For the Period Ending June 30, 2022, Project Abstract

PROJECT TITLE: State Parks for Monarchs and other Native Pollinators PROJECT MANAGER: Edward Quinn AFFILIATION: MN Department of Natural Resources MAILING ADDRESS: 500 Lafayette Road, Box 39 CITY/STATE/ZIP: St. Paul, MN 55155 PHONE: 651-259-5594 E-MAIL: Edward.Quinn@state.mn.us WEBSITE: https://www.dnr.state.mn.us/ FUNDING SOURCE: Environment and Natural Resources Trust Fund LEGAL CITATION: M.L. 2017, Chp. 96, Sec. 2, Subd. 08d as extended by M.L. 2021, First Special Session, Chp. 6, Art. 6, Sec. 2, Subd. 18 AND M.L. 2021, First Special Session, Chp. 6, Art. 6, Sec. 2, Subd. 18. ENVIRONMENT AND NATURAL RESOURCES TRUST FUND; EXTENSIONS. [to June 30, 2022] APPROPRIATION AMOUNT: \$672,000 AMOUNT SPENT: \$660,288 AMOUNT REMAINING: \$11,712

Sound bite of Project Outcomes and Results

This project restored approximately 520 acres of prairie/pollinator habitat in eight state parks where it will be permanently managed and protected. Additionally, educational pollinator plantings ranging in size from tenths of an acre to more than an acre were installed with engaging multi-sensory ADA-accessible interpretive exhibits at ten state parks.

Overall Project Outcome and Results

Many species of pollinators are declining due primarily to habitat loss/degradation, diseases and parasites and pesticide exposure. This project focused on restoring 584 (520 originally planned) acres of prairie/pollinator habitat in eight state parks where it will be permanently managed and protected. Additionally, this project helped raise awareness about pollinators by establishing educational pollinator plantings from tenths of an acre to more than one acre in size with engaging multi-sensory ADA-accessible interpretive exhibits at 10 state parks.

Sites selected for habitat restorations were all within core areas identified in the Minnesota Prairie Conservation Plan. The sites themselves were former agricultural fields in state parks that contained non-native and invasive species. Site preparation included activities such as prescribed fire, control of invasive/problem species, woody stem removal, and disking. At Lake Bronson and Glacial Lakes State Parks, removal of encroached woody vegetation was the primary need to restore pollinator habitat through shearing/timber harvest. Following planting, sites were high mowed, spot treated for invasives and inter-seeded to ensure successful restorations. These sites will provide habitat for many species of pollinators such as bees, moths, and butterflies. For example, a recent study of prairie restorations at Glendalough State Park found more than 25 species of butterflies utilizing the restorations, including the Regal Fritillary, a Minnesota Special Concern Species. This project will also assist in meeting the goals of the Mid-America Monarch Conservation Strategy.

Educational pollinator plantings and exhibits were installed at 10 state parks within all but the Laurentian Mixed Forest Province. Interpretive exhibits were designed and constructed in cooperation with an exhibit contractor. Where needed educational plantings were established similar to the steps above albeit on a much smaller scale. Annual visitation at these 10 parks combined totals over three million visits annually.

Project Results Use and Dissemination

• Educational pollinator plantings and exhibits provide an opportunity for millions of visitors annually to learn more about pollinators and the plant species which attract them. Attendance at these 10 parks combined is

over three million visitors per year. The exhibits are regularly used by thousands of visitors per week based on park attendance and staff reports.

- The exhibit design was entered in the National Association of Interpretive Naturalists 2021 Media Awards competition and earned first place in the Outdoor Exhibits category. The award presentation was broadcast to over 800 interpretive professionals in December of 2021.
- In summers of 2020 and 2021 this project was highlighted on the DNR Parks and Trails social media platforms as part of a monthly theme on butterflies. The 2021 campaign reached 33K Twitter followers and 151K Facebook followers.



Date of Submission: 9/01/22 Final Report Date of Work Plan Approval: May 31, 2017 Project Completion Date: June 30, 2022

PROJECT TITLE: State Parks for Monarchs and other Native Pollinators

Project Manager: Edward Quinn
Organization: MN Dept. of Natural Resources, Division of Parks and Trails
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Location: Big Stone, Blue Earth, Chisago, Clay, Dakota, Douglas, Freeborn, Kandiohyi, Lyon, Nicollet, Rock, Winona, Yellow Medicine, Washington

Total ENRTF Project Budget:	ENRTF Appropriation:	\$672,000
	Amount Spent:	\$660,288
	Balance:	\$11,712

Legal Citation: M.L. 2017, Chp. 96, Sec. 2, Subd. 08d as extended by M.L. 2021, First Special Session, Chp. 6, Art. 6, Sec. 2, Subd. 18

Appropriation Language:

\$672,000 the first year is from the trust fund to the commissioner of natural resources to restore at least 520 acres of monarch butterfly and other native pollinator habitats in at least seven state parks in the Minnesota Prairie Conservation Plan core areas and establish pollinator plantings and interpretive exhibits in at least ten state parks. This appropriation is available until June 30, 2021, by which time the project must be completed and final products delivered.

M.L. 2021, First Special Session, Chp. 6, Art. 6, Sec. 2, Subd. 18. ENVIRONMENT AND NATURAL RESOURCES TRUST FUND; EXTENSIONS. [to June 30, 2022]

I. PROJECT TITLE: State Parks for Monarchs and other Native Pollinators

II. PROJECT STATEMENT:

This project will restore 520 acres of additional habitat for Monarch butterflies and other native pollinators at 8 state parks within MN Prairie Plan Core Areas. Parks include: Big Stone, Blue Mounds, Camden, Ft. Ridgely, Glacial Lakes, Lake Bronson, Sibley, and Upper Sioux Agency. Additionally, at 10 parks educational pollinator plantings of ¼-1 acre+ will be established with interpretive exhibits. Proposed parks for educational pollinator plantings (final selection to be completed by fall, 2017) include: Afton, Buffalo River, Flandrau, Fort Snelling, Lake Carlos, Minneopa, Myre-Big Island, Whitewater, Wild River and William O'Brien. At these sites, visitors will become more aware of native pollinators, where to see them in parks and especially what they can do at their homes to help support Monarch/pollinator conservation.

These efforts are needed to help stop the decline of Monarch butterflies and other native pollinators. Recent surveys suggest that eastern populations of Monarch butterflies have declined 90% from the 20-year average. Additionally, declines have also been observed in many other native pollinator species, such as wild bees and butterflies. In MN, the bulk of these rare pollinators occur in the Prairie Parkland & Aspen Parkland provinces of the state. One of the major factors causing these declines for which there is convincing evidence is habitat degradation and loss.

Restorations will begin with site preparation activities such as prescribed fire, control of invasive/problem species, woody stem removal and disking. Planting will occur once site preparation is completed. Establishment tasks such as mowing, spot invasives control and interseeding/planting will take place following planting to insure successful restorations. Additionally, at educational pollinator planting sites, themes/text will be developed, exhibits will be designed and produced and finally installed as plantings are completed.

It is expected that thousands of Monarchs and other native pollinators will benefit from the additional habitat provided by this project. In addition, over three million visitors annually will have the opportunity to see and learn more about native pollinators and what they can do to help support Monarch/pollinator conservation.

III. OVERALL PROJECT STATUS UPDATES:

Project Status as of February 1, 2018:

This update was not required.

Project Status as of July 1, 2018 (September 2018):

ACTIVITY 1: Restore 520 acres of habitat for Monarchs & other native pollinators at 6 state parks Work is now underway at all six sites. Site preparation (mowing, shearing, burning, herbicide application) has been accomplished at all other state park locations. Seed collection is underway for planting next year at four locations and two sites have already been wholly or partially planted.

ACTIVITY 2: Establish educational pollinator plantings and design/install engaging multi-sensory ADA-accessible interpretive exhibits at 10 state park locations

Visits were conducted to all 10 locations by DNR staff from development, engineering, interpretation, resource management and park operations to further clarify initial ideas for the location of each educational pollinator planting, exhibit and ADA accessibility needs. One location has been reviewed by archaeologists to prevent potential impacts to cultural resources as a result of exhibit/access construction or prairie/pollinator planting. Cultural resource review will be completed at the remaining nine sites this fall or next spring. Interpretive themes have been identified and content is being developed.

Project Status as of: April 17, 2019:

ACTIVITY 1: Restore 520 acres of habitat for Monarchs & other native pollinators at 7 state parks Site preparation (mowing, shearing, burning, herbicide application) has been completed or continues at all seven sites. Issues finding contractors to accomplish shearing work at Lake Bronson have delayed progress on work at this location. Planting of at least a portion of the acres to be restored has been completed at four locations.

ACTIVITY 2: Establish educational pollinator plantings and design/install engaging multi-sensory ADA-accessible interpretive exhibits at 10 state park locations

Design work and cost estimates for site work at all ten state park locations are nearly completed. Remaining cultural resource review is scheduled for the 2019 field season. Park managers are working on scheduling staff and contractors to conduct site work with some starting this field season. A contract with an exhibit vendor has been finalized and work on design will now begin. Next steps include finalizing messages and designing exhibit concept. Final design will dictate installation complexity and inform installation timeline.

Amendment Request (04/17/19)

We are requesting a change in the amount of acreage to be restored at two state parks identified in Activity 1. Originally 50 acres of restoration was planned for Blue Mounds State Park in the work plan. Subsequent to work plan approval, the division determined that much of the Blue Mounds site should be incorporated into a larger stream and uplands restoration project taking place at the park being funded separately. Our proposal is to reduce the amount of acres restored at Blue Mounds via this project to 5 acres and increase the amount of acres to be restored at Big Stone Lake State Park from 50 acres to 95 acres. This change would not affect the total number of pollinator/prairie acres restored or the park locations identified in the work plan. *Amendment Approved by LCCMR 6/10/2019*

Project Status as of November 26, 2019:

ACTIVITY 1: Restore 520 acres of habitat for Monarchs & other native pollinators at 7 state parks Cultural resource investigation at sites where needed is underway and will be completed in early 2020. Site preparation or shearing and planting has been completed at three state parks. Activities are underway at three parks. Work has not been initiated at two parks (one of which is proposed to be included in the amendment.

ACTIVITY 2: Establish educational pollinator plantings and design/install engaging multi-sensory ADA-accessible interpretive exhibits at 10 state park locations

Design work and cost estimates for site work at all ten state park locations are completed. All units have been given the go-ahead to initiate construction when weather permits. Cultural resource investigation fieldwork has been completed at all 10 educational pollinator sites. Reports are being prepared. A response is expected from the State Historic Preservation Office by spring 2020. The company contracted to design the exhibits is at the 90% design phase. Interpretive staff are currently coordinating with the design company to create the specific messages and modifying detailed design elements. Audio is being incorporated into the exhibits to enhance the experience for visitors with limited or no vision. It is expected that exhibits will be installed during the summer of 2020.

Amendment Request (11/26/19)

We are requesting changes to the acreage being restored at three parks identified in Activity 1 and the addition of a park (Ft. Ridgely) also in the MN Prairie Plan Core Area. These changes are being requested to address site level challenges and still meet project goals. Total acreage anticipated to be restored remains the same. We are also requesting a change in the project end date to the same date as funding expires (6/30/21). This will provide further time to establish restoration sites ensuring their success. We are also proposing the following changes in the budget.

Activity	Item	Current Amt.	Prop. Amt.	Reason
1	Seasonal Labor	\$30,000	\$36,000	Use DNR labor, equipment to complete shearing work.
1	Shearing contracts – L Bronson	\$82,000	\$17,000	Shearing contractors not available/interested.
1	Pur. Service-site prep at Sibley	\$10,000	\$1,055	Issues finding local contractors, doing in-house.
1	Prairie seed purchase	\$99,000	\$139,000	Major increase in seed prices
2	Seasonal Labor	\$0	\$40,000	Installation of paths, viewing area & exhibits in many cases will be done by staff. Geographic spread of sites statewide makes it difficult to contract.
2	Cult. Resource review –ed. Sites	\$10,000	\$19,203	Add. Investigations necessary as site boundaries revised.
2	MNDNR Engineering design	\$12,000	\$34,000	Additional engineering needed to address alt. site selection within units.
2	Prof/Tech contract for exhibit design & construction	\$100,000	\$110,000	Additional costs involved evaluating other design elements.
2	Contract to install ADA-accessible exhibits	25,000	\$35,000	Increase in cost for materials and labor over three years since estimate was created. Some sites are more complex than previously anticipated.
2	Establish educational poll. Plantings	\$93,258	\$30,000	Final selection of educ. Sites included locations with restorations already established or to be done in- house.

Amendment approved by LCCMR 01/23/2020

Project Status as of August 17, 2020:

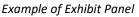
ACTIVITY 1: Restore 520 acres of habitat for Monarchs & other native pollinators at 7 state parks Site preparation and planting has been completed at three state parks (Big Stone, Camden and Upper Sioux Agency)and will be finished at Sibley very soon.. Establishment mowing, spot treatment of invasives and interseeding continues at these parks. Mulching and removal of invasives is largely completed at Glacial Lakes and is underway at Lake Bronson. See details for each park under Activity 1 Status below.

ACTIVITY 2: Establish educational pollinator plantings and design/install engaging multi-sensory ADA-accessible interpretive exhibits at 10 state park locations

Cultural resource review has been completed at all 10 educational pollinator sites. The exhibit contractor and DNR have finished 100% design of exhibits and moved to fabrication of exhibits. An audio description track has been recorded to describe and read the exhibit for the visually impaired. It is expected that exhibits will be installed beginning the fall of 2020.



Example of Exhibit Design



Amendment Request as of September 22, 2020

We are requesting an amendment to the budget to move \$30,000 from Row 15 (*20 seasonal Laborer or Buildings & Grounds Workers...*) in Activity #2 to a new row 27 (*Materials needed for installing and providing access to exhibits*). This is needed to allow State Parks to purchase the materials needed to install and provide access to the exhibits. Previously, we anticipated that supplies would have been part of installation contracts but with most parks indicating that they could do the installations more efficiently, a separate line is needed for supplies.

Amendment Approved by LCCMR 10/6/2020

Project Status as of: March 4, 2021:

ACTIVITY 1: Restore 520 acres of habitat for Monarchs & other native pollinators at 8 state parks Site preparation and planting has been completed at four state parks (Big Stone, Camden, Sibley and Upper Sioux Agency). Establishment mowing, spot treatment of invasives and inter-seeding continues at these parks. Site preparation and planting is underway at Blue Mounds and Ft. Ridgely. Mulching and removal of invasives is largely completed at Glacial Lakes and is underway at Lake Bronson. See details for each park under Activity 1 Status below.

ACTIVITY 2: Establish educational pollinator plantings and design/install engaging multi-sensory ADA-accessible interpretive exhibits at 10 state park locations

All sites that needed planting have been completed with the exception of Flandrau. Site preparation there is underway with seeding this spring. All 10 educational pollinator exhibits have been produced and shipped to state parks for installation. One has been installed at Flandrau State Park. Others are expected to be installed this spring.

Amendment Request as of March 05, 2021

We are requesting an amendment to the budget to provide additional funding for purchase of prairie/pollinator seeds for Activity #1 restoration sites. The Covid-19 pandemic hampered our ability to collect the necessary seed for the remaining restoration sites and interseeding so we are seeking approval to move funds from the categories shown below to the seed purchase category to be increased to meet this need.

We are also seeking permission to move monies from two categories in Activity #2 to meet the need for additional contract work in Activity #1.

Address need for Additional \$\$ for Seed Purchase

Activity	Item	Current Amt.	Prop. Amt.	Reason
& Row				
#				
Act. 1,	Seasonal Labor	\$90,000	\$65,000	DNR labor needed less than
Row 14				planned, move balance to
				seed purchase.
Act. 1,	Herbicides			Less herbicide needed than
Row 28				planned, move balance to
		\$8,769	\$3 <i>,</i> 169	seed purchase.
Act. 1,	Restoration supplies			Less rest. Supplies needed
Row 29				than planned, move balance
		\$12,814	\$6,014	to seed purchase.
Act. 1,	Prairie seed purchase			Increased \$\$ to purchase
Row 30		\$139,000	\$176,600	more seed- expl. Above.

Address need for Additional \$\$ for Restoration Contract Costs

Activity & Row	Item	Current Amt.	Prop. Amt.	Reason
# Act. 2, Row 23	Exhibit contract	\$110,000	\$97,000	Contract complete. Move \$13,000 to restoration contracts.
Act. 2 <i>,</i> Row 25	Establishing educational plantings.	\$30,000	\$26,000	Some sites being done with PAT labor. Moving \$4,000 to restoration contracts.
Act. 1 <i>,</i> Row 18	Shearing/mowing contracts	\$17,000	\$34,000	Needed increase to cover additional contract restoration work.

Amendment Approved by LCCMR 03/10/2021

Project extended to June 30, 2022 by LCCMR 6/30/21 as a result of M.L. 2021, First Special Session, Chp. 6, Art. 6, Sec. 2, Subd. 18, legislative extension criteria being met.

Project Status as of September 2021:

ACTIVITY 1: Restore 520 acres of habitat for Monarchs & other native pollinators at 8 state parks Work has largely been completed at six of the eight state parks included in the project. At these sites, establishment/maintenance work such as mowing, inter-seeding, spot invasives management and burning are on-going to maintain/improve prairie quality. Blue Mounds and Ft. Ridgely were added to the project later so are a little farther behind though both units are nearing completion with nearly all acres planted and establishment activities initiated. See details for each park under Activity 1 Status below.

ACTIVITY 2: Establish educational pollinator plantings and design/install engaging multi-sensory ADA-accessible interpretive exhibits at 10 state park locations

All 10 educational pollinator exhibits have been produced and shipped to state parks for installation. Five sites have exhibits fully installed. One will be installed when drought damaged vegetation emerges. The remaining ones are expected to be installed by June 30th 2022.

Installation Status- as of 8/10/21

- 1. Myre-Big Island: Installed
- 2. Flandrau: Installed
- 3. Whitewater State Park: Installed
- 4. Wm O'Brien State Park: Installed
- 5. Afton State Park: Installed Pending

Lake Carlos State Park Buffalo River State Park Minneopa State Park Fort Snelling State Park Wild River State Park



Project Status as of March 9, 2022:

ACTIVITY 1: Restore 520 acres of habitat for Monarchs & other native pollinators at 8 state parks Planting has been completed at all eight state parks except for Ft. Ridgely which was a later addition to the project. Seeding there will take place this spring. At the other seven locations, establishment/maintenance work such as mowing, inter-seeding, spot invasives management and burning are on-going to maintain/improve prairie quality and will continue as needed beyond project end to ensure success of these restorations. See details for each park under Activity 1 Status below.

ACTIVITY 2: Establish educational pollinator plantings and design/install engaging multi-sensory ADA-accessible interpretive exhibits at 10 state park locations

All 10 educational pollinator exhibits have been produced and shipped to state parks for installation. Seven sites have exhibits fully installed. Some final site work is still being completed using Parks & Trails Division funding Remaining exhibits will be installed by June 30th 2022.

Installation Status- as of 3/10/22

- 1. Afton State Park: Installed
- 2. Buffalo River State Park
- 3. Flandrau State Park: Installed
- 4. Minneopa State Park: Installed
- 5. Myre-Big Island: Installed
- 6. Whitewater State Park: Installed
- 7. Wm O'Brien State Park: Installed

Pending

- 1. Lake Carlos State Park
- 2. Fort Snelling State Park
- 3. Wild River State Park

Amendment Request as of March 10, 2022



We are requesting an amendment to the budget primarily to provide additional funding for purchase of prairie/pollinator seeds and fleet costs for Activity #1 restoration sites. The Covid-19 pandemic hampered our ability to collect the necessary seed for restoration sites and seed costs for locally sourced seed of the species needed have increased two-three times that when the project was initiated. We are seeking approval to move funds from the categories shown below to align with labor, fleet costs and seed purchase as we near the conclusion of the project. These revisions include changes to both Activity #1 and Activity #2. Activity #2 is nearly completed (remaining costs will be borne by the division) so we are seeking to move all but \$540/labor to assist with completion of the prairie/pollinator restoration sites.

Activity	Item	Current Amt.	Prop. Amt.	Reason
Act. 1,	Full-time staff	\$0	\$2,186	Seasonal staff aren't working at time or directed
Row 13				to other duties.
Act. 1,	Seasonal labor	65,000	45,774	C-19 hiring restrictions delayed/reduced
Row 15	Region 4			seasonal hiring in Region 4 so full-time staff had
				to implement project tasks.
Act. 1,	Conservation	10,000	\$9,226	Contract completed, move remaining funds to
Row 20	Corps MN-IA			purchase seed.
Act. 1,	Restoration	\$6,014	\$5,532	Supplies obtained, move remainder to assist
Row 30	supplies			with seed purchase.
Act. 1,	Prairie seed	\$176,600	\$226,600	Increase of \$50,000 to purchase additional
Row 31	purchase			required seed for restoration sites. Local source
				seed of species needed have doubled-tripled in
				cost over course of project.
Act. 1,	Travel-fleet	\$59 <i>,</i> 000	\$67,436	Additional funds needed to cover costs of
Row 33				moving equipment among different sites.
Act. 2,	5 Seasonal	\$10,000	\$2,040	Staff largely installed without coding to project,
Row 16	laborers			shifting funds to aid in critical seed purchase.
Act. 2,	Purc. Service	\$35,000	\$2,820	State park staff were able to install without
Row 25	contract- exhibit			needing outside contractor. Shifting funds to aid
	installation			in critical seed purchase and fleet costs.

Additionally, we request to add a category for staff time in the budget (Row 13), as some tasks have not matched the schedules or responsibilities for seasonal staff.

Amendment approved by LCCMR 3/14/2022

Final Report Summary August 2022

Overall Project Outcomes and Results

Many species of pollinators are declining due primarily to habitat loss/degradation, diseases and parasites and pesticide exposure. This project focused on restoring 520 acres of prairie/pollinator habitat in eight state parks where it will be permanently managed and protected. Additionally, this project helped raise awareness about pollinators by establishing educational pollinator plantings from tenths of an acre to more than 1 acre in size with engaging multi-sensory ADA-accessible interpretive exhibits at ten state parks.

Sites selected for habitat restorations were all within core areas identified in the Minnesota Prairie Conservation Plan. The sites themselves were former agricultural fields in state parks that contained non-native and invasive species. Site preparation included activities such as prescribed fire, control of invasive/problem species, woody stem removal and disking. At Lake Bronson and Glacial Lakes State Parks, removal of encroached woody vegetation was the primary need to restore pollinator habitat through shearing/timber harvest. Following planting, sites were high mowed, spot treated for invasives and inter-seeded to ensure successful restorations. These sites will provide habitat for many species of pollinators such as bees, moths, and butterflies. For example, a recent study of prairie restorations at Glendalough State Park found more than 25 species of butterflies utilizing the restorations, including the Regal Fritillary, a MN Special Concern Species. This project will also assist in meeting the goals of the Mid-America Monarch Conservation Strategy.

Educational pollinator plantings and exhibits were installed at ten state parks within all but the Laurentian Mixed Forest Province. Interpretive exhibits were designed and constructed in cooperation with an exhibit contractor. Where needed educational plantings were established similar to the steps above albeit on a much smaller scale. Annual visitation at these ten parks combined totals over three million visits annually.

IV. PROJECT ACTIVITIES AND OUTCOMES:

ACTIVITY 1: Restore 520 acres of habitat for Monarchs & other native pollinators at 8 Budget: \$452,883 state parks

Description: Diverse native prairie will be restored at 8 state parks to provide critical habitat for Monarchs and other native pollinators. Parks include: (acres are approx.): Big Stone Lake (57acres), Blue Mounds (18_acres), Camden (32 acres), Ft. Ridgely (22 acres), Glacial Lakes (50 acres), Lake Bronson (200 acres), Sibley (108 acres) and Upper Sioux Agency (30 acres).

Summary Budget Information for Activity 1:ENRTF Budget: \$452,883Amount Spent:\$441,171Balance:\$ 11,712

Outcome	Completion Date
1. Cultural resource surveys at 7 parks to insure that restoration activities don't	December 2018
negatively impact archaeological sites or other cultural resources.	
2. Site preparation at 7 parks (incl. activities such as prescribed fire, woody stem removal	December 2019
control of invasive species, disking).	
3. Planting of reconstruction sites at these at 7 parks.	July 2020
4. Establishment activities (mowing, spot invasives control, planting of additional species	November 2020
to increase diversity) to insure a successful restoration.	

Activity 1 Status as of February 1, 2018:

This update was not required.

Activity 1 Status as of July 1, 2018 (September 2018):

Work is underway at all sites except Blue Mounds (amendment request to change location). Site preparation (mowing, shearing, burning, herbicide application) has been accomplished at six state park locations. Seed collection is underway for planting next year at four locations and two sites have already been wholly or partially planted.

Activity 1 Status as of April 17, 2019:

Site preparation (mowing, shearing, burning, herbicide application) has been completed or continues at all seven sites. Issues finding contractors to accomplish shearing work at Lake Bronson have delayed progress on work at this location. Planting of at least a portion of the acres has been completed at Big Stone, Camden, Glacial Lakes and Upper Sioux Agency. Seed collection continues to provide material for the additional acres to be planted.

Activity 1 Status as of November 26, 2019:

Cultural resource investigation at sites where needed is underway and will be completed in early 2020. Site preparation or shearing and planting has been completed at Camden, Glacial Lakes and Upper Sioux Agency State Parks. Restoration acreage was as anticipated at Camden and Upper Sioux Agency, but an additional 40 acres was accomplished at Glacial Lakes. Restoration activities are well underway at Big Stone, Blue Mounds and Sibley. Work is anticipated to begin at Ft. Ridgely and Lake Bronson next year.

Project Status as of: August 17, 2020:

Updates on the status of the project at each park are provided below. **Big Stone SP (57 acres):** Site preparation and planting completed. Some establishment mowing still taking place.

Blue Mounds SP (18 acres): additional acreage was just included at this site (Nov 2019 amendment approved). Two herbicide applications applied to prepare the site for planting.

Camden SP (32 acres): site preparation, planting completed. May still consider an inter-seeding if prescribed burn restrictions are lifted in time.

Ft. Ridgely SP (22 acres): This location was just added to the project (Nov 2019 amendment approved). Work is anticipated to start this fall.

Glacial Lakes SP (50 acres): Shearing of encroaching woody vegetation and invasive species management completed on 90 acres to restore native prairie.

Lake Bronson SP (200 acres): Challenges have remained in finding suitable contractors. Management to remove encroaching woody vegetation from overgrown savanna on 22 acres has been completed. There will likely be an additional 100 acres mulched by the end of the calendar year. Work is on track to complete the 200 acres estimated for the park at the beginning of the project with perhaps some additional savanna recovered as well.

Sibley SP (108 acres): Site preparation and planting completed on 87 acres. Establishment mowing is taking place as needed. The remaining 22 acres has been treated twice with herbicide to prepare the site for planting.

Upper Sioux Agency SP (32 acres): Site preparation and planting completed. Some establishment mowing still taking place as needed.

L — Frost seeding — Upper Sioux Agency

M - Culti-packing at Sibley State Park

R - CCMI Member seed collection







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Example of recovered prairie at Lake Bronson state park.



Project Status as of: March 4, 2021:

Updates on the status of the project at each park are provided below.

Big Stone SP (57 acres): Previously planted, but having issues controlling Kentucky bluegrass. Will burn/spray with grass only herbicide and interseed additional pollinator species on 40 acres.

Blue Mounds SP (18 acres): additional acreage was included at this site as of Nov 2019 approved amendment. 18 acres sprayed for site prep. Additional site prep is needed before seeding in spring 2021. Additional seed needs to be purchased due to staff/CCM limitations during Covid prevented hand collecting.

Camden SP (32 acres): site preparation, planting completed. Planning to burn spring 2021 if restrictions are lifted in time then interseed additional pollinator species.

Ft. Ridgely SP (22 acres): This location was just added to the project as of Nov 2019 approved amendment. 15.6 acres seeded fall 2020, remaining acres sprayed for site prep. Some seed collected, but remainder to be purchased.

Glacial Lakes SP (50 acres): Shearing of encroaching woody vegetation and invasive species management completed on 90 acres to restore native prairie.

Lake Bronson SP (200 acres): The Lake Bronson habitat project continued through the fall and winter with an additional 66 acres of brush mulching (total completed by the end of 2020, 88 acres). Mulching will resume when snow melts and we expect to bring the mulched acres total to 150+ acres by June 30, 2021. 6 acres of logging thinned oak woodland back to savanna (22 acres completed June 2020 + 6 = 28 acres completed of 75 planned). Total brushing/tree removal acres anticipated to be completed = 225 acres. Covid-19 issues have and may continue to be problematic. Concerns with fire danger may also effect these targets.

Sibley SP (108 acres): seeding completed in 2020. Establishment mowing to manage weeds will be taking place in 2021.

Upper Sioux Agency SP (32 acres): Site preparation and planting completed. Some establishment mowing still taking place as needed.

Project Status as of September 2021:

Updates on the status of the project at each park are provided below.

Big Stone SP (57 acres): Completed. Establishment/maintenance activities such as mowing, inter-seeding, burning and spot treatment of invasives are continuing as needed.

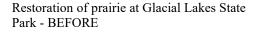
Blue Mounds SP (18 acres): additional acreage was included at this site as of Nov 2019 approved amendment. Entire site is now nearing completion.

Camden SP (32 acres): Completed. Establishment/maintenance activities such as mowing, inter-seeding, burning and spot treatment of invasives are continuing as needed.

Ft. Ridgely SP (22 acres): This location was just added to the project as of Nov 2019 approved amendment. Entire site is now nearing completion.

Glacial Lakes SP (50 acres): Completed. Shearing of encroaching woody vegetation and invasive species management completed on 90 acres to restore native prairie. Maintenance work continues annually using State Parks and Trails

Legacy funding (appx \$12000 annually) to maintain the open nature of the LCCMR funded prairie restoration work.





Restoration of prairie at Glacial Lakes State Park – AFTER mulching/shearing

Lake Bronson SP (200 acres): Logging (67 acres) and shearing (158 acres) of encroaching woody vegetation adjacent to the butterfly critical habitat areas of Lake Bronson SP prairies was completed June, 2021. Maintenance plans include repeat mowing entries in these sites to maintain the open character of this corridor connecting the 2 critical habitat sites. The project restored savanna spacing to an imperiled native plant community adjacent to the butterfly corridor. \$29,000 of Parks and Trails Legacy funds were used to supplement the LCCMR funding for this project. Maintenance mowing will begin fall/winter 2021 and use State Park Legacy funds.



Logging to restore pollinator habitat at Lake **Bronson State Park**



Sibley SP (108 acres): Completed. Establishment/maintenance activities such as mowing, inter-seeding, burning and spot treatment of invasives are continuing as needed.

Upper Sioux Agency SP (32 acres): Completed. Establishment/maintenance activities such as mowing, interseding, burning and spot treatment of invasives are continuing as needed.

Project Status as of March 9, 2022:

Big Stone SP (57 acres): Completed. Establishment/maintenance activities such as mowing, inter-seeding, burning and spot treatment of invasives are continuing as needed thru project end.

Blue Mounds SP (18 acres): Additional acreage was included at this site as of Nov 2019 approved amendment. Site was frost seeded in winter 2021, establishment mowing will be done in spring 2022. Other establishment activities such as spot treatment of invasives and interseeding will continue thru and beyond the end of the project to ensure a successful restoration.

Camden SP (32 acres): Completed. Establishment/maintenance activities such as mowing, inter-seeding, burning and spot treatment of invasives are continuing as needed.

Ft. Ridgely SP (22 acres): This location was just added to the project as of Nov 2019 approved amendment. Due to drought conditions, planting of remaining 10 acres was delayed till spring 2022. Establishment activities such as spot treatment of invasives and interseeding will continue post seeding thru and beyond the end of the project to ensure a successful restoration.

Glacial Lakes SP (50 acres): Completed. Shearing of encroaching woody vegetation and invasive species management completed on 90 acres to restore native prairie. Maintenance work continues annually using State Parks and Trails Legacy funding (appx \$12000 annually) to maintain the open nature of the LCCMR funded prairie restoration work.

Lake Bronson SP (200 acres): Logging (67 acres) and shearing (158 acres) of encroaching woody vegetation adjacent to the butterfly critical habitat areas of Lake Bronson SP prairies was completed June, 2021. Maintenance plans include repeat mowing entries in these sites to maintain the open character of this corridor connecting the 2 critical habitat sites. The project restored savanna spacing to an imperiled native plant community adjacent to the butterfly corridor. \$29,000 of Parks and Trails Legacy funds were used to supplement the LCCMR funding for this project. Maintenance mowing was implemented fall/winter 2021 using State Park Legacy funds.

Sibley SP (108 acres): Completed. Establishment/maintenance activities such as mowing, inter-seeding, burning and spot treatment of invasives are continuing as needed.

Upper Sioux Agency SP (32 acres): Completed. Establishment/maintenance activities such as mowing, interseding, burning and spot treatment of invasives are continuing as needed.

Final Report Summary August 2022

Establishment activities such as spot treatment of invasives, inter-seeding and prescribed burning will/are continuing to ensure successful restoration and maintenance at these sites.

Big Stone SP (57 acres): <u>Completed</u>. Establishment/maintenance activities such as mowing, inter-seeding, burning and spot treatment of invasives are continuing as needed thru project end.

Blue Mounds SP (18 acres): <u>Completed</u>. Additional acreage was included at this site as of Nov 2019 approved amendment. Site was frost seeded in winter 2021, establishment mowing was done in spring 2022. Other

establishment activities such as spot treatment of invasives and interseeding will continue beyond the end of the project to ensure a successful restoration.

Camden SP (32 acres): <u>Completed</u>. Establishment/maintenance activities such as mowing, inter-seeding, burning and spot treatment of invasives are continuing as needed.

Ft. Ridgely SP (22 acres): <u>In-Progress</u>. This location was just added to the project as of Nov 2019 approved amendment. Due to drought conditions, planting of remaining 10 acres was delayed till spring 2022. Establishment activities such as spot treatment of invasives and interseeding will continue post seeding beyond the end of the project to ensure a successful restoration.

Glacial Lakes SP (50 acres, 90 completed): <u>Completed</u>. Shearing of encroaching woody vegetation and invasive species management completed on 90 acres to restore native prairie. Maintenance work continues annually using State Parks and Trails Legacy funding (appx \$12,000 annually) to maintain the open nature of the LCCMR funded prairie restoration work.

Lake Bronson SP (200 acres, 225 completed): <u>Completed.</u> Logging (67 acres) and shearing (158 acres) of encroaching woody vegetation adjacent to the butterfly critical habitat areas of Lake Bronson SP prairies was completed June, 2021. \$29,000 of Parks and Trails Legacy funds were used to supplement the LCCMR funding for this project. Future maintenance includes future/repeat mowing entries in these sites to maintain the open character of this corridor connecting the 2 sites of designated critical habitat.

Sibley SP (108 acres): <u>Completed</u>. Establishment/maintenance activities such as mowing, inter-seeding, burning and spot treatment of invasives are continuing as needed. A portion of the Glacial Lakes State Trail was constructed through the site in 2021 providing visitors a wonderful opportunity to experience the prairie while biking/walking this segment of trail. Staff frost seeded the areas disturbed by the trail in early 2022.

Upper Sioux Agency SP (32 acres): <u>Completed</u>. Establishment/maintenance activities such as mowing, interseding, burning and spot treatment of invasives are continuing as needed.

Activity 2: Establish educational pollinator plantings and design/install engaging multi- Budget: \$219,117 sensory ADA-accessible interpretive exhibits at 10 state park locations.

Description: Exhibits will focus on increasing awareness of native pollinators, state park pollinator habitat, and what visitors can do to help support conservation of Monarchs and other native pollinators. Proposed parks for educational pollinator plantings (final selection to be completed by fall, 2017) include: Afton, Buffalo River, Flandrau, Fort Snelling, Lake Carlos, Minneopa, Myre-Big Island, Whitewater, Wild River and William O'Brien.

Summary Budget Information for Activity 2:

ENRTF Budget:	\$ \$219,117
Amount Spent:	\$ 219,117
Balance:	\$0

Outcome	Completion Date
1. Initiate project team for Monarch/pollinator exhibits	July 2017
2. Finalize site selection.	Sept 2017
3. Cultural resource surveys at 10 parks to insure that the establishment of educational pollinator plantings and exhibit installation don't negatively impact archaeological sites or other cultural resources.	December 2018
4. Develop themes and text for signage.	May 2018
5. Complete site preparation for pollinator plantings	May 2018 July 2018
6. Contract for design and production of exhibits	October 2018

7. MNDNR Operations Services Division conducts engineering reviews.	November 2018
8. Plant educational sites	July 2019
9. Install exhibits as restoration sites are completed	September 2019

Activity 2 Status as of February 1, 2018:

This update was not required.

Activity 2 Status as of July 1, 2018 (September 2018):

Visits were conducted to all 10 locations by DNR staff from development, engineering, interpretation, resource management and park operations to further clarify initial ideas for the location of each educational pollinator planting, exhibit and ADA accessibility needs. One location has been reviewed by archaeologists to prevent potential impacts to cultural resources as a result of exhibit/access construction or prairie/pollinator planting. Cultural resource review will be completed at the remaining nine sites this fall or next spring. Interpretive themes have been identified and content is being developed.

Activity 2 Status as of April 17, 2019:

Design work and cost estimates for site work at all ten state park locations are nearly completed. Remaining cultural resource review is scheduled for the 2019 field season. Park managers are working on scheduling staff and contractors to conduct site work with some starting this field season. A contract with an exhibit vendor has been finalized and work on design will now begin. Next steps include finalizing messages and designing exhibit concept. Final design will dictate installation complexity and inform installation timeline. Approximately \$97,000 has been encumbered for the exhibit contract. Currently exhibit installation is anticipated by June 2020.

Activity 2 Status as of November 26, 2019:

Design work and cost estimates for site work at all ten state park locations are completed. All units have been given the go-ahead to initiate construction when weather permits. Cultural resource investigation fieldwork has been completed at all 10 educational pollinator sites. Reports are being prepared. A response is expected from the State Historic Preservation Office by spring 2020. The company contracted to design the exhibits is at the 90% design phase. Interpretive staff are currently coordinating with the design company to create the specific messages and modifying detailed design elements. Audio is being incorporated into the exhibits to enhance the experience for visitors with limited or no vision. It is expected that exhibits will be installed during the summer of 2020.

Project Status as of: August 17, 2020:

This update was provided above on page 5 under the Overall Project Status section.

Project Status as of: March 4, 2021:

This update was provided above on page 6 under the Overall Project Status section.



Pollinator exhibit installed at Flandrau State Park – installation of access walkway to the display as well as remaining planting efforts will take place in spring 2021.

Project Status as of September 2021:

This update was provided above on page 7 under the Overall Project Status section.

Project Status as of March 10, 2022:

This update was provided above on page 7 under the Overall Project Status section.

Final Report Summary August 2022

Educational pollinator exhibits were produced for 10 state parks. The exhibits use text, tactile elements, and recorded narration to help people engage with pollinators. The exhibits are audio described to add to their accessibility. The exhibits received the 2021 National Association of Interpretation 1st place award for Best Wayside Exhibit. The award presentation was broadcast to over 800 interpretive professionals in December of 2021. A 2021 social media campaign brought attention to the project. The exhibits are regularly used by thousands of visitors per week based on park attendance and staff reports. A Twitter (33K followers) and Facebook (151K followers) campaign in June 2021 highlighted the project during pollinator week.

Status of Educational pollinator Exhibits as of 6/30/22

- 1. Afton State Park: Installed
- 2. Buffalo River State Park: Installed
- 3. Flandrau State Park: Installed
- 4. Minneopa State Park: Installed
- 5. Myre-Big Island: Installed
- 6. Whitewater State Park: Installed
- 7. Wm O'Brien State Park: Installed
- 8. Fort Snelling State Park: Installed
- 9. Lake Carlos State Park: Converted from boardwalk to sled mount, awaiting delivery of sled base, delivery delayed due to supply chain issues.
- 10. Wild River State Park: Awaiting final install.

V. DISSEMINATION:

Description: Visitors to the 10 state parks where educational pollinator plantings will be established will have the opportunity to learn about pollinators, pollinator habitat and how they can help pollinators especially in their own backyards/properties. Approximately 2.5 million visits occur at these sites per year. An additional 700,000 visits take place to the 7 parks where pollinator/prairie habitat will be restored. Information on these efforts will likely also be communicated via state park web pages and other state park communications.

Status as of February 1, 2018:

This update was not required.

Status as of July 1, 2018 (September 2018):

Three courses in prairie management were taught by the Southern Region Regional Resource Specialist. This project was referenced in all three classes.

Status as of April 17, 2019:

No additional dissemination was conducted during this time period.

Status as of November 26, 2019:

No additional dissemination occurred during this time period.

Project Status as of August 17, 2020:

The MNDNR Parks & Trails Outreach Team and Parks & Trails Resource Specialists teamed up to communicate about the project via social media as part of a monthly theme on butterflies. The first week's theme (August

2020) which highlighted the project produced the following statistics for social media platforms used by the division.

<u>Facebook</u>

- People Reached (# of people who saw this post at least once): 27,060
- Reactions (# of "likes, hearts, etc"): 490
- Engagements (# of actions taken on the post, ex: reactions, comments, viewing photo, etc): 1,501

<u>Twitter</u>

- Impressions (time people saw tweet on Twitter): 4,803
- Total Engagements (times people interacted with this on Twitter): 122

<u>Instagram</u>

- Reach (estimate # of unique accounts that have seen post): 5,085
- Impressions (total # of times post has been seen): 5,573
- Reactions (# of "likes" post got): 289

Project Status as of March 4, 2021:

The MNDNR Parks & Trails Outreach Team and Parks & Trails Resource Specialists teamed up to communicate about the project via social media as part of a monthly theme on butterflies. The third week's theme (August 2020) highlighted the work taking place at Lake Bronson through the assistance of the MN Environment and Natural Resources Trust Fund with a link to the ENRTF website. See below for the statistics related to the social media platforms used by the division.

<u>Facebook</u>

- People Reached (# of people who saw this post at least once): 18,270
- Reactions (# of "likes, hearts, etc"): 204
- Engagements (# of actions taken on the post, ex: reactions, comments, viewing photo, etc): 1,098
- Comments: 11
- Shares: 12

<u>Twitter</u>

- Impressions (time people saw tweet on Twitter): 3,760
- Total Engagements (times people interacted with this on Twitter): 95
- Likes: 22
- Retweets: 2

<u>Instagram</u>

- Reach (estimate # of unique accounts that have seen post): 7,135
- Impressions (total # of times post has been seen): 7,893
- Reactions (# of "likes" post got): 329

Project Status as of September 2021:

As noted above, five of 10 educational pollinator exhibits have been installed so information is being disseminated to individuals visiting these units. The other five have been constructed and will be installed soon. No additional social media communication was completed in this time period.

Project Status as of March 10, 2022:

As noted above, seven of 10 educational pollinator exhibits have been installed so information is being disseminated to individuals visiting these units. The other three have been constructed and will be installed prior to project end.

Final Report Summary August 2022

- Educational pollinator plantings and exhibits provide an opportunity for millions of visitors annually to learn more about pollinators and the plant species which attract them. Attendance at these 10 parks combined is over 3 million visitors per year. The exhibits are regularly used by thousands of visitors per week based on park attendance and staff reports.
- The exhibit design was entered in the National Association of Interpretive Naturalists 2021 Media Awards competition and earned first place in the Outdoor Exhibits category. The award presentation was broadcast to over 800 interpretive professionals in December of 2021.
- In summers of 2020 and 2021 this project was highlighted on the DNR Parks and Trails social media platforms as part of a monthly theme on butterflies. The 2021 campaign reached 33K Twitter followers and 151K Facebook followers.

VI. PROJECT BUDGET SUMMARY:

Explanation of Use of Classified Staff:

No classified staff will be funded from this appropriation.

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

N/A

Total Number of Full-time Equivalents (FTE) Directly Funded with this ENRTF Appropriation: Approx. 1.5 FTE Laborer General.

Total Number of Full-time Equivalents (FTE) Estimated to Be Funded through Contracts with this ENRTF Appropriation: 0.23 (0.06 FTE MNDNR- Operations Services Division, 0.17 FTE MN Historical Society)

B. Other Funds:

	\$ Amount	\$ Amount	
Source of Funds	Proposed	Spent	Use of Other Funds
Non-state	N/A	N/A	
State			
Conservation Corps of MN, Parks & Trails Legacy	\$36,000	\$9,226	Provide assistance with seed harvest. Pandemic & difficulty obtaining crew time reduced this amount
DNR resource specialist time directed at pollinator habitat restorations at 7 state parks.	\$36,500	Approx. \$131,000	Activities include contract administration and oversight, planning and directing staff, supply purchases & site visits & site work.
DNR exhibit specialist time	\$10,000	\$4,205	Developing themes, messages, write RFP, manage contract for the 10 exhibits
DNR Interpretive project team	\$10,000	\$8,900	Research, contribute to theme & message development and review exhibit drafts.
TOTAL OTHER FUNDS:	\$92,500	\$153,331	Approx. figure

VII. PROJECT STRATEGY:

A. Project Partners:

Partners receiving ENRTF funding - N/A

Partners NOT receiving ENRTF funding - N/A

B. Project Impact and Long-term Strategy:

This project will provide over 520 acres of additional habitat for Monarchs and other native pollinators. This habitat is within state parks so will be protected in perpetuity and managed to ensure that it retains its quality through regular monitoring and periodic management such as prescribed burning, invasive species management and inter-planting. This effort will also help to achieve goals for prairie restoration/preservation in the MN Prairie Plan because nearly all of the land to be restored falls within the core areas of the plan. Additionally, millions of state park visitors annually will have the opportunity to learn about pollinators, pollinator habitat and ways they can help pollinators. State parks contain approximately 16,900 acres of remnant and restored prairie and has about 11,700 acres still in need of prairie restoration.

C. Funding History:

Funding Source and Use of Funds	Funding Timeframe	\$ Amount
Parks and Trails Legacy Fund – funds allotted to restore and	FY17	\$671,250
maintain prairies on Parks & Trails administered lands.		
Initiate restoration on about 350 acres.		
Primarily Parks and Trails Legacy Fund – funds allotted to	FY16	\$554,410
restore and maintain prairies on Parks & Trails administered		
lands. Initiated restoration on about 369 acres. Small amount		
of General Fund.		
Primarily Parks and Trails Legacy Fund – funds allotted to	FY15	\$599,050
restore and maintain prairies on Parks & Trails administered		
lands. Initiated restoration on about 359 acres. Small amount		
of General Fund.		
Primarily Parks and Trails Legacy Fund – funds allotted to	FY14	\$488,400
restore and maintain prairies on Parks & Trails administered		
lands. Initiated restoration on about 299 acres. Small amount		
of General Fund.		
Primarily Parks and Trails Legacy Fund – funds allotted to	FY13	\$591,723
restore and maintain prairies on Parks & Trails administered		
lands. Initiated restoration on about 206 acres. Small amount		
of General Fund.		

VIII. REPORTING REQUIREMENTS:

- The project is for 4 years 5 months. It will begin on 7/01/2017, and end on 6/30/22. The extra time is needed to complete an additional growing season.
- Periodic project status update reports will be submitted on/before February 1 and July 1 of each year.
- A final report and associated products will be submitted between June 30, 2021 and August 15, 2022.

IX. VISUAL COMPONENT or MAP(S):

A map of the locations of state parks where pollinator habitat will be restored or educational pollinator plantings will be established is at the end of this work plan.

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

A. **Parcel List:** See attached file 2017_parcel list_155F_State Parks_Monarchs_Pollinators

в.

B. Acquisition/Restoration Information:

Fee Title Acquisition – N/A

Conservation Easement Acquisition – N/A

Restoration

1. Provide a statement confirming that all restoration activities completed with these funds will occur on land permanently protected by a conservation easement or public ownership.

All restoration activities utilizing these funds will occur on state park lands where they will be protected in perpetuity.

2. Summarize the components and expected outcomes of restoration and management plans for the parcels to be restored by your organization, how these plans are kept on file by your organization, and overall strategies for long-term plan implementation.

MN State parks resource specialists are highly skilled at reconstructing diverse prairies having restored more than 6,000 acres over the past dozen years. Prairie/pollinator habitat restorations typically occur in three phases: site preparation, planting and establishment.

<u>Site preparation</u>- includes activities such as woody stem removal, herbicide application, prescribed burning and disking to reduce non-native species from the restoration site and create an environment suitable for planting. <u>Planting</u> – includes both the task of seed acquisition either through purchase or collection as well as the deployment onto the restoration sites. Seeds may be planted via a Truax type seed drill or broadcast depending on the site conditions and type of seed being used.

<u>Establishment</u> – includes a period of a few years following planting and is critical to ensure the success of the restoration. Typically sites are mowed high 1-2x per season following planting to reduce competition from non-prairie species. Spot herbicide applications may also be needed to control pockets of invasive species that may crop up in the restoration.

Restoration plans, including seed lists, are retained by the state parks resource specialist responsible for implementing the project.

3. Describe how restoration efforts will utilize and follow the Board of Soil and Water Resources "Native Vegetation Establishment and Enhancement Guidelines" in order to ensure ecological integrity and pollinator enhancement.

State park native plant community/pollinator habitat restorations will follow MNDNR's Operational Order 124 (Plant Material Standards for Native Plant Community Restoration) and Operational Order 130 (Pollinator Habitat). Op Order #124 establishes minimum standards and associated requirements for collecting and deploying native plant materials used on restoration and reconstruction projects. These standards help provide for genetic fitness and resilience of restored/reconstructed native plant communities as well as to protect locally adapted germplasm of existing high quality native plant communities. Op Order 130 provides best management practices for restoring and managing pollinator habitat on DNR lands. State Park Resource Specialists employ their academic training and years of experience implementing native plant community restoration efforts to ensure the ecological integrity and pollinator enhancement values of restoration projects. These efforts and pollicies are consistent with or exceed the BWSR Native Vegetation Establishment and Enhancement Guidelines.

4. Describe how the long-term maintenance and management needs of the parcel being restored with these funds will be met and financed into the future.

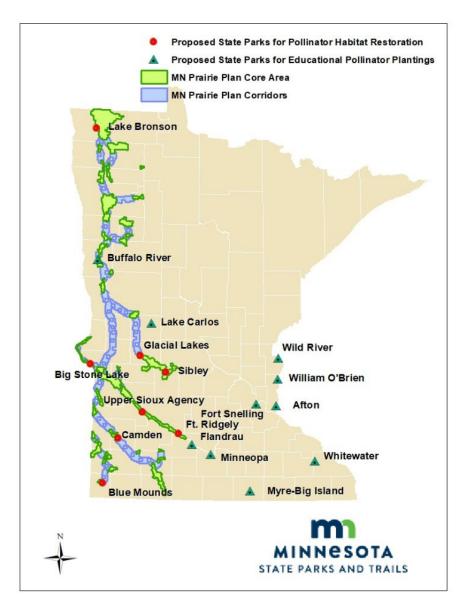
The state parks resource management program is responsible for the restoration and maintenance of natural areas on division-administered lands. The program was initiated in 1978 and is nearing its 40th anniversary. General fund, Legacy and other sources of funds are used to implement priority resource management projects identified annually by resource specialists.

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

The resource program contracts annually with Conservation Corps Minnesota crews to assist with all types of resource management projects throughout the state park system. For this specific project, Conservation Corps Minnesota crews will be contracted to assist with seed collection and also with woody stem removal. They may also be involved in other aspects of the pollinator/prairie restorations.

6. Provide a statement indicating that evaluations will be completed on parcels where activities were implemented both 1) initially after activity completion and 2) three years later as a follow-up. Evaluations should analyze improvements to the parcel and whether goals have been met, identify any problems with the implementation, and identify any findings that can be used to improve implementation of future restoration efforts at the site or elsewhere.

It is important to note that little can be learned regarding the success of a prairie/pollinator habitat restoration in the year following planting because the prairie species are primarily developing their underground root systems and weeds are prevalent on the surface. State Park Resource Specialists will qualitatively evaluate restorations toward the end of this project and then again 3 years later when the restorations can be truly evaluated for success, improvements for future restorations and management needs. Monitoring will be conducted on some sites using the <u>Prairie Reconstruction Initiative monitoring protocol</u>.



Location of Pollinator Habitat Restorations and Educational Pollinator Plantings

State Parks for Pollinator Habitat Restoration

- 1. Big Stone Lake (95 <u>57</u> acres)
- 2. Blue Mounds (5 18acres)
- 3. Camden (32 acres)
- 4. Fort Ridgely (22 acres)
- 5. Glacial Lakes (50 acres)
- 6. Lake Bronson (200 acres)
- 7. Sibley (108 acres)
- 8. Upper Sioux Agency (30 acres)

State Parks for Educational Pollinator Plantings

- 1. Afton
- 2. Buffalo River
- 3. Flandrau
- 4. Fort Snelling
- 5. Lake Carlos
- 6. Minneopa
- 7. Myre-Big Island
- 8. Whitewater
- 9. Wild River
- 10. William O'Brien

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

Project Title: State Parks for Monarchs and other Native Pollinators

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

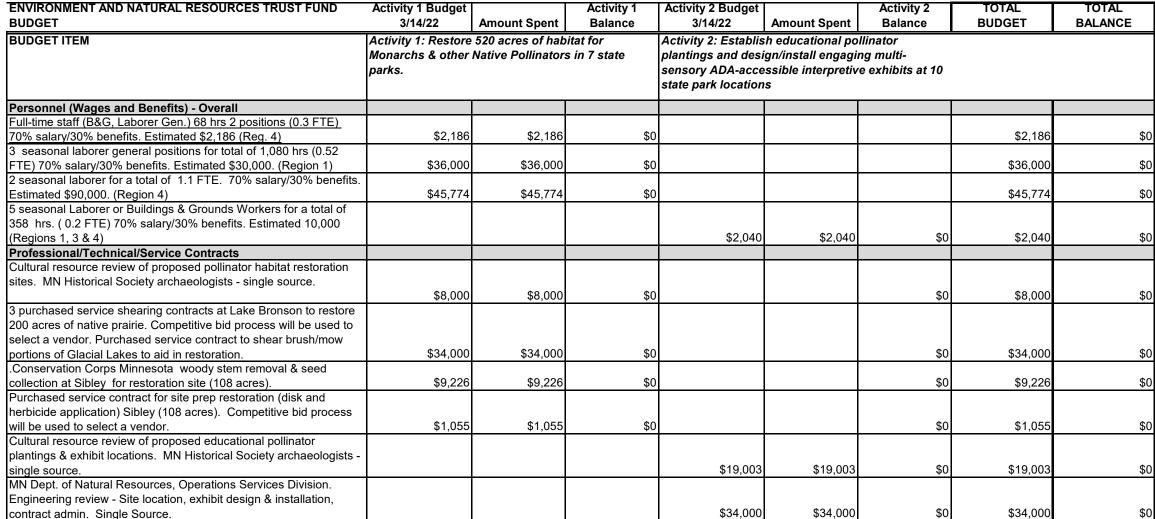
Project Manager: Edward Quinn

Organization: MN Dept of Natural Resources, Parks & Trails

M.L. 2017 ENRTF Appropriation: \$672,000

Project Length and Completion Date: 4 years, June 2022

Date of Report: Sept. 1, 2022





ENVIRONMENT AND NATURAL RESOURCES TRUST FUND BUDGET	Activity 1 Budget 3/14/22	Amount Spent	Activity 1 Balance	Activity 2 Budget 3/14/22	Amount Spent	Activity 2 Balance	TOTAL BUDGET	TOTAL BALANCE
BUDGET ITEM	Activity 1: Restore 520 acres of habitat for Monarchs & other Native Pollinators in 7 state parks.		Activity 2: Establish educational pollinator plantings and design/install engaging multi- sensory ADA-accessible interpretive exhibits at 10 state park locations					
Professional/Technical Contract with RFP to design & fabricate 10								
ADA-accessible exhibits to educate visitors about pollinators				\$97,000	\$97,000	\$0	\$97,000	\$(
Purchased service contracts to install, provide ADA accessibility. Competitive bid process will be used to select a vendor.				\$2,820	\$2,820	\$0	\$2,820	\$(
Establish educational pollinator plantings at 10 parks using the master contract (S-910-5) for native plant community restoration								
services or similar avenues.				\$26,000	\$26,000	\$0	\$26,000	\$0
Equipment/Tools/Supplies								
Materials needed for installing and providing access to exhibits.				\$30,000	\$30,000	\$0	\$30,000	\$(
Herbicides - needed for prepping about 320 acres of restoration sites.	\$3,169	\$3,169	\$C			\$0	\$3,169	\$(
Restoration supplies: additional clippers, sprayers, etc. needed for accelerated restoration effort at 6 state parks.								
	\$5,532	\$5,532	\$C			\$0	\$5,532	\$0
Prairie seed purchase for restoration sites at Big Stone & Sibley (158 acres), Blue Mounds, Ft Ridgely	\$226,600	\$222,501	\$4,099			\$0	\$226,600	\$4,09
Travel expenses in Minnesota								
Travel & fleet costs for tractors, mowers, vehicles transporting staff & equipment to sites over 3 year.period	\$67,436	\$59,823	\$7,613			\$0	\$67,436	\$7,613
Other								
Direct and necessary expenses*: HR Support (~\$8,587), Safety Support (~\$2,620), Financial Support (~\$8,527), Communications Support (~\$1,316), IT Support (\$0), Planning Support (~\$912) & Procurement Support (~\$197) necessary to accomplish funded								
project.	\$13,905	\$13,905	\$C	\$8,254	\$8,254	\$0	\$22,159	\$0
COLUMN TOTAL	\$452,883	\$441,171	\$11,712	\$219,117	\$219,117	\$0	\$672,000	\$11,712
	,	. ,					\$672.000	

\$660,288

*Direct and Necessary expenses include both Department Support Services (Human Resources, IT Support, Safety, Financial Support, Communications Support, Planning Support, and Procurement Support) and Division Support Services. Department Support Services are described in the agency Service Level Agreement, and billed internally to divisions based on rates 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. Division Support Services include costs

> 11712 \$0

Environment and Natural Resources Trust Fund

M.L. 2017 Parcel List

Project Title: State Parks for Monarchs and other Native Pollinators Legal Citation: Fill in your project's legal citation from the appropriation language - this will occur after the 2017 legislative session. Project Manager: Edward Quinn Organization:MN Dept. of Natural Resources, Parks & Trails M.L. 2016 ENRTF Appropriation: \$ 672,000 Project Length and Completion Date: 3 years, Nov 2020. Date of Report: 09/01/2022

Proposed Fee Title or Geographic Coordinates Acquisition or Format: [Deg.]° [Min.]' Estimated # of Easement Estimated Annual PILT Holder Restoration [Sec.]" [Hemis.] Activity Shoreline Type of Liabilities Parcel Name Latitude Longitude Site Significance Description # of Acres Miles Landowner (if applicable) Cost County Status Completed. Mant. (mow, burn, Prairie/pollinator restoration site in MN Prairie Plan interseed) cont. as N/A N/A **Big Stone Lake SP** 45.383928 -96.510861 45,000 **Big Stone** Core Area. Restoration 57 State needed. Completed. Add. establishment Prairie/pollinator restoration site in MN Prairie Plan activities 2 Blue Mounds SP 18,000 N/A N/A continuing. 43.69912 -96.193479 \$ Rock Core Area. Restoration 18 State Completed. Add. establishment Prairie/pollinator restoration site in MN Prairie Plan activities Camden SP 44.356164 -95.92761 \$ 35,000 N/A Lyon Core Area. Restoration 32 State N/A continuing. In Progress, drought delayed. Planted spring 2022. Establishment Prairie/pollinator restoration site in MN Prairie Plan activities Ft. Ridgley SP 44.45628 -94.743 \$ 22,000 N/A Nicollet Core Area. Restoration 22 State N/A continuing Prairie/pollinator restoration site in MN Prairie Plan 5 Glacial Lakes SP 45.536757 -95.511467 50,000 N/A Core Area. Restoration 50 State N/A 90 acres completed. Pope 225 acres completed. Shearing 158, Prairie/pollinator restoration site in MN Prairie Plan 6 Lake Bronson SP 90,000 N/A 48.728184 -96.588841 \$ Kittson Core Area. Restoration 200 State N/A logging 67. Completed. Mant. (mow, burn, Prairie/pollinator restoration site in MN Prairie Plan interseed) cont. as 7 Sibley SP 45.321564 -95.034387 \$ 100,543 N/A Kandioyhi Core Area. Restoration 108 State N/A needed. Completed. Mant. (mow, burn, Yellow Prairie/pollinator restoration site in MN Prairie Plan interseed) cont. as Medicine needed. Upper Sioux Agency 44.737534 -95.445713 Ś 35,000 N/A Core Area. Restoration 32 State N/A 395,543 519 Ś NOTES:

DEPARTMENT OF NATURAL RESOURCES



State Parks for Monarchs and other Native Pollinators: Visual

Component

M.L. 2017, Chp. 96, Sec. 2, Subd. 08d as extended by M.L. 2021, First Special Session, Chp. 6, Art. 6, Sec. 2, Subd. 18

State Park Pollinator Habitat Restoration Sites

Big Stone Lake State Park (57 acres restored)



Ft. Ridgely State Park (22 acres restored)



Camden State Park (32 acres restored)



Glacial Lakes State Park (90 acres restored)



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Lake Bronson State Park (225 acres restored)



Upper Sioux Agency State Park (32 acres restored)

Sibley State Park (108 acres restored)



Blue Mounds State Park (18 acres restored)



NO IMAGE