

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

Date of Submission: September 14, 2016 (rev. October 12, 2016)

Date of Next Status Update Report: February 1, 2018

Date of Work Plan Approval: 06/07/2017

Project Completion Date: November 30, 2020

Does this submission include an amendment request? No

PROJECT TITLE: State Park Pollinator Habitat Restoration

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, Rock, Winona,

Yellow Medicine, Washington

Total ENRTF Project Budget:	ENRTF Appropriation:	\$672,000
	Amount Spent:	\$0
	Balance:	\$672.000

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

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.

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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 7 state parks within MN Prairie Plan Core Areas. Parks include: Big Stone, Blue Mounds, Camden, 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.	OVER	ALL I	PROJECT	STATUS	UPDATES:
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Project Status as of February 1, 2018:

Project Status as of July 1, 2018:

Project Status as of: February 1, 2019:

Project Status as of July 1, 2019:

Project Status as of: February 1, 2020:

Overall Project Outcomes and Results:

IV. PROJECT ACTIVITIES AND OUTCOMES:

ACTIVITY 1: Restore 520 acres of habitat for Monarchs & other native pollinators at 7 Budget: \$423,488 state parks

Description: Diverse native prairie will be restored at 7 state parks to provide critical habitat for Monarchs and other native pollinators. Parks include: (acres are approx..): Big Stone Lake (50 acres), Blue Mounds (50 acres), Camden (32 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: \$ 423,488

Amount Spent: \$0

Balance: \$ 423,488

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 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:

Activity 1 Status as of July 1, 2018:

Activity 1 Status as of February 1, 2019:

Activity 1 Status as of July 1, 2019:

Activity 1 Status as of February 1, 2020:

Final Report Summary:

Activity 2: Establish educational pollinator plantings and design/install engaging multi-Budget: \$248,512 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: \$ 248,512

Amount Spent: \$0

Balance: \$ 248,512

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	December 2018
other cultural resources.	
4. Develop themes and text for signage.	May 2018
5. Complete site preparation for pollinator plantings	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:

Activity 2 Status as of July 1, 2018:

Activity 2 Status as of February 1, 2019:

Activity 2 Status as of July 1, 2019:

Activity 2 Status as of February 1, 2020:

Final Report Summary:

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:

Status as of July 1, 2018:

Status as of February 1, 2019:

Status as of July 1, 2019:

Status as of February 1, 2020:

Final Report Summary:

VI. PROJECT BUDGET SUMMARY:

A. Preliminary ENRTF Budget Overview:

Budget Category	\$ Amount	Overview Explanation
Personnel:	\$120,000	5 seasonal laborer positions assist with pollinator habitat restorations, site prep & establishment. 3 positions (1,080 hrs/ 0.52 FTE), 2 positions (@ 3,340 hrs/1.6 FTE).
Professional/Technical/Service Contracts:		

Cultural resource review of	\$8,000	Required review to insure that pollinator habitat restoration
proposed pollinator habitat		efforts will not negatively impact archaeological sites/cultural
restoration sites. MN Historical		resources.
Society archaeologists - single		
source.		
Cultural resource review of	\$10,000	Required review to insure that development of educational
proposed educational pollinator		pollinator plantings and exhibits will not negatively impact
plantings & exhibit locations. MN		archaeological sites/cultural resources.
Historical Society archaeologists -		
single source.		
MN Dept. of Natural Resources,	\$12,000	Review/administration required by MNDNR engineering for
Operations Services Division.		all department facility design & installation projects.
Engineering review - Site		
location, exhibit design &		
installation, contract admin.		
Single Source.		
Design & fabricate 10 ADA-	\$100,000	Professional/Technical Contract with RFP.
accessible exhibits to educate		
visitors about pollinators.		
Purchased service contracts to	\$25,000	
install, provide ADA accessibility.		
3 purchased service shearing	\$82,000	3 purchased service shearing contracts at Lake Bronson to
contracts		restore 200 acres of native prairie.
Conservation Corps of MN	\$10,000	Conservation Corps Minnesota woody stem removal & seed
		collection at Sibley for restoration site (108 acres).
Purchased service contract for	\$10,000	Purchased service contract for site prep restoration (disk and
site prep restoration		herbicide application) Sibley (108 acres)
Establish educational pollinator	\$93,258	Contracts to establish educational pollinator plantings at 10
plantings		parks using the master contract (S-910-5) for native plant
		community restoration services or similar avenues.
Equipment/Tools/Supplies:	\$120,583	Seed purchase for 158 ac., herbicide, other restoration
		supplies.
Travel Expenses in MN:	\$ 59,000	Travel & fleet costs for tractors, mowers, vehicles
		transporting staff & equipment to sites over 3 year period.
Direct & Necessary Expenses*	\$ 22,159	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.
TOTAL ENRTF BUDGET:	\$672,000	

^{*}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 associated with Division business offices and clerical support. 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-thru to other entities are not assessed Direct and Necessary costs for those activities.

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: 2.12 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,	\$36,000	\$0	Provide assistance with seed harvest,
Parks & Trails Legacy			
DNR resource specialist time	\$36,500	\$0	Activities include contract administration
directed at pollinator habitat			and oversight, planning and directing
restorations at 7 state parks.			staff, supply purchases & site visits
DNR exhibit specialist time	\$10,000	\$0	Developing themes, messages, write RFP,
			manage contract for the 10 exhibits
DNR Interpretive project team	\$10,000	\$0	Research, contribute to theme &
			message development, review exhibit
			drafts.
TOTAL OTHER FUNDS:	\$92,500	\$0	

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 insure 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 3 years 5 months. It will begin on 7/01/2017, and end on 11/30/20. 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 November 30 and December 31, 2020.

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 **B.**

B. Acquisition/Restoration Information:

Fee Title Acquisition – N/A

<u>Conservation Easement Acquisition – N/A</u>

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 a 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 insure 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 policies 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.



Location of Pollinator Habitat Restorations and Educational Pollinator Plantings

State Parks for Pollinator Habitat Restoration

- 1. Big Stone Lake (50 acres)
- 2. Blue Mounds (50 acres)
- 3. Camden (32 acres)
- 4. Glacial Lakes (50 acres)
- 5. Lake Bronson (200 acres)
- 6. Sibley (108 acres)
- 7. 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

Project Title: State Park Pollinator Habitat Restoration **Legal Citation:** M.L. 2017, Chp. 96, Sec. 2, Subd. 08d

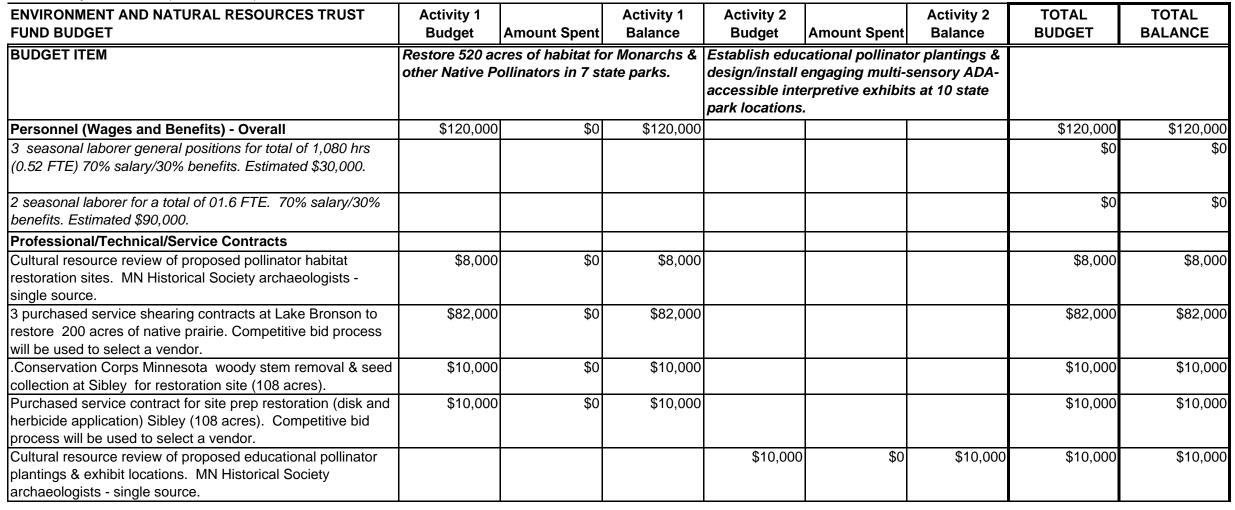
Project Manager: Edward Quinn

Organization: MN Dept of Natural Resources, Parks & Trails

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

Project Length and Completion Date: 3 years, Nov, 2020

Date of Report: 9/14/16 (rev. 10/12/16)



TRUST FUND

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COLUMN TOTAL	\$423,488	\$0	\$423,488	\$248,512	\$0	\$248,512	\$672,000	\$672,000
							\$22,159	\$22,159
Planning Support (~\$912) & Procurement Support (~\$197) necessary to accomplish funded project.								
Communications Support (~\$1,316), IT Support (\$0),								
Safety Support (~\$2,620), Financial Support (~\$8,527),								
Direct and necessary expenses*: HR Support (~\$8,587),	\$13,905	\$0	\$13,905	\$8,254	\$0	\$8,254		
Other 1/10 0 1/10 507)	# 40.00=		0.40.00	Ф0.07.1	•	40.07 (
staff & equipment to sites over 3 year.period								
Travel & fleet costs for tractors, mowers, vehicles transporting	\$59,000	\$0	\$59,000				\$59,000	\$59,000
Travel expenses in Minnesota	*		A= 0.555				***	A=0
Sibley (158 acres)								
Prairie seed purchase for restoration sites at Big Stone &	\$99,000	\$0	\$99,000				\$99,000	\$99,000
needed for accelerated restoration effort at 6 state parks.								
Restoration supplies: additional clippers, sprayers, etc.	\$12,814	\$0	\$12,814				\$12,814	\$12,814
restoration sites.								
Herbicides - needed for prepping about 320 acres of	\$8,769	\$0	\$8,769	\Box			\$8,769	\$8,769
Equipment/Tools/Supplies								
restoration services or similar avenues.								
the master contract (S-910-5) for native plant community								
Establish educational pollinator plantings at 10 parks using				\$93,258	\$0	\$93,258	\$93,258	\$93,258
vendor.								
accessibility. Competitive bid process will be used to select a								
Purchased service contracts to install, provide ADA				\$25,000	\$0	\$25,000	\$25,000	\$25,000
pollinators								
fabricate 10 ADA-accessible exhibits to educate visitors about								
Professional/Technical Contract with RFP to design &				\$100,000	\$0	\$100,000	\$100,000	\$100,000
installation, contract admin. Single Source.								
Division. Engineering review - Site location, exhibit design &				, ,	·	,	, ,	, ,
MN Dept. of Natural Resources, Operations Services				\$12,000	\$0	\$12,000	\$12,000	\$12,000

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

Project Title: State Park Pollinator Habitat Restoration **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. 2016 ENRTF Appropriation: \$ 672,000

Project Length and Completion Date: 3 years, Nov 2020.

Date of Report: 9/14/16

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	Acquisition or	Format: [De		E.C	Estimated			A - 1 * * 1		# of	T f	Easement	
	Restoration	[Sec.]" [Estimated	Annual PILT			Activity		Shoreline	Type of	Holder	
#	Parcel Name	Latitude	Longitude	Cost	Liabilities	County	Site Significance	Description	# of Acres	Miles	Landowner	(if applicable)	Status
							Prairie/pollinator restoration site in MN Prairie Plan						
1	Big Stone Lake SP	45.383928	-96.51086	\$ 50,000	N/A	Big Stone		Restoration	50		State	N/A	
							Prairie/pollinator restoration site in MN Prairie Plan						
2	Blue Mounds SP	43.69912	-96.19348	\$ 50,000	N/A	Rock	Core Area.	Restoration	50		State	N/A	
							Prairie/pollinator restoration site in MN Prairie Plan						
3	Camden SP	44.356164	-95.92761	\$ 35,000	N/A	Lyon	Core Area.	Restoration	32		State	N/A	
							Prairie/pollinator restoration site in MN Prairie Plan						
4	Glacial Lakes SP	45.536757	-95.51147	\$ 50,000	N/A	Pope	Core Area.	Restoration	50		State	N/A	
							Prairie/pollinator restoration site in MN Prairie Plan						
5	Lake Bronson SP	48.728184	-96.58884	\$ 90,000	N/A	Kittson	Core Area.	Restoration	200		State	N/A	
							Prairie/pollinator restoration site in MN Prairie Plan						
6	Sibley SP	45.321564	-95.03439	\$ 113,488	N/A	Kandioyhi	Core Area.	Restoration	108		State	N/A	
	·			·		Yellow	Prairie/pollinator restoration site in MN Prairie Plan						
7	Upper Sioux Agency	44.737534	-95.44571	\$ 35,000	N/A	Medicine	Core Area.	Restoration	32		State	N/A	
8				\$ 423,488					522				
9				•									
10													
10													

NOTES:

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