



# Environment and Natural Resources Trust Fund

## 2023 Request for Proposal

### General Information

**Proposal ID:** 2023-105

**Proposal Title:** Pollinator Central III: Habitat Improvement with Community Monitoring

### Project Manager Information

**Name:** Rebecca Tucker

**Organization:** Great River Greening

**Office Telephone:** (651) 272-3982

**Email:** rtucker@greatrivergreening.org

### Project Basic Information

**Project Summary:** Small phase promoting the restoration and enhancement of 29 acres of pollinator habitat on 4 new sites, with community engagement and education through public planting and pollinator monitoring events.

**Funds Requested:** \$190,000

**Proposed Project Completion:** June 30, 2026

**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): Metro

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

Region(s): Metro

**When will the work impact occur?**

During the Project and In the Future

## Narrative

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

Current urban corridors are largely undeveloped habitat for pollinators, often with mowed turf serving as boundaries between pavement and other impermeable surfaces, or with degraded spaces serving no ecological benefit. These patches of vegetation can be opportunities for municipalities, cities, and utilities to develop low-maintenance, high reward ecological areas that benefit both the pollinator community as well as the neighborhoods that these parks, schools, and public spaces serve. In addition to the restoration and establishment of pollinator habitat for imperiled species, there is an opportunity for stewardship, community education, and hands on monitoring to understand how pollinators interact with these spaces.

This is the third phase of the Pollinator Central grant presented to the Environment and Natural Resources Trust Fund appropriations, the first two of which were initiated in fall 2021 and are progressing well as of spring 2022. Phase III proposes to continue addressing the still present opportunities regarding pollinator habitat establishment, public education and engagement, and pollinator insect population monitoring on four new sites throughout the Twin Cities Metro and adjacent spaces. A larger set of projects is anticipated for the subsequent Phase IV, with these four proposed projects ready to start within this round of funding.

### **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.**

Following recommendations from the Governor's Committee on Pollinator Protection and other habitat assessment guides, we will restore habitats in urban, suburban, and rural landscapes to support a 'hopscotch' corridor for pollinators, as well as improve core habitat areas. Turf conversion of small, high quality patches will join grassland, edge, wetland, shoreline, and limited amounts of forest and woodland all within flight distance of year-round habitat.

Proposed implementation will follow recommendations provided by the Habitat Assessment Guide for Rusty Patched Bumble Bee (*Xerces*), the U.S. Fish and Wildlife Service Monarch Conservation Database and other guides, field surveys and expert review. Emphasis will be placed on adjacency within a landscape mosaic to provide forage habitat throughout the year, as determined by using state-of-the-art pollinator habitat 'core and - patches' adjacency mapping analysis. Restoration and enhancement activities will be guided by ecological plans, and implemented by a variety of labor forces including subcontractors, field crews, landowner in-kind, and volunteers.

### **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?**

These improvements will increase floral resources and improve nesting and over-wintering habitat for pollinators, while engaging a total of 100 habitat volunteers in field activities. In addition, we will monitor every site through several direct pollinator monitoring techniques, guided by both Greening staff and pollinator monitoring experts, to collect useful data on pollinator response to habitat improvements, effectively engaging 50 community scientists in monitoring efforts that require reasonable time, skill, and expense, making the approach scalable. A final report will be generated and disseminated that will help guide the implementation in future phases of this program.

## Activities and Milestones

### Activity 1: Pollinator Habitat Restoration and Enhancement

**Activity Budget:** \$172,700

**Activity Description:**

Habitat restoration and enhancement steps will typically follow: Site selection and ranking; habitat improvement plan including goals, timelines, plans for labor forces such as volunteers, landowners, Greening crew, subcontractors and partners, and long-term management; site preparation, installation, establishment; and monitoring throughout. We will restore pollinator habitat with a focus on Species of Greatest Conservation Need bumble bee species and monarch butterflies on public locations through a pollinator corridor following the Mississippi River throughout the Twin Cities metro area, contributing to the continuing and popular multi-phase "Pollinator Central" effort extending from Hastings to St. Cloud.

Following recommendations from the Governor’s Committee and others, we will include non-traditional habitat areas, with this phase focusing on turf conversions of areas adjacent to traditional habitat cores. Typical restoration activities will include turf conversion and prairie establishment; wetland and shoreline restoration and enhancement; judicious use of invasive removal and woodland restoration, restricted in size and to locations that are adjacent to season-long habitat emphasizing forbs, select flowering shrubs and trees, and habitat needs for overwintering and nesting. Restoration and enhancement activities will be implemented guided by ecological plans and implemented by a variety of labor forces including subcontractors, field crews, landowner in-kind, and volunteers.

**Activity Milestones:**

Description	Completion Date
Site selection and management plan completion for 4 new sites.	June 30, 2024
Completion of restoration and enhancement on all sites.	June 30, 2026

### Activity 2: Community Science Pollinator Monitoring

**Activity Budget:** \$17,300

**Activity Description:**

Monitoring will occur pre and post restoration/enhancement to determine the pollinator habitat value of the site and the response to the improvements. This monitoring will potentially take several forms and at escalating levels of rigor, depending on what has been shown to be accomplishable as well as informative during Phase I and II. These two initial phases are only in their first year of monitoring as this grant is being written, and future phases (including Phase III) will take guidance from what is learned in 2022 and 2023, prior to application in 2024 and beyond.

Direct pollinator monitoring will encompass this suite of approaches including citizen science techniques of timed meander counts on multiple sites, with training, and non-lethal photography with identification on multiple sites. The simplest monitoring will include a timed count of 3 categories of pollinators (honeybees vs. native bees vs. other floral visitors) and camera ‘trapping’ using skilled photographers and expert identification.

**Activity Milestones:**

Description	Completion Date
Pre-restoration baseline surveys for each of the chosen sites.	June 30, 2024
Site specific monitoring plans - community count surveys and photographic surveys.	June 30, 2024
Data collection for all surveys complete, final report on initial findings on all sites.	June 30, 2026



## 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?**

This is the third phase of the Pollinator Central grants presented to the Environment and Natural Resources Trust Fund appropriations and owing to the volume of interest we have received each time we have released RFPs to land-owning partners, we anticipate that there will be critical need and opportunity for future multiple phases in this Pollinator Central corridor. These projects are well matched by cash and in-kind funding from landowners and other sources, and the landowners will commit to long term maintenance of the restoration sites. The restoration monitoring information will be disseminated with grant assistance.

## Other ENRTF Appropriations Awarded in the Last Six Years

Name	Appropriation	Amount Awarded
Upland, Wetland, and Shoreline Restoration in Greater Metropolitan Area	M.L. 2016, Chp. 186, Sec. 2, Subd. 08g	\$509,000
Community Stewardship to Restore Urban Natural Resources - Phase Ten	M.L. 2017, Chp. 96, Sec. 2, Subd. 08i	\$524,000
Pollinator Central: Habitat Improvement with Citizen Monitoring	M.L. 2021, First Special Session, Chp. 6, Art. 5, Sec. 2, Subd. 08a	\$750,000
Pollinator Central II: Habitat Improvement With Community Monitoring	M.L. 2021, First Special Session, Chp. 6, Art. 6, Sec. 2, Subd. 08c	\$631,000

## Project Manager and Organization Qualifications

**Project Manager Name:** Rebecca Tucker

**Job Title:** Program Manager, Twin Cities Metro

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

Rebecca Tucker has been with Great River Greening since fall of 2017, progressing from Ecologist to Program Manager in that time. She is currently managing the ongoing Phase I and II of these Pollinator Central grants as funded by the ENRTF in 2021, funding totaling \$1,381,000. Additionally, Rebecca manages over 30 restoration projects throughout Minnesota, coordinating habitat enhancement contracts, pollinator monitoring projects, and frequent public engagement opportunities. Before coming to Great River Greening, Rebecca was a research assistant on the University of Minnesota Healthy Prairies Project, and previously worked three and a half years as a research assistant at the Archbold Biological Station, an 8,840-acre research preserve and working cattle ranch in Florida where she carried out plant and habitat assessments, managed the hydrological engineering plans, bidding and budgets, and implemented a variety of land management activities. She has a Master of Science in Botany from Purdue University and a Bachelor of Science in Biology from the University of Wisconsin, Stevens Point, during both of which she engaged the public with a variety of educational talks and worked on numerous farm and greenhouse research projects.

**Organization:** Great River Greening

**Organization Description:**

Great River Greening's mission is to secure the legacy of Minnesota land and water through community-based restoration, stewardship and partnership, striving to improve Minnesota's natural resources, protect clean air and water, and increase community access to sustainable open space. Since 1995, Great River Greening has engaged 49,300 volunteers (12,800 of them youth) in hands-on education and stewardship activities, helping restore over 17,000 acres

of habitat in 400 communities across Minnesota. Great River Greening's work focuses on locations and on activities that provide conservation impact, ecosystem services, and community benefits, with projects including: developing planting designs and/or restoration management plans for natural areas; planting native trees, shrubs, wildflowers, and grasses; stabilizing shorelines and ravines; conducting ecological inventories; implementing conservation practices on farmland; and completing restoration and management activities including exotic species removal, prairie seed collection, and prescribed burns. In addition, Great River Greening engages community members from schools, faith groups, civic groups, businesses, and veterans groups in public volunteer events and engages over 100 youth per year through targeted service-learning programs. Through community education and engagement, Greening is restoring natural resources, while building environmental leaders and stewards of tomorrow.

## Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineligible	% Benefits	# FTE	Classified Staff?	\$ Amount
<b>Personnel</b>								
Grant Manager		Oversees Project Managers, Ecologists and Field Coordinator. Approves contracts, invoices and budgets.			21%	0.03		\$2,300
Project Manager Ecologist		Manages day to day project execution, crew, contractors, project budget and timeline.			21%	0.33		\$25,700
Events & Outreach		Manages all tasks related to volunteer acquisition, event development and event execution.			21%	0.24		\$15,900
Field Crew		Conducts on-site work to support project deliverables.			19%	0.15		\$8,400
Grant Administration		Tracks grant budget, project budgets, develops status reports and amendments.			24%	0.03		\$1,700
							<b>Sub Total</b>	<b>\$54,000</b>
<b>Contracts and Services</b>								
Restoration and Enhancement sub-contracts following state competitive RFP requirements.	Professional or Technical Service Contract	We expect that multiple contracts will be engaged to provide the following types of services: site preparation, turf removal, invasive species control, native species planting, woody harvest / thinning, forestry mowing, herbicide treatment, prescribed fire, haying, and other activities. These contracts will be executed as part of Activity 1.				0.4		\$82,450
							<b>Sub Total</b>	<b>\$82,450</b>
<b>Equipment, Tools, and Supplies</b>								
	Tools and Supplies	Activity 1 Tools & Supplies	Seeds, plugs, herbicide, tools for R/E activities conducted by Greening crew, volunteers, and landowners as needed to satisfy project deliverables.					\$48,900
	Tools and Supplies	Activity 2 Tools & Supplies	Sampling supplies and other required equipment to support project deliverables.					\$500

							<b>Sub Total</b>	<b>\$49,400</b>
<b>Capital Expenditures</b>								
							<b>Sub Total</b>	-
<b>Acquisitions and Stewardship</b>								
							<b>Sub Total</b>	-
<b>Travel In Minnesota</b>								
	Miles/ Meals/ Lodging	Activity 1 Related Travel	Support site visits to accomplish deliverables.					\$1,550
	Miles/ Meals/ Lodging	Activity 2 Related Travel	Support site visits to accomplish deliverables.					\$500
							<b>Sub Total</b>	<b>\$2,050</b>
<b>Travel Outside Minnesota</b>								
							<b>Sub Total</b>	-
<b>Printing and Publication</b>								
	Printing	Activity 1 Related Printing	Promotional material for volunteer coordination, signage for event site instructions and logistics.					\$150
	Printing	Activity 2 Related Printing	Promotional material for volunteer coordination, signage for event site instructions and logistics.					\$500
							<b>Sub Total</b>	<b>\$650</b>
<b>Other Expenses</b>								
		Activity 1 Volunteer event related expenses	Tent, table, chairs, food, latrine, etc., as required to support project volunteer event deliverables and the promotion of LCCMR strategy and objectives to citizen volunteers.					\$450
		Activity 2 Volunteer event related expenses	Tent, table, chairs, food, latrine, etc., as required to support project					\$1,000



			volunteer event deliverables and the promotion of LCCMR strategy and objectives to citizen volunteers.					
							<b>Sub Total</b>	<b>\$1,450</b>
							<b>Grand Total</b>	<b>\$190,000</b>

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
<b>State</b>				
In-Kind	Outdoor Heritage Fund	Funding from the OHF to be used on the same project sites for restoration and enhancement activities that cannot be funded by this LCCMR grant.	Potential	\$24,000
			<b>State Sub Total</b>	<b>\$24,000</b>
<b>Non-State</b>				
Cash	City of West St. Paul	A variety of expenses directly related to the individual landowner or partners sites such as contracting, material purchase, or indirect expenses related to management of the projects.	Pending	\$4,000
Cash	Comfort Lake Forest Lake Watershed District	A variety of expenses directly related to the individual landowner or partners sites such as contracting, material purchase, or indirect expenses related to management of the projects.	Pending	\$10,000
In-Kind	Total of 150 volunteers at \$24/hr (MN-DNR posted rate) averaging 4 hours of service per volunteer.	Restoration and enhancement volunteer hours for planting and seeding native species as well as monitoring the pollinator species on the projects.	Potential	\$14,400
In-Kind	GRG administrative match	GRG staff indirect administrative expense to do the work for this grant.	Secured	\$10,000
Cash	GRG cash match	GRG direct expenses to do the work for this grant.	Secured	\$8,000
In-Kind	Partner In-Kind	Landowner labor contributing to the direct execution of the projects, as well as the administrative labor going in to the project management.	Potential	\$10,000
			<b>Non State Sub Total</b>	<b>\$56,400</b>
			<b>Funds Total</b>	<b>\$80,400</b>

## Acquisition and Restoration

### Parcel List

Name	County	Site Significance	Activity	Acres	Miles	Estimated Cost	Type of Landowner	Easement or Title Holder	Status of Work
Cranberry Lake	Washington	Wetland edge buckthorn and hazard ash tree removal, with native tree and pollinator plantings.	Restoration	20	-	\$77,000	Public	Comfort Lake Forest Lake Watershed District	Has Not Begun
Loeb Lake, Marydale Park	Ramsey	Lakeside turf conversion to prairie and native plantings in a popular city park.	Restoration	3	0.5	\$34,200	Public	City of St. Paul	Has Not Begun
Riverside Park	Carver	Turf conversion to prairie and native plantings at a city park.	Restoration	4	-	\$38,500	Public	City of Carver	Has Not Begun
West St. Paul Municipal Campus	Dakota	Turf conversion to prairie and native plantings at the City municipal complex.	Restoration	2	-	\$23,000	Public	City of West St. Paul	Has Not Begun
<b>Totals</b>				<b>29</b>	<b>0.5</b>	<b>\$172,700</b>			

## 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 restoration activities completed with these funds will occur on land permanently protected by a conservation easement or public ownership.

**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 plans include target community, timelines, methods, budgets and long term maintenance. These plans are filed electronically by unique project numbers and can be referenced by staff or landowner as required by the needs of the site.

**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.**

All plans will follow the most recent version Board of Soil and Water Resources “Native Vegetation Establishment and Enhancement Guidelines” in order to ensure ecological integrity and pollinator enhancement.

**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.**

Long-term maintenance and management needs of the parcel being restored with these funds become the responsibility of the landowner. Greening seeks to assist when possible.

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

Great River Greening contacts the Conservation Corps of Minnesota once the grant is secured to seek their interest for any restoration activities.

**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.**

Evaluations will be completed during the process including initially after activity completion and three years later as a follow-up. Evaluations will 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.

## Attachments

### Required Attachments

#### *Map*

File: [cb7e289b-cae.pdf](#)

#### *Alternate Text for Map*

M.L. 2023 Pollinator Central III - Great River Greening map of proposed project sites labeled with Pollinator Central I and II sites marked....

#### *Financial Capacity*

File: [7d3591e4-401.pdf](#)

#### *Board Resolution or Letter*

Title	File
GRG Board Resolution LCCMR ML2023FY2024 Pollinator Central 3	<a href="#">f14e7510-338.pdf</a>

### Optional Attachments

#### *Support Letter or Other*

Title	File
LCCMR PC3 ML2023 Flier	<a href="#">33eea46c-421.pdf</a>
Letter of Support - City of West St. Paul	<a href="#">a6f3cd09-c8b.pdf</a>
Letter of Support - Comfort Lake-Forest Lake Watershed District	<a href="#">af7896be-e5a.pdf</a>

## 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?**

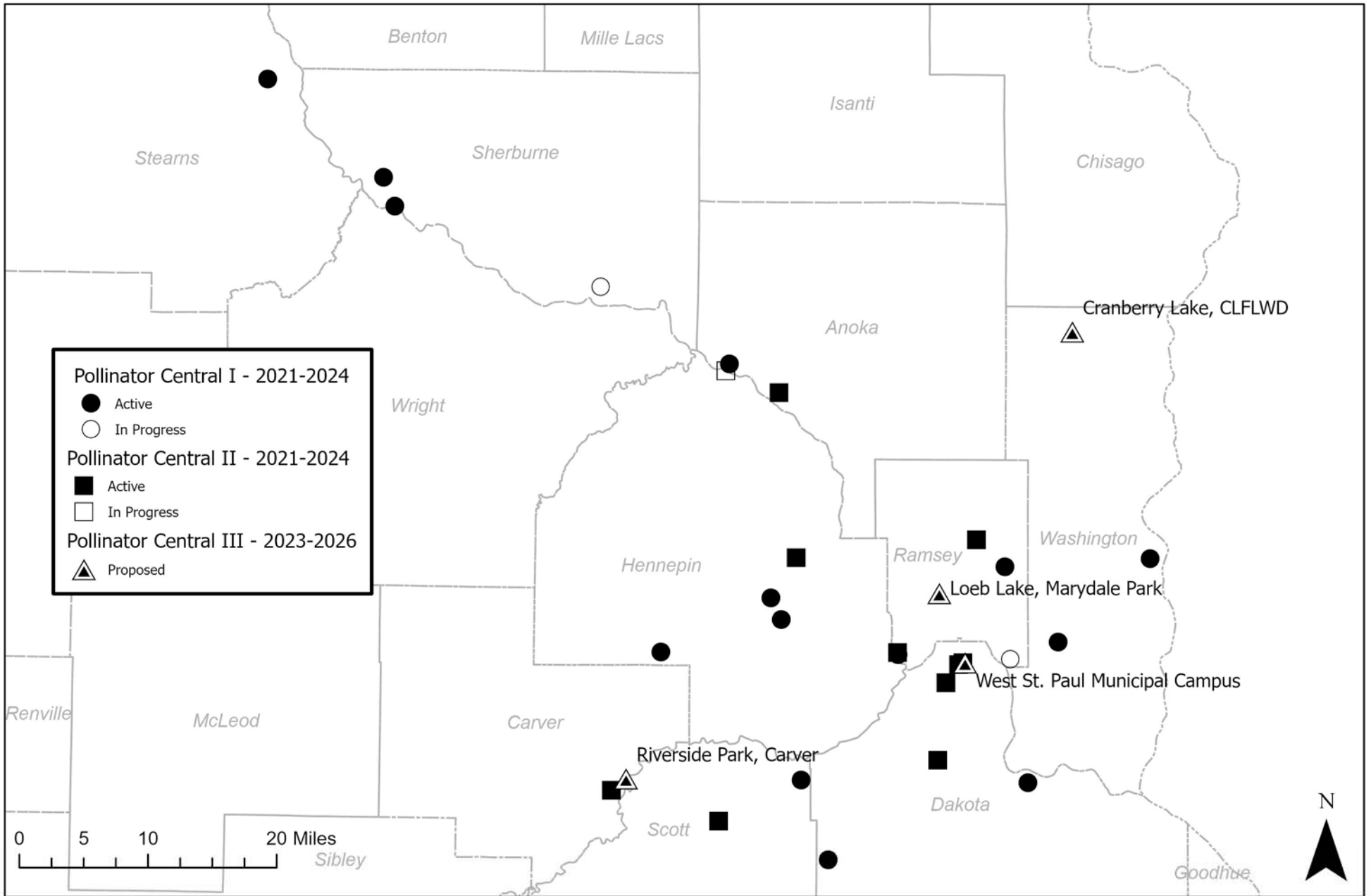
N/A

**Does your project include original, hypothesis-driven research?**

No

**Does the organization have a fiscal agent for this project?**

No



# Pollinator Central I-III, 2021 - 2026



