For the Period Ending June 30, 2024, Project Abstract

PROJECT TITLE: Restoring Forests in Minnesota State Parks PROJECT MANAGER: Louis Peterson AFFILIATION: Minnesota Department of Natural Resources MAILING ADDRESS:3296 State Park RD NE CITY/STATE/ZIP: Bemidji, MN 56601 PHONE: 218-308-2290 E-MAIL: Louis.Peterson@state.mn.us WEBSITE: http://www.dnr.state.mn.us/index.html FUNDING SOURCE: Environment and Natural Resources Trust Fund LEGAL CITATION: M.L. 2018, Chp. 214, Art. 4, Sec. 02, Subd. 08e as extended by M.L 2023, Chapter 60, Article 2, Sec. 2. Subd. 18

APPROPRIATION AMOUNT: \$250,000 AMOUNT SPENT: \$206,647 AMOUNT REMAINING: \$43,353

#### Sound bite of Project Outcomes and Results

This project restored 255 acres of open fields and a previously logged area back to forested native plant communities in four state parks, where it will permanently managed and protected.

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

Turn of the century logging at Itasca State Park caused major impacts to native plant communities in some areas. Early successional deciduous tree species such as aspen, birch, and maple now dominate these areas after logging. This project helps restore missing long lived pine species back to the Itasca landscape.

Forest clearing for agricultural practices affected previously forested areas at Forestville-Mystery Cave, Greenleaf Lake, and Jay Cooke state parks. This project helped restore forested native plant communities in these open field locations.

Restoration tasks varied between sites but generally each site went through three major steps to complete the restoration projects: site preparation, planting, and protecting/establishment. Most of the work performed was done through contracted services to help ensure restoration timelines were met. Site preparation activities included logging, herbicide applications, disking, prescribed fire, and woody stem and invasive species removal. For the Forestville Mystery Cave restoration, a combination of disking and herbicide application were used to prepare the site. Planting included bare root tree seedling planting and direct seeding with species that were present pre-disturbance. All seedlings and seeds used were from a local source to keep the local genotype intact. Natural regeneration is expected to be big component of establishing the native plant community on all sites. Itasca and Jay Cooke interplanted more seedlings in spring of 2024. The protecting/establishment phase included tree release, high mowing, herbicide applications, bud capping, tree cages, invasive species removal, and a deer exclosure fence. Itasca installed a deer exclosure fence around the perimeter of the restoration to combat white-tailed deer browse on pine trees.

It should be noted that Covid-19 significantly impacted progress on many of the above activities and a request was made and granted to extent the project by one year. This helped greatly in completing all planned tasks. There will still be need for the protecting/establishment phase until the pines have grown above the browse line and the hardwoods are well established.

Primary goals for the project include:

- Providing additional habitat for nearly 30 species identified in Minnesota's *Wildlife Action Plan* as a *Species* of *Greatest Conservation Need*<sup>1</sup>, including 10 MN Endangered, Threatened or Special Concern species.
- Helping meet the statutory mandate for MN State Parks to "restore, preserve and perpetuate natural and scenic features..." (86A.05 subd. 2c);
- Aiding the MNDNR in meeting the goals and objectives identified in Minnesota's *Wildlife Action Plan* (2015-2025) and the MNDNR *Conservation Agenda* (2015-2025).
- By restoring agricultural lands that historically were forested, this project will be consistent with Division and Department direction to reduce the amount of land under agricultural lease or cooperative farming agreements.

## **Project Results Use and Dissemination**

Information on the critical steps for each of the four restoration sites will be kept in order to provide necessary documentation for required evaluations and for potential restoration audits. Acres restored using these funds will be incorporated into annual division resource management project reporting. The sites at Jay Cooke and Itasca are readily accessible to visitors.

Project managers for the site at the Forestville Mystery Cave State Park conducted a tour for all park and Mystery Cave interpretive staff so they would be aware of the project and able to answer visitor questions and/or include the project in their programming as appropriate.

This would be a perfect project to be featured on our resource management program website. I plan to bring this up to our resource group once the meetings start again this winter. https://www.dnr.state.mn.us/parks\_trails/pat-resource-management/restore-lands.html



Today's Date: 08/13/24 Date of Next Status Update Report: Final Date of Work Plan Approval: 06/05/2018 Project Completion Date: June 30, 2024 Does this submission include an amendment request? No

**PROJECT TITLE:** Restoring Forests in Minnesota State Parks

Project Manager: Louis Peterson

Organization: Minnesota Dept. of Natural Resources

College/Department/Division: Division of Parks and Trails

Mailing Address: 3296 State Park RD NE

City/State/Zip Code: Bemidji, MN 56601

Telephone Number: 218-308-2290

Email Address: Louis.peterson@state.mn.us

Web Address: http://www.dnr.state.mn.us/index.html

Location: Carlton, Clearwater, Fillmore, Meeker counties

**Total Project Budget:** \$250,000 **Amount Spent:** \$206,647 **Balance:** \$43,353

Legal Citation: M.L. 2018, Chp. 214, Art. 4, Sec. 02, Subd. 08e as extended by M.L 2023, Chapter 60, Article 2, Sec. 2. Subd. 18

**Appropriation Language:** \$250,000 the second year is from the trust fund to the commissioner of natural resources to restore at least 255 acres of high-quality forests in state parks such as Itasca, Jay Cooke, and Forestville Mystery Cave State Parks and Greenleaf Lake State Recreation Area. This appropriation is available until June 30, 2023, by which time the project must be completed and final products delivered.

M.L. 2023 - Sec. 2. Carryforward; Extensions [to June 30, 2024]

## I. PROJECT STATEMENT:

This project will restore 255 acres of forested native plant communities on Parks and Trails administered lands. This effort is needed because of past impacts to forests, such as turn of the century logging, clearing for agriculture and an over-abundance of white-tailed deer. These activities will take place in four state parks/state recreation areas: Forestville-Mystery Cave, Greenleaf Lake, Itasca and Jay Cooke. Primary goals for the project include:

- Providing additional habitat for nearly 30 species identified in Minnesota's *Wildlife Action Plan* as a *Species* of *Greatest Conservation Need*<sup>1</sup>, including 10 MN Endangered, Threatened or Special Concern species.
- Helping meet the statutory mandate for MN State Parks to "restore, preserve and perpetuate natural and scenic features..." (86A.05 subd. 2c);
- Aiding the MNDNR in meeting the goals and objectives identified in Minnesota's *Wildlife Action Plan* (2015-2025) and the MNDNR *Conservation Agenda* (2015-2025).

Secondarily, by restoring agricultural lands that historically were forested, this project will be consistent with Division and Department direction to reduce the amount of land under agricultural lease or cooperative farming agreements. While the restoration tasks may vary between sites to address specific issues generally each site will undergo three major steps to complete the restoration project:

<u>Site preparation</u> –may involve activities such as invasive species control, prescribed burning and disking. <u>Planting</u> – accomplished via direct seeding or planting of seedlings

Protection/establishment - this may require exclosures, bud-capping, deer repellants or high mowing.

## II. OVERALL PROJECT STATUS UPDATES: See Activity-1 below

An error in the project budget worksheet was corrected. \$33,300 needed for purchase of tree seedlings for the forest restoration site was included in the overall category for Equipment, tools, supplies but was not specifically identified in the plants, seeds and planting supplies row. That has now been corrected.

## Corrections approved by LCCMR 6/5/2020

## Amendment Request as of 02/02/2023

An amendment is requested to delay the end date of the project until June 30<sup>th</sup>, 2024. The delay in harvest combined with some pandemic related issues caused planting to be delayed until spring 2023. The additional year would be extremely helpful in getting the seedlings established leading to a successful restoration.

# LCCMR approved 2/10/2023 pending legislative action.

## Amendment approved by the Legislature and signed into law 5/24/23

A request is also being made to amend the budget to reflect current needs and shifts in costs that occurred due to the pandemic and/or supply chain issues. Additionally, more work is being done by contract than originally anticipated as we are still short-handed in some areas.

- Personnel budget reduced by \$14,562 to a revised budget of \$5,000
- Site prep. contracts budget reduced by \$11,000 to revised budget of \$37,000
- Tree planting/seeding services budget reduced by \$8,000 to revised budget of \$29,000
- Restoration management services budget increased by \$28,750 to a revised budget of \$56,750
- Deer exclosure construction budget reduced by \$11,300 to a revised budget of \$11,700
- Plants, seeds, supplies budget increased by \$13,000 to a revised budget of \$50,000.
- Fencing supplies budget increased by \$5,112 to a revised budget of \$47,112.

## Amendment approved by LCCMR 2/10/2023

## LCCMR Staff Amended and Approved 11/29/23

Per email received November 21, 2023. New project manager: Louis Peterson.

#### ACTIVITY 1: Restore 255 acres of forested native plant communities at three (3) State Budget: \$250,000 Parks and one (1) State Recreation Area

Description: Forested native plant communities will be restored at the following sites: Forestville/Mystery Cave State Park (65 acres), Greenleaf Lake State Recreation Area (10 acres), Itasca State Park (150 acres) and Jay Cooke State Park (30 acres).

| Summary Budget Information for Activity 1: | ENRTF Budget: | \$250,000  |
|--|---------------|------------|
|  | Amount Spent: | \$ 206,647 |

Balance: \$43,353

| Outcome – Forestville State Park – 65 acres   | <b>Completion Date</b> |
|---|------------------------|
| 1. Site Preparation Phase (ex. archaeological review, prescribed fire, seed collection, | Fall 2021              |
| invasive species control, tree harvest or thinning, herbicide application(s), tillage)  |                        |
| 2. Seeding and/or Planting Phase  | Fall 2021              |
| 3. Establishment phase - management activities to insure a successful restoration (ex.  | Fall 2023              |
| mechanical conifer release, bud capping, spray deer deterrents, invasive species mgmt.) |                        |

| Outcome – Greenleaf Lake State Recreation Area – 10 ac.                                 | <b>Completion Date</b> |
|---|------------------------|
| 1. Site Preparation Phase (ex. archaeological review, prescribed fire, seed collection, | Fall 2020              |
| invasive species control, tree harvest or thinning, herbicide application(s), tillage)  |                        |
| 2. Seeding and/or Planting Phase  | Fall 2021              |
| 3. Establishment phase - management activities to insure a successful restoration (ex.  | Fall 2022              |
| mechanical conifer release, bud capping, spray deer deterrents, invasive species mgmt.) |                        |

| Outcomes - Itasca State Park – 150 acres  | <b>Completion Date</b> |
|---|------------------------|
| 1. Site Preparation Phase (ex. archaeological review, prescribed fire, seed collection, | Fall 2019              |
| invasive species control, tree harvest or thinning, herbicide application(s), tillage)  |                        |
| 2. Deer exclosure(s) construction   | Spring 2020            |
| 3. Seeding and/or Planting Phase  | Fall 2021              |
| 4. Establishment phase - management activities to insure a successful restoration (ex.  | <u>Spring 2024</u>     |
| mechanical conifer release, bud capping, spray deer deterrents, invasive species mgmt.) |                        |

| Outcome – Jay Cooke State Park – 30 acres   | <b>Completion Date</b> |
|---|------------------------|
| 1. Site Preparation Phase (ex. archaeological review, prescribed fire, seed collection, | Fall 2019              |
| invasive species control, tree harvest or thinning, herbicide application(s), tillage)  |                        |
| 2. Seeding and/or Planting Phase  | Fall 2019              |
| 3. Establishment phase - management activities to insure a successful restoration (ex.  | Fall 2021              |
| mechanical conifer release, bud capping, spray deer deterrents, invasive species mgmt.) |                        |

## Activity 1 Status as of April 30, 2019

Forestville Mystery Cave State Park 65 acres

All seed needed for the restoration of 60 acres was collected via contractor in the fall of 2018. About half the acreage (30 acres) will be planted in the spring of 2019 and the other half in the fall of 2019. About 5 acres will be planted with bare root stock obtained from the DNR nursery.

## Greenleaf Lake State Recreation Area 10 acres

Agricultural use of the site has ceased and site visits to plan the restoration have been conducted. Tree species to be used in the restoration have been selected and seed collection will take place this field season as well as direct seeding this fall. Some site preparation is occurring using non-LCCMR funding. There may be some variation between species selection and what is planted based on availability.

#### Itasca State Park 150 acres

A survey to identify bat roosting trees in the restoration area was conducted using non-LCCMR funding. Results from the survey combined with knowledge of forested wetlands were used to adjust harvest boundaries to avoid impacts to bats and herpetofauna. The timber (aspen) has been sold with a two-year cut window expiring in August 2021. Following harvest, the site will be planted to the appropriate native plant community (mixed hardwood and pines) for the site.

#### Jay Cooke State Park 30 acres

The project is currently in the planning phase. The Division has discontinued the agricultural lease on the project site and will be meeting with local Soil and Water Conservation District in May to view a similar type project nearby. A direct seeding of hardwood species is the anticipated restoration technique to be used on the site.

#### Activity 1 Status as of September 3, 2019

#### Forestville Mystery Cave State Park 65 acres

Site preparation and seeding was completed on approximately 25 acres. The remainder of the project areas should be completed in fall 2019. An additional four acres of bare root trees (1200 trees) were planted as part of this project but utilizing non-LCCMR funds.

#### Greenleaf Lake State Recreation Area 10 acres

An RFP was distributed for direct seeding of the restoration site. The contract has been awarded and the area will be direct seeded this fall (prior to 11/15/19). There are plans to collect seed of early season species which are not part of the direct seeding in the spring/early summer of 2020.

#### Itasca State Park 150 acres

Per the previous update, the project area has not been harvested (aspen) but will be cut prior to August, 2021. Once harvested, the exclosure will be established, aspen control will be initiated along with planting and aspen control continued through and beyond LCCMR project end.

#### Jay Cooke State Park 30 acres

Herbicide application to control invasive species for site preparation has begun this summer. A follow-up treatment on a small area will happen in September. After doing a nearby site visit of a failed direct hardwood seeding, the project will be shifting gears to a planting project. There is already a small amount of natural tree regeneration happening on the edges of the fields. Planning has been started for the planting, but species selections and planting contract preparation will begin in September after discussions with the state nursery. The goal is to have trees in the ground by May 2020.

#### Activity 1 Status as of March 16, 2020

#### Forestville Mystery Cave State Park 65 acres

All direct seedings are installed and approximately half of bare root seedlings have been planted. An herbicide treatment of about \$350 will be applied this spring. The remainder of the bare root seedlings will be planted in 2020. Additional labor necessary for tree planting, prescribed burning and mowing needed for this project was provided through Legacy and other funds. That include approximately 70 hrs. of staff time and a week of Conservation Corps (CCMI) labor.

## Greenleaf Lake State Recreation Area 10 acres

In November 2019, the 10 acre direct hardwood seeding was completed by a contractor. Prior to that, crews completed some tree cutting to remove boxelder seed trees (paid with legacy). In spring 2020, it is anticipated that local ecotype soft mast tree seeds will be collected and interseeded on the 10 acres.

#### Itasca State Park 150 acres

No change or expenses to this portion of the project since last update. Awaiting logger to cut aspen which must take place prior to August, 2021. Once harvested, the exclosure will be established, aspen control will be initiated along with planting and aspen control continued through and beyond LCCMR project end.

#### Jay Cooke State Park 30 acres

Over 3,000 trees have been ordered from the state nursery over the winter. It is anticipated that approx. 14 acres of the site will be planted this coming May. Before being planted, the site will be surveyed and treated for invasive species. If appropriate nursery stock can be found, white pine and other desirable species will also be planted this year and caged/protected as needed. Invasives monitoring will still go on across the project area.

#### Activity 1 Status as of September 28, 2020

Note: the Covid-19 pandemic significantly impacted progress on this project because of the inability to purchase trees and planting contracts which had to be cancelled.

#### Forestville Mystery Cave State Park 65 acres

The project is nearly completed. An additional herbicide application was needed on 23 acres to control invasives. Legacy funding was utilized for the contract. Staff will be high mowing some of the restoration sites to reduce competition for the tree seedlings. Bare root trees weren't able to be planted due to C-19 issues. Purchase and planting of those seedlings is now planned for spring 2021.

#### Greenleaf Lake State Recreation Area 10 acres

Covid-19 prevented field work in spring 2020 so plans for collecting and interseeding local ecotype soft mast tree seeds were not completed as anticipated. Some seed collection was done but it is likely the remainder of this effort will need to be completed in 2021.

#### Itasca State Park 150 acres

The logger initiated harvest of the aspen in August. It is expected that timber harvest will be completed by Nov-Dec, 2020. It is anticipated that herbicide application will be done in late summer 2021 to control aspen regeneration. Construction of the deer exclosure will also begin about that time. Tree planting will take place after site preparation and exclosure construction is completed, likely spring 2023.

#### Jay Cooke State Park 30 acres

Covid-19 impacts cancelled order for 3,000 trees and planting crew. 200 trees were planted by Parks & Trails staff that were available from another source. CCMI assisted with invasive species management and watering of the trees. Plans for fall 2020 include: caging planted trees with the assistance of CCMI and mowing/treating the next site. It is anticipated that purchase and planting of the trees at both sites will take place in spring 2021.

#### Activity 1 Status as of March 10, 2021

#### Forestville Mystery Cave State Park 65 acres

Staff are high mowing some of the restoration sites to reduce competition for the tree seedlings. The primary task remaining is the planting of bare root seedlings. Bare root trees weren't able to be obtained in 2020 due to Covid-19 issues and likely won't be available in 2021 either. Will purchase and plant as soon as seedlings are available and conditions are suitable for planting.

#### Greenleaf Lake State Recreation Area 10 acres

The site has been planted and is now in the establishment phase. It will be monitored for weeds in 2021 and if additional local elm seed can be collected that will be inter-seeded into the site.

#### Itasca State Park 150 acres

The logger initiated harvest of the aspen in August and it was completed by late October, 2020. The plan is to allow the vegetation to grow this summer (2021) and then burn the slash piles that were left from logging next winter (2021/2022). Site preparation for planting will take place in summer 2022. Exclosure materials will be ordered and construction of the exclosure will begin in fall 2022. Tree planting is planned for spring 2023.

#### Jay Cooke State Park 30 acres

Caging of a portion of the trees planted in spring of 2020 was completed. Mowing followed by site prep herbicide application was completed on the hay field portion of the project in preparation for spring planting. 5,000 white pine, red oak, bur oak and white spruce trees have been ordered from the State nursery and will be planted by contractors this spring.

#### Activity 1 Status as of August 24, 2021

Forestville Mystery Cave State Park 65 acres Staff are high mowing some of the restoration sites to reduce competition for the tree seedlings. Approximately 2000 bare root hardwood species were purchased and planted this spring.

#### Greenleaf Lake State Recreation Area 10 acres

In May 2021, staff conducted a monitoring visit to the site. Many tree seedlings were observed. Some herbaceous invasives were observed but none are causing issues with the planting and will go away on their own as the trees get taller and reduce sunlight to the soil surface. Drought conditions are a concern and staff will continue to monitor the site to assess whether it will significantly impact the restoration site.



Oak seedlings at Forestville-Mystery Cave State Park forest restoration site.

#### Itasca State Park 150 acres

As noted in the previous update (March 2021) we are allowing the vegetation to grow onsite following the logging that took place in 2020. Assuming sufficient snow cover, slash piles left from the logging will be burned this coming winter (2021-22). Site preparation for planting will take place in summer 2022. Exclosure materials will be ordered and construction of the exclosure will begin in fall 2022. Tree planting is planned for spring 2023

#### Jay Cooke State Park 30 (32) acres

This project consists of two former fields that were in agricultural production (corn and hay). The total acres of the two fields is 32 (14 acres + 8 acres). Planting of both sites took place in May 2021. Species selection was done with climate change in mind and included white pine, red oak, bur oak and white spruce. Natural regeneration on the site includes: basswood, maple, paper birch and oak. Trees will be bud-capped or exclosed to prevent over-browsing by deer. Some loss of trees is expected due to the drought this year. Additional trees will be planted to make up for those losses.



Planting crew in LCCMR Forest Restoration Site at Jay Cooke State Park, May 2021

## Activity 1 Status as of March 3, 2022

*Forestville Mystery Cave State Park 65 acres* No additional work conducted in Fall 2021.

#### Greenleaf Lake State Recreation Area 10 acres

No additional work conducted in Fall 2021. Drought conditions are a concern and staff will continue to monitor the site to assess whether it will significantly impact the restoration site.

#### Itasca State Park 150 acres

As noted previously. Logging of the site was completed in 2020. Slash piles from the logging were allowed to dry and are being burned this winter in anticipation of site preparation this coming season. Tree planting is anticipated for spring 2023.

#### Jay Cooke State Park 30 (32) acres

Some loss of planted stock occurred this past year due to drought conditions. Utilizing bud caps/exclosures trees were protected this winter. Additional planting to address drought loss and other needs will take place this field season.

#### Activity 1 Status as of July 1, 2022

*Forestville Mystery Cave State Park 65 acres* This project has been completed.

## Greenleaf Lake State Recreation Area 10 acres

Project is completed but drought conditions continue to be a concern. If the restoration is significantly impacted by the drought, some replanting will take place in fall 2022 or spring 2023.

#### Itasca State Park 150 acres

A skidsteer mulched 3 miles of aspen regeneration in preparation for installation of the deer exclosure fencing. An herbicide treatment to manage aspen regeneration is scheduled for this summer. Contract specifications are being prepared for exclosure materials with purchase expected this fall and installation to begin soon after. Planting of the restoration site is planned for spring 2023.



*3 miles of linear mulching to create space for exclosure fence installation* 

#### Jay Cooke State Park 30 (32) acres

Interplanted both fields with over 900 trees due to 2021 drought. Purchased wire fencing materials and have been caging trees. We will continue to cage trees over this field season and plan to budcap remaining trees in need in the fall. Regeneration surveys to monitor the site will also be completed later this summer or early fall. Continued tree caging/protection with supplies on-hand is anticipated for 2023. Invasive species management has been performed this spring and will continue as needed this summer. As the trees grow and create shade over the next several years this concern will diminish.

#### Activity 1 Status as of February 1, 2023

*Forestville Mystery Cave State Park 65 acres* This project has been completed.

#### Greenleaf Lake State Recreation Area 10 acres

Project is completed but drought conditions continue to be a concern. If the restoration is significantly impacted by the drought, some replanting will take place in 2023.

#### Itasca State Park 150 acres

Herbicide treatment was completed on July 28<sup>th</sup>. All deer exclosure materials have been ordered and received. Fence installation contract has been awarded to a local business with a June 15, 2023 deadline to do the work. Seedling order has been placed from Itasca stock seedlings at Badoura Nursery. Seedling planting contract specifications have been submitted for planting spring 2023. Remaining slash piles are being burned this winter.

#### Jay Cooke State Park 30 (32) acres

CCMI crews helped to cage some trees in fall of 2022 and bud cap the rest. Invasive species work continued and will restart again in spring 2023. Installing tree tubes/caging will continue as well to protect the seedlings.



## Activity 1 Status as of August 29, 2023

*Forestville Mystery Cave State Park 65 acres* This project has been completed.

#### Greenleaf Lake State Recreation Area 10 acres

Project is completed but drought conditions continue to be a concern. As of this summer, the tree seedlings are in good shape. The site is weedy but that's to be expected at this point, they will eventually be shaded out. The site will be assessed for additional planting needs and if required will be done in spring 2024 prior to project completion.

#### Jay Cooke State Park 30 (32) acres

Invasive species work continued as will installation of tree tubes and caging to protect seedlings.

#### Itasca State Park 150 acres

Tree planting - 120,000 red and white pine trees were planted the week of May 15th. A small percentage were lost due to high temperatures during planting and lack of rainfall immediately after. However, generally timely rains throughout the summer have been keeping the seedlings alive. Trees were stocked at 800/acre to allow for some mortality, so the restoration is on track so long as sufficient precipitation continues.



Fence line prep – The fence line regrew over the summer and needed to be mulched again for easier fence installation. Staff re-mulched the line to ensure it will be in good shape for fence installation.

Fence installation contract – The contractor moved supplies out to the site in late May and initiated work but had to stop due to equipment failure. Contract was extended to 10/31/23. The contractor will be installing the rest of the fence this fall. It is estimated that it will take about a month to finish the fence installation.

Tree seedling release – The seedlings will need to be released prior to the end of the project. That will take place either Fall 2023 or Spring 2024.

#### Activity 1 Status as of February 1, 2024

*Forestville Mystery Cave State Park 65 acres* This project has been completed.

#### Greenleaf Lake State Recreation Area 10 acres

Project is completed but drought conditions continue to be a concern. The site will be assessed for additional planting needs and if required will be done in spring 2024 prior to project completion.

#### Jay Cooke State Park 30 (32) acres

4,000 seedlings have been ordered and a planting contract arranged to interplant the fields due to some tree mortality. Tree mortality is due to 2 out of 3 years since planting having droughts during the growing season. We are expected to interplant in May of 2024.

#### Itasca State Park 150 acres

The fencing contractor resumed work on the fence in late October. The late start was due to the contractor having other obligations. Since there are no other options to



2024-08-14 FINAL WP.docx

install the fence, the contract has been extended to June 1<sup>st</sup>, 2024. As of 12/21/23, the contractor has the fence about 75% complete and hopes to finish by mid-January, pending weather.

The seedlings will need to be released prior to the end of the project; contract specifications have been submitted for a spring 2024 release.

#### Final Report Summary June 30, 2024

*Forestville Mystery Cave State Park 65 acres* This project has been completed. Additional pictures:





*Greenleaf Lake State Recreation Area 10 acres* This project has been completed.

## Jay Cooke State Park 30 (32) acres

4,000 seedlings were interplanted utilizing a planting contact in May. Some white pine will be caged this season and the site will be bud-capped with CCMI this fall. Project is completed.





#### Itasca State Park 150 acres

The fencing contractor finished installing the fence in mid-January. Brushsaw contractors completed seedling release on the entire site in mid April. Tree cage material has been purchased and will be installed on a small number of pines that didn't get enclosed by the fence in early fall. Project completed.

Some bud-capping will continue on pines around the outer edge of the fence each fall until above the browse line. Future plans are to brushsaw or herbicide release the site when needed, and routinely maintain the deer exclosure as needed (usually 3-4 checks a year). Fence will be removed when 90% of the pines are above the browse line.



2024-08-14 FINAL WP.docx

#### **IV. DISSEMINATION:**

#### **Description:**

Information on the critical steps for each of the four restoration sites will be kept in order to provide necessary documentation for required evaluations and for potential restoration audits. Acres restored using these funds will be incorporated into annual division resource management project reporting. The sites at Jay Cooke and Itasca are readily accessible to visitors. We will be exploring options for communicating information about these restoration efforts to the public via signage, site visits with division naturalist staff.

#### Status as of April 30, 2019

Project managers for the site at the Forestville Mystery Cave State Park conducted a tour for all park and Mystery Cave interpretive staff so they would be aware of the project and able to answer visitor questions and/or include the project in their programming as appropriate.

#### Status as of September 3, 2019

No additional project dissemination has occurred. It is anticipated that a news release will be prepared for the Greenleaf Lake site in spring/summer 2020.

#### Status as of March 16, 2020

No additional project dissemination has occurred. Some sites are remote from public view. It is anticipated that a news release will be prepared for the Greenleaf Lake site in spring/summer 2020 and communication will take place regarding Itasca's project when that work begins.

#### Status as of September 28, 2020

No additional project dissemination has occurred. Some sites are remote from public view. It was determined that a news release wasn't appropriate for the Itasca timber harvest since it is way out of the public view. Staff are providing information to visitors at the park.

#### Status as of March 10, 2021

Accidently failed to include.

#### Status as of August 24, 2021

No additional project dissemination has occurred.

#### Status as of March 3, 2022

No additional project dissemination has occurred.

#### Status as of July 1, 2022

No additional project dissemination has occurred.

# Status as of February 1, 2023

No additional project dissemination has occurred.

# Status as of August 29, 2023

No additional project dissemination has occurred.

Status as of February 1, 2024 No additional project dissemination has occurred.

# Final Report Summary (June 30, 2024)

No additional project dissemination has occurred.

## V. PROJECT BUDGET SUMMARY:

## A. Preliminary ENRTF Budget Overview: See attached budget spreadsheet

Note: More detail than on budget sheet - Direct and Necessary expenses include Department Support Services (Human Resources, IT Support, Safety, Financial Support, Communications Support, and Planning Support). Department Support Services are described in the agency Service Level Agreement and billed internally to divisions based on rate that have been developed for each area of service. These services are directly related to and necessary for the appropriation. Department leadership services (Commissioner's Office and Regional Directors) are not assessed. Those elements of individual projects that put little or no demand on support services such as large single-source contracts, large land acquisitions, and funds that are passed through to other entities are not assessed Direct and Necessary costs for those activities.

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

#### Explanation of Use of Classified Staff: N/A

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

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

| Enter Total Estimated Personnel Hours: Still to be | Divide by 2,080 = TOTAL FTE: TBD |
|--|----------------------------------|
| determined   |                                  |

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

| SOURCE OF AND USE OF OTHER FUNDS  | Amount<br>Proposed   | Amount<br>Spent | Status and Timeframe   |  |  |  |
|---|--|-----------------|--|--|--|--|
| Other Non-State \$ To Be Applied To Proj  | Other Non-State \$ To Be Applied To Project During Project Period: |                 |  |  |  |  |
| N/A   |  |                 |  |  |  |  |
| Other State \$ To Be Applied To Project D   | ouring Project   | Period:         |  |  |  |  |
| Conservation Corps MN – assistance<br>with site preparation, seed collection,<br>invasive species control & tree<br>establishment activities (Parks & Trails<br>Legacy)   | \$ 35,000  | \$18,365        | Removal of box elders at Green Leaf<br>Lake SRA. Herbicide application at Jay<br>Cooke to prepare the site and tree<br>planting at Forestville site.   |  |  |  |
| DNR resource specialist & supervisor<br>time directed at this forest habitat<br>restoration project. Activities include<br>contract administration and oversight,<br>planning and directing staff, purchasing<br>and deploying supplies, and site visits<br>(General Fund, Parks & Trails Legacy) | \$21,000   | \$21,000        | District Resource Specialist time –<br>oversight, coordination of resource<br>laborers at park. Resource laborer time.<br>Hauling equipment to site. Resource<br>Program Supervisor – budget oversight,<br>report preparation. |  |  |  |
| Additional materials: tree seedlings, mats, etc.  | 0  | \$1,600         | Also includes \$1,600 additional tree/mat purchase.  |  |  |  |

| Natural resource surveys critical for the project. (General Fund, Parks & Trails Legacy). | \$0 | \$9,200 | Bat roost tree survey needed to avoid<br>impacts to roost trees during aspen<br>harvest. |
|---|-----|---------|--|
|   |     |         |  |

| Past and Current ENRTF Appropriation: |        |        |  |  |
|---------------------------------------|--------|--------|--|--|
|                                       | \$ N/A | \$ N/A |  |  |
| Other Funding History:                |        |        |  |  |
|                                       | \$ N/A | \$ N/A |  |  |

#### **VI. PROJECT PARTNERS:**

#### A. Partners receiving ENRTF funding

| Name | Title | Affiliation | Role |
|------|-------|-------------|------|
| N/A  |       |             |      |

#### **B.** Partners NOT receiving ENRTF funding

| Name | Title | Affiliation | Role |
|------|-------|-------------|------|
| N/A  |       |             |      |

#### VII. LONG-TERM- IMPLEMENTATION AND FUNDING:

The Parks and Trails Division has an excellent track record of implementing and managing high quality native plant community restorations. The Division has restored more than 3,500 acres of high-quality forests over the past 10 years. This project will significantly increase the amount of forest habitat the Parks and Trails Division restores annually, while also providing critical habitat to Minnesota's *Species of Greatest Conservation Need*. A coarse filter analysis suggests that there are ≥ 25,000 acres of Parks and Trails administered lands that are in need of restoration to appropriate forested native plant communities. These lands are presently old fields, areas of declining aspen, conifer plantations, agricultural land, and similar sites. This project helps accelerate forest restoration efforts by providing funding needed to restore nearly the equivalent of a year's forest restoration acres and aids in meeting statutory direction to preserve and perpetuate natural features that existed in the area of the park prior to [European] settlement. Lastly, this project will reduce the amount of land encumbered by agricultural lease or cooperative farming agreements on Parks and Trails lands by 50 acres, improving wildlife habitat and potentially improving the quality of nearby surface water.

#### **VIII. REPORTING REQUIREMENTS:**

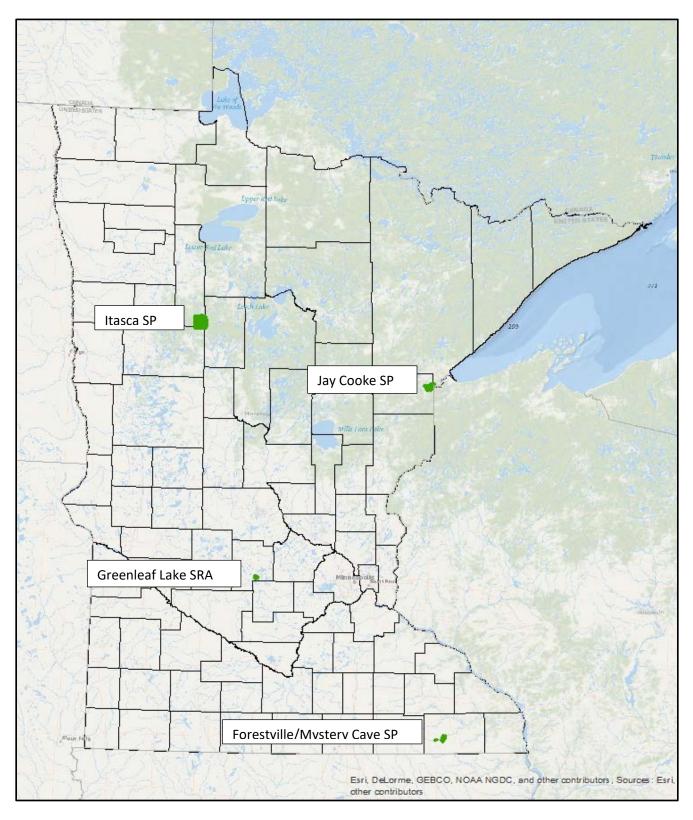
- The project is for 5 years, will begin on July 31, 2018, and end on June 30, 2024.
- Periodic project status update reports will be submitted February 1<sup>st</sup> and July 1st of each year.
- A final report and associated products will be submitted between June 30 and August 15, 2024.

#### IX. SEE ADDITIONAL WORK PLAN COMPONENTS:

- A. Budget Spreadsheet see attached
- **B. Visual Component or Map** see attached map
- C. Parcel List Spreadsheet see attached
- D. Acquisition, Easements, and Restoration Requirements see below
- E. Research Addendum N/A

#### B. Restoring Minnesota's Forests in State Parks (182-F) – Project Location Map

Forestville/Mystery Cave State Park (Fillmore) – 65 acres Greenleaf Lake State Recreation Area (Meeker) – 10 acres Itasca State Park (Clearwater) – 150 acres Jay Cooke State Park (Carlton) – 30 acres



## D. Acquisition, Easements, and Restoration Requirements

- All of these restoration efforts are in public ownership within state parks or state recreation areas. They
  are planned and implemented by Division of Parks & Trails resource specialists with extensive experience in
  and knowledge of MN's natural communities and restoration practices. These restorations will
  meet/exceed the guidance for forest restorations contained in BWSR's Native Vegetation Establishment
  and Enhancement Guidelines (2017). In addition, MNDNR has several operational orders that provide
  specific direction to staff conducting restoration projects and for tasks involved in the restoration process.
  Examples include: Operational Order #124 (Plant Material Standards for Native Plant Community
  Restoration), Operational Order # 130 (Pollinator Habitat), Operational Order #113 (Preventing the
  Introduction & Spread of Invasive Species) and Operational Order #59 (Pesticide Use).
- Site level plans have been, or are in process of being prepared for each of the four locations.
- The Division of Parks and Trails is mandated by statute (MS 86A.05 subd. 2c) to preserve and perpetuate natural features present in state parks prior to [European] settlement as well as other significant natural, scenic, scientific and historic features and to reintroduce species once present that are now missing. It is the responsibility of the divisions' Resource Management Program to insure that long term maintenance and management needs of these restorations are addressed. The Parks and Trails resource management program has been in place since 1978 and has adequate funding through a variety of sources to meet the needs of these sites.
- As noted in the budget, Conservation Corps of MN will assist with site preparation, seed collection, invasive species control and establishment activities. Monies for these efforts will come from Parks and Trails Legacy funding.
- Individual project leads at each of the four sites understand that an initial evaluation is required at the end of the appropriation (6/3/2024) and a follow-up evaluation three years later.

Attachment C:

Environment and Natural Resources Trust Fund M.L. 2018 Acquisition/Restoration Parcel List Spreadsheet Project Title: Restoring Minnesota's Forests in State Parks Legal Citation: M.L. 2018, Chp. 214, Art. 4, Sec. 02, Subd. 08e Project Manager: Louis Peterson Organization: MN Dept. of Natural Resources College/Department/Division: Division of Parks and Trails M.L. 2018 ENRTF Appropriation: Project Length and Completion Date: 6 years, June 30, 2024 Todays's Date: 08/13/2024

| 43 | 13 37'             | Longitude<br>92 14'  | Cost  | Liabilities                    | County                             | benefits)  |   |   | # of<br>Shorelin  | organization,<br>for-profit   | Easement<br>Holder  | negotiations, no longer in consideration, restoration  |
|----|--------------------|----------------------|---|--------------------------------|------------------------------------|--|---|---|---|---|---|--|
|    |                    | 92 14'               |   |                                |                                    |  | preparation, restoration)   | # of Acres  | e Miles   | entity)   | (if applicable)   | activities underway)   |
|    |                    | 35.20"W              | \$ 43,302   | N/A                            | Fillmore                           | Restoring multiple old field sites to mesic<br>hardwoods. This will increase the amount and<br>connectivity of forested native plant<br>communities and associated wildlife.                                     | Restoration   | 65  | N/A   | State of MN   | N/A   | Project completed.   |
| -  |                    | 94° 27'<br>50.663" W | \$ 10,000   | N/A                            | Meeker                             | Restoring a former agricultural field to mesic<br>hardwoods. This will increase the amount and<br>connectivity of forested native plant<br>communities and associated wildlife.                                  | Restoration   | 10  | N/A   | State of MN   | N/A   | Project completed.   |
|    | 17°9'14.60<br>'''N |                      | \$ 158,260  | N/A                            | Clearwater                         | Restoring an area to a mixed hardwood/pine<br>native plant community. This area was logged<br>prior to park ownership and currently is in<br>aspen.  | Restoration   | 150   | N/A   | State of MN   |   | Fence installation<br>completed. Release<br>contract completed. Small<br>amounts of budcapping<br>and tree cageing to happen<br>in the future. Project<br>completed.   |
|    |                    |                      | \$ 30,000   | N/A                            | Carlton                            | Restoring an area currently in agricultural lease<br>to a forested native plant community. This<br>will increase the amount and connectivity of<br>forested native plant communities and<br>associated wildlife. | Restoration   |   |   | State of MN   |   | 4,000 seedlings were<br>interplanted in May. Some<br>white pine will be caged<br>this season and the site<br>will be bud-capped this fall.<br>Project completed.   |
| 46 |                    |                      | -   |                                |                                    |  |   | 255   |   |   |   |  |
|    | 4                  | 46° 39'3.4"          | 92°<br>46° 39'3.4" 23'17.2"<br>Necessary costs of \$8,438 not i | 46° 39'3.4" 23'17.2" \$ 30,000 | 46° 39'3.4" 23'17.2" \$ 30,000 N/A | 46° 39'3.4" 23'17.2" \$ 30,000 N/A Carlton   | to a forested native plant community. This<br>will increase the amount and connectivity of<br>forested native plant communities and | 46° 39'3.4"       23'17.2"       \$ 30,000       N/A       Carlton       to a forested native plant community. This will increase the amount and connectivity of forested native plant communities and associated wildlife.       Restoration | 46° 39'3.4"       23'17.2"       \$ 30,000       N/A       Carlton       to a forested native plant community. This will increase the amount and connectivity of forested native plant communities and associated wildlife.       Restoration       30         46° 39'3.4"       23'17.2"       \$ 30,000       N/A       Carlton       associated wildlife.       Restoration       30 | 46° 39'3.4"       23'17.2"       \$ 30,000       N/A       Carlton       to a forested native plant community. This will increase the amount and connectivity of forested native plant communities and associated wildlife.       Restoration       30       N/A         46° 39'3.4"       23'17.2"       \$ 30,000       N/A       Carlton       associated wildlife.       Restoration       30       N/A | 46° 39'3.4"23'17.2"\$ 30,000N/ACarltonto a forested native plant community. This<br>will increase the amount and connectivity of<br>forested native plant communities andRestoration30N/AState of MN46° 39'3.4"23'17.2"\$ 30,000N/ACarltonassociated wildlife.Restoration30N/AState of MN | 46° 39'3.4"       23'17.2"       \$ 30,000       N/A       Carlton       to a forested native plant community. This will increase the amount and connectivity of forested native plant communities and associated wildlife.       Restoration       30       N/A       State of MN       N/A |



Environment and Natural Resources Trust Fund M.L. 2018 Budget Spreadsheet Project Title: Restoring Forests in Minnesota State Parks Legal Citation: M.L. 2018, Chp. 214, Art. 4, Sec. 02, Subd. 08e Project Manager: Louis Peterson Organization: MN Dept. of Natural Resources College/Department/Division: Division of Parks & Trails M.L. 2018 ENRTF Appropriation:

Project Length and Completion Date: 6 years, June 30, 2024

Date of Report: 08/13/24



|  | Revised Budget |              |               |
|--|----------------|--------------|---------------|
| ENVIRONMENT AND NATURAL RESOURCES TRUST FUND BUDGET  | 2/2/23         | Amount Spent | Balance       |
| BUDGET ITEM  |                |              |               |
| Personnel (Wages and Benefits)   | \$5,000        | \$2,191      | \$2,809       |
| Seasonal labor staff equivalent to a total of 0.1 FTE. 70%                                 |                |              |               |
| salary/30% benefits. Existing staff will assist with site preparation,                     |                |              |               |
| planting/seeding, and restoration establishment activities.                                |                |              |               |
|  |                |              |               |
| Professional/Technical/Service Contracts - Overall   |                |              |               |
| Site preparation contracts - these will be selected via state contract                     |                |              |               |
| or locally for activities such as disking and broadcast herbicide                          |                |              |               |
| application as well as required archaeological review. (Total estimated amount - \$48,000) | \$37,000       | \$36,658     | \$342         |
| Tree planting and seeding service contracts - these will be via state                      | \$37,000       | \$30,038     | Ş <b>3</b> 42 |
| contract or selected locally and plant seedlings or direct seeding.                        |                |              |               |
| (Total estimated amount - \$39,000)  | \$29,000       | \$28,827     | \$173         |
| Restoration management services - these will be selected via state                         | \$25,000       | 720,027      | Ş175          |
| contract selected locally. Examples of services provided: bud-                             |                |              |               |
| capping, application of deer deterrents, mechanical conifer release,                       |                |              |               |
| high mowing. (Total estimated amount - \$28,000)   |                |              |               |
|  | \$56,750       | \$26,694     | \$30,056      |
| Deer exclosure construction contract - this contract is for Itasca and                     |                |              |               |
| will be selected locally. (Total estimated amount - \$23,000)                              |                |              |               |
|  | \$11,700       | \$11,600     | \$100         |
|  |                |              |               |
| Equipment/Tools/Supplies - Overall   |                |              |               |
| Site Preparation Supplies (Total estimated amount - \$5,000)                               | \$5,000        | \$1,131      | \$3,869       |
| Plants, Seeds, and Planting Supplies (Total estimated amount -                             |                |              |               |
| \$37,000)  | \$50,000       | \$47,302     | \$2,698       |
| Fencing Supplies (Total estimated amount - \$42,000)                                       | \$47,112       | \$47,112     | \$0           |
| Other  |                |              |               |
| Additional Budget Items: *Direct and necessary expenses: HR                                |                |              |               |
| Support (~\$891), Safety Support (~\$205), Financial Support                               |                |              |               |
| (~\$3156), Communications Support (~\$1,271), IT Support (\$1845),                         |                |              |               |
| Planning Support (~\$1,072) necessary to accomplish funded project.                        |                |              |               |
|  | \$8,438        |              |               |
| COLUMN TOTAL   | \$250,000      | \$206,647    | \$43,353      |