

Final Abstract

Final Report Approved on December 3, 2024

M.L. 2021 Project Abstract

For the Period Ending June 30, 2024

Project Title: Pollinator Central II: Habitat Improvement With Community Monitoring

Project Manager: Rebecca Tucker

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Funding Source:

Fiscal Year:

Legal Citation: M.L. 2021, First Special Session, Chp. 6, Art. 6, Sec. 2, Subd. 08c

Appropriation Amount: \$631,000

Amount Spent: \$630,332

Amount Remaining: \$668

Sound bite of Project Outcomes and Results

Pollinator Central II: Habitat Improvement with Community Monitoring established native habitat on 116 acres at 10 project sites and directly engaged 883 volunteers and 122 citizen scientists, enhancing the natural environment of both urban and rural areas as well as connecting people with plants, pollinators, and their local communities.

Overall Project Outcome and Results

Great River Greening staff worked with enthusiastic local landowners to create native plant habitats supporting native wildlife, specifically pollinators, and to provide free and available outdoor areas for education, engagement, and enjoyment for the local community in these accessible ecosystems. GRG also supported conservation stewardship and community science in the form of observational monitoring to record how the habitat restoration projects impacted pollinator communities over time.

These unique 10 projects met or exceeded goals, with a total of 116 acres restored or enhanced (original milestones = 11 sites, 116 acres), engaging a total of 883 habitat volunteers in active restoration activities such as native planting, seeding, or invasive shrub removal (goal = 350) and 122 community scientists in pollinator monitoring and related

educational events (goal = 75). Urban projects were smaller than rural projects, but consistently saw more community involvement in the habitat work (large volunteer events with high interest in pollinator monitoring), and even small pockets of pollinator habitat serve as corridors connecting larger areas. An example is the set of projects along a county path in West St. Paul spanning two schools, two parks, two cities, that converted turf to prairie with restored woodlands visited daily by students and walkers.

The pollinator education and monitoring efforts facilitated dozens of multi-site and virtual pollinator identification trainings directly leading to 109, 3-Category independent monitoring contributions on 7 sites (2,473 native bees observed) and 6 bumble bee counting events on one site with 478 native bumble bees of 9 species observed through 2024, summarized with multiple reports attached from the University of Minnesota Bee Lab and Xerces Society partners. This information will be used to continue steward the habitat projects and provide context for the positive impact these efforts are having on local wildlife, including the endangered monarch butterfly and rusty-patched bumble bee.

Project Results Use and Dissemination

Communications to the public, contractors, media, and volunteers included the language or ENRTF logo as required, temporary and permanent signs were used to describe habitat work and ENRTF backing. The pollinator monitoring work is described in the attached “Xerces Final Report” and Spring Lake / Two Rivers “RPBB Assessments” (Xerces Society for Invertebrate Conservation), as well as the University of Minnesota Bee Lab yearly Spring Lake Bumble Bee Summaries (2022 and 2023). Greening staff also presented at the Society for Ecological Restoration conference in 2023 and continues this dissemination of monitoring results to event participants and landowning partners into 2024.



Environment and Natural Resources Trust Fund

M.L. 2021 Approved Final Report

General Information

Date: December 3, 2024

ID Number: 2021-058

Staff Lead: Tom Dietrich

Project Title: Pollinator Central II: Habitat Improvement With Community Monitoring

Project Budget: \$631,000

Project Manager Information

Name: Rebecca Tucker

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Project Reporting

Final Report Approved: December 3, 2024

Reporting Status: Project Completed

Date of Last Action: December 3, 2024

Project Completion: June 30, 2024

Legal Information

Legal Citation: M.L. 2021, First Special Session, Chp. 6, Art. 6, Sec. 2, Subd. 08c

Appropriation Language: \$631,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Great River Greening to restore and enhance pollinator habitat in the metropolitan area to benefit pollinators and people and to build knowledge of the impact through community-based monitoring.

Appropriation End Date: June 30, 2024

Narrative

Project Summary: We will restore and enhance 116 acres of pollinator habitat on 11 sites around the metro to benefit pollinators and people, and build knowledge of the impact through community-based monitoring.

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 open mowed turf serving as boundaries between pavement and other impermeable surfaces. 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 in an effort to understand how pollinators interact with these urban spaces.

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 350 habitat volunteers in field activities. In addition, we will monitor every site through a number of direct pollinator monitoring techniques, guided by Xerces Society and U of M Bee Lab, to collect useful data on pollinator response to habitat improvements, effectively engaging 75 community scientists in monitoring efforts by requiring 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.

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

Activities and Milestones

Activity 1: Pollinator Habitat Restoration and Enhancement

Activity Budget: \$544,000

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 and protected private locations through a pollinator corridor following the Mississippi River throughout the Twin Cities metro area, contributing to the 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 trail-sides adjacent to traditional habitat cores. Typical restoration activities will include prairie and savanna restoration; 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	Approximate Completion Date
Site selection and management plan completion for 11 sites.	June 30, 2022
Restoration and enhancement completion on 11 sites for a total of 116 acres.	June 30, 2024

Activity 2: Community Science Pollinator Monitoring

Activity Budget: \$87,000

Activity Description:

Monitoring will include timed vegetation meanders, and pollinator assessment using guides such as Rusty Patched Bumble Bee Habitat Assessment guide (Xerces Society). Direct pollinator monitoring guided and developed by Xerces Society and U of M Bee Lab will encompass a suite of approaches including citizen science techniques of timed meander counts on half the sites, with training; non-lethal bumble bee capture with expert identification 7 times over 3 years on one site, non-lethal photography with expert identification at 3 sites.

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: the simplest monitoring will include a timed count of 3 categories of pollinators (honey bees vs. native bees vs. other floral visitors); catch and release surveys of bumble bees with expert identification following MN Native Bee Survey and Midwest Guide to Bumble Bee Monitoring (Xerces Society) methods; and camera ‘trapping’ using skilled photographers and expert identification using guidelines established by the USFWS for monitoring bumble bee communities and new approaches being developed by Xerces Society and the Bee Lab for other groups.

Activity Milestones:

Description	Approximate Completion Date
Pre-restoration baseline surveys for each of the 11 sites.	June 30, 2022
Site specific monitoring plan - 5 (citizen surveys), 3 (photographic surveys), 1 (bumblebee capture surveys))	June 30, 2022
Data collection for all surveys complete, final report on initial findings on all 11 sites.	June 30, 2024

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.

Great River Greening will coordinate multiple volunteer events and widely distribute digital media to showcase individual projects and educate the community on the specific restoration and enhancement work being done. This will include e-news letters, social media, and online articles written with partners on their websites, describing the activities as well as the benefits these activities have to the natural environment and the surrounding communities.

We will also document the method and results of the pollinator insect monitoring on these restoration sites. The collected data will be given to the site partners individually and collectively, as well as disseminated in the form of written summaries and presentations and talks to the site owners and general conservation community. This will allow other restoration practitioners as well as the general public to use the knowledge gained on successful pollinator habitat improvement techniques on projects of their own in the future.

The Environmental and Natural Resource Trust Fund will be acknowledged in all dissemination, as well as with on site signage as required by the associated guidelines.

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 second phase of the Pollinator Central program as funded by the LCCMR appropriations (pending legislation as this application is being submitted), 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 and Shoreline Restoration in Greater Metropolitan Area	M.L. 2014, Chp. 226, Sec. 2, Subd. 06g	\$300,000
Metro Conservation Corridors Phase VIII - Enhancing Restoration Techniques for Improved Climate Resilience and Pollinator Conservation	M.L. 2015, Chp. 76, Sec. 2, Subd. 08f	\$400,000
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

Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineligible	% Benefits	# FTE	Classified Staff?	\$ Amount	\$ Amount Spent	\$ Amount Remaining
Personnel										
Grant Administrator		Tracks grant budget, project budgets, develops status reports and amendments			24%	0.36		\$27,700	-	-
Accounting Manger		Processes reimbursement requisitions			24%	0.12		\$11,200	-	-
Events & Outreach Coordinator		Conducts day to day tasks to support volunteer acquisition and event execution			21%	0.27		\$5,800	-	-
Events & Outreach Manager		Manages all tasks related to volunteer acquisition, event development and event execution			21%	0.45		\$18,600	-	-
Field Technician		Conducts on-site work to support project deliverables			9%	0.69		\$21,200	-	-
Field Crew Coordinator		Oversees day to day activities of Field Technicians			9%	0.45		\$17,700	-	-
Program/Project Manager Ecologist		Manages day to day project execution, crew, contractors, project deliverables, budget and timeline.			17%	1.02		\$81,500	-	-
Communications Manager		Develop communications for events			21%	0.03		\$1,000	-	-
							Sub Total	\$184,700	\$184,690	\$10
Contracts and Services										
University of Minnesota Bee Laboratory	Subaward	Identify bumble bee species from photographs at 750-1,000 specimens per 40 hours, including data management and analysis. Time and materials basis. Single-source provider selected due to the unique and expert set of skills required for these tasks. This contract will be executed as part of Activity 2.				0.12		\$23,800	\$23,800	-
Xerces Society	Subaward	Lead approximately seven public bumble bee monitoring events, three citizen and GRG staff training				0.12		\$33,400	\$33,400	-

		workshops, and provide expert support for monitoring efforts. Single-source provider selected due to the unique and expert set of skills required for these tasks. This contract will be executed as part of Activity 2.								
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.				1.17		\$241,367	\$240,718	\$649
							Sub Total	\$298,567	\$297,918	\$649
Equipment, Tools, and Supplies										
	Tools and Supplies	Activity 2 Tools & Supplies	Sampling Supplies to support monitoring project deliverables					\$1,500	\$1,500	-
	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					\$131,524	\$131,524	-
							Sub Total	\$133,024	\$133,024	-
Capital Expenditures										
							Sub Total	-	-	-
Acquisitions and Stewardship										
							Sub Total	-	-	-
Travel In Minnesota										

	Miles/ Meals/ Lodging	Support on-site visits as needed to accomplish deliverables. (Activity 1 and Activity 2)						\$4,268	\$4,268	-
							Sub Total	\$4,268	\$4,268	-
Travel Outside Minnesota										
	Conference Registration Miles/ Meals/ Lodging	Activity 2 travel, 1 trip, 435 miles, 1 staff, meals	Dissemination at Society for Ecological Restoration-Great Lakes Chapter Baraboo, WI for 1 GRG employee.	X				\$1,000	\$991	\$9
							Sub Total	\$1,000	\$991	\$9
Printing and Publication										
	Printing	Activity 2 Printing	Promotional material for volunteer acquisition, signage for event site instructions and logistics.					\$900	\$900	-
	Printing	Activity 1 Printing	Promotional material for volunteer acquisition, signage for event site instructions and logistics.					\$1,000	\$1,000	-
							Sub Total	\$1,900	\$1,900	-
Other Expenses										
		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	X				\$7,541	\$7,541	-
							Sub Total	\$7,541	\$7,541	-
							Grand Total	\$631,000	\$630,332	\$668

Classified Staff or Generally Ineligible Expenses

Category/Name	Subcategory or Type	Description	Justification Ineligible Expense or Classified Staff Request
Travel Outside Minnesota	Conference Registration Miles/Meals/Lodging	Activity 2 travel, 1 trip, 435 miles, 1 staff, meals	Dissemination of information outside of Minnesota is of regional significance and funding is required to do so.
Other Expenses		Volunteer Event Related Expenses	Volunteer Event Related expenses will support volunteer hours needed to accomplish project deliverables and to provide education to volunteers on the ecological benefits of the project and awareness of LCCMR's commitment and funding to these projects.

Non ENRTF Funds

Category	Specific Source	Use	Status	\$ Amount	\$ Amount Spent	\$ Amount Remaining
State						
Cash	ML2021, 1st Special Session, Chapter 104, Article 1, Section 2, Subd 5(b) Metro Big Rivers Phase XI	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.	Secured	\$336,000	\$336,000	-
			State Sub Total	\$336,000	\$336,000	-
Non-State						
Cash	Landowners	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.	Secured	\$89,100	\$89,100	-
In-Kind	Volunteer Labor	Events for restoration/enhancement planting and seeding native species as well as monitoring the pollinator species on the projects.	Secured	\$83,700	\$83,700	-
Cash	GRG administrative match	GRG overhead costs covered by general operating support	Secured	\$59,500	\$34,000	\$25,500
			Non State Sub Total	\$232,300	\$206,800	\$25,500
			Funds Total	\$568,300	\$542,800	\$25,500

Acquisition and Restoration

Parcel List

Name	County	Site Significance	Activity	Acres	Miles	Estimated Cost	Type of Landowner	Easement or Title Holder	Status of Work
Anoka High School	Anoka	Degraded fields at an educational institution adjacent to corridors of woodland and floodplain on the Rum River.	Restoration	5	-	\$42,600	Public		Completed
Bassett Creek Park	Hennepin	Diverse mosaic of forest, lake, and highly visited trails for turf to prairie conversion.	Restoration	10	-	\$54,700	Public		Completed
Copperfield Ponds Park	Dakota	Community park with woodland habitat focused on pollinator enhancement & restoration.	Restoration	8	-	\$49,400	Public		Completed
Creekside Park	Carver	New community park with creek and trailside habitat establishment.	Restoration	5	0.75	\$68,000	Public		Completed
Garlough and Marthaler Parks	Dakota	Oak savanna, woodlands and wet forest with shoreline, invasive removal and pollinator enhancement.	Restoration	15	0	\$66,900	Public		Completed
Hidden Falls-Crosby Farm	Ramsey	Regional park with floodplain habitat complex to get pollinator focused restoration/enhancement.	Restoration	12	-	\$78,700	Public		Completed
Independent School District 197	Dakota	High use trail side and open lawn turf conversions to prairie at educational institutions.	Restoration	5	-	\$56,400	Public		Completed
Lebanon Hills Regional Park	Dakota	Large mixed habitat oak savanna parkland in the midst of an urban / suburban area.	Restoration	40	-	\$34,000	Public		Completed
Linear Park	Ramsey	Utility corridor with established walking path and wetlands, turf to prairie restoration.	Restoration	6	-	\$53,700	Public	Northern States Power Co.	Completed
Lower Landing	Ramsey	Urban floodplain park along Mississippi Migration corridor.	Restoration	0	-	-	Public		No Longer Being Considered
Spring Lake Regional Park	Scott	Lake shoreline with woodland habitat to receive pollinator enhancement.	Restoration	10	-	\$38,600	Public		Completed
Stephen's Park	Hennepin	Mississippi shoreline park with farmland, community amenities, and river access.	Restoration	0	-	-	Public		No Longer Being Considered
Totals				116	0.75	\$543,000			

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 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: [a8ab0c9c-f7a.pdf](#)

Alternate Text for Map

M.L. 2021 Pollinator Central II - Great River Greening map of proposed project sites on a Minnesota county map surrounded by pictures of people and pollinators....

Financial Capacity

File: [f95b5ec9-3f2.pdf](#)

Board Resolution or Letter

Title	File
LCCMR ML2021 Pollinator Central II GRG Board Resolution	f716016f-3a2.pdf

Supplemental Attachments

Capital Project Questionnaire, Budget Supplements, Support Letter, Photos, Media, Other

Title	File
Creekside City Of Carver LCCMR ML2021 GRG	6caf4e58-b70.pdf
Little Canada Letter of Support for Great River Greening	51ff9666-d43.pdf
Dakota County Letter of Support GRG	669cb499-eb7.doc
City of Crystal Letter of Support GRG	d9b9db29-a90.pdf
Scott County Letter of Support for Great River Greening	fe45ace0-037.pdf
Great River Greening ENRTF Background Check Certification Form	19cbd963-265.pdf
2021-07-06_ENRTF Background Check Certification Form FINAL	c2255d9a-ab7.pdf
GRG PC1 and 2 Pollinator Monitoring Summary	1a4b03e2-ae1.pdf
Pollinator Stewardship Presentation (SER Conference 2023)	6ca13112-b37.pdf
2022 Spring Lake Park Bumble Bee Summary	6f6cbcfb-9a2.pdf
2023 Spring Lake Park Bumble Bee Summary	b4ed05fc-fc9.pdf
2023 GRG Report Detailed Addendum	fd3b669e-ec9.pdf
Xerxes Final Report	c0e555a2-2f2.pdf
Xerxes Final Report Appendices	58bc2a5f-e2b.pdf
Anoka HS Sign	e71de495-f76.jpe
Garlough Sign	c3c31ca7-7ab.jpe
Two Rivers Sign	ba88ff02-7af.jpe
Spring Lake Sign	58b7dc2e-a50.jpe
Creekside Sign	16d689ca-7fc.jpe
Crosby Sign	312af71d-799.jpe
PC2 Final Project Site Map	aec3a5e-f18.jpe
Copperfield Sign	15282076-071.jpe
Lebanon Sign	73f6dc5e-a71.jpe
Linear Park Sign	3f8ed7c9-d9a.jpe
Spring Lake RPBB Assessment	857e1f33-6c1.pdf
Two Rivers RPBB Assessment	d97824da-b69.pdf
Garlough RPBB Assessment	3ffe1c8a-ab1.pdf

Media Links

Title	Link
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Difference between Proposal and Work Plan

Describe changes from Proposal to Work Plan Stage

Budgets and acreage totals for individual projects were evaluated for scalability and adjusted accordingly, with reductions to the professional / technical contracts, supplies, and Greening staff labor made where applicable. Volunteer and monitoring event expenses, personnel time, and impacted number of volunteers were reduced proportionately according to the scaled number of events to be held. One project was reduced to a zero budget but retained in the overall plan as a potential possibility. Non ENRTF Funds Contributed were reduced proportionately to the reduction in project size and anticipated Outdoor Heritage Fund appropriation value. A reporting schedule of Feb 1 and Aug 1 was requested and approved. The public ownership of Linear Park was confirmed and updated. The milestones were clarified to include measurable outcomes. The miles in the Garlough and Marthaler Parks parcel were successfully changed from 0.34 miles to 0 miles.

(July 8, 2021, RCT) - Background check form was completed and attached to the workplan. The University of Minnesota and Xerces Society budgets were changed to Sub-awards. Lower Landing acreage and budgets (which had already been zeroed out in the previous changes) was updated to "No longer being considered".

(July 15, 2021, RTC) - Comment 1113 - Budget lines for the Operations and Finance Directors were removed, totals were reallocated into applicable non-director staff, total personnel budget and activity budget totals remain the same.
Comment 1114 - Completed Background Check Certification Form attached again with no title changes.

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 understand that travel expenses are only approved if they follow the "Commissioner's Plan" promulgated by the Commissioner of Management of Budget or, for University of Minnesota projects, the University of Minnesota plan?

Yes, I understand the Commissioner's Plan applies.

Does your project have potential for royalties, copyrights, patents, sale of products and assets, or revenue generation?

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

Work Plan Amendments

Amendment ID	Request Type	Changes made on the following pages	Explanation & justification for Amendment Request (word limit 75)	Date Submitted	Approved	Date of LCCMR Action
1	Amendment Request	<ul style="list-style-type: none"> • Activities and Milestones • Budget - Personnel • Budget - Professional / Technical Contracts • Budget - Capital, Equipment, Tools, and Supplies • Budget - Travel and Conferences • Budget - Other • Acquisition and Restoration - Parcel List 	This amendment reflects more up to date project costs for some parcels, removes Stephen's Park which is not moving forward, updates parcel names to reflect updated work and accurate labeling, and requests \$10,000 of the Contract budget be moved to Supplies. The budget shift is requested due to higher than anticipated supply costs and a revised contracting plan to account for this shift. Typos are also corrected in this amendment request.	December 8, 2022	Yes	December 16, 2022
2	Amendment Request	<ul style="list-style-type: none"> • Budget - Personnel • Budget - Professional / Technical Contracts • Budget - Capital, Equipment, Tools, and Supplies • Budget - Travel and Conferences • Budget - Other • Acquisition and Restoration - Parcel List 	<p>Due to landowner preferences, the scope and scale of the work at Anoka High School changed. GRG would like to use funds originally designated for labor and supplies to complete a more complicated site preparation of 5 acres of degraded prairie with contracting funds. Parcel List language has been updated to reflect this amendment.</p> <p>The out-of-state travel funds will go toward 1 GRG staff attending the Society of Ecological Restoration-Midwest Chapter conference in Baraboo, WI.</p>	March 27, 2023	Yes	March 30, 2023
3	Amendment Request	<ul style="list-style-type: none"> • Budget - Personnel • Budget - Professional / Technical Contracts • Budget - Capital, Equipment, Tools, and Supplies • Budget - Travel and Conferences • Budget - Other 	GRG requests budget changes to reflect the fact no volunteer event will be held at the Creekside site as previously planned. All associated supply, travel, volunteer supply and labor is being shifted to contracts to complete work on the Creekside project. In addition, \$5,000 is requested to move from Contracts to	August 14, 2023	Yes	August 17, 2023

			Supplies to cover seeding work at Bassett Creek site.			
4	Amendment Request	<ul style="list-style-type: none"> • Budget - Professional / Technical Contracts • Budget - Capital, Equipment, Tools, and Supplies • Budget - Other 	As GRG is no longer utilizing the "Volunteer supply" budget as originally planned due to fewer large events requiring food / tent rentals, we propose to shift those remaining \$13,343 funds out of the "Other" category into the main "Supply" category to support more events and better complete the current acreage. We also completed the planned contracting on this grant, and propose to shift the remaining \$6,433 into the main "Supply" category for spending.	May 10, 2024	Yes	May 15, 2024
5	Amendment Request	<ul style="list-style-type: none"> • Other • Budget - Non-ENRTF Funds Contributed • Attachments • Acquisition and Restoration - Parcel List 	Final budget spent numbers have been entered with this final status update report as well as our final secured Non-ENRTF Funds Contributed amounts. In addition, acreage and cost have been updated on the parcel list to reflect the final state of each individual parcel upon completion of the grant.	August 14, 2024	Yes	September 17, 2024

Status Update Reporting

Final Status Update August 14, 2024

Date Submitted: September 13, 2024

Date Approved: September 17, 2024

Overall Update

GRG completed work on all active projects, providing documentation and recommendations on continued maintenance of the work as we handed long-term site management over to landowners. This spring was significantly wetter with more “typical” weather patterns compared to the prior years of drought, adding to the success of native vegetation establishment. Contracted habitat work was completed at Anoka High School, Bassett Creek Park, Copperfield Ponds, Spring Lake Regional Park, Linear Park, ISD197, and Garlough / Marthaler Parks, including final mowings or spot treatments of establishing prairie areas, plug planting or seeding to add species diversity, tree planting and protection installation, and mowing for thatch removal and native growth promotion. In this reporting period, 5 habitat restoration volunteer events occurred at 4 project sites engaging 291 volunteers (Activity1), and pollinator monitoring outreach and independent monitoring engaged an additional 4 community scientists (Activity2). Finally, the Xerces Society submitted a bumble bee monitoring final report and completed the “Rusty Patched Bumble Bee Habitat Assessment Form and Guide” for Ritter Farm Park to document the state of the project area and serve as a model for future habitat work facilitated by Greening and our partners. Final cumulative individuals engaged: Habitat Volunteers – 883, Citizen Scientists – 122.

Activity 1

Work concluded on the approved 10 total sites (all grant changes to reduce from the original 11 projects were completed with approved amendments). During this period, contractors finished prairie establishment maintenance at Anoka High School Bassett Creek Park, and Creekside Park, contractors (with additional planting and maintenance assistance from Great River Greening crew) also completed invasive woody understory brush removal at Copperfield Ponds Park and completed trail-side and turf to prairie conversions at the ISD197 schools, Garlough and Marthaler Parks, Linear Park, and Spring Lake Regional Park. Volunteers planted trees, shrubs, and understory plants at the Anoka High School, Copperfield Ponds Park and Garlough Park, removed buckthorn at Garlough Park and Copperfield Ponds Park, and planted plugs into the establishing prairie at Lebanon Hills Regional Park. Additional seed was also purchased for distribution by the landowner on multiple projects.

(This activity marked as complete as of this status update)

Activity 2

Pollinator monitoring training for independent volunteers occurred at Linear Park on June 13th with only 4 monitors in attendance, however training at other Pollinator Central 1 parks occurred other times in the spring for volunteers that work on any of our monitored projects. Those volunteers began the independent monitoring season later in the growing season than this reporting period, as pollinators are more after June of the year. Interest continued to be shown by the public in learning about the use of iNaturalist, the 3-Category survey technique, and the capture / ID / release events that will be continued through funding on Pollinator Central 3 and Pollinator Central 4. Final data and bumble bee capturing reports from the previous seasons at Spring Lake Regional Park was provided by the Xerces Society and the University of Minnesota Bee Lab, as well as the Rusty-Patched Habitat Assessment completed by the Xerces Society regarding Spring Lake Regional Park. Great River Greening is working to build a concise summary of all submitted reports and data collection to disseminate to partners and interested public. The Xerces and Bee Lab reports summarize recommended monitoring for all sites as well as data from the individual site bumble bee monitoring,

(This activity marked as complete as of this status update)

Dissemination

Community engagement during this period included work on multiple sites and educational dissemination of project-related communications. 20 volunteers continued buckthorn removal and planted 100 plugs of native zigzag goldenrod at Garlough Park on May 8th, 70 10th and 11th grade students from Anoka High School planted 195 trees and shrubs and distributed native seeds into the edge of the restored prairie on May 10th, 155 3rd and 4th graders planted 2,200 plugs of pollinator-supporting native understory plants into Garlough Park on May 30th, 32 volunteers from University of California San Francisco planted 133 trees and shrubs at Copperfield Ponds Park on June 6th, and 14 volunteers Shephard of the Valley Church planted 1,500 prairie plugs at Lebanon Hills Regional Park. All Pollinator Central efforts were discussed in an oral presentation at each event, highlighting the monitoring and community science efforts, with ENRTF properly credited for funding. Social media posts mentioned PC2 with ENRTF credited multiple times during this period, highlighting volunteer events and overall habitat restoration and stewardship efforts in general that were supported by this grant. Greening staff also tabled the Spring Lake Regional Park trailhead opening June 28th talking with 72 people about ENRTF supported efforts.

Status Update Reporting

Status Update February 1, 2024

Date Submitted: January 29, 2024

Date Approved: February 22, 2024

Overall Update

Progress continued on all projects, including some nearing completion (Anoka High School and Lebanon Hills Regional Park), with final season planning completed for spring 2024 work to maintain the current grant completion deadline of the end of June 2024. Most projects received the second or third season follow up facilitating establishment maintenance of native plantings or follow-up invasive control for work initiated in previous reporting periods. During this period, 3 habitat restoration volunteer events occurred with a total of 173 volunteers engaged for Activity 1, 3 public bumble bee monitoring events occurred at Spring Lake Regional Park with 35 total community science volunteers, and significant progress was made on the independent pollinator monitoring project with 28 separate 3-Category monitoring events occurring in this period on 5 active project sites (Activity 2). This increased focus on types of community engagement that is structure and guided (multiple trainings occurred in both spring and fall 2023 with an easy to complete web form for data submission) while also being flexible and allowing for independent participation was very well received by the volunteers.

Activity 1

Significant progress occurred on the establishment plantings in turf conversion areas at the ISD197 projects (Two Rivers High School and Garlough Environmental Magnet School) with continued maintenance on native plantings that were having drought issues during the summer (spot weeding, targeted mowing, and native species monitoring) as well as replanting areas that were largely unsuccessful at establishment. Garlough and Marthaler Parks in West St. Paul received the final buckthorn removal follow-up in fall 2023, with the continued maintenance of the invasive species removal of most of the acres being turned over to the City and Dakota County. Trail-side plantings of blooming pollinator plant species was completed by a contractor at Spring Lake Regional Park, and contracted work began at Hidden Falls / Crosby Parks in St. Paul. Contract as well as GRG managed site work continued at Anoka High School, Linear Park, and Creekside Parks with prairie planting and maintenance establishment on all, preparing for the final season of spot treatments and native species planting to complete the projects.

Activity 2

Bumble bee capture / ID / release pollinator monitoring volunteer events hosted by the Xerces Society and the University of Minnesota Bee Lab with Great River Greening staff were held on July 7th, August 4th, and August 17th, with a total of 35 community science volunteers. Three in-person trainings for independent pollinator monitoring were held by Greening staff in July with a total of 27 volunteers in attendance, which adds to additional trainings held in June and on Pollinator Central 1 funding which did contribute to the whole pool of volunteers monitoring sites funded by both grants. On Pollinator Central 2 projects during this period, 28 individual monitoring events contributed a collective 100 hours of site monitoring on 5 sites. Initial data analysis and summary has been started by Great River Greening, the Xerces Society, and the UM Bee Lab, on the bumble bee data, independent monitoring, and iNaturalist observations. This will be given to landowning partners and disseminated publicly in 2024 to serve as the main reference point for how populations have changed over time after habitat restoration or enhancement when these pollinator monitoring methods are done again on these sites in the future.

Dissemination

Volunteer planting events were held at Bassett Creek on September 16th (82 volunteers planting prairie species), at Lebanon Hills Regional Park on September 23rd (104 volunteers spreading native seed and planting plugs grown / purchased by Dakota County), and at Spring Lake Regional Park on October 14th (37 volunteers adding native species to

a recently seeded hillside at the new public park access that will open in Spring 2024). Social media postings accompanied all events as well as highlighting the planting efforts at Bassett Creek on October 2, 2023, the National Public Lands Day celebration at Lebanon Hills Regional Park (posted October 5, 2023), the creek-side restoration in Carver on November 3, 2023, and the season's pollinator monitoring efforts on December 22, 2023. A gathering was held at the University of Minnesota Bee Lab on October 18th for independent pollinator monitoring volunteers, serving as a continued educational opportunity as well as a thank you for their efforts, with 10 people in attendance and 30 thanked virtually, where a summary presentation from the years observations was made by Great River Greening, Xerces Society, and the Bee Lab staff.

Status Update Reporting

Status Update August 1, 2023

Date Submitted: August 14, 2023

Date Approved: August 17, 2023

Overall Update

Restoration and monitoring activities continued across the projects supported by these funds. Projects that did not have active restoration on site during this period continued to have active communication and planning with the landowners (Activity 1), and the coordination for the 2023 pollinator monitoring season for each of the three proposed types of techniques progressed well with the University of Minnesota Bee Lab, Xerces Society, and recruitment for public community scientists on all levels (Activity 2). Numerous projects supported public restoration volunteer events on spring prairie plants, as well as the involvement of elementary and high school students on the ISD197 projects, totaling four volunteer planting days with 270 adult and youth volunteers on that project set alone during this reporting period. Dollar value for supplies and equipment spent on previous status update was incorrect. Current update includes all supply and equipment spending through 6/30/2023.

Activity 1

Winter restoration and enhancement work started or continued on a number of projects involving buckthorn or woody invasive/undesired tree removal at Anoka High School, Copperfield Park, Spring Lake Regional Park, and Garlough and Marthaler Parks. Spring planting and seeding occurred both through contracted and volunteer efforts on the majority of the prairie establishment projects, highlighting the ISD197 project at the Two Rivers High School and Garlough Elementary Magnet School and the adjacent Garlough Park in West St. Paul. Contractors prepared the previously killed turf lawn areas in early spring, seeded the areas, and volunteers (including students) planted over 11,000 plugs into the trail side, parking lot adjacent, and school forest areas in these projects, with good establishment on many of the areas despite the drought that has occurred this year. Contracted watering was used to promote these plantings, and the turf to prairie plantings continued to be monitored and maintained during the reporting period. Spring Lake Regional Park also hosted a volunteer planting event where 29 volunteers planted approximately 2000 native plugs to enhance a trail intersection for pollinator habitat and trail users alike.

Activity 2

Monitoring planning and volunteer recruitment for the 2023 season occurred during this reporting period. Efforts were made to recruit and train community scientists on the "3-category" survey as well as the use of iNaturalist at project sites throughout the range of work. Group training sessions were hosted by Greening staff for specific sites to orient the volunteers to both the monitoring effort as well as the public spaces themselves, and a group training was hosted by the Xerces Society for Greening staff, project partners, and volunteers which was supported by Pollinator Central 1 funds for the site and contracted portions (Xerces time) but benefits all Pollinator Central monitoring efforts overall. iNaturalist and 3-category monitoring efforts are already underway by these community scientists, with an easier to use data collection Google form proving a more streamlined way for public engagement on the 3-category sampling technique. Public volunteers are now independently conducting 3-category and iNaturalist surveys at Anoka High School, Garlough and Marthaler Parks, Hidden Falls Regional Park, ISD197 (Two Rivers High School and Garlough Environmental Magnet School), Lebanon Hills Regional Park, Linear Park, and Spring Lake Regional Park.

Dissemination

Social media posts, with the ENRTF funding prominently noted, were written and disseminated on the ISD197, Garlough and Marthaler, Spring Lake Regional Park, and Activity 2 monitoring overall. We also continued the use of logoed corrugated plastic signs at active restoration and pollinator monitoring areas to inform trail and park users of the background of the projects, with QR codes to information on the Greening website including this landing page

<https://www.greatrivergreening.org/pollinator>. Thank you emails also accompanied all volunteer events to again cite the ENRTF funding on these projects. Greening staff also attended the Society for Ecological Restoration Midwest-Great Lakes chapter conference in Baraboo, WI, in April 2023 and all Pollinator Central efforts were discussed in an oral presentation, highlighting the monitoring and community science efforts, with ENRTF properly credited for funding.

Status Update Reporting

Status Update February 1, 2023

Date Submitted: January 27, 2023

Date Approved: February 8, 2023

Overall Update

All aspects of the grant are fully in motion, on all projects that will be supported by these funds. Site preparation for habitat restoration / enhancement (such as buckthorn removal for native understory development or turf replacement for pollinator habitat creation) has been started or contracted across the full set of projects. Volunteer engagement has happened both tangibly and through outreach in most of the communities, with numbers on track to exceed goals for both Activity 1 and Activity 2 participation. Some sites had significant engagement interest in the restoration work, Dakota County supporting the National Public Lands Day celebration and planting event at Lebanon Hills Regional Park, while Spring Lake Regional Park in Scott County had a significantly harder time generating interest in bumble bee monitoring events. We will be using those different responses in outreach to inform how we recruit participation for the 2023 season, all of which will go into a final summary to inform future phases or partners that may want to perform similar pollinator monitoring projects.

Activity 1

All active projects have progressed through cooperative agreement full execution and are currently in progress on restoration activities on approximately 50 acres. The Stephen's Park project was officially removed from consideration, and the funds were redistributed to other projects within the grant. Fall planting of diverse, native grasses, forbs, shrubs, and trees occurred at 5 sites through contracted seeding as well as publicly engaging volunteer events, with over 200 volunteers and 150 students participating in hands-on planting work in this period.

Activity 2

Pollinator sampling continued on sites that had been started in Spring 2022 on all levels of monitoring types. Volunteers participated in Xerces Society / UMN Bee Lab led bumble bee catch, ID and release events on July 7th, August 9th, and August 24th at the Spring Lake Regional Park in Prior Lake. There was limited interest in these events, despite maximum attendance at the same events at the PC1 project monitor events on the same days. The staff and 15 total public volunteers did still observe a total of 216 bumble bees of 9 different species, including 1 individual of the state endangered *Bombus affinis* at each of the the August 9th and 25th capture / ID / release events, with 3 seen by staff on September 12th (which was added to make the sampling efforts similar between this and the PC1 site to insure more accurate site comparisons). Similar low interest was shown by the public, despite recruitment attempts, in both the 3-Category and guided iNaturalist photo monitoring on these sites, with the data from the full 2022 monitoring year to be analyzed this winter.

Dissemination

Social media posts, with the ENRTF funding prominently noted, were written and disseminated on the ISD197, Garlough / Marthaler, Linear Park, Lebanon Hills, Copperfield Ponds and pollinator monitoring projects several times this reporting period by both Great River Greening and our landowning partners. Signs were developed for placement on sites explaining the types of work going on in that area, ie "Prairie Restoration in Progress" and "Forest Restoration in Progress", again with the ENRTF logo and links to our website for more project and grant related information. The Lebanon Hills Regional Park project was also highlighted on broadcast news and social media by WCCO September 27th highlighting the National Public Lands Day volunteer event that occurred.

Status Update Reporting

Status Update August 1, 2022

Date Submitted: July 26, 2022

Date Approved: August 15, 2022

Overall Update

Pollinator resource development, native habitat restoration, and interactive volunteerism / education has seen significant progress through the Pollinator Central II grant during this period. Projects have either been fully made online through cooperative agreements with the landowners or are actively in progress for that step or any needed amendments. Sites including Copperfield Park, Garlough and Marthaler Parks, and Linear Park have all had active restoration started to date. Lebanon Hills Regional Park area is being prepared by matching OHF funding for a large, public volunteer event that is actively being planned for Fall 2022 involving coordination with Dakota County. The Garlough project (and associated Two Rivers High and Garlough Elementary project) were kicked off with an elementary school forest seeding and planting public event totaling 190 volunteers with a public RFP released for initiation of work in Summer 2022. Active projects have had RFPs similarly released, volunteers have been engaged in both the restoration activities as well as the pollinator monitoring efforts, agreements are in place with the Xerces Society and the University of Minnesota Bee Lab, with more engagement and monitoring planned for Summer and Fall 2022. Contracting numbers included in this update include encumbered and fully executed agreements.

Activity 1

Cooperative agreements with the associated landowners for the following projects have been completed: Bassett Creek, Copperfield Ponds Park, Creekside Park, Garlough and Marthaler Parks, Henry Sibley High (which will be renamed to Two Rivers High School after a name change) and Garlough Elementary, Hidden Falls, Lebanon Hills Regional Park, and Linear Park. Great River Greening is still coordinating with Scott County to finalize what now is a multiple grant (including two OHF phases) cooperative agreement but is on track for completion in Summer 2022, and the cooperative agreement has been drafted and is being processed on the Anoka High School project. The Stephens Park project funds may need to be reallocated as we are not making progress with coordinating with the landowner, that will be done with an amendment in the next reporting period if needed. As a number of these projects have associated match or separately funded work in tandem that are currently being developed, we have had active work on 10 acres during this period but will have significant progress in the next reporting period.

Activity 2

The Xerces Society and the University of Minnesota Bee Lab coordinated and held multiple pollinator monitoring trainings for internal staff, interested partners, volunteer supervisors, as well as for the general public (with the assistance of NFWF funding) including an online training, with in-field hands-on portion, led by the Xerces Society staff on June 15, 2022. Protocols for all monitoring types have been designed, field tested, and initiated. Plans for summer pollinator monitoring were made for the public bumble bee capture, ID, and release sampling events at Spring Lake Regional Park in Prior Lake (which started in July) and for the other two types of monitoring (the 3-Category and iNaturalist photo monitoring) at 5 and 3 sites respectively. All sites were monitored for baseline vegetation composition or are actively being surveyed during the summer months by Greening staff to record the sites prior to major restoration, with surveys of first year pollinator composition to be completed throughout the growing and insect active season in 2022.

Dissemination

Volunteer events were held on Pollinator Central II projects during this period including the Garlough / Marthaler Park and Linear Park projects, as well as pollinator monitoring training and observation events held virtually and in person. The Garlough Environmental Magnet School 3rd grade class, 75 students total, was given a brief presentation by Great

River Greening ecologists and then participated in hands on understory grass seeding on 2 acres of Garlough Park. This area then hosted a public event which drew 115 habitat restoration volunteers planting grasses, forbs, trees, and shrubs in this school forest area as a broader project kickoff and celebration. Virtual webinars and informational meetings were also held regarding these restoration projects and the pollinator monitoring activities, with over 50 participants on the live presentations, and additional views from the YouTube posted videos. In-person pollinator monitoring and iNaturalist observation trainings were held by the University of Minnesota Bee Lab with 15 volunteers, and a staff / partner pollinator training in June by the Xerces Society with an additional 15 in attendance. Social media posts (Facebook, Instagram, Twitter) accompanied most of those events, with more than 10 referencing the projects as well as ENRTF funding within this period.