

**Environment and Natural Resources Trust Fund
2017 Request for Proposals (RFP)**

Project Title:

ENRTF ID: 155-F

State Parks for Monarchs and Other Native Pollinators

Category: F. Methods to Protect, Restore, and Enhance Land, Water, and Habitat

Total Project Budget: \$ 672,159

Proposed Project Time Period for the Funding Requested: 3.5 years, July 2017 - November 2020

Summary:

Restores 520 acres of Monarch/native pollinator habitat at 7 state parks in MN Prairie Plan core areas. Establishes pollinator plantings with multi-sensory, ADA-accessible interpretive exhibits at 10 state park locations.

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Sponsoring Organization: MN DNR

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Location

Region: Central, Metro, Northwest, Southwest, Southeast

County Name: Big Stone, Blue Earth, Chisago, Clay, Dakota, Douglas, Freeborn, Kandiyohi, Lyon, Rock, Washington, Winona, Yellow Medicine

City / Township:

Alternate Text for Visual:

This visual is a map of the state of MN depicting the MN Prairie Plan core areas and corridors and the 7state park sites proposed for pollinator habitat restoration. It also shows the 10 state parks proposed to establish educational pollinator plantings with multi-sensory, ADA-accessible interpretive exhibits.

_____ Funding Priorities	_____ Multiple Benefits	_____ Outcomes	_____ Knowledge Base
_____ Extent of Impact	_____ Innovation	_____ Scientific/Tech Basis	_____ Urgency
_____ Capacity Readiness	_____ Leverage	_____ TOTAL	_____ %



PROJECT TITLE:

State Parks for Monarchs and Other Native Pollinators

I. PROJECT STATEMENT

This project will restore 520 acres of additional habitat for Monarch butterflies and other native pollinators at 7 state parks within MN Prairie Plan Core Areas. Parks include: Big Stone, Blue Mounds, Camden, Glacial Lakes, Lake Bronson, Sibley and Upper Sioux Agency. A total of approximately 700,000 visits take place to these sites annually. Additionally, at 10 parks educational pollinator plantings of ¼-1 acre+ will be established with interpretive exhibits. Proposed parks for educational pollinator plantings (final selection to be completed by fall, 2017) include: Afton, Buffalo River, Fort Snelling, Lake Carlos, Minneopa, Myre-Big Island, Sibley, Whitewater, Wild River and William O’Brien. A total of approximately 2.5 million visits occur at these sites per year. At these sites, visitors will become more aware of native pollinators, where to see them in parks and especially what they can do at their homes to help support Monarch/pollinator conservation.

These efforts are needed to help stop the decline of Monarch butterflies and other native pollinators. Recent surveys suggest that eastern populations of Monarch butterflies have declined 90% from the 20 year average. Additionally, declines have also been observed in many other native pollinator species, such as wild bees and butterflies. In MN, the bulk of these rare pollinators occur in the Prairie Parkland & Aspen Parkland provinces of the state. One of the major factors causing these declines for which there is convincing evidence is habitat degradation and loss.

MN State parks is highly skilled at reconstructing diverse prairies having restored more than 6,000 acres over the past dozen years. However, additional funding is needed to continue/accelerate these restoration and communication efforts. Prairies reconstructed by MNDNR-PAT provide excellent habitat for pollinators. A recent survey of a restored prairie at Glendalough State Park documented 22 species of butterflies and more than 1,500 individuals including over 80 Monarchs and 44 MN Special Concern Regal Fritillaries. Reconstructing diverse prairie that resembles pre-settlement conditions requires 30-50 or more plant species depending on site conditions and local genotype seed availability. Years of experience has shown the cost of high quality prairie reconstructions such as these ranges between \$800-\$1,500/acre.

II. PROJECT ACTIVITIES AND OUTCOMES

Activity 1: Restore 520 acres of habitat for Monarchs & other native pollinators at 7 state parks **Budget: \$424,182**

Diverse native prairie will be restored at 7 state parks to provide critical habitat for Monarchs and other native pollinators. Parks include: (acres are approx.): Big Stone Lake (50 acres), Blue Mounds (50 acres), Camden (32 acres), Glacial Lakes (50 acres), Lake Bronson (200 acres), Sibley (108 acres) and Upper Sioux Agency (30 acres).

Outcome	Completion Date
1. Site preparation at 7 parks (incl. activities such as prescribed fire, woody stem removal control of invasive species, disking).	December 2019
2. Planting of reconstruction sites at these 7 parks.	July 2020
3. Establishment activities (mowing, spot invasives control, planting of additional species to increase diversity) to insure a successful restoration.	November 2020



Activity 2: Establish educational pollinator plantings and design/install engaging multi-sensory ADA-accessible interpretive exhibits at 10 state park locations. Budget: \$247,977

Exhibits will focus on increasing awareness of native pollinators, state park pollinator habitat, and what visitors can do to help support conservation of Monarchs and other native pollinators. Proposed parks for educational pollinator plantings (final selection to be completed by fall, 2016) include: Afton, Buffalo River, Fort Snelling, Lake Carlos, Minneopa, Myre-Big Island, Sibley, Whitewater, Wild River and William O'Brien.

Outcome	Completion Date
1. Initiate project team for Monarch/pollinator exhibits	July 2017
2. Finalize site selection.	Sept 2017
3. Develop themes and text for signage.	May 2018
4. Complete site preparation for pollinator plantings	July 2018
5. Contract for design and production of exhibits	October 2018
6. Plant educational sites	July 2019
4. Install exhibits as restoration sites are completed	September 2019

III. PROJECT STRATEGY

A. Project Team/Partners

The project team consists of State Parks & Trails staff. However, the DNR is also a conservation partner on the MN Prairie Plan as well as a member of the Monarch Joint Venture and the division serves on/supports the DNR’s MN Monarch Butterfly and Native Pollinator Initiative. This project will help achieve the goals of all of these three efforts. Only DNR will be receiving project funds.

B. Project Impact and Long-Term Strategy

State Parks has an excellent track record of restoring and managing high quality native prairies that provide high quality habitat for native insect pollinators. The division also provides environmental interpretation to millions of visitors annually through non-personal and in-person interpretation, including a number of programs specifically addressing insects and native pollinators. This project will significantly increase and protect in perpetuity, the amount of habitat available to Monarchs and other native pollinators on state park lands. It will also help increase the awareness of large numbers of visitors regarding pollinators, their habitat and hopefully encourage the creation of additional habitat patches at visitor’s homes/properties. Examples of funding that supported similar efforts in the past include the State Parks Working Capital account and Parks & Trails Legacy funding.

C. Timeline Requirements

It is fully anticipated that all aspects of the proposed project will be completed within a 39 month period of receiving funding. This amount is required in order to provide the time necessary for appropriate site preparation, planting and activities to insure that pollinator habitat restorations and plantings are successful.

2017 Detailed Project Budget

Project Title: State Parks for Monarchs and Other Native Pollinators

IV. TOTAL ENRTF REQUEST BUDGET - 3 years

BUDGET ITEM (See "Guidance on Allowable Expenses", p. 13)	AMOUNT
Personnel:	\$ -
3 seasonal laborer general positions for total of 1,080 hrs (0.52 FTE) 70% salary/30% benefits. Will assist with seed collection, herbicide application, woody stem removal.	\$ 30,000
2 seasonal laborer for a total of 01.6 FTE. 70% salary/30% benefits. Will assist with seed collection, herbicide application, woody stem removal & mowing.	\$ 90,000
Professional/Technical/Service Contracts:	\$ -
Professional/Technical Contract with RFP to design & fabricate 10 ADA-accessible exhibits to educate visitors about pollinators (\$110,000). Purchased service contracts to install, provide ADA accessibility. (\$30,000).	\$ 140,000
3 purchased service shearing contracts at Lake Bronson to restore 200 acres of native prairie.	\$ 90,000
Conservation Corps Minnesota woody stem removal & seed collection at Sibley for restoration site (108 acres).	\$ 10,000
Purchased service contract for site prep restoration (disk and herbicide application) Sibley (108 acres)	\$ 10,000
Contracts to establish educational pollinator plantings at 10 parks using the master contract (S-910-5) for native plant community restoration services or similar avenues.	\$ 100,000
Equipment/Tools/Supplies:	\$ -
Herbicides (needed for prepping restoration sites, about 320 acres).	\$ 8,000
Restoration supplies: additional clippers, sprayers, etc. needed for accelerated restoration effort at 6 state parks (total 320 acres). Approximately \$2,300 per park(none needed at Lake Bronson)	\$ 14,000
Prairie seed purchase for restoration sites at Big Stone & Sibley (total 158 acres)	\$ 99,000
Travel:	\$ -
Travel and fleet costs for tractors, mowers, trailers and vehicles transporting staff and equipment to and from sites over 3 year period of project.	\$ 59,000
Additional Budget Items:	\$ -
Direct and necessary expenses: HR Support (~\$3,266), Safety Support (~\$915), Financial Support (~\$8,960, Communications Support (~\$1,316), IT Support (\$6,593), Planning Support (~\$912) & Procurement Support (~\$197) necessary to accomplish funded project.	\$ 22,159
TOTAL ENVIRONMENT AND NATURAL RESOURCES TRUST FUND \$ REQUEST =	\$ 672,159

V. OTHER FUNDS (This entire section must be filled out. Do not delete rows. Indicate "N/A" if row is not applicable.)

SOURCE OF FUNDS	AMOUNT	Status
Other Non-State \$ To Be Applied To Project During Project Period:	NA	
Other State \$ To Be Applied To Project During Project Period:		<i>Pending</i>
Conservation Corps of MN - assistance with seed harvest (Parks & Trails Legacy) \$12,000/yr.	\$ 36,000	
In-kind Services To Be Applied To Project During Project Period:		<i>Secured</i>
1. DNR resource specialist time directed at pollinator habitat restorations at 7 state parks. Activities include contract administration and oversight, planning and directing staff, supply purchases & site visits. (\$36,500)		
2. DNR exhibit specialist time directed at developing themes, messages, write the RFP and manage the contract for the 10 exhibits (\$10,000)		
3. DNR project team to conduct research, contribute to theme and message development and review exhibit drafts (\$10,000)	\$ 56,500	
Funding History:	NA	
Remaining \$ From Current ENRTF Appropriation:	NA	

LCCMR 2017 Proposal Graphic: State Parks for Monarchs and other Native Pollinators



Proposed State Parks for Pollinator Habitat Restoration

1. Big Stone Lake (50 acres)
2. Blue Mounds (50 acres)
3. Camden (32 acres)
4. Glacial Lakes (50 acres)
5. Lake Bronson (200 acres)
6. Sibley (108 acres)
7. Upper Sioux Agency (30 acres)

Proposed State Parks for Educational Pollinator Plantings

1. Afton
2. Buffalo River
3. Fort Snelling
4. Lake Carlos
5. Minneopa
6. Myre-Big Island
7. Sibley
8. Whitewater
9. Wild River
10. William O'Brien



Example of State Parks Pollinator Habitat Restoration



Ex. of DNR Educational Pollinator Planting (multi-sensory interp. exhibit will be incorporated into planting area).

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Environment Trust Fund 2017 Project Proposal

Project Title: State Parks for Monarchs and other Native Pollinators

Project Manager Qualifications

Ed Quinn oversees the natural/cultural resource management program for the Division of Parks & Trails. He provides direction for and coordination of 16 Parks & Trails resource management specialists and technicians. The program is responsible for protecting, managing and restoring natural/cultural resources on division-administered lands. Annually the division restores approximately 890 acres of prairie, forest & wetlands, conducts prescribed burns on about 5,600 acres and manages invasive species on approximately 8,700 acres.

Ed has worked in the natural resource field for over 20 years. He has been employed as a naturalist, wildlife biologist and natural areas manager. He has overseen the MNDNR Parks & Trails resource program since 1998. He holds a bachelor's degree in Fish & Wildlife from Michigan State University and a master's degree from the University of Minnesota. He has been a certified wildlife biologist since 1994.

He was a member of the team that developed the DNR's Pollinator Best Management Practices and Habitat Restoration Guidelines and currently represents the Division of Parks and Trails on the DNR's Monarch Butterfly and Native Pollinator Initiative Team.

Organization Description

The Department of Natural Resources-Division of Parks and Trails operates 75 state parks and state recreation areas, 25 state trail segments, 1,502 water access sites, 33 water trails and 8 state waysides throughout Minnesota. The Division is responsible for protecting, managing & restoring natural and cultural resources and providing outstanding park, trail and water recreation experiences for visitors.