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

4, Sec. 2

**Project Abstract** 

For the Period Ending June 30, 2021

PROJECT TITLE: Mississippi and Vermillion Rivers-Restoration of Forest, Savanna and Prairie Habitat-

Phase X

PROJECT MANAGER: Lisa Mueller

AFFILIATION: Friends of the Mississippi River MAILING ADDRESS: 101 E. 5<sup>th</sup> Street, Suite 2000

CITY/STATE/ZIP: St. Paul, MN 55101

PHONE: 651-222-2193 x 12 E-MAIL: lmueller@fmr.org WEBSITE: www.fmr.org

FUNDING SOURCE: Environment and Natural Resources Trust Fund

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

Chp. 4, Sec. 2

**APPROPRIATION AMOUNT: \$213,000** 

AMOUNT SPENT: \$199,520.59 AMOUNT REMAINING: \$13,479.41

# Sound bite of Project Outcomes and Results

Friends of the Mississippi River increased and improved 133 acres of habitat at 6 sites along the Mississippi and Vermillion River corridors, linking existing nodes of high biodiversity. The project restored and enhanced prairie, savanna and forest habitat along the river corridors with a focus on increasing habitat for pollinators.

#### **Overall Project Outcome and Results**

Friends of the Mississippi River improved 133 acres of habitat at 6 sites along the Mississippi and Vermillion River corridors, 51 more acres of habitat than the goal of 82 acres.

At River Oaks Park, FMR restored 2 acres of mesic oak forest, woodland, savanna and blufftop prairie. In the Minneapolis Gorge, we enhanced 10 acres of savanna and forest along the bluff, completing 5 acres more than originally proposed. At the Minneapolis Riverfront in north Minneapolis, FMR enhanced 2 acres of prairie. At the Kasel Unit of the Vermillion Aquatic Management Area, we enhanced 22 acres of oak savanna, woodland and forest. At Heritage Village Park, FMR improved habitat on 33 acres of prairie, savanna and floodplain forest. We installed oak copses to restore savanna on 30 acres and seeded and conducted maintenance following city burns on the prairie. We enhanced 3 acres of floodplain forest through seeding and planting. At Spring Lake Park, FMR enhanced 30 acres of oak forest and 34 acres of restored prairie, completing almost 50 acres of habitat improvement over our original goal of 15 acres. We did invasive woody removal in the oak forest, removed invasive trees in the prairie, mowed goldenrod, and did prescribed burns and over-seeding.

FMR worked with MN DNR and Great River Greening to develop a more uniform restoration monitoring and evaluation protocol that enables data sharing. FMR held a series of meetings, identified data needs, standardized ways to collect data and where to store data. We used Survey 123 as an accessible GIS collection application, and stored data on DNR servers. We field tested the restoration monitoring tool over multiple seasons.

# **Project Results Use and Dissemination**

FMR promoted and disseminated information about this project through earned media, FMR's website (www.FMR.org), electronic & printed newsletters, and volunteer stewardship events. FMR has acknowledged ENRTF in all publications and events that refer to these projects. FMR will work with landowners to erect signage where ENRTF grant funds were spent.



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

Date of Report: October 13, 2021

**Final Report** 

Date of Work Plan Approval: 06/07/2017 Project Completion Date: June 30, 2021

PROJECT TITLE: Mississippi and Vermillion Rivers Restoration of Prairie, Savanna, and Forest Habitat – Phase

Χ

Project Manager: Lisa Mueller

**Organization:** Friends of the Mississippi River **Mailing Address:** 101 East 5<sup>th</sup> Street, Suite 2000

City/State/Zip Code: Saint Paul, MN 55101 Telephone Number: 651-222-2193 ext. 12

Email Address: lmueller@fmr.org

Web Address: www.fmr.org

Location: Dakota County, Hennepin County, Washington County

Total ENRTF Project Budget:	<b>ENRTF Appropriation:</b>	\$213,000
	Amount Spent:	\$199,576
	Balance:	\$13,424

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

# **Appropriation Language:**

\$213,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Friends of the Mississippi River for continued implementation of the Metro Conservation Corridors partnership by improving at least 80 acres of habitat at approximately seven sites along the Mississippi River and Vermillion River corridors. Expenditures are limited to the identified project corridor areas as defined in the work plan. A list of proposed restoration sites 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: Restoring 82-acres of Prairie, Savanna & Forest Habitat: MeCC 10

#### **II. PROJECT STATEMENT:**

Through this project, Friends of the Mississippi River will increase and improve 82 acres of habitat at 7 sites along the Mississippi and Vermillion river corridors. Habitat fragmentation and degradation from non-native species, diseases and other causes threaten Minnesota's rich natural heritage. This situation will be exacerbated as the state's climate continues to change. A system of interconnected natural areas can help to lessen these impacts by providing both habitat and the ability for native species to move on the landscape in response to these changes. This is the goal of the Metro Conservation Corridors partnership and of this proposal. The projects on our list are all along the Mississippi and Vermillion Rivers, natural corridors that link the existing nodes of high biodiversity.

The overarching goal for this project is to restore and enhance prairie, savanna and forest habitat along these river corridors. While these projects will improve habitat for a variety of species, FMR will specifically focus on increasing habitat for our diminishing pollinators. We will seed and install a diversity of host and nectar plants. The restoration activities, presented in existing natural resource management plans, include exotic invasive plant removal, soil preparation, spraying, seeding, mowing, plant installation and burning. To help reduce costs and to increase the educational outcomes, FMR will organize volunteer stewardship events to accomplish some of the restoration activities at some of these sites. These restoration activities will have multiple benefits. An important outcome will be to improve or increase habitat for native pollinators by increasing host and nectar plants. Seed mixes will exceed the Minnesota Board of Soil and Water minimum guidelines, with many additional pollinator plant blooms in all seasons. Restoration activities at these sites will provide water quality benefits by installing deep-rooted prairie/savanna plants that help reduce erosion and sediment & chemicals from entering the rivers. Being within the Metro area, these sites provide examples of diverse native habitat for area residents to enjoy and learn about. A final goal of this project is to work with Metro Conservation Corridors partners to develop a more uniform restoration monitoring and evaluation protocol that also allows the data to be shared. Each of the specific sites in this project is in public ownership and have natural resource management plans in place to guide the habitat restoration and management activities and are on file at FMR. The Conservation Corps of Minnesota is on our contractor contact list and receive notice for all restoration Request for Proposals that we prepare and distribute.

FMR will conduct an evaluation for each of site upon completion of this grant-funded restoration activities and three years later. These evaluations will analyze how the activities achieved the goals for the project, present any unforeseen issues that impacted the achievement of those goals and lessons learned from the project.

#### **III. OVERALL PROJECT STATUS UPDATES:**

**Project Status as of** (July 26, 2017): **Work plan amendment request**. FMR is seeking permission to begin to utilize funds associated with this grant before all funds have been spent or contractually encumbered from our ENRTF M.L. 2015 grant. All of the funds from the 2015 grant are allocated and committed to the projects that are on the restoration list. We have restoration projects on our M.L. 2017 list that are ready for implementation and/or additional activities, which would benefit from efficiencies by being able to conduct these activities now rather than waiting until all of the previously appropriated funds, committed to other sites, are spent.

**Project Status as of** [8/28/17]: **Work plan amendment request**. I am requesting to change the project manager for this grant. Tom Lewanski will be leaving FMR on September 13, 2017. The new project manager will be Karen Schik, Senior Ecologist. Her e-mail is <a href="mailto:kschik@fmr.org">kschik@fmr.org</a>.

Amendment Approved: [08/29/2017]

# **Project Status as of (February 1, 2018):**

Betsy Daub was hired at FMR on 1/2/2018 as Conservation Director, and will take on the responsibilities as the new project manager. Her email is bdaub@fmr.org

In September 2017, 60 burr oaks were planted at Heritage Village Park. At the remaining sites, fall 2017 activities involved bidding out projects to contractors, and planning and coordinating with partners for restoration projects. We are ready to get restoration activities underway in 2018. FMR met with partners to develop data collection protocols and storage needs.

#### Project Status as of (August 1, 2018):

Restoration work is underway at most of the sites. The City of Minneapolis decided to pull one of the sites, Riverside Park, from restoration work at this time – and the site will no longer be part of our work in this grant. This will bring the total number of sites down from 7 to 6. We will be using the resources originally allocated for this site to restore additional acres at Spring Lake Park Reserve. For Activity 2, the monitoring protocol and data sharing system, we have held additional meetings with project partners to refine the survey form. This program is nearly complete and in the testing phase.

# Project Status as of (February 1, 2019):

Restoration activities took place at River Oaks Park, Vermillion River AMA, Minneapolis Gorge, and Heritage Village Park. Activities at Minneapolis River Front/Ole Olson Park were delayed while the Minneapolis Park Board ratified an MOU for FMR's work on its lands. FMR and partners continued their work testing and perfecting the restoration monitoring protocol tool using the Survey 123 platform.

#### Project Status as of (August 1, 2019):

All projects are still in progress, but to date FMR has: Installed 17 acres of prairie, enhanced 1 acre of prairie, enhanced 52 acres of savanna and 11 acres of forest. Work at the Minneapolis River Front/Ole Olson Park was delayed while the Minneapolis Park and Recreation Board staff worked on a large MOU governing FMR's work at MPRB sites. The agreement was finally ratified by the MPRB commissioners in early 2019. However, at this point, the project timeline was such that work would not have been completed in time. FMR and MPRB decided to temporarily forego this work, and FMR transferred the funds and acres to another project in this grant - Spring Lake Park. This shift will enable FMR to enhance an additional 25 acres of prairie at Spring Lake Park.

#### Amendment Request as of 8/30/2019:

Friends of the Mississippi River would like to extend the Project Completion Date by a year, changing the completion date from June 30, 2020 to June 30, 2021. Our ecologists believe additional restoration time will benefit the projects we are working on, as described below. We expect to be able to accomplish this restoration using the remaining budgeted funds in this grant.

# South Branch Vermillion Aquatic Management Area (VAMA):

The fall 2018 seeding has been slow to establish at VAMA. Because of this, our establishment mow tasks were not completed in 2019. Moving this and other follow-up tasks to summer 2020 would better serve the project. Moreover, contractor bids came in lower than expected for the final project budget. Thus, we have some flexibility to augment current tasks and add additional tasks to the restoration of the site. Rather than rushing to fit these tasks in before June 2020, and with contractor schedules often full, these tasks (additional buckthorn follow-up control) could be added, and would be much more effective, in fall of 2020 or winter 2021. Extending our grant by one full year (to June 30, 2021), would allow us the flexibility to spend remaining funds in a worthwhile and effective way.

# Mississippi River Gorge Regional Park (Gorge):

Match funding from other sources has largely paid for plant material (trees and shrubs) for the project so far. Extending the grant until June 30, 2021 would allow us time to spend the planned plant material budget and additional seed and plant material to restored areas.

#### River Oaks Park (RivOak):

Extending our grant by one full year (to June 30, 2021), would allow us the flexibility to fully spend plant material funds and additional plant diversity to the prairie and savanna acres at the site.

# **Spring Lake Park**

Extending the grant for this project will enable more effective management of invasive plants in the restored prairie. Fewer funds than were needed than anticipated in the earlier phase of restoration, but as woody plants are maturing, funding will be needed by fall of to control them and targeted invasive forbs. Extending the grant will enable us to shift the funds not needed earlier to these important tasks and help ensure the long-term success of the restoration.

#### **Project Status as of (February 1, 2020):**

Restoration and enhancement work continues at all sites. FMR has installed 17 acres of prairie, enhanced 1 acre of prairie, enhanced 52 acres of savanna and 12 acres of forest – meeting our overall goal of 82 acres of habitat improvement. FMR and partners continued their work testing and perfecting the restoration monitoring protocol tool.

Project Status as of (June 18, 2020):

**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.

# Project Status as of (August 1, 2020):

Restoration and enhancement work continues at all sites. FMR has installed 17 acres of prairie, enhanced 1 acre of prairie, enhanced 52 acres of savanna and 12 acres of forest – meeting our overall goal of 82 acres of habitat improvement. FMR and partners continued their work testing and perfecting the restoration monitoring protocol tool.

Amendment Request as of (January 6, 2021): Friends of the Mississippi River request an amendment to this project to change the Project Manager from Betsy Daub, Conservation Director – to Lisa Mueller, Conservation Director. Betsy Daub is leaving FMR to move out of state, and Lisa Mueller has been hired to replace her. Going forward, Lisa will be the project manager for this project. Amendment Approved by LCCMR 1/12/2021

**Project Status as of** (February 1, 2021): FMR has installed 17 acres of prairie, enhanced 1 acre of prairie, enhanced 52 acres of savanna and 12 acres of forest – meeting our overall goal of 82 acres of habitat improvement. FMR and partners continued their work testing and perfecting the restoration monitoring protocol tool.

#### **Overall Project Outcomes and Results:**

Friends of the Mississippi River improved 133 acres of habitat at 6 sites along the Mississippi and Vermillion River corridors, 51 more acres of habitat than the goal of 82 acres.

At River Oaks Park, FMR restored 2 acres of mesic oak forest, woodland, savanna and blufftop prairie. In the Minneapolis Gorge, we enhanced 10 acres of savanna and forest along the bluff, completing 5 acres more than originally proposed. At the Minneapolis Riverfront in north Minneapolis, FMR enhanced 2 acres of prairie. At the Kasel Unit of the Vermillion Aquatic Management Area, we enhanced 22 acres of oak savanna, woodland and

forest. At Heritage Village Park, FMR improved habitat on 33 acres of prairie, savanna and floodplain forest. We installed oak copses to restore savanna on 30 acres and seeded and conducted maintenance following city burns on the prairie. We enhanced 3 acres of floodplain forest through seeding and planting. At Spring Lake Park, FMR enhanced 30 acres of oak forest and 34 acres of restored prairie, completing almost 50 acres of habitat improvement over our original goal of 15 acres. We did invasive woody removal in the oak forest, removed invasive trees in the prairie, mowed goldenrod, and did prescribed burns and over-seeding.

FMR worked with MN DNR and Great River Greening to develop a more uniform restoration monitoring and evaluation protocol that enables data sharing. FMR held a series of meetings, identified data needs, standardized ways to collect data and where to store data. We used Survey 123 as an accessible GIS collection application, and stored data on DNR servers. We field tested the restoration monitoring tool over multiple seasons.

# **IV. PROJECT ACTIVITIES AND OUTCOMES:**

**ACTIVITY 1:** Restore 82 acres of forest, savanna & prairie at 7 sites.

**Description:** FMR will hire contractors and organize stewardship volunteers to conduct restoration and enhancement activities on 57-acres of oak savanna, 19-acres of prairie and 6-acres of forest at 7 sites in Dakota, Washington and Hennepin Counties. These activities will include prescribed burns, woody and exotic plant removal, site preparation, seeding, and mowing. FMR staff will work with contractors in the field to clarify activities, timeframes, & expected performance standards and will monitor the work throughout the project's timeframe. Staff will evaluate impacts of restoration activities. FMR staff may conduct breeding bird surveys at some of the sites to help assess long-term impact of specific restoration activities.

Summary Budget Information for Activity 1: ENRTF Budget: \$ 207,800

Amount Spent: \$ 195,626 Balance: \$ 12,174

Outcome	<b>Completion Date</b>
1. Install 18 acres of prairie	June 30, 2021
2. Enhance 1 acre of prairie	June 30, 2021
3. Enhance 57 acres of oak savanna	June 30, 2021
4. Enhance-6 acres of forest	June 30, 2021

#### Activity 1 Status as of (February 1, 2018):

FMR activities included:

# Mississippi Gorge:

FMR bid out the gorge restoration project in September 2017. Wetland Habitat Restorations was selected as the subcontractor and will begin work removing invasive woody shrubs in 2018.

# Heritage Village Park:

Restoration work began with a large planting event in September 2017. With help from City of Inver Grove Heights and FMR staff, volunteers planted 60 bur oaks into the prairie in copses of 6-10

individuals. This oak savanna restoration work will be followed by invasive species removal from the floodplain forest portion of the site in 2018.

# Mississippi River Front:

Work to date has included meeting/communication with Minneapolis Park and Recreation Board staff to coordinate the planned restoration.

#### Riverside:

No work has been done at this site to date.

#### River Oaks:

Subcontractor work at River Oaks will begin in 2018. Work to date has consisted of a site visit to review the restoration tasks laid out in the management plan and make any necessary changes based on the site's previous restoration phase.

# Spring Lake Park Reserve:

No work has been done at this site to date.

#### Vermillion AMA:

Work to date has included two site visits with DNR staff to assess FMR's restoration plan and to explore options for keeping restoration costs low. Subcontractor work at Vermillion AMA will be bid out and contracted in February 2018, with restoration starting soon thereafter.

#### Activity 1 Status as of (August 1, 2018):

#### River Oaks Park:

FMR staff conducted site visits to evaluate the site after its initial restoration phase and update restoration tasks laid out in the management plan. Invasive shrub removal will occur in fall 2018, with subsequent prairie work in spring 2019. An RFP for contractor work at ROP was sent out in July 2018.

# Mississippi River Front/Ole Olson:

In May 2018, Minneapolis Park and Recreation Board staff approved the restoration at the site, and will provide temporary permits for the work while the Park and Rec Board approves and updated MOU for future FMR work. FMR has secured quotes for initial invasive tree removal on the site, which will be followed by prairie prep and seeding.

#### Heritage Village Park:

In September 2017, FMR volunteers planted 60 bur oaks into the prairie in copses of 6-10 individuals. This oak savanna restoration work will be followed by invasive species removal from the floodplain forest portion of the site in fall 2018. Subsequent tasks will include watering the oak trees, follow-up treatments in invasive removal areas, and native floodplain forest plantings.

# Minneapolis Gorge:

FMR selected Wetland Habitat Restorations (now Landbridge Ecological) as its subcontractor in September 2017. Landbridge began woody invasive species removal on 1.5 acres in October, prepping the area for a public volunteer brush haul event. The remaining acres will be removed in fall 2018. Subsequent tasks will include follow-up spot treatments, volunteer tree, shrub, and wildflower plantings, and contracted watering of the plantings.

#### Vermillion River Aquatic Management Area:

After site evaluations with DNR staff, an RFP was released in winter 2018 and Applied Ecological Services was selected as the subcontractor for the project. Initial woody invasive shrub removal was conducted via forestry mowing in February/March 2018 on 16 acres, with additional follow-up work occurring in May 2018. A second forestry mow will occur in fall 2018, which will help to control res-sprouts and seedlings, and will pave the way for native savanna seeding. Future work will include spot sprays, establishment mows, and an eventual prescribed burn.

# Spring Lake Park Reserve:

Management at Spring Lake Park has proceeded through June 2018 under a separate state grant. A contractor has been retained to continue the project with MeCCX funding, beginning in July 2018. Tasks will consist of mowing a 17-acre prairie that was seeded in 2017 (second phase of the project), and woody and weed management of this and a previously restored 17-acre prairie (phase one). In addition, there will be enough funding to work on invasive woody removal at five acres of the surrounding oak forest, which will be very beneficial as seed from those plants results in continual woody invasion of the restored prairie.

# Activity 1 Status as of (February 1, 2019):

#### River Oaks Park:

FMR staff conducted site visits to evaluate the site after its initial restoration phase and update restoration tasks laid out in the management plan. An RFP for contractor work at ROP was sent out in July 2018 and a contractor was selected and began work in October 2018. Work to date has occurred on the entire site (2.1 acres) and consisted of treating buckthorn re-sprouts and seedlings that have returned since the previous phase of work. In November, red cedar and other woody species were removed from the prairie margin to expand this remnant habitat, and pin oak and other trees were thinned from the savanna unit to better replicate historical oak woodland and oak savanna densities. All woody material was piled and burned on site. 2019 work will consist of a prescribed woodland burn, seeding, planting, and additional treatments.

#### Vermillion River Aquatic Management Area:

Applied Ecological Services was selected as the subcontractor and initiated work on the 21-acre project in winter 2018. Initial woody invasive shrub removal was conducted via forestry mowing in February/March 2018 on 16 acres, with additional follow-up work occurring in May 2018. A follow-up spot spray and second forestry mow both occurred in fall 2018, which helped to control re-sprouts and seedlings, and thinned any woody chip prior to broadcast seeding 16 acres with native savanna grasses. Future work will include spot sprays, establishment mows, and an eventual prescribed burn.

#### Minneapolis Gorge:

FMR selected Landbridge Ecological as its subcontractor in September 2017. Landbridge removed buckthorn on 1.5 acres in October 2017, prepping the area for a public volunteer brush haul event. In 2018, a public volunteer planting occurred to plant over 450 trees, shrubs, grasses, and wildflowers into the removal area and Landbridge worked with a CCM crew to continue removals. Work on the remaining 4.5 acres will occur in winter 2019 after the Minneapolis Park and Recreation Board approves a new MOU for work at the site, which had been delaying the remaining work. Subsequent tasks will include follow-up spot treatments, volunteer tree, shrub, and wildflower plantings, and contracted watering of the plantings.

# Heritage Village Park:

In September 2017, FMR volunteers planted 60 bur oaks into the prairie in copses of 6-10 individuals. In late fall 2018, FMR secured two days of work from a CCM crew to re-stake any leaning oaks, provide extra watering, and begin some invasive plant removal in the floodplain unit. This work will be followed by contracted invasive species removal from the remaining areas of the floodplain forest portion of the site in winter 2019. Subsequent tasks will include additional watering of the oak trees, follow-up treatments in invasive removal areas, and native forest plantings.

#### Mississippi River Front/Ole Olson:

Work at MRF was delayed while the Minneapolis Park and Recreation Board staff worked on a large MOU governing FMR's work at MPRB sites. The agreement was finally ratified by the MPRB commissioners in early 2019. FMR will now begin hiring subcontractors. FMR has secured quotes for initial invasive tree removal on the site, which will be followed by prairie prep and seeding.

#### Spring Lake Park Reserve:

With separate funding, FMR completed a breeding bird survey at the prairie and forest parts of the site (Archery trail), and evaluated the restoration needs in the forest. In 2019, a spring prescribed burn will be completed at the restored prairie, invasive weeds will be managed and the invasive woody plants in a portion of the woods will be cut and treated in the fall.

# Activity 1 Status as of (August 1, 2019):

All projects are still in progress, but to date FMR has: Installed 17 acres of prairie, enhanced 1 acre of prairie, enhanced 52 acres of savanna and 11 acres of forest.

#### River Oaks Park:

Work in 2018 occurred on the entire site (2.1 acres) and consisted of treating buckthorn re-sprouts and seedlings that have returned since the previous phase of work. In November, red cedar and other woody species were removed from the prairie margin to expand this remnant habitat, and pin oak and other trees were thinned from the savanna unit to better replicate historical oak woodland and oak savanna densities. All woody material was piled and burned on site. In spring 2019, crews conducted a prescribed burn in the woodland and savanna portions of the site, and followed that with broadcast of native woodland and savanna species. Future work consists of follow-up treatments, a prescribed burn on the prairie, and additional seeding.

#### Vermillion River Aquatic Management Area:

Initial woody invasive shrub removal was conducted via forestry mowing in early 2018 on 16 acres, with spot treatments occurring on an additional 5 acres of the site. A follow-up spot spray and second forestry mow both occurred in fall 2018, which helped to control re-sprouts and seedlings and thinned any woody chip prior to broadcast seeding. In November 2018, crews seeded 16 acres with native savanna grasses. This spring, CCM crews thinned box elders and Siberian elms from along the eastern edge of the site. An additional mow is scheduled for summer 2019. Future work will include spot sprays, establishment mows, and an eventual prescribed burn.

# Minneapolis Gorge:

In winter 2019, the Minneapolis Park and Recreation Board approved a new MOU governing FMR's restoration work at this and other sites, which had been delaying the remaining work. Landbridge and CCM crews continued to do sporadic buckthorn removal and treatment on the entire project acreage, though invoicing will not occur until current buckthorn piles are chipped or disposed of. In June 2019, volunteers planted additional trees, shrubs, wildflowers and sedges into removal areas. Subsequent tasks will include follow-up spot treatments and contracted watering of the plantings.

# Heritage Village Park:

In September 2017, FMR volunteers planted 60 burr oaks into the prairie in copses of 6-10 individuals. In late fall 2018, FMR secured two days of work from a CCM crew to re-stake any leaning oaks, provide extra watering, and begin some invasive plant removal in the floodplain unit. Landbridge crews began invasive species removal from the remaining areas of the floodplain forest portion of the site in spring 2019, prior to an FMR volunteer planting event. In June 2019, volunteers planted over 250 shrubs into removal areas. Remaining removal areas are set to be completed by Landbridge this summer. Subsequent tasks will include additional watering of the oak trees, follow-up treatments in invasive removal areas, and native seeding.

# Mississippi River Front/Ole Olson:

Work at MRF was delayed while the Minneapolis Park and Recreation Board staff worked on a large MOU governing FMR's work at MPRB sites. The agreement was finally ratified by the MPRB commissioners in early 2019. However, at this point, the project timeline was such that work would not have been completed in time. FMR and MPRB decided to temporarily forego this work, and FMR transferred the funds and acres to another project in this grant - Spring Lake Park.

#### Spring Lake Park Reserve:

A prescribed burn was completed on the west 17-acre prairie restoration, as the last step of the 3-year establishment process. The burn carried well. The site will continue to be managed for invasive woody and herbaceous plants the rest of the season and invasive woody removal will be completed in the adjacent oak forest this fall. With matching funding, FMR completed a breeding bird survey at the prairie and forest parts of the site (the Archery trail).

# Activity 1 Status as of (February 1, 2020):

#### River Oaks Park:

In spring 2019 crews conducted a prescribed burn in the woodland and savanna portions of the site, and followed that with broadcast of native woodland and savanna species. In fall 2019, crews conducted follow-up spot sprays of buckthorn and honeysuckle throughout the site. Some of the seeded species have germinated in the woodland, though more cover is expected in spring 2020. Remaining work consists of a potential additional oak thin, and a spring prescribed burn on the prairie, followed by supplemental seeding.

#### <u>Vermillion River Aquatic Management Area:</u>

Following a year of woody removal and spot treatments, crews seeded 16 acres with native savanna grasses in late 2018. This spring, CCM crews thinned box elders and Siberian elms from along the eastern edge of the site, and conducted additional thinning work in fall 2019. Crews forestry mowed buckthorn in late summer 2019 and conducted spot sprays in late October. Future work includes a spring prescribed burn and additional seeding, and potential additional follow-up buckthorn treatments.

#### Minneapolis Gorge:

In winter 2019 the Minneapolis Park and Recreation Board approved a new MOU governing FMR's restoration work at this and other sites, which had been delaying the remaining work. Landbridge and CCM crews continued to do sporadic buckthorn removal and treatment on the entire project acreage. In June 2019, volunteers planted additional trees, shrubs, wildflowers and sedges into removal areas. In fall 2019, CCM crews high-stumped additional buckthorn, while Landbridge crews conducted follow-up spot treatments on previously cut areas and removed invasive black locust trees from an overlook area.

#### Heritage Village Park:

Landbridge crews began invasive species removal from the remaining areas of the floodplain forest portion of the site in spring 2019, prior to an FMR volunteer planting event. In June 2019, volunteers planted over 250 shrubs into removal areas. In November 2019, Landbridge completed the remaining removal. Subsequent tasks will include additional watering of the oak trees, follow-up treatments in invasive removal areas, and native seeding.

#### Mississippi River Front/Ole Olson:

Work at MRF was delayed while the Minneapolis Park and Recreation Board staff worked on a large MOU governing FMR's work at MPRB sites. The agreement was finally ratified by the MPRB commissioners in early 2019. However, at this point, the project timeline was such that work would not have been completed in time.

FMR and MPRB decided to temporarily forego this work, and FMR transferred the funds and acres to another project in this grant - Spring Lake Park.

#### Spring Lake Park:

Two patches, about an acre, of Canada goldenrod were mowed in the restored prairie to try to set it back as it now starting to overtake the prairie. Invasive woody removal (mostly buckthorn), was completed on 30 acres of oak forest. The brush was chipped or burned.

## Activity 1 Status as of (August 1, 2020):

# Spring Lake Park

In February, contractors cut and removed 30 green ash and black walnut trees from the savanna restoration. Most trees were about 8-10 inch diameter. In March, the 2 acres of remnant native prairie were mowed to reduce the cover of honeysuckle and sumac. In May, partners from Mississippi Park Connection installed 30 bareroot bur oak trees, 6-8 ft tall.

# River Oaks Park:

In winter 2020, crews additional tree thinning to better replicate the past historical savanna and woodland densities at the site. In spring 2020, more of the seeded species have germinated in the woodland, and more cover is expected as time goes on, especially with the increase in light to the forest floor due to the thinning. Crews were also able to conduct a prescribed burn in early May, which achieved great coverage and removed some encroaching woody species. FMR staff broadcast additional savanna seed on the prairie edges, and NRP conducted a small amount of additional buckthorn follow-up work around the prairie borders. Work at this site is now complete.

# Vermillion River Aquatic Management Area:

Applied Ecological Services continue tree thinning work to expand the savanna acres at the site. This spring, crews continued to thin box elders and completed all Siberian elm removal. As of June, the results of the post-removal grass seeding were astounding, and the site has dense groundlayer cover throughout. However, a burn was delayed due to COVID, and will be pushed to spring 2021. This extension will also allow for additional follow-up buckthorn treatment in fall 2020.

# Minneapolis Gorge:

While Landbridge completed all contracted work in 2019, the grant extension allows for additional acres of buckthorn removal to be pursued in fall 2020. Another 1.25 acres of removal will be added to the north end of the project area and is anticipated to be complete in fall 2020.

## Heritage Village Park:

Landbridge has completed all woody removal, follow-up treatments, and native seeding associated with the current contract. The grant extension will allow for additional follow-up treatments in invasive removal areas in fall 2020.

# Mississippi River Front/Ole Olson:

Work at MRF was delayed while the Minneapolis Park and Recreation Board staff worked on a large MOU governing FMR's work at MPRB sites. The agreement was finally ratified by the MPRB commissioners in early 2019. However, at this point, the project timeline was such that work would not have been completed in time. FMR and MPRB decided to temporarily forego this work, and FMR transferred the funds and acres to another project in this grant - Spring Lake Park.

# Activity 1 Status as of (February 1, 2021):

# **Final Report Summary:**

# River Oaks Park:

Work at this site was planned to be complete in spring 2020 (original grant deadline). Contractors had finished the final prescribed burn and completed additional tree thinning and buckthorn follow-up work. However, site visits in late 2020 and early 2021 revealed a need for additional buckthorn follow-up work on resprouts in the bluff prairie. In June 2021, contractors were able to conduct one last removal visit to the prairie, setting it up well for maintenance into the future.

# Vermillion River Aquatic Management Area:

By June 2020, the results of the post-removal grass seeding were astounding, and the site has dense ground layer cover throughout. However, a planned spring burn was delayed due to COVID, so we were unable to add supplemental seed or combat buckthorn seedlings and resprouts. Some buckthorn removal work was done in fall 2020 with CCM crews and volunteers, and contractors were able to conduct additional buckthorn treatments in spring 2021. May 2021 also saw an attempt at a prescribed burn on the site. After navigating ever-changing DNR burn regulations, contractors tried to burn the site. However, the dense cover of mostly wild rye had become spindly, and without much litter due to invasive earthworms, the site was unable to carry fire well.

# Minneapolis Gorge:

While Landbridge completed all contracted work in 2019, the grant extension allowed us to add additional acres of buckthorn removal fall 2020. Another 1.25 acres of removal was added to the north end of the project area, with crews largely finishing this fall. However, normal herbicide use on these acres was not allowed (MPRB herbicide policy), so we experimented with organic (OMRI-approve) herbicide. Crews went back again in spring 2021 to deal with some hard-to-get spots that were difficult with snow-cover, and treated resprouts with organic approved herbicides. Finally, in later June 2021, crews pushed the boundary of the work unit event more, removing buckthorn from the edges and expanding our total acreage restored.

# Heritage Village Park:

Landbridge has completed all woody removal, follow-up treatments, and native seeding associated with the current contract. The grant extension allowed us to add one final buckthorn follow-up treatment in fall 2020. Also, FMR partnered with the City of Inver Grove Heights to host a volunteer planting event where roughly 25 volunteers planted over 300 shrubs and wildflowers into buckthorn removal areas. In spring 2021, FMR purchased supplemental forb seed for some of the prairie acres at the site, which the City of Inver Grove Heights added to areas that were burned or mowed.

#### Mississippi River Front/Ole Olson:

Because of uncertainty with MPRB's restoration and herbicide policies, FMR transferred the bulk of funds associated with this site to another project in this grant - Spring Lake Park - which allowed us to add additional acreage to our grant totals. However, in winter and spring 2021, we used funding to treat problem areas of Canada thistle and Siberian elm in the original work area. We hope that we are awarded funding in 2021 to continue to expand this site as originally planned.

# Spring Lake Park

A prescribed burn was completed in November 2020 on the initial 17-acre restored prairie (east unit), which was seeded in 2014. In March, we broadcast about 3.5 lbs of 14 native prairie forb species and 0.5 pounds of two grass species. This restoration ranked medium-high for quality.

#### **ACTIVITY 2:** Develop evaluation protocol and data sharing system

**Description:** In order to better monitor and track the progress and success of our ecological restorations, FMR will work with Minnesota Department of Natural Resources and Great River Greening to develop and institute a restoration monitoring protocol. FMR's Ecologists are crucial to the development of this protocol. We will make

use of software that will allow the data to be shared. Using recently acquired hardware (Apple tablets), FMR ecologists will use the protocols to evaluate current restoration projects and to conduct initial vegetation surveys and site assessments at new sites, during the time period of this appropriation. This technology and the associated protocols will streamline data collection and fieldwork, and will make tracking our restorations efficient and shareable, improving interagency collaboration and overall restoration success.

**Summary Budget Information for Activity 2:** 

ENRTF Budget: \$ 5,200

Amount Spent: \$3,950 Balance: \$1,250

Outcome	Completion Date		
Develop restoration monitoring protocol and methodology	June 30, 2021		

# Activity 2 Status as of (February 1, 2018):

# Monitoring:

We have convened other Metro Conservation Corridors partners (Great River Greening and MN DNR) and held a series of three meetings to identify the types of data needed, how to collect that data in a standardized way, and where to store the data so that it can be accessed and shared with partners. Data will be collected using an available GIS application (Survey123) and will be stored on DNR servers.

# Activity 2 Status as of (August 1, 2018):

Additional meetings were held with project partners to fine-tune the monitoring survey form, which the DNR has been developing. The survey program is virtually complete and in the testing phase. The program was developed within the Survey 123 program, which is a very accessible and user-friendly system. Partners will be testing the form on surveys this summer.

# Activity 2 Status as of (February 1, 2019):

Partners continued their work testing and perfecting the restoration monitoring protocol tool using the Survey 123 platform. FMR staff tested the survey form at various sites, including using the form to complete LCCMR monitoring requirements for previous grant phases. The program has performed as designed, is accessible and user-friendly, and will allow easy sharing of data between restoration partners. Going forward, partners will continue to use the protocol tool, and FMR will purchase data plans for field tablets in order to test the tool's functionality for live uploading of collected data to the cloud.

# Activity 2 Status as of (August 1, 2019):

Monitoring protocols have been developed and are currently being tested. Going forward, partners will continue to use the protocol tool, and FMR will purchase data plans for field tablets in order to test the tool's functionality for live uploading of collected data to the cloud.

# Activity 2 Status as of (February 1, 2020):

FMR continues to use this tool to monitor restorations. We purchased data plans for field tablets and are using the plans to test the tool's functionality for uploading data to the cloud.

# Activity 2 Status as of (August 1, 2020):

FMR continues to use this tool to monitor restorations. We purchased data plans for field tablets and are using the plans to test the tool's functionality for uploading data to the cloud.

#### Activity 2 Status as of (February 1, 2021):

FMR continued to use this tool to monitor restorations. We purchased data plans for field tablets and are using the plans to test the tool's functionality for uploading data to the cloud.

# **Final Report Summary:**

FMR continued to use this tool to monitor restorations. We purchased data plans for field tablets and are using the plans to test the tool's functionality for uploading data to the cloud. FMR is an active participant on the Metro Conservation Network Steering Committee and serves on the Land and Water Protection, Social Dimensions and Restoration and Management Subcommittees. A long range goal of this group is to be able to share protected areas and those places in need of protection or additional restoration and management throughout the 11-county metro area.

#### V. DISSEMINATION:

**Description:** FMR will seek to promote and disseminate information about this project through earned media, FMR's website (<a href="www.FMR.org">www.FMR.org</a>), electronic & printed newsletters, and volunteer stewardship events. To sign up for FMR's electronic newsletter sign up here.

Status as of (February 1, 2018):

https://fmr.org/events/2017/09/16/plant-oak-trees-heritage-village-park-full

**Status as of** (August 1, 2018): No new media coverage.

# Status as of (February 1, 2019):

https://www.fmr.org/events/2018/09/22/collect-native-prairie-seed-heritage-village-park-full

# **Status as of (**August 1, 2019):

https://www.fmr.org/events/2019/06/04/enjoy-view-and-tend-native-prairie-ole-olson-park

https://www.fmr.org/above-falls-river-stewards

https://www.fmr.org/events/2019/05/21/pull-garlic-mustard-river-gorge-sand-flats-full

https://www.fmr.org/birds-minneapolis-river-gorge

https://www.fmr.org/events/2019/06/25/plant-shrubs-wildflowers-and-sedges-along-river-gorge-full

https://www.fmr.org/events/2019/05/23/garlic-mustard-removal-vermillion-ama

https://www.fmr.org/events/2019/06/01/plant-shrubs-heritage-village-park

#### Status as of (February 1, 2020):

https://www.fmr.org/events/2019/08/27/remove-sumac-river-oaks-park-full https://www.fmr.org/river-gorge-stewards

# **Status as of (**August 1, 2020):

No new media coverage

#### **Final Report Summary:**

FMR promoted and disseminated information about this project through earned media, FMR's website (www.FMR.org), electronic & printed newsletters, and volunteer stewardship events. FMR has acknowledged ENRTF in all publications and events that refer to these projects. FMR will work with landowners to erect signage where ENRTF grant funds were spent.

#### VI. PROJECT BUDGET SUMMARY:

# A. Preliminary ENRTF Budget Overview:

\*This section represents an overview of the preliminary budget at the start of the project. It will be reconciled with actual expenditures at the time of the final report.

Budget Category	\$ Amount	t Overview Explanation				
Personnel:	\$ 29,750	<ul> <li>Conservation Director: Overall project management, assist with evaluation of restoration projects, partner communications, landowner relations.</li> <li>Ecologist (2): Plan/organize restoration activities, develop and put out RFPs, hire and oversee vendors, guide restoration activities, evaluate restoration activities. Participate in evaluation protocol &amp; methodology development with partners.</li> <li>Bookkeeper: Pay invoices received. Assist in developing report &amp; reimbursement documentation, track and document staff expenses.</li> </ul>				
Professional/Technical/Service Contracts:	\$144,000	Vendors to provide restoration services such as prescribed burns, soil prep., seeding, woody and exotic plant removal, herbicide application, etc. (RFPs will be distributed and vendor contracts will be awarded on a competitive and performance basis.)				
Equipment/Tools/Supplies:	\$36,000	Restoration Supplies: (\$26,000 Plants for 5 sites), (\$8,800 prairie seed for 1 site), (\$1,200 tree guards, mulch, etc.)				
Travel Expenses in MN:	\$1,450	Staff travel to and from project sites.				
Other:	\$1,800	Data plan for one tablet covering the 3 years of the grant. This is an integral component of the monitoring protocol.				
TOTAL ENRTF BUDGET:	\$213,000					

**Explanation of Use of Classified Staff: NA** 

Explanation of Capital Expenditures Greater Than \$5,000: NA

Total Number of Full-time Equivalents (FTE) Directly Funded with this ENRTF Appropriation: .127 FTE

Total Number of Full-time Equivalents (FTE) Estimated to Be Funded through Contracts with this ENRTF Appropriation: Approximately 1 FTE.

#### **B. Other Funds:**

Source of Funds	\$ Amount Proposed	\$ Amount Spent	Use of Other Funds				
Non-state	- Troposon	эрэнэ					
Foundations and private donation.	\$9,500	\$5,194	Staff expenses for stewardship events and tablets.				
City of Inver Grove Heights	\$4000	\$4,000	In-kind soil prep and water over the length of the grant				
Dakota County	\$0	\$8,500	NRMP writing, woody removal, prescribed burns				
FMR Stewardship staff	\$0	\$1,800	In-kind staff support for volunteer restoration events				
State							
MN DNR	\$0	\$4,000	In-kind burning and spraying				
National Football League	\$0	\$4,000	Planting supplies				
TOTAL OTHER FUNDS:	\$13,500	\$27,494					

#### VII. PROJECT STRATEGY:

#### A. Project Partners:

#### Partners receiving ENRTF funding

- 1. Friends of the Mississippi River (\$31,150) Manage restoration projects and grant, project evaluation.
- 2. Plant/seed retailers TBD (\$34,800) Provide native plants and seeds for restoration projects.
- 3. Habitat restoration contractors TBD (\$144,000) Conduct habitat restoration activities.

# **Partners NOT receiving ENRTF funding**

- 1. Minneapolis Park Board. Consultation regarding restoration on Park Board land.
- 2. Dakota County. Consultation regarding restoration on County land.
- 3. City of Inver Grove Heights. Consultation regarding restoration on city land and providing in-kind restoration activities.
- 4. City of Cottage Grove. Consultation regarding restoration on city land.
- 5. Minnesota Department of Natural Resources. Consultation regarding restoration on state land.

## **B. Project Impact and Long-term Strategy:**

This proposal is the tenth phase in the Metro Conservation Corridors partnership, formed to address land conservation needs in the 11-county metro area. The partnership may submit additional proposals in the future to continue land conservation efforts. As for the specific project sites presented in this proposal, there are some that will achieve a management stage and therefore will become the responsibility of the landowner in the future. For others, we may expand restoration to adjoining areas. FMR has been strategically focused on specific areas within the designated conservation corridors for over a decade. This has allowed us to stay engaged with projects, landowners, partners and communities, helping to ensure continuous improvement and expansion of the habitat values at these sites, while protecting the public investment that has been made. Our project areas have grown by orders of magnitude to protect and restore large tracts of land, ultimately creating contiguous greenway corridors. Each of the projects submitted in this proposal will have long-term benefits to the State of Minnesota's environment. This project will quicken the pace of restoring and enhancing critical habitat in the Metro area and the migration corridors species need to move on the landscape in response to a changing environment. With the landowners' commitments to maintain these sites, once they achieve a management phase, we are confident that these natural assets will provide important ecological services well into the future. FMR is committed to conducting fundraising from both public and private sources, for the ongoing restoration and enhancement activities required at these sites.

# C. Funding History:

Funding Source and Use of Funds	Funding Timeframe	\$ Amount		
2011 ENRTF appropriation. MeCC 6. Restoration within Metro	7/1/2011 - 6/30/13	\$200,000		
Corridors				
2013 ENRTF appropriation. MeCC 7. Restoration within Metro	7/1/2013 – 6/30/16	\$304,000		
Corridors.				
2015 ENRTF appropriation. MeCC 8. Restoration within the Metro	7/11/15 – 6/30/ 18	\$276,000		
Corridors.				
OHF appropriation - Metro Big Rivers II. Restoration in the Metro	7/1/11 – 6/30/16	\$150,000		
Area.				
OHF appropriation - Metro Big Rivers III. Restoration in the Metro	7/1/12 – 6/30/17	\$375,000		
Area.				
OHF - Conservation Partners Legacy Grant Program	1/10/2011 – 6/30/14	\$94,374		
2014 ENRTF appropriation. Restoration within the Metro Area.	6/4/14 – 6/30/17	\$200,000		
OHF appropriation - Metro Big Rivers IV. Restoration in the Metro	7/1/13 – 6/30/17	\$160,000		
Area.				
OHF appropriation - Metro Big Rivers V. Restoration in the Metro	7/12/14 – 6/30/18	\$160,000		
Area.				
OHF – Conservation Partners Legacy Grant Program. Restoration in	5/1/16 - 6/30/2019	\$77,767		
Metro Area.				
Private Landowners.	1/1/09-12/31/15	\$600,000		

# **VIII. REPORTING REQUIREMENTS:**

- The project is for 4 years, will begin on 07/01/2017, and end on 6/30/2021.
- Periodic project status update reports will be submitted [2/1] and [8/1] of each year.
- A final report and associated products will be submitted between June 30 and August 16, 2021.

# IX. VISUAL COMPONENT or MAP(S):

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

A. Parcel List:

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

Project Title: Mississippi and Vermillion Rivers Restoration of Prairie, Savanna, and Forest Habitat – Phase X

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

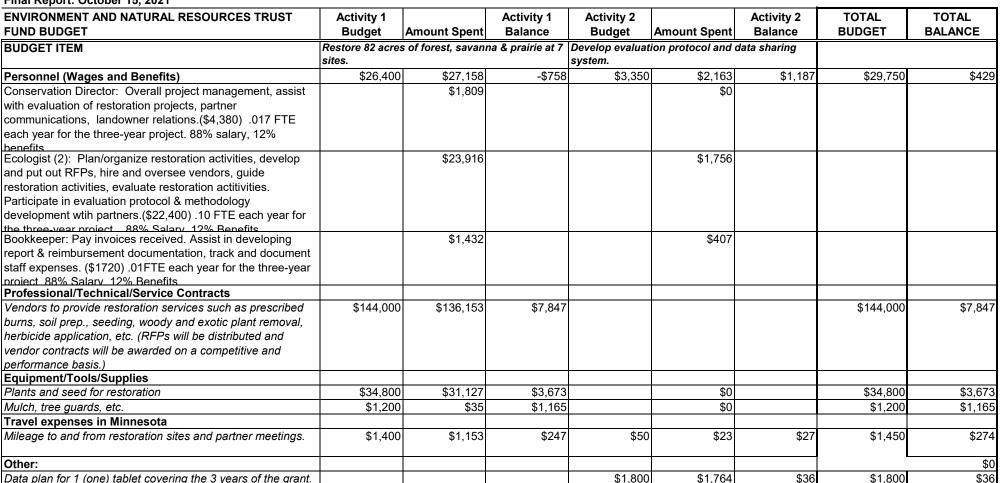
Project Manager: Lisa Mueller

Organization: Friends of the Mississippi River M.L. 2017 ENRTF Appropriation: \$213,000

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

Final Report: October 15, 2021

**COLUMN TOTAL** 





\$12.174

\$5,200

\$3,950

\$1.250

\$195,626

\$207.800

\$213,000

\$13,424

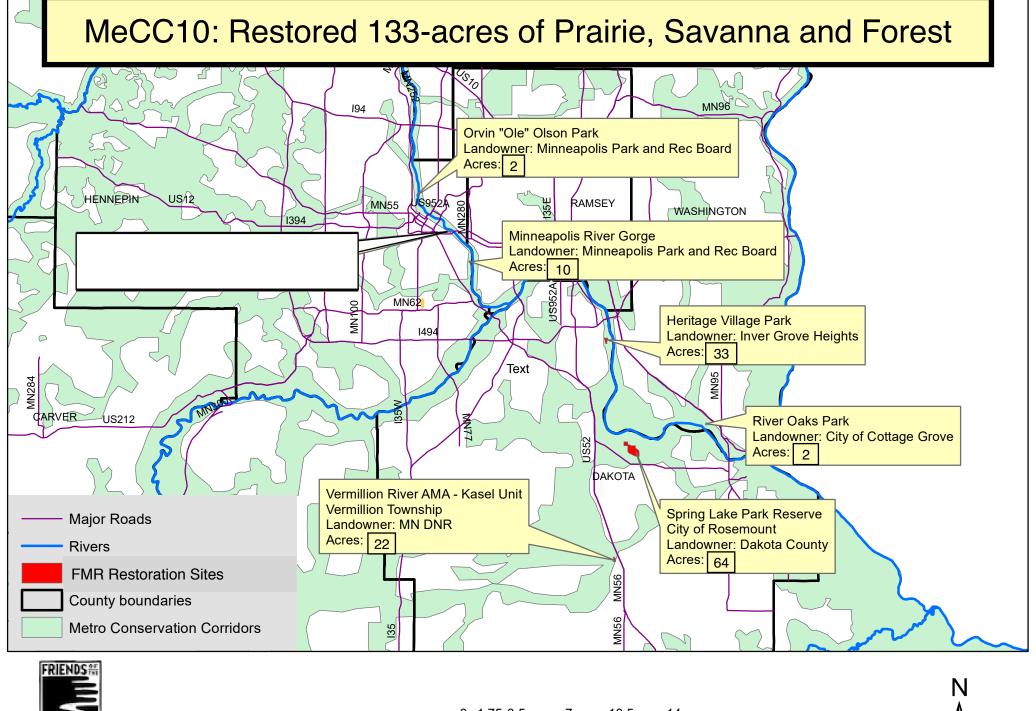
#### **Environment and Natural Resources Trust Fund** 2017 Acquisition/Restoration List

Project Title: Mississippi and Vermillion Rivers Restoration of Prairie, Savanna, and Forest Habitat – Phase X Legal Citation: M.L. 2017, Chp. 96, Sec. 2, Subd. 08h Project Manager Name: Lisa Mueller Organization: Friends of the Mississippi River

M.L. 2016 ENRTF Appropriation: \$ \$213,000
Project Length and Completion Date: 4 years, June 30, 2021

Final Report: 10-15-21

	Acquisition or Restoration	Format: [De	Coordinates eg.]° [Min.]' [Hemis.]	Estimated			Activity		# of Shoreline	Type of	Proposed Fee Title or Easement Holder		
#	Parcel Name	Latitude	Longitude	Cost	County	Ecological Significance	Description	# of Acres	Miles	Landowner	(if applicable)	Staus	
			92°53'00.6"			Oak Savanna, Prairie, Mississippi	Weed control and planting of native shrubs and seeding						
1	River Oaks Park	44°46'57.7"N	W	9,200	Washington	River Bluffland	forbs	2		Public	NA	Completed	ı
2	Riverside Park	44°58'01.4"N	93°13'54.8" W	17,700	Hennepin	Forest habitat along Mississippi River. Important bird habitat	Forest restoration	0		Public	NA	No longer	part of projec
,	Minneapolis Gorge -	44°56'15.1"N		18000	Hennepin	Oak Savanna, Mississippi River Bluffland, Important bird habitat	Savanna restoration	10		Public	NA	Completed	
	Minneapolis Riverfront - Ole Olson		93°16'33.5"	21,800	Hennepin	Mississippi River riparian area, pollinator habitat, water quality Vermillion River Riparian Area,	Prairie restoration	2		Public	NA	Completed	
5	Vermillion River AMA- Kasel unit	44°39'01.5"N	93°00'26.6" W	95,200	Dakota County	Oak savanna, important bird & pollinator habitat	Oak savanna restoration	22	0.3	Public	NA	Completed	
6	Heritage Park - Inver Grove Heights	44°51'44.0"N	93°01'06.5" W	20,200	Dakota County	Mississippi River riparian area, bird & pollinator habitat, water quality	Floodplain forest and upland savanna restoration	33	0.16	Public	NA	Completed	1
7	Spring Lake Park Reserve	44°45'19.6"N	92°59'11.4" W	24,200	Dakota County	Pollinator and bird habitat along Mississippi River	Prairie restoration and oak forest enhancement	64		Public	NA	Completed	ı
NO	I TES:	l	1	1	1	I	I	1	1				







12/13/202