

# **Environment and Natural Resources Trust Fund**

2023 Request for Proposal

# **General Information**

**Proposal ID: 2023-136** 

Proposal Title: Pollinator Enhancement and Mississippi River Shoreline Restoration

# **Project Manager Information**

Name: Josh Pennington

**Organization:** Department of Military Affairs

**Office Telephone:** (320) 616-2720

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# **Project Basic Information**

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

Funds Requested: \$187,000

Proposed Project Completion: September 30, 2024

**LCCMR Funding Category:** Small Projects (H)

Secondary 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): 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** 

## **Narrative**

#### 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.

# **Activities and Milestones**

## Activity 1: Prairie restoration site preparation

**Activity Budget:** \$1,000

## **Activity Description:**

Site preparation for three prairie field sites will be covered by the Department of Military Affairs conservation program staff. Activities include spraying fescue with a glyphosate product to remove all current vegetation. The site will be aerated with a small disc to expose soil and broadcast with a dry prairie seed mix.

Site preparations for main entrance and the Valhalla cabin entrance pollinator gardens will be conducted by the Camp Ripely grounds department and will include removal of evergreen shrubs other site preparation needs. Planting of flowering native shrubs with pollinator forbs will be conducted by Camp Ripley grounds department staff.

#### **Activity Milestones:**

| Description  | Completion Date    |
|--|--------------------|
| Treat fescue with herbicide and light disc to expose soil. | September 30, 2023 |

# **Activity 2: Pollinator Enhancement Planting**

Activity Budget: \$70,000

**Activity Description:** 

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#### **Activity Milestones:**

| Description   | Completion Date    |
|---|--------------------|
| Professional service contract for design services for flowering shrub and prairie plugs | July 31, 2023      |
| Broadcast site with native seed mix   | September 30, 2023 |
| Plant flowering shrubs and prairie plant plugs in high visibility areas.                | September 30, 2023 |
| Monitor flowering shrubs and plugs  | June 30, 2024      |
| Monitor prairie restoration using prairie reconstruction initiative protocol            | June 30, 2024      |
| Mow at 24" to discourage weed development   | June 30, 2024      |
| Continue monitoring protocol for prairie restoration sites                              | September 30, 2024 |

## Activity 3: Outreach and public engagement

**Activity Budget: \$1,000** 

#### **Activity Description:**

Camp Ripley environmental staff will develop educational signage to be placed in the high visibility areas and develop education content to include in school groups and other site visits.

#### **Activity Milestones:**

| Description   | Completion Date    |
|---|--------------------|
| Incorporate educational signage at high visibility areas                          | June 30, 2023      |
| Incorporate educational information to groups visiting camp Ripley                | June 30, 2023      |
| Use partnerships with local schools and colleges for planting of shrubs and plugs | September 30, 2023 |

# **Activity 4: Riverbank Restoration**

**Activity Budget:** \$115,000

# **Activity Description:**

A professional technical contract will be awarded to construct a toe wood bench to prevent further erosion along a stretch of the Mississippi River. Native seed mix and flowering shrubs and bushes will be planted to restore the streambank to support pollinator habitat.

# **Activity Milestones:**

| Description  | <b>Completion Date</b> |
|--|------------------------|
| Award Technical service contract                   | July 31, 2023          |
| Obtain wood bench materials for bank stabilization | July 31, 2023          |
| Native seed mix and flowering shrubs on riverbank  | May 31, 2024           |

# **Project Partners and Collaborators**

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

# **Project Manager and Organization Qualifications**

Project Manager Name: Josh Pennington

Job Title: Environmental Supervisor

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

Project Manager implements the conservation program for the Camp Ripely Training Center. This involves managing cooperative agreements with the Minnesota Department of Natural Resources for wildlife and forestry projects across 53,000 acres.

**Organization:** Department of Military Affairs

#### **Organization Description:**

The Minnesota Department of Military Affairs is responsible for implementing conservation and land stewardship activities across the 53,000 acres of Camp Ripley Training Site. Camp Ripley is a multi-state training center hosting numerous facilities to support training requirements of military and civilian agencies. The 53,000 acres of Camp Ripley is also designated a State Wild Game Refuge.

# **Budget Summary**

| Category /<br>Name                   | Subcategory or Type                                 | Description  | Purpose   | Gen.<br>Ineli<br>gible | %<br>Bene<br>fits | #<br>FTE | Class ified Staff? | \$ Amount |
|--------------------------------------|---|--|---|------------------------|-------------------|----------|--------------------|-----------|
| Personnel                            |   |  |   |                        |                   |          |                    |           |
|                                      |   |  |   |                        |                   |          | Sub<br>Total       | -         |
| Contracts and Services               |   |  |   |                        |                   |          |                    |           |
| Minnesota<br>Native<br>Landscape     | Professional<br>or Technical<br>Service<br>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<br>or Technical<br>Service<br>Contract | Streambank Stabilization   |   |                        |                   | -        |                    | \$115,000 |
|                                      |   |  |   |                        |                   |          | Sub<br>Total       | \$125,000 |
| Equipment,<br>Tools, and<br>Supplies |   |  |   |                        |                   |          |                    |           |
|                                      | Tools and<br>Supplies                               | Pollinator enhancement seed  | The 4 acres of prairie restoration sites will acquire 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 a distributor of MN native vegetation. |                        |                   |          |                    | \$15,000  |
|                                      | Tools and<br>Supplies                               | Plugs for streambank stabilization   | Pollinator specific plugs will be planted after streambank stabilization project occurs.  |                        |                   |          |                    | \$2,000   |
|                                      | Tools and<br>Supplies                               | Pollinator shrubs and plugs  | Flowering shrubgs and plugs will be aquired and planted in highly visible areas along the main entrance of Camp Ripely and other high traffic areas.  |                        |                   |          |                    | \$43,000  |
|                                      | Tools and<br>Supplies                               | 4 acres of fescue  | Herbicide to treat fescue on restoration sites  |                        |                   |          |                    | \$1,000   |
|                                      |   |  |   |                        |                   |          | Sub<br>Total       | \$61,000  |

| Capital<br>Expenditures        |          |   |  |                |           |
|--------------------------------|----------|---|--|----------------|-----------|
| Expenditures                   |          |   |  | Sub<br>Total   | -         |
| Acquisitions and Stewardship   |          |   |  |                |           |
|                                |          |   |  | Sub<br>Total   |           |
| Travel In<br>Minnesota         |          |   |  |                |           |
|                                |          |   |  | Sub<br>Total   | -         |
| Travel<br>Outside<br>Minnesota |          |   |  |                |           |
|                                |          |   |  | Sub<br>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<br>Total   | \$1,000   |
| Other<br>Expenses              |          |   |  |                |           |
|                                |          |   |  | Sub<br>Total   | -         |
|                                |          |   |  | Grand<br>Total | \$187,000 |

# Classified Staff or Generally Ineligible Expenses

| Category/Name | Subcategory or | Description | Justification Ineligible Expense or Classified Staff Request |
|---------------|----------------|-------------|--|
|               | Туре           |             |  |

# 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 | \$116,000 |
|           |   |  | Sub Total |           |
|           |   |  | Funds     | \$116,000 |
|           |   |  | Total     |           |

# Acquisition and Restoration

# Parcel List

| Name        | County   | Site Significance | Activity    | Acres | Miles | Estimated | Type of   | Easement or  | Status of |
|-------------|----------|-------------------|-------------|-------|-------|-----------|-----------|--------------|-----------|
|             |          |                   |             |       |       | Cost      | Landowner | Title Holder | 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         | <u>3d30807c-bcb.pdf</u> |
| Streambank Stabilization Final Estimate | <u>9fd2754f-d31.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?

N/A

Do you wish to request reinvestment of any revenues into your project instead of returning revenue to the ENRTF?

N/A

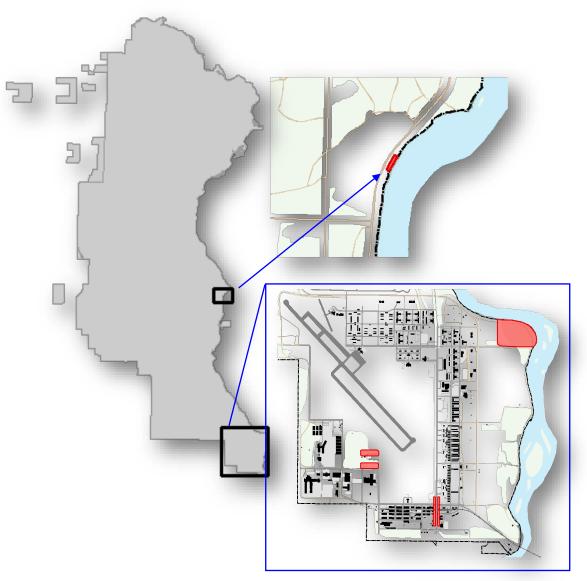
Does your project include original, hypothesis-driven research?

No

Does the organization have a fiscal agent for this project?

No

# Camp Ripley Pollinator Enhancement and Mississippi River Shoreline Restoration



- Directly supports goals of Minnesota's Wildlife Action Plan
- Advances goals of Minnesota
   Governor's Executive Order 19-28
   on state-owned lands
- Benefits 7 bee & butterfly species of greatest conservation need
- Enhances flower diversity, pollinator foraging resources, provides nesting sites, reduces impacts of mowing & spraying
- Supports stabilization of eroding streamline along the Mississippi River
- Uses best practices & guidelines from the BWSR pollinator & biodiversity toolbox