

**Environment and Natural Resources Trust Fund  
2020 Request for Proposals (RFP)**

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**Project Title:**

**ENRTF ID: 209-F**

Pollinator & Beneficial Insect Strategic Habitat Program

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

**Sub-Category:**

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**Total Project Budget: \$** 780,500

**Proposed Project Time Period for the Funding Requested:** June 30, 2023 (3 yrs)

**Summary:**

This project address dramatic declines of beneficial insects by building a new BWSR initiative to strategically restore and enhance approximately 1000 acres of diverse native habitat over 100 projects.

**Name:** Dan Shaw

**Sponsoring Organization:** MN Board of Water and Soil Resources

**Job Title:** Senior Ecologist

**Department:** Resource Conservation Section

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St. Paul MN 55155

**Telephone Number:** (612) 236-6219

**Email** dan.shaw@state.mn.us

**Web Address:** bwsr.state.mn.us

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**Location:**

**Region:** Statewide

**County Name:** Statewide

**City / Township:**

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**Alternate Text for Visual:**

Insects such as bees, butterflies, dragonflies and lacewings that provide critical support to our ecosystems and food systems are at risk and this program will focus on strategic placement of habitat to support these insects.

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



PROJECT TITLE: Pollinator & Beneficial Insect Strategic Habitat Program

I. PROJECT STATEMENT

Dramatic declines of bees, butterflies, dragonflies and other beneficial insects that support our ecosystems and food systems have been raising significant alarm amongst scientists and conservation professionals both locally and globally. The Pollinator and Beneficial Insect Strategic Habitat Program proposed here will build a new BWSR initiative to restore and enhance approximately 1000 acres of diverse native habitat over 100 projects strategically located across Minnesota. Project placement and seed mix design will be tailored to address the habitat needs of a wide diversity of insects, including at-risk species. This program will align with the Governor’s new pollinator executive order (EO 19-28), address several habitat goals and recommendations of the Governor’s Committee on Pollinator Protection (including GCPP recommendations 1.1 and 1.2), and help attain goals of the Interagency Pollinator Protection Team.

Program and Project Types: Funding through this new initiative will be distributed through BWSR’s Cost-share process and a competitive grant RFP. Eligible projects will include public lands or private lands with a public investment, including existing RIM easements, CRP, city parks, county parks, and protected natural areas.

Projects will focus on:

- 1) establishing new floral rich plots or riparian plantings 0.5 to 5 acres in size and/or
2) enhancing prairie, savanna, wetland, and shoreline communities that provide high value habitat. Projects will be planned to benefit a variety of beneficial insects in need of habitat improvements, including at-risk species (e.g., rusty-patched bumblebees), and other declining insect guilds (e.g., dragonflies, native bees, butterflies).

Project Selection/ranking: Project areas will be selected based on The Minnesota Prairie Conservation Plan, Minnesota’s Wildlife Action Plan, pollinator habitat mapping, and range maps of at-risk species. Within these areas, sites will be selected based on size, protection from pesticide drift, proximity to other permanently protected habitat and riparian areas, and likelihood of project success. Regional ranking criteria/assessment forms will be developed, and technical experts around the state will assist with the ranking of projects, aligning funding with conservation programs, identifying matching funds, and working with landowners.

Standards: New pollinator–beneficial Insect conservation plans will be developed to establish diverse, local ecotype vegetation that benefits priority insect species and protects and restores natural plant communities.

Outreach: Four regional pollinator habitat workshops with Xerces Society and local conservation partners will be held and new pollinator-beneficial technical information will be added to BWSR’s Pollinator Toolbox. “Success Information” will be requested from practitioners working with the funding and this information along with featured case studies will be added to BWSR’s “What’s Working” webpage.

II. PROJECT ACTIVITIES AND OUTCOMES

Activity 1: Develop project ranking criteria and pollinator-beneficial insect conservation plan templates, conduct four regional pollinator workshops.

ENRTF BUDGET: \$59,000

Table with 2 columns: Outcome, Completion Date. Row 1: Assemble an advisory team from DNR, TNC, SWCDs, USFWS, Xerces Society, Pheasants Forever, and other conservation partners to guide program development, combine available habitat maps, and develop regional project ranking criteria. December 2020. Row 2: Collaborate with Xerces Society to develop two pollinator – beneficial insect conservation plan templates, one for new habitat installations, and one for enhancement/management of existing habitat, based on Xerces’ existing habitat guidance. January 2021.



**Environment and Natural Resources Trust Fund (ENRTF)  
2020 Main Proposal Template**

3. Collaborate with Xerces Society on four regional pollinator workshops to present program requirements, best practices and new conservation plan templates.	<i>December 2021</i>
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**Activity 2:** Restore and enhance approximately 1000 acres across 100 sites on conservation lands.

**ENRTF BUDGET: \$720,000**

<b>Outcome:</b>	<b>Completion Date</b>
1. SWCDs or their designees develop pollinator-beneficial insect conservation plans/conservation plan updates for awarded projects on protected lands.	<i>December 2021</i>
2. Conduct site preparation, planting and management of projects with the goal of establishing and maintaining high diversity plantings.	<i>April 2022- January 2023</i>

**Activity 3:** Assess disseminate results, findings, and best practices.

**ENRTF BUDGET: \$1,500**

<b>Outcome:</b>	<b>Completion Date</b>
1. Assemble the advisory team to discuss results of project assessments, successes of the program, areas of improvement, and next steps to continue refining the grant program and pursuing additional funding sources.	<i>April 2023</i>
2. Add ENRTF signage at all project sites	<i>June 2023</i>
3. Document successful planning, design, installation and management strategies and case studies on BWSR’s “What’s Working” webpage.	<i>June 2023</i>

**III. PROJECT PARTNERS AND COLLABORATORS:**

**Partners receiving ENRTF funding**

- BWSR (Grant Coordination) (14% FTE)
- Xerces Society (Plant template development and workshop assistance)

**Partners not receiving ENRTF funding**

- Redwood SWCD, Minnesota Association of Soil and Water Conservation Districts.
- Advisory Team Members: BWSR’s Senior Ecologist, SWCD Conservation Specialists, BWSR Easement Program Staff, State Pollinator Coordinator, DNR’s Invertebrate Ecologist, Xerces Habitat Specialists and TNC, USFWS and Pheasants Forever staff.

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

This proposal enhances existing investments in long-term conservation as part of a solution to the decline of at-risk species and other important insects. The project will develop and implement plans that will guide the long-term management and monitoring of protected lands. Once the new BWSR program is established BWSR will pursue other funding sources for the program such federal grants and foundation funding.

**V. SEE ADDITIONAL PROPOSAL COMPONENTS:**

- A. Proposal Budget Spreadsheet**
- B. Pollinator-Beneficial Insect Graphic**
- D. ENRTF Project Requirements for Restoration**
- E. Project Manager Qualifications and Organization Description**

Attachment A: Project Budget Spreadsheet  
 Environment and Natural Resources Trust Fund  
 M.L. 2020 Budget Spreadsheet



Legal Citation:

Project Manager: Dan Shaw, Senior Ecologist

Project Title: Pollinator & Beneficial Insect Strategic Habitat Program

Organization: Minnesota Board of Water and Soil Resources

Project Budget: \$780,500

Project Length and Completion Date: 3 years, June 30, 2023

Today's Date: April 11, 2019

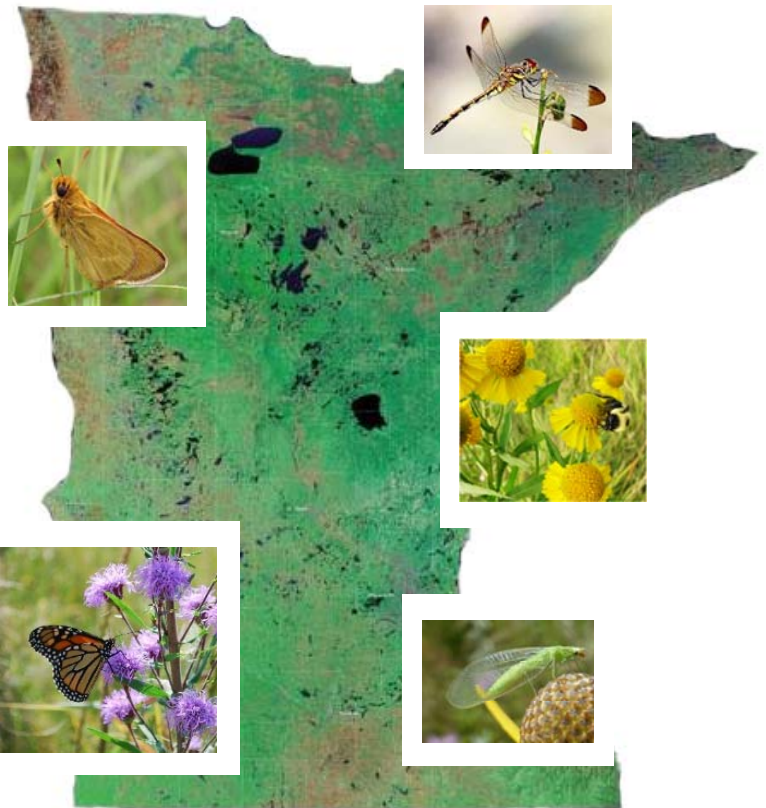
ENVIRONMENT AND NATURAL RESOURCES TRUST FUND BUDGET		Budget	Amount Spent	Balance
<b>BUDGET ITEM</b>				
<b>Personnel (Wages and Benefits)</b> BWSR Grant Coordinator, \$12,000 (78% Salary 22%Benefits) 14%FTE for three years. This funding is direct and necessary for grant administration and supplements the work that BWSR is currently conducting.		\$ 36,000	\$ -	\$ 36,000
<b>Professional/Technical/Service Contracts:</b> Xerces Society assistance developing program ranking criteria, co-presenting at four regional pollinator workshops, and development of two pollinator-beneficial insect conservation plan templates, one for new habitat installations, and one for enhancement/management of existing habitat.		\$ 23,000		\$ 23,000
Project funding will go to SWCDs through a competitive RFP process to work on an estimated 1000 acres over approximately 100 projects including existing RIM easements, CRP, city and county parks and other high value protected landscapes such as shoreline plant communities.		\$ 720,000	\$ -	\$ 720,000
<b>Equipment/Tools/Supplies</b>				
ENRTF signage for each project including a sign and post.		\$ 1,500	\$ -	\$ 1,500
<b>Capital Expenditures Over \$5,000</b>				
		\$ -	\$ -	\$ -
<b>Fee Title Acquisition</b>				
		\$ -	\$ -	\$ -
<b>Easement Acquisition</b>				
		\$ -	\$ -	\$ -
<b>Professional Services for Acquisition</b>				
		\$ -	\$ -	\$ -
<b>Printing</b>				
		\$ -	\$ -	\$ -
<b>Travel expenses in Minnesota</b>				
		\$ -	\$ -	\$ -
<b>Other</b>				
		\$ -	\$ -	\$ -
<b>COLUMN TOTAL</b>		\$ 780,500	\$ -	\$ 780,500
<b>SOURCE AND USE OF OTHER FUNDS CONTRIBUTED TO THE PROJECT</b>				
	<b>Status (secured or pending)</b>	<b>Budget</b>	<b>Spent</b>	<b>Balance</b>
<b>Non-State:</b> Minimum 25% cost-share requirement for public projects and 10% for private landowners	Pending	\$ 108,000	\$ -	\$ 108,000
<b>State:</b>		\$ -	\$ -	\$ -
<b>In kind:</b> Xerces Society Outreach (\$1,000), Minnesota BWSR Senior Ecologist (8% FTE) of time over three years (\$32,400)	Secured	\$ 33,400	\$ -	\$ 33,400
<b>Other ENRTF APPROPRIATIONS AWARDED IN THE LAST SIX YEARS</b>				
	<b>Amount legally obligated but not yet spent</b>	<b>Budget</b>	<b>Spent</b>	<b>Balance</b>
No related applications		\$ -	\$ -	\$ -



# Pollinator & Beneficial Insect Strategic Habitat Program

## Insects at Risk

- Dramatic declines of bees, butterflies, dragonflies and other beneficial insects have raised significant alarm by scientists and conservation professionals.
- These insects provide critical support to our ecosystems and food systems



## Project Benefits/Outcomes

- This program is designed to provide multiple benefits including:
  - Build collaboration with local teams of experts
  - Restore and enhance approximately 1000 acres of diverse native habitat over 100 projects strategically located across Minnesota
  - Facilitate development of new BWSR Pollinator-Beneficial Insect Cost-share Program
  - Conduct four regional pollinator-beneficial insect workshops across the state.
  - Develop conservation plan templates for pollinator habitat installation and enhancement
  - Document successful restoration strategies

## Attachment D. Additional Work Plan Information for Acquisition, Easements, and Restoration

### 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 lands to be restored through this project will be permanently protected with an emphasis on lands with easements or parks on city, county or state land.

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.

As part of this project templates for project implement and project enhancement will be developed to be used on all projects. These templates will include detail on project site preparation, installation and management as well as needs for documentation of the restoration process. In addition to being saved at local SWCD offices, these documents will be provided to landowners to guide long-term management. Ensuring the long-term care of projects will be a key ranking criteria used as part of the competitive RFP process for the grant program.

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.

Use of the BWSR Native Vegetation Establishment and Enhancement Guidelines will be stressed as a project requirement in the program RFP, as well as the project templates used for all projects. There will be an emphasis on protecting the genetic integrity of any remnant plant communities associated with projects.

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.

Ensuring the long-term care of projects will be a key ranking criteria used as part of the competitive RFP process for the grant program, this will include considerations about future funding availability for management. The project templates developed for all projects will also provide direction for the long-term management. The role of landowners to maintain projects into the future will be stressed and local conservation staff will continue working with landowners to provide technical guidance.

5. Describe how consideration will be given to contracting with Conservation Corps of Minnesota for any restoration activities.

The grant RFP for the program will state that consideration needs to be given to contracting with the Conservation Corp of Minnesota.

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.

Project assessments/evaluations will be completed by local staff working with landowners after completion and three years as a follow-up to ensure that project goals are being met and to document project success that will be a requirement of the grant program (BWSR has routine inspection requirements for conservation projects funded with state dollars). These evaluation will also play a key role in determining if any specific maintenance activities are needed for projects.

## Project Manager Qualifications

### Proposed Project: *Pollinator& Beneficial Insect Strategic Habitat Program*

**Project Manager:** Dan Shaw

**Organization:** Minnesota Board of Water and Soil Resources (BWSR)

**Title:** Senior Ecologist/Vegetation Specialist

**BWSR Mission Statement and Charge:** Improve and protect Minnesota's water and soil resources by working in partnership with local organizations and private landowners. BWSR is the state soil and water conservation agency, and it administers programs that prevent sediment and nutrients from entering our lakes, rivers, and streams; enhance fish and wildlife habitat; and protect wetlands. The 20-member board consists of representatives of local and state government agencies and citizens.

#### **Project Manager Experience – Dan Shaw:**

Dan Shaw, is the Senior Ecologist and Vegetation Specialist for BWSR where he works on invasive species, restoration, native vegetation, wetland, agricultural BMPs, stormwater design, pollinator habitat, and climate adaptation programs through conservation partnerships. Dan has also taught classes at the University of Minnesota for the last seventeen years and currently teaches a course on “Ecological Restoration Planning and Management”.

Related projects include:

- Establishment and management of BWSR’s Native Buffer Cost-share Program
- Establishment and management of BWSR’s Cooperative Weed Management Area Program
- Establishment and management of BWSR’s Habitat Friendly Solar Program
- Coordination of BWSR’s Pollinator Initiative
- Development and updating of BWSR’s Native Vegetation Establishment and Management Guidelines
- Development of BWSR’s Pollinator, Landscape Resiliency and Buffer Toolboxes
- Development of State Seed Mixes
- Author, co-author or contributing author of “Plants for Stormwater Design”, “The Minnesota Wetland Restoration Guide”, “Native Vegetation in Restored and Created Wetlands”, The Blue Thumb Guide to Raingardens”, BWSR’s Native Vegetation Establishment and Enhancement Guidelines “Ecological Restoration in the Midwest, Past, Present and Future”

Before coming to BWSR, Mr. Shaw’s experience included being Conservation Director at Great River Greening, working for environmental consulting firms, restoration companies, native plant nurseries, research at the University of Minnesota and over 20 years of farming experience.

