	Camp Ripley	Materials needed for toe wood bench and rock boulders for streambank stabilization	Secured	$56,000
In-Kind	National Guard Bureau	Prairie planting monitoring and educational outreach	Secured	$25,000
			Non State Sub Total	**$116,000**
			Funds Total	**$116,000**

Acquisition and Restoration

Parcel List

Name	County	Site Significance	Activity	Acres	Miles	Estimated Cost	Type of Landowner	Easement or Title Holder	Status of Work
Camp Ripley	Morrison	State Game Refuge	Restoration	4	1	$187,000	Public		In Progress
Totals				**4**	**1**	**$187,000**			

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.
All activities will occur on State-owned Land. Camp Ripley is a Statutory designated State Game Refuge.

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.
Restoration and management plans, as well as monitoring an education outreach will be conducted by the Camp Ripley environmental staff. These staff members are state employees funded through a special cooperative agreement. All files will be maintained on the Camp Ripley environmental office network files and available through the annual report to the Integrated Natural Resource Management Plan.

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.
Native insect pollinators require two basic habitat requirements: places that provide forage for food and areas for nesting. Camp Ripley is State owned land and follows Minnesota Governor's Executive Order 19-28: Restoring Healthy, Diverse Pollinator Populations that Sustain and Enhance Minnesota's Environment, Economy, and Way of Life. In response to this directive, the Minnesota Board of Soil and Water Resources has developed a biodiversity toolbox (http://bwsr.state.mn.us/pollinator-toolbox) to more effectively support living landscapes beneficial to pollinator and other wildlife species that sustain ecological systems, and maximize soil and water conservation benefits that build landscape resiliency. Step-by-step guidelines from the biodiversity toolbox for establishing residential pollinator gardens through planning, installation, and management will be used for the project planned at Camp Ripley.

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.
The National Guard allocates funding to a special cooperative agreement with the Minnesota Department of Military Affairs for natural resource management. Three natural resource employees work on Camp Ripley and will conduct monitoring and future management to these sites.

5. Describe how consideration will be given to contracting with Conservation Corps of Minnesota for any restoration activities.
All technical/professional service contracts will be operated through the Minnesota Management and Budget contractual process.

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.
Monitoring of restoration sites will be conducted by Camp Ripley environmental office staff. Camp Ripley uses the National protocol framework for monitoring vegetation in prairie reconstructions. The Prairie Reconstruction Initiative (PRI) has developed a monitoring protocol framework with two complementary floristic monitoring methods for assessing outcomes of reconstructions: a meandering walk and nested frequency plots. The meandering walk allows users to generate a more complete species list and have a relatively quick overview of the floristic community. The nested frequency plots allow users to generate quantitative data to compare among sites and over time. These methods were developed in response to the prairie reconstruction and monitoring needs in the Midwest and Great Plains

Attachments

Required Attachments

Map

File: 516d9223-db3.pdf

Alternate Text for Map

Map and summary of the project area...

Optional Attachments

Support Letter or Other

Title	File
Streambank Stabilization Design	3d30807c-bcb.pdf
Streambank Stabilization Final Estimate	9fd2754f-d31.pdf
Background check	0f19932d-d2b.pdf

Difference between Proposal and Work Plan

Describe changes from Proposal to Work Plan Stage

The timeline of contract bidding and planting has been amended to better reflect time necessary to go through State procurement processes.

Additional Acknowledgements and Conditions:

The following are acknowledgements and conditions beyond those already included in the above workplan:

Do you understand and acknowledge the ENRTF repayment requirements if the use of capital equipment changes?

N/A

Do you agree travel expenses must follow the "Commissioner's Plan" promulgated by the Commissioner of Management of Budget or, for University of Minnesota projects, the University of Minnesota plan?

N/A

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?

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