Legal Citation: M.L. 2017, Chp. 96, Sec. 2, Subd. 08i as extended by M.L. 2020, First Special Session, Chp. 4, Sec.

Project Abstract

For the Period Ending June 30, 2021

PROJECT TITLE: Community Stewardship to Restore Urban Natural Resources - Phase X

PROJECT MANAGER: Wiley Buck AFFILIATION: Great River Greening

MAILING ADDRESS: 215 Starkey Street, Suite #2200

CITY/STATE/ZIP: St. Paul, MN 55107

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FUNDING SOURCE: Environment and Natural Resources Trust Fund

LEGAL CITATION: M.L. 2017, Chp. 96, Sec. 2, Subd. 08i as extended by M.L. 2020, First Special Session, Chp. 4,

Sec.

APPROPRIATION AMOUNT: \$524,000

AMOUNT SPENT: \$523,962 AMOUNT REMAINING: \$38

Sound bite of Project Outcomes and Results

To protect Minnesota's natural heritage, Greening restored and enhanced 310 ecologically significant acres in priority metro areas and engaged volunteers in a suite of activities to address the need for long-term management of projects. Greening disseminated results for the layperson through electronic channels and to professionals through a published paper.

Overall Project Outcome and Results

We reached 123% of our acreage goals, restoring and enhancing 310 acres of significant ecological habitat, compared to the 252 acres anticipated. The 12 restoration and enhancement sites were selected based on ecological significance and potential for improvement. Restoration and enhancement improvements were made on prairie, forest, and wetland communities including habitat for rare species, within the mapped Metro Conservation Corridors.

We successfully engaged 468 volunteers in hands-on restoration, and 5 known observers via iNaturalist app for a combined total of 473 contacts. Reaching this number was a challenge we met, as during the second half of this appropriation, we had to significantly and rapidly modify our community outreach and event models in response to the COVID-19 pandemic to safely engage our volunteers throughout 2020 and 2021. We were successful in our community engagement events with staggered start time, multi-shift days with smaller pods of volunteers, and strict safety guidelines in place. Furthermore, we also piloted independent volunteer outings utilizing the iNaturalist platform, allowing volunteers to explore project parcels and record their observations independently. These observations provided very useful data (e.g. benchmarking progress and identifying patches of exotic species) while engaging volunteers in a novel way.

To help address the need for innovative methods for long term maintenance, we also offered two additional levels of volunteer engagement beyond field volunteer and started using a digitized restoration evaluation for more standard, shareable data. The 'site monitor' level of engagement was successful, but the 'site steward' level of engagement was challenging due to a combination of the pandemic, and the effort needed to get landowners, GRG, and volunteers comfortable with making independent enhancement decisions.

Project Results Use and Dissemination



Environment and Natural Resources Trust Fund (ENRTF) M.L. 2017 Work Plan Final Report

Date of Report: November 5, 2021

Final Report

Date of Work Plan Approval: June 7, 2017 Project Completion Date: June 30, 2021

PROJECT TITLE: Community Stewardship to Restore Urban Natural Resources – Phase X

Project Manager: Wiley Buck

Organization: Great River Greening

Mailing Address: 251 Starkey Street, Suite 2200

City/State/Zip Code: St. Paul, MN 55107 Telephone Number: (651) 665-9500 x15

Email Address: wbuck@greatrivergreening.org

Web Address: www.greatrivergreening.org

Location: Carver, Chisago, Hennepin, Dakota

Total ENRTF Project Budget:	ENRTF Appropriation:	\$52	4,000
	Amount Spent:	\$52	3,962
	Balance:	\$	38

Legal Citation: M.L. 2017, Chp. 96, Sec. 2, Subd. 08i as extended by M.L. 2020, First Special Session, Chp. 4, Sec. 2

Appropriation Language:

\$524,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Great River Greening to work with volunteers for continued implementation of the Metro Conservation Corridors partnership to restore approximately 250 acres of forest, prairie, woodland, wetland, and shoreline throughout the greater Twin Cities metropolitan area. Expenditures are limited to the identified project corridor areas as defined in the work plan. A list of proposed restoration sites and evaluations must be provided as part of the required work plan. Plant and seed materials must follow the Board of Water and Soil Resources' native vegetation establishment and enhancement guidelines. This appropriation is available until June 30, 2020, by which time the project must be completed and final products delivered.

M.L. 2020 - Sec. 2. ENVIRONMENT AND NATURAL RESOURCES TRUST FUND; EXTENSIONS. [to June 30, 2021]

I. PROJECT TITLE: Community Stewardship to Restore Urban Natural Resources - Phase X

II. PROJECT STATEMENT: Great River Greening selects high priority restoration projects within Metropolitan Conservation Corridors (MeCC) and works with committed landowners to evaluate, restore, and engage the community. Proposed are five of these projects, each one restoring a parcel that was previously acquired with Trust Fund dollars and/or having a strong community engagement opportunity. We also propose to continue developing applications for conservation haying, improvements in restoration monitoring, and an enhanced opportunity for citizens to become more deeply engaged in restoration maintenance through a pilot Site Steward program. We will restore 250 acres of critical habitat, engage 530 volunteers, improve restoration practices, foster partnerships among an array of local, state, federal, non-profit, and private entities, promote community stewardship of urban natural resources, and leverage \$132,000 in non-state dollars.

Much of our remaining habitat in the metro area is threatened by conversion, fragmentation, altered hydrology, invasive species, and a public that is spending less time in natural areas. Restoration and management of these habitats is needed now and into the future to retain Minnesota's natural heritage for generations, protect rare and declining species, protect our clean water, and reconnect habitat corridors.

III. OVERALL PROJECT STATUS UPDATES:

Amendment Request (08/02/2018):

Greening wishes to add two parcels to our Parcel List:

- 1) Minnehaha Creek Methodist Hospital Easement (shared funding and pro-rated deliverables with ML2016), and
- 2) Sunfish Lake Park (shared funding and pro-rated deliverables with ML2016).

Activities on these parcels will be funded by reducing the Chanhassen Nature Preserve budget by \$35,000 due to actual costs coming in less than anticipated.

Amendment Approved by LCCMR 8/6/2018.

Overall Project Status as of August 1, 2018:

All activities are progressing on schedule, are on target for meeting deliverables, and are within budget.

Greening discovered a \$400 math error in our Parcel list. This has been corrected in the Allemansratt Wilderness Park budget.

Amendment Request (02/15/2019):

GRG respectfully requests to add Pilot Knob Hill Corrective Actions parcel to this appropriation to continue work started in the ML2016 project. Pilot Knob requires additional time to complete implementation and monitoring to increase the success of the restoration as well as improved gathering of results for dissemination. An additional outcome for Pilot Knob corrective actions and monitoring will be added to Activity 1. Funding for this parcel will come from Allemansratt Wilderness Park, where tree planting acreage has been reduced.

Sunfish Lake parcel is not going forward at this time, and we request to move those budgeted funds to the Minnehaha Creek Methodist Hospital Easement parcel, to restore full funding to this project which will not start in time to draw down the previously budgeted amount in our ML2016 appropriation.

Amendment Approved by LCCMR 2/22/2019

Project Status as of February 1, 2019:

This project is on track to meet deliverables. While significant funds and activities remain for the final 1.5 years of the appropriation, plans are in place.

Amendment Request (08/30/2019)

GRG respectfully requests a three part amendment request:

- Shift funds between categories to match our anticipated needs between now and grant closeout:
 - o Personnel from \$90,500 to \$131,540
 - o Contracts from \$279,900 to 277,200
 - Supplies subcategory 1 from \$132,000 to 89,900
 - Equipment/Tools from \$910 to \$800
 - o Data Plan from \$1,800 to \$-0-
 - Travel Expense from \$5,210 to \$6,860
 - Volunteer Event Supplies from \$5,380 to \$9,200

The above changes are shown in the revised Budget, Part 1

- Consolidate the two Supplies subcategories under Equipment/Tools/Supplies, into one subcategory. This will allow for more efficient processing, reporting and forecasting. This proposed amendment is outlined in the revised Budget, Part 2.
- Add three new parcels: Hidden Valley Park, Inspiration Easement, and Hidden Falls/Crosby Farm/Meeker
 Dam, to our parcel list. These have been identified as important pollinator management sites, and have
 the potential to get underway quickly and have a history of engaging volunteers. The addition of these
 three parcels, along with adjusting other parcel budgets, are key to dispensing all the allocation funds
 prior to the end of the grant and meeting deliverables.

Amendment Approved by LCCMR 9/17/2019.

Project Status as of August 30, 2019:

Restoration work on six active parcels is progressing solidly and coming in under budget in several instances. A seventh parcel is no longer going forward. We are forecasting over 280 acres restored, which would exceed our acreage goals.

With volunteers engaged to date plus anticipated volunteers between now and grant closeout, we are forecasting to be slightly above our goal of 540 volunteers engaged.

Activity 3 has met some challenges, likely reducing our deliverables by a fraction. Details on these challenges, as well as opportunities, are found in the Activity report.

GRG discovered a math error in the previous report where \$690 was charged to the wrong activity. This has been corrected.

Amendment Request (02/05/2020)

GRG respectfully requests a work plan amendment to best meet our deliverables:

- 1) Add two new projects to our parcel list:
 - Blaine Wetland Sanctuary, a large wet prairie enhancement with intensive tree and shrub removal.

Rapid Response fund for sites with a need identified during 3-year restoration evaluations

These new projects will be funded with a reduction in the Allemansratt Wilderness Park IV budget, and funds that are now available since the Hidden Valley Park and the Hidden Falls/Crosby Farm/Meeker Dam projects are not going forward. Hidden Valley Park and Hidden Falls/Crosby Farm/ Meeker Dam projects are currently recommended for funding in GRG's ML2020 Pollinator Central I work plan, and with that the respective landowners have requested to stick with the anticipated original start date of July 1, 2020.

- 2) For Activity 3, we wish to add pollinator monitoring to our list of activities for baseline evaluations, and shift funds for a potential contract to assist with restoration evaluations this upcoming spring
- 3) Related budget shifts to implement the above, as well as match our anticipated needs between now and grant closeout are:
 - Personnel from \$131,540 to \$138,080
 - Contracts from \$277,200 to \$256,375
 - Supplies from \$98,400 to \$110,915
 - Equipment/Tools from \$800 to \$750
 - Travel Expense from \$6,860 to \$8,440
 - Volunteer Event Supplies from \$9,200 to \$9,440

Amendment Approved by LCCMR 3/13/2020.

Project Status as of February 1, 2020:

We anticipate exceeding our acreage goals, as long as spring 2020 work, which relies on somewhat reliable weather among other factors, goes according to plan.

With volunteers engaged to date plus anticipated volunteer engagement this spring, we will meet or exceed our goal of 530 volunteers engaged.

We are planning for an intensive period of restoration evaluations this spring to meet our goals for this important area of work, and if the amendment is approved we will be able to reach out to outside evaluators for assistance. In addition, our evaluation work will be more robust, by adding pollinator monitoring to the scope as well as improving our response capacity with rapid response funding, upon amendment approval.

Project extended to June 30, 2021, by LCCMR 6/18/20 as a result of M.L. 2020, First Special Session, Chp. 4, Sec. 2, legislative extension criteria being met.

Amendment Request August 7, 2020

GRG respectfully requests a work plan amendment to best meet our deliverables:

- Shift \$2,000 from Activity 1 Supplies to Activity 1 Labor
- Shift \$1,000 from Activity 2 Supplies to Activity 1 Travel

We have experienced increased travel costs to meet social distancing requirements with our field crew and other staff. We anticipate coming in under budget on Supplies and needing more in Labor for the duration of the extended grant.

Amendment Approved by LCCMR 9/1/2020

Project Status as of June 30, 2020:

We were able to make significant progress on our activities and deliverables, while adjusting to the pandemic and the new safety and distancing requirements. Adjustments had to be made with staff and especially field crew, subcontractors, and most of all with our large public events. We successfully made the transition including successfully hosting two (2) volunteer events following our new protocols that adhere to pandemic response safety guidelines.

Amendment Request February 1, 2021

Greening respectfully requests a number of budget line item adjustments to more accurately capture our anticipated spend in the final months of the appropriation. These budget requests are outlined in the budget attachment, parcel list, and budget summaries below.

Greening requests to slightly reduce our volunteer goal from 530 to 468 (88%) to reflect the reduced activity due to the pandemic limitations on large volunteer outings that extended through the end of 2020 including 2021 planning. Much of the related field work was shifted to Greening personnel and contracts.

Amendment Approved by LCCMR on 02/08/2021

Project Status as of February 1, 2021:

We were able to make significant progress on our activities and deliverables and are on track to meet our revised deliverables.

Amendment Request August 6, 2021

Greening respectfully requests to a budget reconciliation amendment to reflect actual expenditures.

Blaine Wetland Sanctuary South was a very active project and transitioned into contracted non-native invasive herbaceous species control in June 2021. As shown in the budget spreadsheet, we are asking to increase the Activity 1 Contract budget by \$4,034 to pay for the June herbaceous control work at the site, as well as an increase in Activity 1 Personnel of \$1029. To balance the budget, we request the following reductions:

Activity 1 Equipment and tools--\$75

Activity 1 Supplies--\$166

Activity 1 Travel--\$1,802

Activity 2 Personnel--\$346

Activity 3 Personnel--\$1,883

Activity 3 Travel--\$792

With these adjustments, we will spend all but \$38 from this allocation.

The revised estimated parcel budgets are show in the Restoration List, with a corresponding increase of \$4,000 to Blaine Wetland Sanctuary, balanced by Rapid Response parcels coming in \$2,000 under budget as well as our non-parcel Evaluation activities coming in under budget by \$2,000.

Amendment Approved by LCCMR 8/12/2021

Overall Project Outcomes and Results:

We reached 123% of our acreage goals, restoring and enhancing 310 acres of significant ecological habitat, compared to the 252 acres anticipated. The 12 restoration and enhancement sites were selected based on ecological significance and potential for improvement. Restoration and enhancement improvements were made on prairie, forest, and wetland communities including habitat for rare species, within the mapped Metro Conservation Corridors.

We successfully engaged 468 volunteers in hands-on restoration, and 5 known observers via iNaturalist app for a combined total of 473 contacts. Reaching this number was a challenge we met, as during the second half of this appropriation, we had to significantly and rapidly modify our community outreach and event models in response to the COVID-19 pandemic, to safely engage our volunteers throughout 2020 and 2021. We were successful in our community engagement events with staggered start time, multi-shift days with smaller pods of volunteers, and strict safety guidelines in place. Furthermore, we also piloted independent volunteer outings utilizing the iNaturalist platform, allowing volunteers to explore project parcels and record their observations independently. These observations provided very useful data (e.g. benchmarking progress and identifying patches of exotic species) while engaging volunteers in a novel way.

To help address the need for innovative methods for long term maintenance, we also offered two additional levels of volunteer engagement beyond field volunteer and started using a digitized restoration evaluation for more standard, shareable data. The 'site monitor' level of engagement was successful, but the 'site steward' level of engagement was challenging due to a combination of the pandemic, and the effort needed to get landowners, GRG, and volunteers comfortable with making independent enhancement decisions.

IV. PROJECT ACTIVITIES AND OUTCOMES:

ACTIVITY 1: Restore 250 acres of Upland Habitat

Description: We will restore 252 acres of priority forest, prairie, woodland, and savanna over five sites located within the mapped Metro Conservation Corridors. Projects are designed to preserve high quality features, prevent further degradation, and/or protect species of greatest conservation need. Actions include invasive removal, woody encroachment reduction, prescribed burning, seeding, planting, and conservation haying. Projects are designed and managed by Greening ecologists, and field work under Activity 1 will be conducted by Greening crew and subcontractors). Activities that require specialized training or safety protocol/equipment (e.g. herbicide application, chainsaw operation, prescribed burning, large and/or specialized equipment operation) are contained in this Activity.

All projects will include a management plan and initial restoration evaluation at the end of the grant period. Subcontracts are awarded competitively: RFP's are posted publicly (questcdn.com); distributed to contractors who have requested to be on our mailing list; and quotes are systematically ranked by a review team before being awarded.

Summary Budget Information for Activity 1: ENRTF Budget: \$ 441,980
Amount Spent: \$ 441,980

Balance: \$0

Outcome	Completion Date
1. Write restoration and management plans for 5 sites	June 30, 2018
2. Restore 5 sites, 252 acres total	June 30, 2020
3. Pilot Knob corrective actions and monitoring – continuation of ML 2016 project	June 30, 2020

Activity 1 Project Status as of August 1, 2018:

Restoration and enhancement activities and planning are now underway at the five (5) parcels on the original parcel list, with a projected total acreage of 270 acres, above the stated deliverable.

Activity 1 Project Status as of February 1, 2019:

Allemansratt Wilderness Park IV: Wetland restoration plan has been developed along with USFWS Partners for Wildlife Program, scheduled for spring 2019 implementation. Tree planting plan is being developed for the

remaining acreage; site preparation began with removal of out-of-place shelterbelt planted pines, on a 3-acre portion, with City in-kind.

Chanhassen Nature Preserve: A competitive RFP was completed for woody invasive removal and subcontract awarded, and work started in January 2019.

Ojiketa Regional Park: A competitive RFP was completed for woody invasive removal / tree thinning and a subcontract was awarded. Contractor completed the buckthorn removal activity as well as the removal of low value trees to release native understory plants and encourage the regeneration of oaks.

Six Mile Marsh: A competitive RFP was completed for conservation haying and burning, and one for pollinator monitoring; both were awarded. Contractor completed the initial haying of 1/3rd of the prairie, GRG staff established sampling transects throughout the site and conducted the initial vegetation surveys; and second contractor conducted the initial pollinator surveys.

Westwood Hills Nature Center III: A competitive RFP was completed for woody invasive removal / tree thinning and subcontract was awarded. Contractor started site work in January 2019.

Activity 1 Project Status as of June 30, 2019:

Allemansratt Wilderness Park IV:

Wetland restoration with USFWS Partners for Wildlife Program has been delayed due to exceptionally high water table and the resulting inability to excavate. It has been rescheduled for late fall or early spring.

Additional site prep was completed in anticipation of tree planting scheduled for this fall, including a volunteer event on September 14th. Follow up woody invasive control is also scheduled for this fall.

Pilot Knob Hill:

The results of conservation haying, from fall 2017 and fall 2018, were monitored and the results were encouraging. Conservation haying resulted in a noticeable reduction in overabundant Canada/tall goldenrod, a return to higher forb diversity, and a mosaic in stature and phenology. We plan to continue and expand conservation haying into acres that fit the profile of having latent diversity. Acres in lower condition are scheduled for spraying in late summer, and re-seeding.

Lime soil amendments were implemented on a small pilot basis. Results did not indicate that it was a cost effective approach and there are no plans to implement on a larger scale, though further pilot plots may be pursued.

Monitoring of the pollinator shrubs from earlier planting indicate that small shrubs are being outcompeted by tall herbaceous vegetation. A second planting of larger pollinator shrub stock in the same area is being planned for fall 2019.

Chanhassen Nature Preserve:

Subcontractor completed 19 acres of woody invasive treatment during the first quarter of 2019. They are under contract to complete follow-up treatments in the fall of 2019.

Ojiketa Regional Park:

Progress was made on plans for understory vegetation enhancement in fall of 2019.

Six Mile Marsh:

Subcontractor successfully completed a prescribed burn within the appropriate window on 27 acres of restored prairie. Greening and University of Minnesota staff completed surveys in May and June of both vegetation and

pollinators on the entire site. Data for the first two years of monitoring responses to management treatments will be analyzed in winter 2019.

Westwood Hills Nature Center III:

Subcontractor progressed on the removal of woody invasives and tree thinning on 14 acres. Volunteers, with the assistance of Nature Center staff and other organizations, have cut, stacked, and removed buckthorn on an adjacent 9.5 acres.

Project Status as of February 1, 2020:

Allemansratt Wilderness Park IV:

Follow-up buckthorn control was completed on 10 acres within the park.

Wetland restoration with USFWS Partners for Wildlife Program was further delayed in fall due to a persistent high water table. It has been rescheduled for winter or early spring.

Pilot Knob Hill:

Conservation haying for prairie management and overabundant Canada/Tall goldenrod control was expanded to 3 acres in fall 2019, based on monitoring results that continue to indicate it is an effective method. Soil amendment treatments for goldenrod control will have a second set of trials in winter/spring 2020.

General herbaceous and invasive control was sustained, and another 100 large-stock pollinator shrubs were planted.

Chanhassen Nature Preserve:

Subcontracted work crews completed foliar follow up of buckthorn seedlings and re-sprouts.

Ojiketa Regional Park:

Subcontractor completed foliar follow-up buckthorn control.

Six Mile Marsh:

Subcontractor completed the final haying of 32 acres of the prairie, GRG staff completed the summer and fall seasons of vegetation surveys; and a subcontractor completed the summer and fall seasons of pollinator surveys.

Westwood Hills Nature Center III:

Subcontractor completed the foliar follow-up buckthorn control on previously cut 14 acres, GRG crew continued the buckthorn hand clearing and removal on 9.5 acres.

Hidden Valley Park:

This project is not going forward.

Inspiration Easement:

Planning meetings were held with the landowner for spring implementation.

Hidden Falls / Crosby Farms / Meeker Dam:

This project is not going forward.

Project Status as of June 30, 2020:

Allemansratt Wilderness Park IV: 55 additional trees and shrubs were planted. Wetland restoration with USFWS Partners for Wildlife Program was implemented, including excavation, seeding, and 100 count willow staking. Additional tree planting is scheduled for fall 2020.

Pilot Knob Hill: Monitoring of Conservation haying continues to show positive results. Soil amendment treatments for goldenrod control were applied in March 2020 and are not showing significant results. A 3ac reseeding progressed with final spray, with seeding scheduled for the fall; seed for Rusty Patched Bumble Bee habitat was secured as match from UWFWS. Out-of-place planted trees from previous owner were removed and replaced with bur oak and hackberry. General herbaceous and invasive control was sustained, and the contract for additional large-stock pollinator shrubs, fall invasive control, and conservation haying is in place for fall 2020. The revised natural resource management plan is being developed and reviewed by the City; with other funds, plans are being developed for a new entrance and trails, worthy of the site's place on the National Registry of Historic Places.

Chanhassen Nature Preserve: Volunteers planted 12 woodland pollinator nursery plots along the trail system. Prior to planting, any buckthorn seedlings or re-sprouts were hand pulled. The entire site was seeded with a woodland grass/sedge mix to start the herbaceous ground cover restoration.

Ojiketa Regional Park: Crew and volunteers planted 841 understory grasses, forbs and shrubs to diversify an important quarter acre of path edge in need of erosion control, in areas where buckthorn had been previously removed by the subcontractor.

Six Mile Marsh: Surveying of vegetation and insect species continued on the full site by Greening and subcontractor. The planning for wetland edge species diversification through plug planting was initiated between Greening, the landowner, and prospective subcontractors to take advantage of this accessible low water year.

Westwood Hills Nature Center III: Greening crew planted 115 trees and understory shrubs in a 3-acre unit that had been cleared of the main, dense, buckthorn population. Subcontractor completed an additional foliar follow up on buckthorn resprouts on 14 acres, advancing the long-term management of these areas. Seed was purchased for a fall 2020 planting of 7 acres of understory with woodland grass / sedge and pollinator species mixes to replace buckthorn removed from those areas and augment the currently low diversity understory.

Inspiration Easement: The landowner agreement with significant match funds was executed in this period. A subcontractor prepared, seeded, and installed plugs on 5 acres of the site to specifically add forb diversity and pollinator species to a currently grass dominated, previously established prairie. Plans for restoring another 5 acres are in place.

Blaine Wetland Sanctuary – South Unit: Winter clearing of woody encroachment from the wet prairie was completed on over 20 acres. With OHF funds, clearing on the remaining acres is scheduled for completion next winter, and herbaceous management will begin in spring 2021.

Rapid Response on 3-Year Sites: Based on Digitized Restoration Evaluations completed in 2019 and 2020, 5 sites were identified as being in need of additional work to protect the investment in restoration and keep them on track to meet long term goals, and sites where the site goals were achievable within the budget and timeframe available. Sites were as follows: Pilot Knob Hill (DOT Right-of-Way Unit), Trout Brook Nature Sanctuary (St. Paul), Katherine Abbott Park (Mahtomedi), Crossroads Prairie Unit at Central Corridor (South Washington Watershed District), and Hidden Valley Park (Savage). Working with subcontractors, primary activities will be

management of herbaceous and woody invasive species over 20 acres. As of 6/30/2020, work was completed at Trout Brook, with the other sites slated for work in Summer and Fall of 2020.

Activity 1 Status as of February 1, 2021:

Allemansratt Wilderness Park IV: . Additional tree planting was completed in fall 2020 with an additional 20 trees. Landowner in-kind continued with follow up buckthorn control and prairie management.

Pilot Knob Hill: 1 ac of conservation haying, 3 ac of prairie seeding, seeding scheduled for the fall; seed for Rusty Patched Bumble Bee habitat was secured as match from UWFWS. An additional 45 large stock pollinator shrubs were installed in fall 2020. Burn break mowed in anticipation of spring 2021 prairie burn. Natural Resource management plan out for review to City and County. Planning continues for a new entrance and trails and interpretive center, worthy of the site's place on the National Registry of Historic Places; together, the City and County also purchased an adjacent parcel.

Chanhassen Nature Preserve: Project was completed before July 1.

Ojiketa Regional Park: Project is near complete; no field work was completed during this period.

Six Mile Marsh: Four acres of wetland edges were planted with 2700 native plants specifically chosen to increase wetland edge stability and increase the flowers available for pollinator foraging. Field monitoring of pollinators and vegetation effected by land management activities (haying and burning) continued, and initial summary reports of the findings were written.

Westwood Hills Nature Center III: Buckthorn resprout control was continued on 14 acres of woodland in fall 2020, and seven acres of understory was reseeded with a variety of grasses and native wildflowers to revegetate areas that previously were inundated with woody invasive species preventing light from penetrating to this layer of habitat.

Inspiration Easement: Five acres of prairie were seeded with a diverse mix of forbs and grasses to add species to the largely grass field by Great River Greening staff and project partners in advance of goat grazing for buckthorn and woody control (a maintenance activity that was funded separately by the Inspiration Community Association).

Blaine Wetland Sanctuary – South Unit: The Trust Fund portion of this project is complete. The project continues to completion with tree clearing re-started in late 2020 once frozen ground conditions were reached, under Anoka Sand Plain program funded by OHF.

Rapid Response on 3-Year Sites: Woody and herbaceous invasives species were managed at the following metro corridors sites as follow-up activities: Pilot Knob Hill (DOT Right-of-Way Unit), Katherine Abbott Park (Mahtomedi), Crossroads Prairie Unit at Central Corridor (South Washington Watershed District), and Hidden Valley Park (Savage).

Final Report Summary:

We reached 123% of our acreage goals, restoring and enhancing 310 acres of significant ecological habitat, compared to the 252 acres anticipated. The 12 restoration and enhancement sites were selected based on ecological significance and potential for improvement. Restoration and enhancement improvements were made on prairie, forest, and wetland communities including habitat for rare species, within the mapped Metro Conservation Corridors. Site specific summaries follow.

Allemansratt Wilderness Park IV: The 33-acre peninsula unit was enhanced with invasive species control; removal of 50 planted pines by the City (landowner), followed by planting a total of 419 trees and pollinator shrubs, 100 willow stakes, and 840 pollinator grasses and forbs; and a small wetland restoration with significant UWFWS in-kind. Prairie restoration on the peninsula was completed with USFWS in-kind.

Oheyawahe/Pilot Knob Hill: Corrective actions were taken on over 5 acres with conservation haying for containing overabundant tall/canada goldenrod, invasive species control, prairie inter-seeding, woody encroachment removal; conversion to a woodland community in problem grassland areas with native oak and hackberry tree planting, and pollinator shrub planting. Conservation haying and woody encroachment were also important activities as burn alternatives at this difficult-to-burn site. Pollinator surveys documented a second rusty-patched bumble bee. A revised Natural Resource Management Plan was developed with a large group of stakeholders, and accepted by the City of Mendota Heights (landowner), outlining the next 10 years of natural areas management at the site. The City continues to fund management at the site beyond the grant period.

Using other funds, Dakota Co. is leading the development of a bonding bill proposal to develop a recreational, historical, cultural, and ecological area along the Mississippi River that includes Pilot Knob Hill/ Oheyawahe which is on the National Register of Historic Places. Also using other funds, the City and County together purchased and improved an adjacent parcel.

Chanhassen Nature Preserve: 19 acres of oak woodland were enhanced through woody invasive species removal with one year of follow up treatment. Volunteers, through two events, planted 10,000 woodland plugs across 18 nursery plots. As the plants mature City staff will be able to work with volunteers to divide the plants and distribute them across the project area.

Ojiketa Regional Park: 73 acres of forest restoration was completed through contracted low-density invasive removal, thinning of undesired canopy trees, and focused installation of native ground cover, with a limited number of volunteers engaged due to the COVID-19 pandemic (19 hrs), native seed was broadcast on 0.5 acres, and 840 native plugs and shrubs planted on 2 acres over the course of funding. This multi-use city park has been managed to focus on both the health of the maple-basswood / oak forest as well as the services that this space can provide as a publicly rentable camping and event space. Prioritizing the removal of the limited buckthorn population before it can dominate the currently open and native understory has been successful, and the creation of openings to allow for native tree regeneration will allow the Chisago City to maintain this target community.

Six Mile Marsh: 115 acres of previously restored prairie was managed through conservation haying, prescribed burning, or allowed to grow to facilitate the study of the effects of those techniques on pollinators and pollinator habitat. These three management techniques did result in different populations of bees and other native pollinating insects, with conservation haying supporting the highest bee diversity and abundance, as well as containing the greatest number of forb species seen in bloom, over the three years of study, suggesting that haying may be a significantly beneficial management technique for an establishing prairie. Funding was also used to increase native wetland diversity across the site with 2,780 plugs planted on 4 acres of lowland edge, and native seed was broadcast on 30 acres to boost target species populations and diversify pockets of habitat.

Westwood Hills Nature Center III: 23.5 acres of woody invasive removal and selective tree thinning was completed, including 166 shrubs and trees planted and understory seed broadcast on 12.5 of those acres with a total of 344 volunteer hours. This buckthorn focused removal and native planting was largely successful in drastically reducing the invasive shrub population; control and replacement efforts were repeated and sustained

during the grant period. The Nature Center staff and associated volunteers will continue to monitor the population and manage the buckthorn over time.

Inspiration Easement: 10 acres of prairie were inter-seeded and plugged, increasing forb and pollinator plant diversity, with 10 hours of volunteer time. Of the 10 acres, 5 acres were seeded and 5 acres prepared and planted with 5,000 plants. Privately funded prairie management is also being coordinated by the homeowner's association in the neighboring subdivision.

Blaine Wetland Sanctuary - South Unit: This large 200 ac project blended funding from this appropriation and 3 Outdoor Heritage Fund appropriations. On a pro-rated 15 acres with this appropriation, large-scale woody encroachment removal was completed to counteract the decades of fire and grazing suppression to greatly enhance this wet prairie habitat. This site contains several rare plants and is host to robust avian and pollinator wildlife.

Rapid Response based on 3-Year Evaluations: Through the process of restoration evaluations (Activity 3), 4 sites were identified for needing impactful rapid response follow-up work. Rapid response enhancement activities were conducted in 2020 and spring of 2021. Invasive species management and woody encroachment removal occurred at: Oheyawahe/Pilot Knob Hill (DOT Right-of-Way Unit); Katherine Abbott Park (Mahtomedi); Crossroads Prairie Unit at Central Corridor (South Washington Watershed District); and Hidden Valley Park (Savage). This project was key in protecting the earlier Trust Fund investment in restorations and enhancements and helped to mobilize landowners and volunteers alike in sustaining the maintenance going forward.

ACTIVITY 2: Volunteer Restoration Events

Description: We will purchase necessary seeds, plants, and other restoration and event supplies needed to engage 468 volunteers in select meaningful, appropriate (safe, impactful), and cost-effective restoration activities such as planting, hauling and stacking cut brush, monitoring, seeding, and fencing. These activities will occur on the same acres reported in Activity 1 as part of the overall restoration.

Volunteer Events include Saturday and weekday events open to the public, and private group events (church, corporate, school, civic, work, etc.). A total of 468 volunteers will be engaged over a projected 7 events.

Volunteer investment promotes community engagement in the long-term success of the restoration projects, often in the form of monitoring and reporting, and provides an active outdoor educational opportunity that can result in transferable restoration skills and knowledge applied beyond the project boundaries.

Table 2.1: Anticipated volunteer outputs

Task	Unit	Cost/Unit *
Monitoring	Acre	\$5-\$50
Plugging	Plug	\$1.50
Planting	Shrub	\$15
Planting	#10 Tree	\$25
Woodland Hand Seeding	Acre	\$50-\$175
Stacking	Acre	\$400-\$1,800

^{*}Cost/Unit is comprised of Greening labor costs to recruit, coordinate, and oversee volunteers; volunteer event supplies; associated mileage; and hand tool replacement.

Summary Budget Information for Activity 2:

ENRTF Budget: \$53,455 Amount Spent: \$53,454

Balance: \$ 1

Outcome	Completion Date
1. Engage 468 volunteers in restoration tasks	June 30, 2020

Project Status as of August 1, 2018:

On September 30, 2017 in celebration of National Public Lands Day, 114 volunteers, (including 52 adult volunteers, 47 youth volunteers, and 15 volunteer supervisors) many from Chisago Lakes Middle School, Chisago Lakes National Honors Society, Forest Lake High School, and the North Branch Area High School Air Force Jr ROTC, planted 141 trees and shrubs over 5 acres to help restore Allemansratt Wilderness Park's woodlands.

Shortly after that, on October 26 2017, two adult and 11 youth volunteers from Chisago Lakes Middle School planted 840 milkweed plugs in the open spaces between the trees.

For a third event at the same site, 93 volunteers volunteered at Allemansratt Wilderness Park on February 10, 2018 cutting, hauling, and burning pre-cut invasive shrubs as part of the restoration of the oak woodland community. Due to the time of year and the later start time than our spring and fall events, winter pile burning events tend to engage a different demographic, and based on volunteer feedback they are a more attractive option for teens and millennials.

In June 2018, 26 volunteers from a local philanthropy group hauled and stacked pre-cut buckthorn in sloped areas as part of the larger oak woodland restoration, at Westwood Hills Nature Center, learning about habitat deterioration caused by buckthorn.

Roving presentations, question and answer, and printed materials are part of the active education for all volunteers In addition, volunteer supervisor event/project packets were distributed pre-event to our 27 volunteer supervisors (our second level of engagement). Thank you emails recapping project accomplishments were sent to general volunteers and volunteer supervisors post-events.

A running total of 246 volunteers over four events, have been engaged in meaningful portions of our restoration projects through July 1, 2018

Project Status as of February 1, 2019:

No volunteer events occurred during this period, but planning is underway for event(s) in the upcoming six months.

Project Status as of June 30, 2019:

In May GRG conducted a volunteer event at the Westwood Hills Nature Center. A total of 35 volunteers worked to stack two acres of cut buckthorn and seed two acres with native grasses and wildflowers.

Our running total of volunteers is now over 280. We are forecasting another 250-300 between now and grant closeout, reaching our volunteer deliverables. Events include a tree planting event this fall at Allemansratt, and spring events at Chanhassen, Ojiketa, and Westwood Hills.

Roving presentations, question and answer, and printed materials are part of the active education for all volunteers. In addition, volunteer supervisor event/project packets were distributed pre-event to volunteer

supervisors (second level of engagement). Thank you emails recapping project accomplishments were sent to general volunteers and volunteer supervisors post-events.

Project Status as of February 1, 2020:

A total of 158 volunteers participated in several GRG events during this time period:

- At Chanhassen Nature Preserve: 54 volunteers were engaged in planting 5000 plants in 5 pollinator habitat plots.
- A tree planting event was completed on September 14 at Allemansratt Wilderness Park where 69 volunteers planted 153 trees and shrubs over 2 acres.
- At Westwood Hills Nature Center on September 19, 2019, Nature Center staff and 35 volunteers planted 53 trees to re-vegetate 9 acres.

Roving presentations, question and answer, and printed materials are part of the active education for all GRG volunteer events. In addition, volunteer supervisor event/project packets were distributed pre-event to volunteer supervisors (second level of engagement). Thank you emails recapping project accomplishments were sent to general volunteers and volunteer supervisors post-events.

GRG has engaged a running total of 439 volunteers in various engaging activities with this allocation, at a variety of project sites.

Activity 2 Status as of August 1, 2020:

Due to the COVID-19 pandemic, Great River Greening had to significantly modify our community outreach and event models to engage our volunteers. We did this through internal meetings as well as checking in with partners and similar volunteer-based organizations. We ultimately agreed on staggered start time, multi-shift days with small groups of volunteers and strict safety guidelines in place.

We had several large volunteer events planned for the spring that were cancelled, but still had many plants that needed to get in the ground. While most of the planting was shifted to crew and subcontractors, we identified the sites where volunteer assistance would be most needed and appropriate, and planned our modified events accordingly. Volunteer projects stretched over 2-3 days with 4 shifts available each day at varied start times. This was to ensure volunteers were not all entering and exiting at the same time, and to allow for adequate time to disperse into work groups throughout the site before the next wave of volunteers arrives.

We have always prioritized the safety of our staff and volunteers at our events, and the pandemic has only reinforced our commitment. Currently, we only allow work groups of 10 or fewer people (including staff) and require all participants to wear face coverings. Additionally, we are asking volunteers to provide their own work gloves and tools. Staff also thoroughly clean all tools following a planting session.

During the month of June, we successfully completed a proof-of-concept 15-person event at Chanhassen Nature Preserve. We piloted this event with our core of Volunteer Supervisors, who are trained by us to lead small volunteer groups at our events, and are thus more engaged with Greening and skilled in the work that we do. This way, we were able to beta test our social-distanced event procedures with our most committed volunteers and to solicit their feedback. We also engaged a small private group of volunteers at Ojiketa Regional Park. Following each project, we asked for volunteer feedback and conducted a SWOT analysis of how the events went and what we could do to improve.

We had contact with a total of 18 volunteers during this period, bringing our total to 457 volunteers engaged, or 86% of our projected 530 volunteers. While we will continue to seek additional opportunities, we do not anticipate much if any additional volunteer engagement for the remainder of the grant due to largely completing volunteer appropriate field work.

Activity 2 Status as of February 1, 2021:

On October 1, 2020, a private group from 3M Net Impact chapter hauled brush and cut material at the South Washington Conservation Corridor - Crossroads site. The group of ten 3M volunteers along with one Great River Greening volunteer supervisor hauled material for two-hours each (a combined total of 22 hours of service). 3M contributed \$1500 in matching funds to support this work. This brings our total volunteer engagement to 468 volunteers.

In January 2021, we will begin exploring the iNaturalist platform for general volunteer engagement. The platform will allow for volunteers to work independently and safely in light of COVID-19. We will connect volunteers to one or more metro corridor sites via iNaturalist to assist with site monitoring and data collection in the spring of 2021 and beyond.

Final Report Summary:

We successfully engaged 468 volunteers in hands-on restoration, and 5 known observers via iNaturalist for a combined total of 473 contacts. Reaching this number was a challenge we met, as during the second half of this appropriation, we had to significantly and rapidly modify our community outreach and event models in response to the COVID-19 pandemic, to safely engage our volunteers throughout 2020 and 2021. We were successful in our community engagement events with staggered start time, multi-shift days with small pods of volunteers, and strict safety guidelines in place. Furthermore, we also piloted independent volunteer outings utilizing the iNaturalist platform, allowing volunteers to explore Great River Greening restoration sites and record their observations independently. These observations provided very useful data (e.g. benchmarking progress and identifying patches of exotic species) while engaging volunteers in a novel way.

ACTIVITY 3: Digitized Restoration Monitoring and Advanced Site Steward Program

Description: To advance the practice of restoration, Greening will continue to refine our protocol and methodology for the restoration evaluations, to improve the cost-effectiveness and efficacy of future efforts. We will institute new DNR recommendations for field equipment and software, which includes Apple platform field recording devices (e.g. iPad mini's) as well as ESRI Survey123 and ArcCollector software/applications. This will enable us to upload our data into a compatible shared database. We will coordinate closely with MN DNR and MnIT staff to finalize protocols. We will complete all of the initial evaluations from this appropriation, 14 'third year' evaluations from our ML 2013 appropriation, and upgrade our 18 'third year' evaluations of our ML 2011 projects into this electronic format. Also, we will explore opportunities to use this equipment to improve our efficiencies for initial site assessments, plant surveys, and other planning activities.

To address an industry-wide challenge for sustainable maintenance strategies, and offer a deeper engagement opportunity for volunteers, we will pilot a Site Steward volunteer program. The program will promote a long-lasting and action-based conservation ethic at sites of past and present Environmental Trust Fund projects. We will recruit and train skilled volunteers to work at four sites yearly under the guidance of Greening ecologists. Stewardship activities will include vegetation monitoring, invasive species management, seed collection, planting, and other tasks to further the natural resource management goals. Outcomes of this program are twofold. Greening will track the acres affected, the number restoration activities completed, and assess the ways in which Site Stewards can best meet the long-term maintenance needs for restored natural areas. Secondly, the Site Stewards will develop in-depth knowledge of the management issues of restoration areas, increase their capability with invasive and native plants, and deepen their commitment to conservation activities. Site Stewards will contribute over 240 hours of natural resource work during the course of the grant, with potential for future contributions by Site Stewards trained in the program.

Summary Budget Information for Activity 3:

ENRTF Budget: \$ 28,565 Amount Spent: \$ 28,528 Balance: \$ 37

Outcome	Completion Date
1. Upgrade 18 'third year evaluations' of our 2011 projects to digital format.	June 30, 2018
2. Complete the 5 'initial evaluations' from this appropriation, in digital format.	June 30, 2020
3. Complete 14 'third year evaluations' of our 2013 projects, in digital format.	June 30, 2020
4. Engage Site Stewards at 4 sites; complete pilot program evaluation.	June 30, 2020

Project Status as of August 1, 2018:

Greening received the ESRI Non-Profit grant for 6 ArcGIS Online licenses and began collecting field data, with the ArcCollector application, and conducting field trials to develop uploadable, shareable data.

A thorough development process with Friends of the Mississippi River, Mn DNR, and U of M was completed and resulted in a customized digitized field tool for evaluations using free mobile apps. Two evaluations have been completed; team review and analysis of the evaluations is scheduled for August.

Our site steward program is being well received, exceeding recruitment expectations for this stage in the process. As part of the program, we request volunteers start by monitoring a site (with stewarding as a second step for select participants). Several sites are being monitored and our first volunteer written report has been received.

Project Status as of February 1, 2019:

Digitized restoration evaluations proceeded, but slowly with staff transition. Evaluations are continuing with new staff responsible; to date, we have not needed to subscribe to a data plan, saving funds.

Our site steward program is on track. Our initial set of monitors have completed their original assignments; from this core group, a select number will be further trained by Greening in early 2019 to graduate to site steward level.

Project Status as of June 30, 2019:

Digitized restoration evaluations are scheduled for this fall and primarily next spring. We no longer anticipate needing a dedicated data plan, which is reflected in the revised budget.

Our site steward program made strides with 4 monitors being invited to become site stewards; these 4 were subsequently trained and are in the program. Only 3 landowners however wanted to participate, so we will only reach 3 sites instead of 4. Site stewards are keenly interested in learning about pollinator monitoring techniques, informing management decisions, so we are adding pollinator citizen monitoring to our training program.

Project Status as of February 1, 2020:

Digitized restoration evaluations are scheduled to begin in early spring 2020. All sites have been identified and mapped.

Site stewards were active on 3 sites and completed buckthorn removal, spotted knapweed removal, and other invasive species control, as well routinely completed monitoring forms and submitted additional site

observations via iNaturalist. Planning is underway for continuing to engage our site stewards, especially with regards to pollinator citizen monitoring.

Activity 3 Status as of August 1, 2020:

Digitized restoration evaluations were conducted for 18 sites and new staff were trained on protocols. Data analysis has been initiated based on collected data with scoring scheduled for the winter. Anecdotally, prairies are performing better than buckthorn removal sites. The data was used to determine rapid response activities on sites, as described above under Activity 1.

As part of the restoration evaluations, research on existing pollinator species sampling protocols was completed in order to develop a concise, broadly accessible, and easily teachable monitoring method. The aim was to simply convey how to sample the overall pollinator population on any site while ensuring the comparability of data between sites. This information gathering contributed to the development of a three category, "honey bee, native bee, other" observation method outline, the protocol for which will be utilized by various Greening staff members in the summer of 2020 to get a "Year Zero" pollinator population record currently as well as to continue to refine our protocol.

Stewards for three sites from 2019 expressed interest in continuing to monitor sites. Steward activity adjusted for the pandemic and remained effective at one site, but lack of in-person meetings and impacted availability of the stewards resulted in reduced activity at two sites. Site steward activities continue through the end of the extended grant period. Site stewards will continue to utilize iNaturalist as a digital platform for collecting and tracking information on the sites and guiding management activities. Emphasis will continue to be placed on the stewards' abilities to identify and address restoration needs independently based on their experience, and effectively report to project managers.

Activity 3 Status as of February 1, 2021:

Restoration Evaluations:

Collected data has been reviewed for completeness and consistency; analysis and restoration scoring will be done in the first quarter of 2021.

We continue to develop pollinator monitoring as an integral part of our restoration evaluations. We beta-tested our pollinator site monitoring surveys; data was compiled to evaluate the effectiveness of the surveys, the ability for community members to complete similar surveys, and the usefulness of the data that was collected by the surveys as they are currently designed. During these surveys, a second record of our state bumble bee and federally-endangered rusty patched bumble bee was made at Pilot Knob Hill in July 2020.

Site Steward:

Site steward activities for Doyle-Kennefick and Crossroads Prairie sites were limited by the pandemic, but stewards continued with monitoring of the sites on a limited scale. The Allemansratt site steward has ceased participation in the program due to exposure concerns; recruitment of a replacement steward is well underway. Due to several factors, we are finding it challenging to get stewards to the point where they are confident in conducting enhancement activities without direct guidance.

All three sites have visits scheduled for spring 2021, with a goal of focusing on invasive monitoring and removal. Great River Greening has added development of its own site within the iNaturalist app program and this should increase visibility of site steward observations and activities.

Final Report Summary:

Site Steward

This site steward program offered a deeper, more advanced level of engagement for select volunteers advancing from field volunteer. We were successful at recruiting, training 11 volunteers, for the intermediate level of engagement as 'site monitor', benefitting from 138 volunteer hours for site visits and reporting, spent by these site monitors at 10 sites. In addition, Allemansratt Wilderness Park has two site stewards continuing beyond the grant period, providing essential monitoring and reporting services to the City of Lindstrom (landowner), who has identified a lack of capacity to keep on top of the needs of the site.

Recruiting from this pool of site monitors, 3 participants graduated' to the 'site steward' level of engagement, which was designed to empower these select volunteers to advance to the point of taking on self-directed enhancement activities at Doyle-Kennefick Regional Park, South Washington Conservation Corridor, and Allemansratt Wilderness Park. Getting site stewards to proceed with self-directed activities proved to be challenging. Ambitious plans for steward activities were significantly curtailed by the Covid-19 pandemic, which reduced both interest in the program and ability to deliver. Two stewards made visits to do limited monitoring in 2020, and then resigned prior to the spring season of 2021. Doyle-Kennefick's steward maintained activity on the site, once site access protocols were established with the landowner. This required more than anticipated communication and coordination, which clarified the need for clear parameters by landowning partners in order for stewards to perform site work in an official, sanctioned capacity. Despite these challenges, site stewards contributed 58 hours of impactful volunteer labor during their tenure in the program, although on-the-ground activity level varied between stewards more than between monitors. Finally, observations from both monitors and stewards were uploaded to the iNaturalist platform for wider availability to the public and visitors to the sites.

Digitized Restoration Evaluations

Digitized evaluations proved an effective method for standardizing data collection for evaluations. While transfer of data from ArcGIS to spreadsheet format is a time-consuming process, digitized evaluations will continue to be an important tool for GRG to monitor and assess restoration success. Additionally, the user-friendly interface and meander-based protocol provides an important opportunity for volunteers and project partners to collect data from sites and share the results with others for review and assessment.

Through our digitized evaluations, we identified a general trend that prairie vegetation projects were generally more successful than buckthorn removal sites.

V. DISSEMINATION:

Description:

Greening anticipates periodic reporting on this project through our various electronic media outlets: The Greening monthly e-newsletter (reaches 7,500) (subscribe at www.greatrivergreening.org); Facebook (2475 likes) (Like us on Facebook https://www.facebook.com/greatrivergreening); and Twitter (905 followers) (Follow us on Twitter https://twitter.com/greatrivergreen).

Results of this tenth phase of the Metro Conservation Corridors (MeCC) partnership appropriation will also be shared with colleagues including the seven other organizations in the MeCC partnership; our landowning partners; and other avenues as the opportunity arises.

Dissemination Project Status as of August 1, 2018:

In fall 2017, the public Allemansratt Park volunteer event was publicized via posts on Greening's website (approximately 1,500 views per month) and 5 emails to Greening's volunteer supervisor e-list (350 subscribers).

In addition, 530 fliers (with Trust Fund acknowledgement including logo) were distributed at service and volunteer fairs to recruit volunteers for fall 2017 events.

Public volunteer events including Allemansratt Wilderness Park are publicized via posts on GRG's website (approximately 1,500 views per month), GRG's e-news (to 3,500 subscribers), GRG's Facebook page, and 5 mass e-mails to GRG's constituents e-list (9,000 individual addresses) including GRG's volunteer supervisors e-list (350 individual addresses)..

As stated above, a total of 246 volunteers have been engaged in meaningful volunteer events that included active education

Dissemination Project Status as of February 1, 2019:

The Westwood Hills project was featured in the October issue of GRG's e-news (circulation 9,250), while Pilot Knob project was featured in the November issue.

Dissemination Project Status as of June 30, 2019:

In January and May, the Chanhassen Nature Preserve site was featured in two articles in GRG's Enews electronic magazine, and publicized on GRG's website.

Dissemination Project Status as of February 1, 2020:

Over this reporting period GRG work at the Allemansratt Park site was publicized, including LCCMR acknowledgement, on the following outlets:

- GRG's August E-News 8/20/19 (cir. 9,000)
- GRG's Fall Events E-Blast 8/14/19 (cir. 9,000)
- Facebook, Twitter, and Instagram posts on 8/6, 8/19, 9/10, 9/16, and 12/29 (cir. 3,600/post)
- Volunteer recruitment promotions across seven online platforms (HandsOn Twin Cities, KARE 11, Volunteer Match, Do It Green Minnesota, Northern Gardener Board, Patch)
- 270 personalized volunteer recruitment emails

Over this reporting period LCCMR and GRG work at the Westwood Hills site was publicized, including LCCMR acknowledgement, on the following outlets:

• Facebook, Twitter, and Instagram posts on 11/22/19 (cir. 3,600)

Over this reporting period work at the Pilot Knob Hill site was publicized, including LCCMR acknowledgement, on the following outlets:

- Article in Summer Digest 8/2019 print and digital (cir. 9,500)
- Facebook, Twitter, and Instagram posts on 8/22/19 (cir. 3,600)

Over this reporting period work at the Chanhassen Nature Preserve site was publicized, including LCCMR acknowledgement, on the following outlets:

Facebook, Twitter, and Instagram posts in 9/10/19 (cir. 3,600)

Dissemination Project Status as of August 1, 2020:

Dissemination was reduced during this period, while staff focused on pandemic response and outreach.

Dissemination Project Status as of February 1, 2021:

Over this reporting period, work at the Inspiration Easement was publicized, including LCCMR acknowledgement, on the following outlets:

• Facebook, from Great River Greening as repeated by the Minnesota Environment and Natural Resources Trust Fund, on November 6 – 9, 2020.

• Inspiration Community Association website on November 6, 2020.

Final Report Summary:

Over the course of this appropriation, Greening disseminated results over a suite of social and other media. This momentum continued in the final months of the appropriation, illustrating our dissemination success.

The May 2021 newsletter included a blog about work on Inspiration Easement and Trust Fund acknowledgement; posted on the Great River Greening website; posted on social media channels.

The Oheyawahe/Pilot Knob Hill site was highlighted during a March 2021 segment on KARE 11; shared in March newsletter; posted on social media channels.

The Blaine Wetland Sanctuary enhancement was featured in our June 2021 newsletter; posted on GRG website and social media channels.

Great River Greening, the University of Minnesota Bee Lab, and the Minnehaha Creek Watershed District have written a summary of the vegetation and pollinator response to burning and haying at Six Mile Marsh and will be published on the Great River Greening website, and takeaways disseminated through each organization's general media. A peer-reviewed paper on the pollinator response to different treatments has been authored by members of each organization and has been accepted for publication in 2021. See:

Portman, Z. M. et al., *in press, The Prairie Naturalist*. A Survey of the Bees of the Six Mile Marsh Prairie Restoration in Minnesota Suggests Benefits from Haying.

VI. PROJECT BUDGET SUMMARY:

A. ENRTF Budget Overview:

See attached budget spreadsheet

Explanation of Use of Classified Staff: N/A

Explanation of Capital Expenditures Greater Than \$5,000: N/A

Number of Full-time Equivalents (FTE) Directly Funded with this ENRTF Appropriation: 1.9 FTE

Number of Full-time Equivalents (FTE) Estimated to Be Funded through Contracts with this ENRTF Appropriation: 2.2 FTE

B. Other Funds:

Source of Funds (Non-State)	\$ Amount Proposed	\$ Amount Spent	Use of Other Funds
City of Chanhassen	\$15,000	\$15,000	Chanhassen Nature Preserve
Minnehaha Creek Watershed District	\$25,000	25000	Six Mile Marsh
City of St. Louis Park	\$30,000	\$22,500	Westwood Hills Nature Center III
City of Lindstrom	\$20,000	\$19,250	Allemansrätt Wilderness Park IV
Chisago City	\$5,000	\$5,000	Ojiketa Regional Park
City of Mendota Heights	\$5,000	\$16,000	Pilot Knob Hill

Inspiration Homeowners			Inspiration Easement
Association	\$0	\$11,700	Inspiration Easement
ESRI Software	\$25,000	\$25,000	Reduced price for software/applications
Private donations	\$2,000	\$27,900	Volunteer events
Volunteer In-kind services	\$16,000	\$60,200	volunteer hours at \$25/hr
TOTAL OTHER FUNDS:	\$143,000	\$227,550	

VII. PROJECT STRATEGY:

A. Project Partners:

Chisago City (Ojiketa Regional Park): Non-state funding

City of Chanhassen (Chanhassen Nature Preserve): Non-state funding

City of Lindström (Allemansrätt Wilderness Park): Non-state funding

City of St. Louis Park (Westwood Nature Center): Non-state funding

Inspiration Homeowners Association (Inspiration Easement): Non-state funding Minnehaha Creek Watershed District (Six Mile Marsh Prairie): Non-state funding

Private Donors (pursued as the project moves forward): Non-state funding Volunteers (recruited during implementation): Non-state in-kind services

Metro Conservation Corridors Partnership (MeCC) organizations: In-kind project development, dissemination

City of Blaine: Non-state funding

B. Project Impact and Long-term Strategy:

This project will add to the 9,500 acres already restored by the Metro Conservation Corridors partnership. In particular, this project will address restoration and engagement opportunities in the urban core; areas experiencing conversion pressure; and the west metro which to date has been under-served by Greening activities. By continuing to implement conservation having as a restoration and management practice; and digitizing evaluations, Greening will promote cost-effective and beneficial restoration techniques with wide application.

Engaging volunteers in meaningful, appropriate and transferrable outdoor restoration activities on natural areas will allow community members to learn, enjoy, and understand the restoration process, which are key elements for safeguarding our natural treasures through time. To date, Greening has engaged 7,600 volunteers in the Corridors; nearly half of Great River Greening's volunteers are under the age of 25. In this proposal we are piloting a Site Steward program that has the potential for a deeper and longer-term engagement for this community of environmentally-minded citizens. The Site Steward program promotes a cost-effective, sustainable approach to restoration maintenance.

Opportunities to restore new sites, and subsequent phases covering additional acres/shoreline will continue into the future. The mapped Metro Conservation Corridors provide direction as to where our efforts are best focused.

C. Funding History:

Funding Source and Use of Funds	Funding Timeframe	\$ Amount
ENRTF M.L. 2011. MeCC VI: Restoring our Lands and Waters	July 1, 2011 – December 1, 2014	\$400,000
OHF M.L. 2012. Anoka Sand Plain Habitat Restoration and	July 1, 2012 – June 30 2017	\$30,700
Enhancement, Phase II – Allemansrätt project		
ENRTF M.L. 2013. MeCC VII: Restoring our Lands and	July 1, 2013 – June 30, 2016	\$208,000
Waters		
ENRTF M.L. 2014. Upland and Shoreline Habitat Restoration	July 1, 2014 – June 30, 2017	\$300,000
in the Greater Metropolitan Area		

ENRTF M.L. 2015. MeCC VIII: Enhancing Restoration	July 1, 2015 – June 30, 2018	\$400,000
Techniques for Improved Climate Resilience and Pollinator		
Conservation		
ENRTF M.L. 2016. Upland, Wetland, and Shoreline	July 1, 2016 – June 30, 2019	\$509,000
Restoration in Greater Metropolitan Area		

- VIII. REPORTING REQUIREMENTS:
- The project is for 4 years, will begin on July 1, 2017, and end on June 30, 2021.
- Periodic project status update reports will be submitted February 1 and August 1 of each year.
- A final report and associated products will be submitted between June 30 and August 15, 2021.

IX. VISUAL COMPONENT or MAP(S):

X. FEE TITLE ACQUISITION/CONSERVATION EASEMENT/RESTORATION REQUIREMENTS:

A. Parcel List:

See attached.

B. Acquisition/Restoration Information:

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

Restoration and management plans will, to the extent practical, be consistent with the highest quality conservation and ecological goals for the restoration site. In determining the restoration target community, consideration will be given to soil, geology, topography, historic vegetation, existing conditions, anticipated future conditions, size, and location. Plans will include the proposed timetable for implementing the restoration, including site preparation, establishment of diverse plant species, maintenance, and additional enhancement to establish the restoration; identify long-term maintenance and management needs of the restoration and how the maintenance, management, and enhancement will be financed; and take advantage of the best available science and include innovative techniques to achieve the best restoration. These plans will be stored electronically in project folders.

All restoration projects and habitat improvements will follow the Board of Soil and Water Resources "Native Vegetation Establishment and Enhancement Guidelines" when developing specifications for RFPs and contracts; and developing species lists for contracts, volunteer events, and field staff implementation. Implementation of the latest developments in pollinator habitat management will be achieved by periodically reviewing various species lists, latest research results, and with a current emphasis on early spring food sources, nesting habitat, and identifying and maintaining invertebrate refugia during the restoration process.

Maintenance of the restorations becomes the responsibility of the landowners after the grant period; Greening requires a statement accepting that responsibility to be signed by the landowners.

Greening will continue to give consideration to CCM for restoration activities, particularly their summer youth crews.

Evaluations will be completed at the site of each restoration activity, upon activity completion and three years after completion. Restorations will be evaluated relative to the stated goals and standards in the restoration plan, current science, and, when applicable, the Board of Water and Soil Resources' native vegetation establishment and enhancement guidelines. Evaluations will determine whether the restorations are meeting

recommendations on improving restorations. The evaluations will focus on improving future restorations.

planned goals, identify any problems with the implementation of the restorations, and, if necessary, give

Greening highlighted projects over a suite of social media (twitter, Facebook), website, and external media. Examples from the final months of the appropriation include: May 2021 feature on our work at Inspiration easement; Oheyawahe/Pilot Knob Hill site highlighted during a March 2021 segment on KARE 11, then shared in Greening channels; the Blaine Wetland Sanctuary enhancement featured in our June 2021 Greening channels.

A peer-reviewed paper on the pollinator response to conservation having and burning treatments at Six Mile Marsh authored by members of each stakeholder organization has recently been accepted for publication in 2021.

Environment and Natural Resources Trust Fund M.L. 2017 Project Budget

Project Title: Community Stewardship to Restore Urban Natural Resources – Phase X

Legal Citation: M.L. 2017, Chp. 96, Sec. 2, Subd. 08i

Project Manager: Wiley Buck Organization: Great River Greening M.L. 2017 ENRTF Appropriation: \$524,000

Project Length and Completion Date: 4 Years, June 30, 2021

Date of Report: November 5, 2021



ENVIRONMENT AND NATURAL RESOURCES TRUST FUND BUDGET	Activity 1 Budget	Amount Spent	Activity 1 Balance	Activty 2 Budget	Amount Spent	Activity 2 Balance	Activity 3 Budget	Amount Spent	Activity 3 Balance	TOTAL Budget	TOTAL BALANCE
BUDGET ITEM											
Personnel (Wages and Benefits) All FTE totals are for 3 years	\$101,215	\$101,215	\$0	\$18,989	\$18,989	\$0	\$27,758	\$27,757	\$1	\$147,962	\$0
Program Manager/Ecologist: Wiley Buck \$16,600 (78% salary, 22% benefits; 0.07 FTE)											
Restoration Ecologists: Julia Bohnen, Todd Rexine, TBD. \$29,700 (83% salary, 17% benefits; 0.18 FTE)											
Director of Conservation: Steve Huckett \$4,000 (estimate 83% salary, 17% benefits; 0.02 FTE)											
Grants Management Assistant: Lisa Strauss \$7,200 (90% salary, 10% benefits; 0.10 FTE)											
Volunteer & Outreach Manager: Katie McCann \$14,100 /\$7,550 (85% salary, 15% benefits; 0.06 FTE)											
Field Coordinator: TBD \$4,000 (85% salary, 15% benefits; 0.02 FTE)											
Field Technicians: Jessie Hendrix, Max Samuelson \$12,150 (92% salary, 8% benefits; 0.04 FTE)											
Director of Finance: William Smith \$5,000 (78% salary, 22% benefits; 0.02 FTE)											
Financial Operations Manager: Julia Wells \$3,100 (84% salary, 16% benefits; 0.02 FTE)											
Communications Manager: Mary Anne Welch \$1,200 (80% salary, 20% benefits; 0.01 FTE)											
Professional/Technical/Service Contracts											
Competitive RFP: site preparation and prairie seeding, invasive species control, woody harvest, thinning, forestry mowing, herbicide treatment prescribed fire, haying; vegetation monitoring; pollinator monitoring.	\$258,370	\$258,370	\$0					\$0	\$0	\$258,370	\$0
Equipment/Tools/Supplies											
SUPPLIES: Seed plugs, shrubs, trees. Fencing, erosion control mats, herbicide	\$75,934	\$75,934	\$0	\$28,969	\$28,969	\$0				\$104,903	\$0
Equipment/Tools: Personal protective gear, hand tools, repair and maintenance of mowers, ATV, UTV, and sprayers, etc.	\$425	\$425	\$0	\$250	\$248	\$2				\$675	\$2
Travel expenses in Minnesota						\$0					
In-state mileage to/from sites, meetings, purchases.	\$6,036	\$6,036	\$0	\$589	\$589	\$0	\$807	\$770	\$37	\$7,432	\$36
Other						\$0					
Volunteer Event Supplies: Volunteer protective gear, Healthy food/bvg; table/chair/potty rentals; 1 lg tent rental, etc.				\$4,658	\$4,658	\$0				\$4,658	\$0
COLUMN TOTAL	\$441,980	\$441,980	\$0	\$53,455	\$53,454	\$1	\$28,565	\$28,528	\$37	\$524,000	\$38

Environment and Natural Resources Trust Fund M.L 2017 Parcel List

Project Title: Community Stewardship to Restore Urban Natural Resources – Phase X

Legal Citation: M.L. 2017, Chp. 96, Sec. 2, Subd.

Project Manager: Wiley Buck
Organization: Great River Greening
M.L. 2017 ENRTF Appropriation: \$524,000

Project Length and Completion Date: 4 Years, June 30, 2021

Date of Report: August 15, 2021

	Acquisition or Restoration	tion Format: [Deg.]° [Min.]' [Sec.]" [Hemis.]					# of Shoreline	Type of			
#	Parcel Name	Latitude	Longitude	Estimated Cost	County	Site Significance	Activity Description	# of Acres	Miles	Landowner	Status
1	Allemansratt Wilderness Park IV	45° 23' 58.72" N	92° 50' 42.408" W	\$113,000	Chisago	High quality maple-oak-basswood forest, and wetland mosaic	Forest enhancement; 8ac of tree planting, wetland restoration	33		Public	Complete
2	Chanhassen Nature Preserve	44° 51' 32.4" N	-93° 35' 9.5994" W	\$64,000	Carver	Open-grown bur and red oaks in rolling morainal terrain surrounded by wetlands	Oak savanna restoration including intensive tree and shrub removal; restoration of herbaceous layer	16		Public	Complete
3	Ojiketa Regional Park	45° 20' 35.52" N	-92° 53' 4.55" W	\$43,000	Chisago	High quality terrace forest	Forest restoration with low density invasive removal; thinning	73		Public	Complete
4	Six Mile Marsh	44° 54' 38.88" N	-93° 43' 33.96" W	\$96,000	Hennepin	Restored prairie in Six Mile Creek corridor, upstream of Lake Minnetonka, innovative maintenance and enhancement of restored prairie using haying	Conservation haying of previously restored prairie in maintenance stage; monitor nitrogen, vegetation, and pollinators	115		Public	Complete
5	Westwood Hills Nature Center III	44° 58' 15.972" N	93° 23′ 15.15" W	\$66,000	Hennepin	Mosaic of maple-basswood forest, oak woodland, oak savanna, and prairie.	Oak Savanna/Prairie transition restoration incl. woody invasive removal; thinning; seeding and planting	16		Public	Complete
6	Sunfish Lake Park	44° 59' 58.56" N	092° 53' 50.64" W	\$0	Washington	Oak Forest enhancement	Invasive species management, thinning, coarse woody debris removal	0		Municipal	Not going forward
7	Minnehaha Creek, Methodist Hospital Easement	44° 55' 52.31" N	093° 21' 53.99" W	\$0	Hennepin	Wetland/Floodplain easement	Wetland enhancement	0		Watershed District	Not going forward
8	Pilot Knob Hill	44°52'54.796"N	93°10'7.336"W	\$41,000	Dakota	Located in big river confluence, in township identified with need for savanna and prairie for SGCN; Rusty patched bumbe bee site.	wnship identified with need for vanna and prairie for SGCN;			Municipal	Complete
9	Hidden Valley Park	44° 45' 47.2" N	93° 20' 34.4" W	\$0	Scott	high quality dry prairie remnant with rare species	pollinator lawn; enhance remnant, raingarden, reconstruction	0		Municipal	No longer being pursued
10	Inspiration Easement	45° 00' 45.2" N	92° 47' 26.0" W	\$23,000	Washington	restored prairie in river corridor	interseeding prairie	10		Municipal	Complete
11	Hidden Falls/Crosby Farm/Meeker Dam	44° 54' 17.1" N	93° 11' 26.5" W	\$0	Ramsey	forest, woodland, savanna, prairie, shoreline, wetland mosaic in river corridor	interseeding; woodland; turf conversion; pollinator turf	0		Easement Municipal	No longer being pursued
12	Blaine Wetland Sanctuary - South Unit	45° 10' 5.751" N	93° 11' 2.751" W	\$29,000	Anoka	Large wet prairie complex with rare species	Wood chipping , hauling; stump grinding and herbicide treatment. Part of tree and shrub layer removal as major step to wet prairie enhanceent, to be finished with OHF funds.	20		Municipal	Complete
13	Rapid Response for sites with an identified need from 3-year restoration evaluations	various	various	\$20,000	various	Protecting earlier restoration and enhancement investments	Rapid response for sites that need additional treatment	22		Various	Complete

Note: List does not include Activity 3 Digitized Restoration Monitoring and Advanced Site Steward Program-Budget \$25000 of 28

