



Lessard-Sams Outdoor Heritage Council

DNR Grassland Enhancement - Phase 16
ML 2024 Request for Funding

General Information

Date: 06/23/2023

Proposal Title: DNR Grassland Enhancement - Phase 16

Funds Requested: \$6,828,600

Confirmed Leverage Funds: -

Is this proposal Scalable?: Yes

Manager Information

Manager's Name: Greg Hoch

Title: Prairie Habitat Supervisor

Organization: DNR

Address: 500 Lafayette Rd

City: St Paul, MN 55155

Email: greg.hoch@state.mn.us

Office Number: 651-259-5230

Mobile Number: 651-259-5230

Fax Number:

Website:

Location Information

County Location(s): Faribault, Grant, Traverse, Becker, Otter Tail, Marshall, Stevens, Clay, Roseau, Wilkin, Pope, Mahnommen, Norman, Kittson, Douglas, Red Lake, Polk, Murray, Dodge, Waseca, Le Sueur, Kandiyohi, Meeker, Chippewa, Lincoln, Yellow Medicine, Lyon, Cottonwood, Lac qui Parle, Big Stone, Swift, Winona, Olmsted, Goodhue, Wabasha, Fillmore, Mille Lacs, Washington, Chisago, Kanabec, Jackson, Brown, Renville, Redwood and Anoka.

Eco regions in which work will take place:

- Northern Forest
- Forest / Prairie Transition
- Prairie
- Metro / Urban
- Southeast Forest

Activity types:

- Restore
- Enhance

Priority resources addressed by activity:

- Prairie
- Wetlands

Narrative

Abstract

Grasslands continue to be the most threatened habitat in the state. This programmatic request will build on the DNR's history of enhancing and restoring grasslands. The Prairie Plan and Wildlife Action Plan will guide our efforts to ensure we are operating in a strategic and targeted manner. This proposal will enhance and restore grasslands on 13,605 acres that are permanently protected using prescribed fire, tree removal, high-diversity seedings, and similar practices. Most lands enhanced with these funds are public and open to hunting.

Design and Scope of Work

In many farmland counties less than five percent of the area is in public wildlife lands, often much less. We continue to lose about 200 acres of native prairie per year. While Minnesota does have acres enrolled in CRP as well as state programs such as RIM and CREP, there is still very little grassland left in many counties of the state. As such, we need to make sure the remaining grasslands, especially those open to public recreation are as diverse and productive as possible. These lands provide wildlife habitat as well as pollinator habitat and ecosystem services such as floodwater capture and groundwater recharge.

Wildlife and pollinator populations are a fraction of what they were even a couple decades ago. Water quality, especially nitrate contamination, is a human health and wildlife issue. Restoring and enhancing grasslands are one of the most effective ways to improve all of these issues. Grasslands and embedded wetlands are also very good at sequestering and storing carbon, helping to mitigate the effects of climate change. These efforts can be an important part of the state's Climate Action Framework. Grassland and wetland restoration and enhancement, carefully guided by planning, is one of the best ways to address many of these issues.

This programmatic request seeks funding to enhance grassland habitat on permanently protected grasslands and prairies, most of which are open to public hunting. Without periodic management to simulate historical disturbance patterns, grassland lose diversity and productivity. Invasive species may increase and woody vegetation will encroach into the grasslands, changing their very character and the species that inhabit the area. The activities listed in this proposal will use BMPs for grassland enhancement and diverse local ecotype seed mixes for restoration. These activities will include prescribed fire, installing grazing infrastructure, tree removal, seeding to increase plant diversity, and restoring cropland to grassland.

Explain how the proposal addresses habitat protection, restoration, and/or enhancement for fish, game & wildlife, including threatened or endangered species conservation

Grasslands and grassland wildlife continue to be the most threatened habitat and populations, both in Minnesota and across the Midwest.

According to the Wildlife Action Plan, Minnesota's grasslands contain 4 state threatened species, 14 state endangered species, and 29 species of concern. The species on this list include 1 amphibian, 11 birds, 5 mammals, 16 moths and butterflies, 9 other invertebrates, and 5 reptiles. The Dakota skipper was recently federally listed as

threatened and the Poweshiek's skipperling as endangered. Minnesota is a key state for monarch butterflies and they need the pollen and nectar found in grasslands to complete their life cycle.

With few exceptions, grasslands for game species, nongame species, SGCN, and T&E species are similar. They all need habitat composed of a diversity of native grasses and forbs. Enhancements for one species will almost always benefit dozens of other species in the habitat. Many species of invertebrates and pollinators need a diversity and abundance of flowering plants. Many birds need grassland free of trees. All species need clean water. While the work proposed here will benefit game species, non-game species, SGCN, and T&E, it will also go beyond these objectives to provide numerous ecosystem services such as water filtration, floodwater retention and reduced flood damage, and create pollinator habitat to help sustain segments of the agricultural economy.

What are the elements of this proposal that are critical from a timing perspective?

Without management, grassland habitat for many species of wildlife and pollinators will continue to degrade. The earlier we can address these issues, the more cost-effective the efforts are. For instance, removing a few scattered saplings early in a tree invasion is much less costly than waiting decades and removing a dense forest of large trees. The sooner we get areas restored to stands of diverse native grasses and wildflowers, the more carbon the soils will store in the long-term.

Describe how the proposal expands habitat corridors or complexes and/or addresses habitat fragmentation:

The projects in this proposal will be guided primarily by the Prairie Conservation Plan as well as the Wildlife Action Plans. First and foremost, these Plans outline focal areas (Core Areas and Habitat Complexes) where we can build on an existing base of conservation lands and improve the habitat there. The Prairie Plan identifies specific corridors and complexes that connect larger core areas. The latest science states that it isn't the size of an individual habitat parcel that matters as much as the amount of habitat in the larger surrounding landscape. These Plans, and the work proposed here, build on these concepts of landscape level habitat planning. We will not restrict ourselves to these focal areas. There are critical habitats outside these areas. However, we will use these Plans to focus our efforts in areas where they can have the greatest wildlife benefits.

Which Conservation Plans referenced in MS97A.056, subd. 3a are most applicable to this project?

- Minnesota Prairie Conservation Plan
- Minnesota's Wildlife Action Plan 2015-2025

Explain how this proposal will uniquely address habitat resilience to climate change and its anticipated effects on game, fish & wildlife species utilizing the protected or restored/enhanced habitat this proposal targets.

Prairie soils are famously dark, almost black. Prairie soils have a lot of carbon in them. When the prairie is broken, a lot of that carbon is lost. However, restoring grasslands using native grasses and wildflowers can significantly increase the amount of carbon taken out of the air and buried deep in the soil (Knops and Tilman 2000, Baer et al 2002, McLaughlin et al 2006, Fornara and Tilman 2008, Hernandez et al 2013, Ampleman et al 2014, Yang et al 2019). Matamala et al (2008) state that restoring prairie "has the potential to store relatively large amounts of SOC [Soil Organic Carbon]". Research at the University of Minnesota found that using high diversity seed mixes sequesters more carbon than low diversity mixes. We've been doing this all along for pollinators and wildlife. What we were doing for pollinators is also be best practice for carbon capture.

Which LSOHC section priorities are addressed in this proposal?

Forest / Prairie Transition

- Protect, enhance, and restore rare native remnant prairie

Metro / Urban

- Protect, enhance, and restore remnant native prairie, Big Woods forests, and oak savanna with an emphasis on areas with high biological diversity

Northern Forest

- Restore and enhance habitat on existing protected properties, with preference to habitat for rare, endangered, or threatened species identified by the Minnesota County Biological Survey

Prairie

- Restore or enhance habitat on public lands

Southeast Forest

- Protect, enhance, and restore remnant goat prairies

Describe how this project/program will produce and demonstrate a significant and permanent conservation legacy and/or outcomes for fish, game, and wildlife, and if not permanent outcomes, why it is important to undertake at this time:

The work conducted under this proposal will be done on land under permanent conservation protection. However, by the very nature of habitat management, these enhancements will not be permanent. Grasslands rely on periodic disturbances. To maintain the health and diversity of grasslands, they need burning, grazing, or other ecological disturbances, at least every 4 to 6 years.

With our restorations, we are leaving a lasting legacy. In recent years the use of 40-80 species seed mixes and local ecotype seed is dramatically improving the quality of our restorations for wildlife and pollinators. The diversity and structure of our newer restorations looks much better than restorations from even a few years ago.

Outcomes

Programs in forest-prairie transition region:

- Protected, restored, and enhanced nesting and migratory habitat for waterfowl, upland birds, and species of greatest conservation need ~ *Migratory game and non-game birds will be some of the primary beneficiaries of this work. We hope to continue to strengthen partnerships with the University of Minnesota to incorporate graduate students into research and monitoring work.*

Programs in metropolitan urbanizing region:

- Core areas protected with highly biologically diverse wetlands and plant communities, including native prairie, Big Woods, and oak savanna ~ *Monitoring will take place with the base level monitoring conducted by DNR staff and staff from other agencies/NGOs.*

Programs in the northern forest region:

- Healthy populations of endangered, threatened, and special concern species as well as more common species ~ *Monitoring will take place with the base level monitoring conducted by DNR staff and staff from other agencies/NGOs. This includes surveys such as pheasant, sharp-tailed grouse, and woodcock, which are all dependent on open areas.*

Programs in prairie region:

- Restored and enhanced upland habitats ~ *The multi-agency/NGO Grassland Monitoring Team (GMT) has developed standardized protocols for sampling grassland vegetation and a number of the sites on this request will be sampled over the 5 year period.*

Programs in southeast forest region:

- Healthier populations of endangered, threatened, and special concern species as well as more common species ~ *Monitoring will primarily be done through studies conducted by the DNR's Ecological and Water Resources Division of key indicator species such as timber rattlesnakes.*

What other dedicated funds may collaborate with or contribute to this proposal?

- N/A

Per MS 97A.056, Subd. 24, Please explain whether the request is supplanting or is a substitution for any previous funding that was not from a legacy fund and was used for the same purpose.

These funds are for additional enhance/restoration work beyond what the DNR is already conducting. These funds are not supplanting or substituting any funds.

How will you sustain and/or maintain this work after the Outdoor Heritage Funds are expended?

We select projects with these funds that strategically enhance priority habitats. We will continue management of these sites with agency staff. The OHF provides Minnesota’s conservation community with a large amount of non-Federal dollars as match that other Midwestern states don’t have. In recent years, the Minnesota prairie conservation partners have been coordinating to maximize our efforts with funding sources such as the North American Wetland Conservation Act (NAWCA) and the America the Beautiful Challenge Grants.

Actions to Maintain Project Outcomes

Year	Source of Funds	Step 1	Step 2	Step 3
2027	Those listed above and OHF	Monitor subset of projects	Document results	Determine capacity for traditional funds to meet results
2028 and beyond	Those listed above and OHF	Continue monitoring	adapt results to future projects	seek funding for continued monitoring

Provide an assessment of how your program may celebrate cultural diversity or reach diverse communities in Minnesota, including reaching low- and moderate-income households:

The Minnesota DNR has adopted advancing diversity, equity and inclusion (DEI) as a key priority in its strategic plan. The plan focuses on increasing the cultural competence of our staff, creating a workforce that is reflective of Minnesota, continuing to strengthen tribal consultation and building partnerships with diverse communities.

DNR’s OHF projects aim to serve all Minnesotans. At the same time, we are bringing more focus in all our work to

BIPOC and diverse communities. OHF achieves high quality habitat that provides ecosystem services like clean water and carbon sequestration that support environmental justice. OHF also supports public access and recreational opportunities on these lands. Project scoring and implementation benefit BIPOC and diverse communities through recreational opportunities that are close-to-home, culturally responsive and accessible to Minnesotans with disabilities.

Activity Details

Requirements

If funded, this proposal will meet all applicable criteria set forth in MS 97A.056?

Yes

Will restoration and enhancement work follow best management practices including MS 84.973 Pollinator Habitat Program?

Yes

Is the restoration and enhancement activity on permanently protected land per 97A.056, Subd 13(f), tribal lands, and/or public waters per MS 103G.005, Subd. 15 or on lands to be acquired in this program?

Yes

Where does the activity take place?

- WMA
- SNA
- AMA
- Permanently Protected Conservation Easements
- State Forests

Land Use

Will there be planting of any crop on OHF land purchased or restored in this program?

Yes

Explain what will be planted:

There may be an instance of very limited rowcrop planting as part of a restoration process. But this would only be for a very short time before the site is planted to native grasses and forbs. Some of the crops may be GMO, but none of the crops should be treated with neonicotinoid seed coats and any farming will follow standard chemical use practices as outlined in DNR Operational Orders.

Will neonicotinoid pesticide products be used within any activities of this proposal?

No

Other OHF Appropriation Awards

Have you received OHF dollars in the past through LSOHC that are current OPEN appropriations?

Yes

Approp Year	Funding Amount Received	Amount Spent to Date	Funding Remaining	% Spent to Date
2023	\$3,003,000	-	-	-
2022	\$3,088,000	\$1,800	\$3,086,200	0.06%
2021	\$3,534,000	\$137,300	\$3,396,700	3.89%

2020	\$4,432,000	\$1,703,300	\$2,728,700	38.43%
2019	\$8,861,000	\$3,559,700	\$5,301,300	40.17%
2018	\$4,007,000	\$2,950,600	\$1,056,400	73.64%
Totals	\$26,925,000	\$8,352,700	\$18,572,300	31.02%

Timeline

Activity Name	Estimated Completion Date
WMA Enhancement / Restoration - contracts	6/30/2029
SNA / NPB Enhancements	6/30/2029

Budget

Totals

Item	Funding Request	Total Leverage	Leverage Source	Total
Personnel	\$668,100	-	-	\$668,100
Contracts	\$4,336,600	-	-	\$4,336,600
Fee Acquisition w/ PILT	-	-	-	-
Fee Acquisition w/o PILT	-	-	-	-
Easement Acquisition	-	-	-	-
Easement Stewardship	-	-	-	-
Travel	\$200,700	-	-	\$200,700
Professional Services	-	-	-	-
Direct Support Services	\$195,400	-	-	\$195,400
DNR Land Acquisition Costs	-	-	-	-
Capital Equipment	-	-	-	-
Other Equipment/Tools	\$33,000	-	-	\$33,000
Supplies/Materials	\$1,394,800	-	-	\$1,394,800
DNR IDP	-	-	-	-
Grand Total	\$6,828,600	-	-	\$6,828,600

Personnel

Position	Annual FTE	Years Working	Funding Request	Total Leverage	Leverage Source	Total
SNA Laborers and Seasonals	0.39	4.0	\$54,100	-	-	\$54,100
SNA Specs and Techs	2.16	4.0	\$604,000	-	-	\$604,000
SNA Project Management	0.03	4.0	\$10,000	-	-	\$10,000

Amount of Request: \$6,828,600

Amount of Leverage: -

Leverage as a percent of the Request: 0.0%

DSS + Personnel: \$863,500

As a % of the total request: 12.65%

Easement Stewardship: -

As a % of the Easement Acquisition: -

Does this proposal have the ability to be scalable?

Yes

If the project received 50% of the requested funding

Describe how the scaling would affect acres/activities and if not proportionately reduced, why?

This proposal is composed of numerous projects. If we receive less than we request, we can scale back the number of projects and acres accordingly.

Describe how personnel and DSS expenses would be adjusted and if not proportionately reduced, why?

Personnel would be scaled back proportionally. We would redo the DSS with the new budget in the DNR's calculator.

If the project received 30% of the requested funding

Describe how the scaling would affect acres/activities and if not proportionately reduced, why?

This proposal is composed of numerous projects. If we receive less than we request, we can scale back the number of projects and acres accordingly.

Describe how personnel and DSS expenses would be adjusted and if not proportionately reduced, why?

Personnel would be scaled back proportionally. We would redo the DSS with the new budget in the DNR's calculator.

Personnel

Has funding for these positions been requested in the past?

Yes

Please explain the overlap of past and future staffing and position levels previously received and how that is coordinated over multiple years?

This funding will be used to pay project-associated costs for staff paid almost exclusively with special project funds. These positions would not exist, but for special project funding received through the OHF and other funds. Each year these staff code time working on OHF related acquisition activities using specific funding string codes.

Contracts

What is included in the contracts line?

This line includes contracts for restoration and enhancement work that the DNR or Roving Crews don't have the specialized equipment or staff to conduct. Contracts increase our capacity to impact acres beyond what staff alone are capable of.

Travel

Does the amount in the travel line include equipment/vehicle rental?

Yes

Explain the amount in the travel line outside of traditional travel costs of mileage, food, and lodging

There could be some rental for specialized equipment on a specific project, but if so it would be a very small part of the travel budget.

I understand and agree that lodging, meals, and mileage must comply with the current MMB Commissioner Plan:

Yes

Direct Support Services

How did you determine which portions of the Direct Support Services of your shared support services is direct to this program?

We used the DNR's Direct and Necessary (D&N) calculator that was created for LSOHC/OHF and LCCMR/ENRTF proposals.

Other Equipment/Tools

Give examples of the types of Equipment and Tools that will be purchased?

This would be primarily fire equipment such as drip torches, backpack water pumps, etc.

Federal Funds

Do you anticipate federal funds as a match for this program?

Yes

Are the funds confirmed?

No

What is the approximate date you anticipate receiving confirmation of the federal funds?

These funds will be matched with Pittman-Robertson, which is part of the DNR's annual funding cycle.

Output Tables

Acres by Resource Type (Table 1)

Type	Wetland	Prairie	Forest	Habitat	Total Acres
Restore	0	799	0	0	799
Protect in Fee with State PILT Liability	0	0	0	0	0
Protect in Fee w/o State PILT Liability	0	0	0	0	0
Protect in Easement	0	0	0	0	0
Enhance	0	12,806	0	0	12,806
Total	0	13,605	0	0	13,605

How many of these Prairie acres are Native Prairie? (Table 1b)

Type	Native Prairie (acres)
Restore	0
Protect in Fee with State PILT Liability	0
Protect in Fee w/o State PILT Liability	0
Protect in Easement	0
Enhance	1,000
Total	1,000

Total Requested Funding by Resource Type (Table 2)

Type	Wetland	Prairie	Forest	Habitat	Total Funding
Restore	-	\$798,000	-	-	\$798,000
Protect in Fee with State PILT Liability	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	-	-
Enhance	-	\$6,030,600	-	-	\$6,030,600
Total	-	\$6,828,600	-	-	\$6,828,600

Acres within each Ecological Section (Table 3)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Acres
Restore	0	0	50	749	0	799
Protect in Fee with State PILT Liability	0	0	0	0	0	0
Protect in Fee w/o State PILT Liability	0	0	0	0	0	0
Protect in Easement	0	0	0	0	0	0
Enhance	410	1,089	1,727	9,422	158	12,806
Total	410	1,089	1,777	10,171	158	13,605

Total Requested Funding within each Ecological Section (Table 4)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Funding
Restore	-	-	\$114,000	\$684,000	-	\$798,000
Protect in Fee with State PILT Liability	-	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-	-
Protect in Easement	-	-	-	-	-	-
Enhance	\$602,000	\$311,300	\$1,267,500	\$3,630,800	\$219,000	\$6,030,600
Total	\$602,000	\$311,300	\$1,381,500	\$4,314,800	\$219,000	\$6,828,600

Average Cost per Acre by Resource Type (Table 5)

Type	Wetland	Prairie	Forest	Habitat
------	---------	---------	--------	---------

Restore	-	\$998	-	-
Protect in Fee with State PILT Liability	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-
Protect in Easement	-	-	-	-
Enhance	-	\$470	-	-

Average Cost per Acre by Ecological Section (Table 6)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest
Restore	-	-	\$2,280	\$913	-
Protect in Fee with State PILT Liability	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	-	-
Enhance	\$1,468	\$285	\$733	\$385	\$1,386

Target Lake/Stream/River Feet or Miles

Parcels

Sign-up Criteria?

No

Explain the process used to identify, prioritize, and select the parcels on your list:

Parcels are identified by Area Wildlife Managers and approved by Regional Managers. Priorities are set by the Plans identified earlier in this proposal.

Restore / Enhance Parcels

Name	County	TRDS	Acres	Est Cost	Existing Protection
Blaine Preserve SNA	Anoka	03123226	5	\$5,000	Yes
Blaine Preserve SNA	Anoka	03123226	10	\$27,000	Yes
White Earth 20 NPB	Becker	14241220	5	\$3,500	Yes
White Earth 20 NPB	Becker	14241220	8	\$7,200	Yes
Lac qui Parle WMA: Main Unit	Big Stone	12045202	62	\$60,000	Yes
Big Stone 6-1 NPB	Big Stone	12246206	5	\$6,000	Yes
Clinton Prairie SNA	Big Stone	12347216	50	\$8,500	Yes
Lower Akron 5-2 NPB	Big Stone	12044205	35	\$10,000	Yes
Lac qui Parle WMA: Main Unit	Big Stone	11943224	150	\$60,000	Yes
Lac qui Parle WMA	Big Stone	11841206	272	\$200,000	Yes
Cottonwood River Prairie SNA	Brown	10935231	50	\$5,000	Yes
Linden 6-1 NPB	Brown	10830206	4	\$3,900	Yes
Joseph A. Tauer Prairie SNA	Brown	10931235	30	\$6,000	Yes
Eden North 19-1 NPB	Brown	11233219	12	\$5,500	Yes
Cottonwood River Prairie SNA	Brown	10935233	40	\$6,000	Yes
Cuka WMA	Chippewa	11639205	100	\$500,000	Yes
Lac qui Parle WMA	Chippewa	11942234	5	\$15,000	Yes
Lac qui Parle WMA: Main Unit	Chippewa	11943224	100	\$100,000	Yes
Lac qui Parle WMA: Main Unit	Chippewa	11943203	190	\$100,000	Yes
Lac qui Parle WMA	Chippewa	11942236	32	\$50,000	Yes
Carlos Avery WMA: Sunrise Unit	Chisago	03421234	100	\$100,000	Yes
Flowing 12 NPB	Clay	14146212	10	\$7,000	Yes
Ulen 29-1 NPB	Clay	14244229	8	\$7,200	Yes
Ulen 29-1 NPB	Clay	14244229	5	\$3,500	Yes
Tansem-1 NPB	Clay	13744201	8	\$7,200	No
Tansem-1 NPB	Clay	13744201	5	\$3,500	No
Strand N & S NPB	Clay	14244219	8	\$7,500	Yes
Strand N & S NPB	Clay	14244219	10	\$7,000	Yes
Felton Prairie SNA-Shrike Unit	Clay	14245230	8	\$7,200	Yes
Felton Prairie SNA-Shrike Unit	Clay	14245230	10	\$7,000	Yes
Clay County WMA	Clay	13845222	300	\$90,000	Yes
Parke 25 NPB	Clay	13844235	5	\$3,500	Yes
Parke 25 NPB	Clay	13844235	8	\$7,200	Yes
Felton Prairie SNA-Assinaboia Unit	Clay	14245220	10	\$7,000	Yes
Felton Prairie SNA-Assinaboia Unit	Clay	14245220	10	\$9,000	Yes
B-B Ranch NPB	Clay	14146213	10	\$7,000	Yes
B-B Ranch NPB	Clay	14146213	6	\$5,500	Yes
Felton Prairie SNA-Bicentennial Units	Clay	14145205	10	\$7,000	Yes
Felton Prairie SNA-Bicentennial Units	Clay	14145205	8	\$7,200	Yes
Blanket Flower SNA	Clay	13744214	10	\$7,000	Yes
Blanket Flower SNA	Clay	13744214	8	\$7,500	Yes
Felton Prairie SNA-Dakota Skipper & County Prairie Units	Clay	14245231	10	\$7,000	Yes
Felton Prairie SNA-Dakota Skipper & County	Clay	14245231	8	\$7,500	Yes

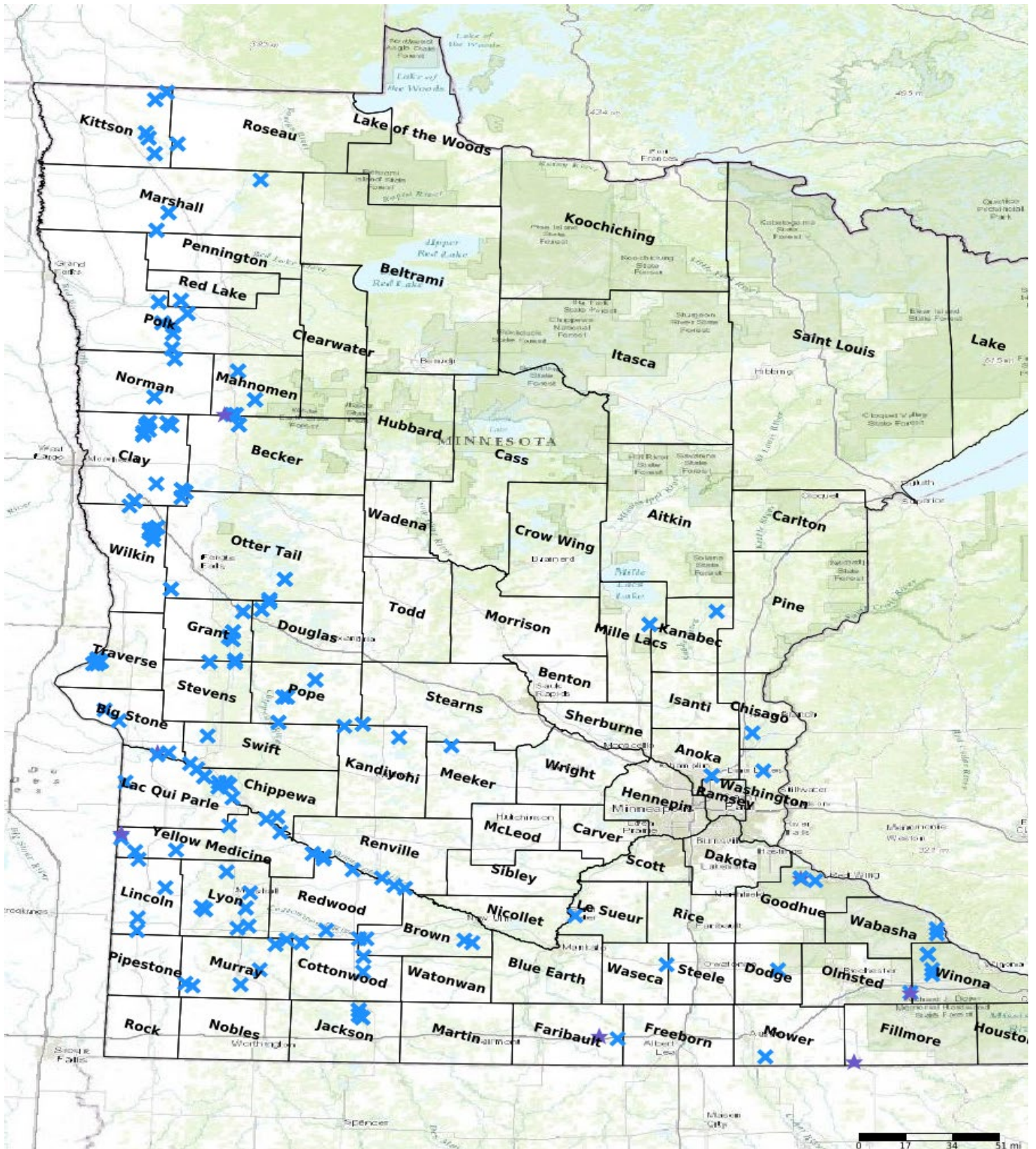
Prairie Units					
Flowing 12 NPB	Clay	14146212	6	\$5,500	Yes
Ann 9-1 NPB	Cottonwood	10838209	15	\$5,300	Yes
Rock Ridge Prairie SNA	Cottonwood	10735205	40	\$6,000	Yes
Lac qui Parle WMA: Main Unit	Cottonwood	10225201	200	\$200,000	Yes
Ann 9-1 NPB	Cottonwood	10838209	5	\$11,200	Yes
Carson 5-1 NPB	Cottonwood	10635205	15	\$3,000	Yes
McMartin WMA	Dodge	10717225	15	\$20,000	Yes
Aurora WMA	Dodge	10117216	1,000	\$50,000	Yes
Lund 2-1 NPB	Douglas	13040202	8	\$7,500	Yes
Lund 21-1 NPB	Douglas	13040221	5	\$3,500	Yes
Lund 21-1 NPB	Douglas	13040221	8	\$7,500	Yes
Lund 2-1 NPB	Douglas	13040202	10	\$7,000	Yes
Chadderdon WMA	Faribault	10224211	790	\$20,000	Yes
Beaver Creek WMA	Fillmore	10113228	232	\$116,000	Yes
Buck Family Memorial WMA	Goodhue	10511212	1,000	\$190,000	Yes
Cannon River Turtle Preserve SNA	Goodhue	11316225	20	\$54,000	Yes
Cannon River Turtle Preserve SNA	Goodhue	11316225	5	\$5,000	Yes
Spring Creek Prairie SNA	Goodhue	11315234	10	\$23,000	Yes
Cannon River Turtle Preserve SNA	Goodhue	11316225	10	\$23,000	Yes
Elk Lake 19-1 NPB	Grant	12841219	6	\$5,500	Yes
Olsen NPB	Grant	12841206	5	\$3,500	Yes
Lien 13-1 NPB	Grant	12842213	5	\$3,500	Yes
Woodke A & B NPB	Grant	12741232	8	\$7,200	Yes
Woodke A & B NPB	Grant	12741232	5	\$3,500	Yes
Olsen NPB	Grant	12841206	8	\$7,200	Yes
Lien 13-1 NPB	Grant	12842213	8	\$7,500	Yes
Pelican Lake-27-1 NPB	Grant	13041227	8	\$7,200	Yes
Pelican Lake-27-1 NPB	Grant	13041227	5	\$3,500	Yes
Elk Lake 19-1 NPB	Grant	12841219	5	\$3,500	Yes
Des Moines River Prairie SNA	Jackson	10435219	60	\$60,000	Yes
Christiania 31 NPBs	Jackson	10435231	25	\$5,500	Yes
Holthe Prairie SNA	Jackson	10335205	80	\$8,000	Yes
Belmont 5-1 NPB	Jackson	10335205	35	\$7,500	Yes
Des Moines River Prairie SNA	Jackson	10435219	20	\$6,000	Yes
Kroschel WMA	Kanabec	04222232	130	\$190,000	Yes
Norway Lake 5-01 NPB	Kandiyohi	12236205	35	\$13,650	Yes
Burbank WMA	Kandiyohi	12234226	42	\$130,000	Yes
Arvison 5	Kittson	15945205	5	\$3,500	Yes
Caribou 20 NPB	Kittson	16345220	8	\$7,500	No
Norway 1-1 NPB	Kittson	16046201	10	\$7,000	Yes
Lake Bronson Parkland SNA	Kittson	16146225	10	\$7,000	Yes
Caribou 20 NPB	Kittson	16345220	10	\$7,000	No
Caribou 2	Kittson	16345202	10	\$7,000	Yes
Caribou 2	Kittson	16345202	8	\$7,500	Yes
Arvison 5	Kittson	15945205	6	\$5,500	Yes
Norway 1-1 NPB	Kittson	16046201	8	\$7,200	Yes
Lake Bronson Parkland SNA	Kittson	16146225	8	\$7,500	Yes
Camp Release 32-1 NPB	Lac qui Parle	11841232	25	\$9,000	Yes
Lac qui Parle WMA	Lac qui Parle	11842210	10	\$30,000	Yes
Yellow Bank Hills SNA	Lac qui Parle	11846204	30	\$9,500	Yes
Agassiz 11-1 NPB	Lac qui Parle	12045211	30	\$9,800	Yes
Bob Gehlen WMA	Le Sueur	11026211	61	\$70,000	Yes
Hole-In-Mountain WMA	Lincoln	10945230	500	\$50,000	Yes
Archerville WMA	Lincoln	11345206	184	\$58,000	Yes
Bue-tiful Acres WMA	Lincoln	11045231	500	\$50,000	Yes
Rost WMA	Lincoln	11244232	58	\$17,400	Yes

Glynn Prairie SNA	Lyon	10940207	30	\$5,500	Yes
Lyons 7-2 NPB	Lyon	11042207	15	\$4,500	Yes
Lyons 7-1 NPB	Lyon	11042207	15	\$4,500	Yes
Custer 15-1 NPB	Lyon	10941215	15	\$36,000	Yes
Coon Creek 1-2 NPB	Lyon	11041201	10	\$3,500	Yes
Clifton WMA	Lyon	11140206	729	\$160,000	Yes
Prairie Marshes WMA	Lyon	11043201	452	\$155,000	Yes
Coon Creek 1-1 NPB	Lyon	11041201	10	\$3,500	Yes
Vallers WMA	Lyon	11341230	737	\$25,000	Yes
Lake Grove 31-1 NPB	Mahnomen	14341231	5	\$3,500	Yes
Lake Grove 31-1 NPB	Mahnomen	14341231	8	\$7,500	Yes
Popple Grove 36-1 NPB	Mahnomen	14342236	5	\$3,500	Yes
Popple Grove 36-1 NPB	Mahnomen	14342236	8	\$7,200	Yes
Rosedale fen SNA	Mahnomen	14441236	10	\$7,000	No
Rosedale fen SNA	Mahnomen	14441236	8	\$7,200	No
Santee Prairie SNA	Mahnomen	14541206	10	\$7,000	Yes
Santee Prairie SNA	Mahnomen	14541206	8	\$7,200	Yes
Waubun WMA	Mahnomen	14342234	250	\$290,000	Yes
Marsh Grove 36-1 NPB	Marshall	15645236	10	\$7,000	Yes
Thief Lake WMA	Marshall	15840219	863	\$129,450	Yes
Viking 4 NPB	Marshall	15445204	8	\$7,200	Yes
Viking 4 NPB	Marshall	15445204	10	\$7,000	Yes
Marsh Grove 36-1 NPB	Marshall	15645236	8	\$7,500	Yes
Teal Scurry WMA	Meeker	12131207	95	\$95,000	Yes
Mille Lacs WMA	Mille Lacs	04125229	13	\$13,000	Yes
Mille Lacs WMA	Mille Lacs	04125229	15	\$16,000	Yes
Holly 2-1 NPB	Murray	10839202	20	\$5,850	Yes
Moulton 5-1 NPB	Murray	10543205	30	\$11,500	Yes
Moulton 10-1 NPB	Murray	10543210	15	\$6,600	Yes
Badger WMA	Murray	10541202	1,000	\$100,000	Yes
Holly 17-1 NPB	Murray	10839217	10	\$4,850	Yes
Sandpiper Prairie SNA	Norman	14445233	8	\$7,200	Yes
Sandpiper Prairie SNA	Norman	14445233	10	\$7,000	Yes
Prairie Smoke Dunes SNA	Norman	14644217	8	\$7,200	Yes
Prairie Smoke Dunes SNA	Norman	14644217	10	\$7,000	Yes
Vermilya WMA	Olmsted	10511212	30	\$60,000	Yes
Whitewater WMA: Callahan Unit	Olmsted	10610201	200	\$253,500	Yes
Nidaros 21-1 NPB	Otter Tail	13239221	5	\$3,500	Yes
Wallace NPB	Otter Tail	13140235	8	\$7,200	Yes
Wallace NPB	Otter Tail	13140235	10	\$7,000	Yes
Otter Tail Prairie SNA	Otter Tail	13144217	10	\$7,000	Yes
Nidaros 21-1 NPB	Otter Tail	13239221	8	\$7,200	Yes
Otter Tail Prairie SNA	Otter Tail	13144217	8	\$7,200	Yes
Gentilly 27-1 NPB	Polk	15045227	5	\$3,500	Yes
Garfield 30-1 NPB	Polk	14744230	10	\$7,000	Yes
Pembina Trail SNA-Foxboro Unit	Polk	14845203	10	\$7,000	Yes
Garfield 30-1 NPB	Polk	14744230	8	\$7,500	Yes
Agassiz Dunes SNA	Polk	14844230	6	\$5,500	Yes
Pembina Trail SNA-Foxboro Unit	Polk	14845203	8	\$7,500	Yes
Agassiz Dunes SNA	Polk	14844230	10	\$7,000	Yes
Godfrey 7-1 NPB	Polk	14844207	8	\$7,500	Yes
Godfrey 7-1 NPB	Polk	14844207	10	\$7,000	Yes
Pembina Trail SNA-Crookston Prairie Unit	Polk	14944213	10	\$7,000	Yes
Pembina Trail SNA-Crookston Prairie Unit	Polk	14944213	8	\$7,500	Yes
Gentilly 27-1 NPB	Polk	15045227	10	\$9,000	Yes
Blue Mounds 10-1 NPB	Pope	12439210	8	\$7,500	Yes
Langhei Prairie SNA	Pope	12339232	10	\$7,000	Yes

Langhei Prairie SNA	Pope	12339232	8	\$7,500	Yes
Minnewaska 1-1 NPB	Pope	12538201	8	\$7,500	Yes
Minnewaska 1-1 NPB	Pope	12538201	10	\$7,000	Yes
Selix NPB	Pope	12439209	8	\$7,200	Yes
Selix NPB	Pope	12439209	5	\$3,500	Yes
Blue Mounds 10-1 NPB	Pope	12439210	10	\$7,000	Yes
Lake Johanna 31-2 NPB	Pope	12335231	5	\$3,500	Yes
Lake Johanna 31-2 NPB	Pope	12335231	8	\$7,500	Yes
Lake Pleasant 22-1 NPB	Red Lake	15044222	5	\$3,500	Yes
Lake Pleasant 22-1 NPB	Red Lake	15044222	8	\$7,500	Yes
Swedes Forest 21-2 NPB	Redwood	11437221	10	\$6,000	Yes
Lamberton 15-1 NPB	Redwood	10937215	10	\$5,400	Yes
Delhi 14-1 NPB	Redwood	11336214	8	\$5,500	Yes
Swedes Forest 28-1 NPB	Redwood	11437228	5	\$4,500	Yes
Cedar Mountain SNA	Redwood	11234215	20	\$60,000	Yes
Swedes Forest 21-2 NPB	Redwood	11437221	10	\$6,000	Yes
Morton Outcrops SNA	Renville	11334231	10	\$8,000	Yes
Two Rivers Aspen Parkland SNA	Roseau	16044217	8	\$7,200	Yes
Two Rivers Aspen Parkland SNA	Roseau	16044217	10	\$7,000	Yes
Swan Lake 5-1	Stevens	12641205	5	\$3,500	No
Verlyn Marth Memorial Prairie SNA	Stevens	12642206	8	\$7,200	Yes
Verlyn Marth Memorial Prairie SNA	Stevens	12642206	5	\$3,500	Yes
Fairfield 31-1 NPB	Swift	12242231	15	\$6,600	Yes
Lac qui Parle WMA: Main Unit	Swift	12043229	116	\$30,000	Yes
Fibranz NPB	Traverse	12647206	5	\$3,500	Yes
Windsor 13-1 NPB	Traverse	12648213	8	\$7,200	Yes
Windsor 13-1 NPB	Traverse	12648213	5	\$3,500	Yes
Walls 18-1 NPB	Traverse	12647218	8	\$7,200	Yes
Walls 8-1 NPB	Traverse	12647208	5	\$3,500	Yes
Walls 8-1 NPB	Traverse	12647208	8	\$7,200	Yes
Walls 7-1 NPB	Traverse	12647207	5	\$3,500	Yes
Walls 7-1 NPB	Traverse	12647207	8	\$7,200	Yes
Walls 7-2 NPB	Traverse	12647207	5	\$3,500	Yes
Walls 7-2 NPB	Traverse	12647207	10	\$9,000	Yes
Walls 18-1 NPB	Traverse	12647218	5	\$3,500	Yes
Fibranz NPB	Traverse	12647206	8	\$7,500	Yes
Mc Carthy Lake WMA	Wabasha	10909218	30	\$42,000	Yes
Kellogg Weaver Dunes	Wabasha	10909206	100	\$270,000	Yes
Moonan WMA	Waseca	10722213	80	\$120,000	Yes
Keystone Woods WMA	Washington	03120218	200	\$375,000	Yes
Tanberg 33-1 NPB	Wilkin	13545233	8	\$7,200	Yes
Tanberg 29-1 NPB	Wilkin	13545229	10	\$7,000	Yes
Tanberg 21-1 NPB	Wilkin	13545221	8	\$7,200	Yes
Tanberg 20-1 NPB	Wilkin	13746227	10	\$7,000	Yes
Tanberg 20-1 NPB	Wilkin	13545220	8	\$7,500	Yes
Tanberg 20-1 NPB	Wilkin	13746227	8	\$7,200	Yes
Rogers NPB	Wilkin	13746227	8	\$7,200	Yes
Rogers NPB	Wilkin	13746227	5	\$3,500	Yes
Akron 9 NPB	Wilkin	13445209	5	\$3,500	Yes
Tanberg 20-1 NPB	Wilkin	13545220	5	\$3,500	Yes
Akron 9 NPB	Wilkin	13445209	8	\$7,200	Yes
Atherton 5-1 NPB	Wilkin	13646205	5	\$3,500	Yes
Bilden NPB	Wilkin	13545215	5	\$3,500	Yes
Bilden NPB	Wilkin	13545215	8	\$7,500	Yes
Tanberg 29-2 NPB	Wilkin	13545229	10	\$7,000	Yes
Tanberg 29-2 NPB	Wilkin	13545229	8	\$7,200	Yes
Tanberg 33-1 NPB	Wilkin	13545233	10	\$7,000	Yes

Tanberg 21-1 NPB	Wilkin	13545221	5	\$3,500	Yes
Whitewater WMA: Main Branch Unit	Winona	10810226	55	\$99,000	Yes
Whitewater WMA: Main Branch Unit	Winona	10810226	75	\$95,000	Yes
Whitewater WMA: South Branch Unit	Winona	10710225	75	\$60,000	Yes
Whitewater WMA: Main Branch Unit	Winona	10810226	167	\$207,000	Yes
Mound Spring Prairie SNA	Yellow Medicine	11546229	70	\$8,000	Yes
Swedes Forest SNA	Yellow Medicine	11438213	30	\$60,000	Yes
Swedes Forest SNA	Yellow Medicine	11438213	20	\$8,000	Yes
Stony Run 3-1 NPB	Yellow Medicine	10640203	20	\$9,100	Yes
Blue Devil Valley SNA	Yellow Medicine	11539204	6	\$12,000	Yes
Stoney Run WMA	Yellow Medicine	11641230	130	\$93,000	Yes
Stony Run 11-1 NPB	Yellow Medicine	11640211	10	\$9,100	Yes
Fortier 24-1 NPB	Yellow Medicine	11446224	20	\$9,500	Yes
Antelope Valley SNA	Yellow Medicine	11444214	20	\$7,000	Yes
Mound Spring Prairie SNA	Yellow Medicine	11546217	5	\$18,000	Yes

Parcel Map

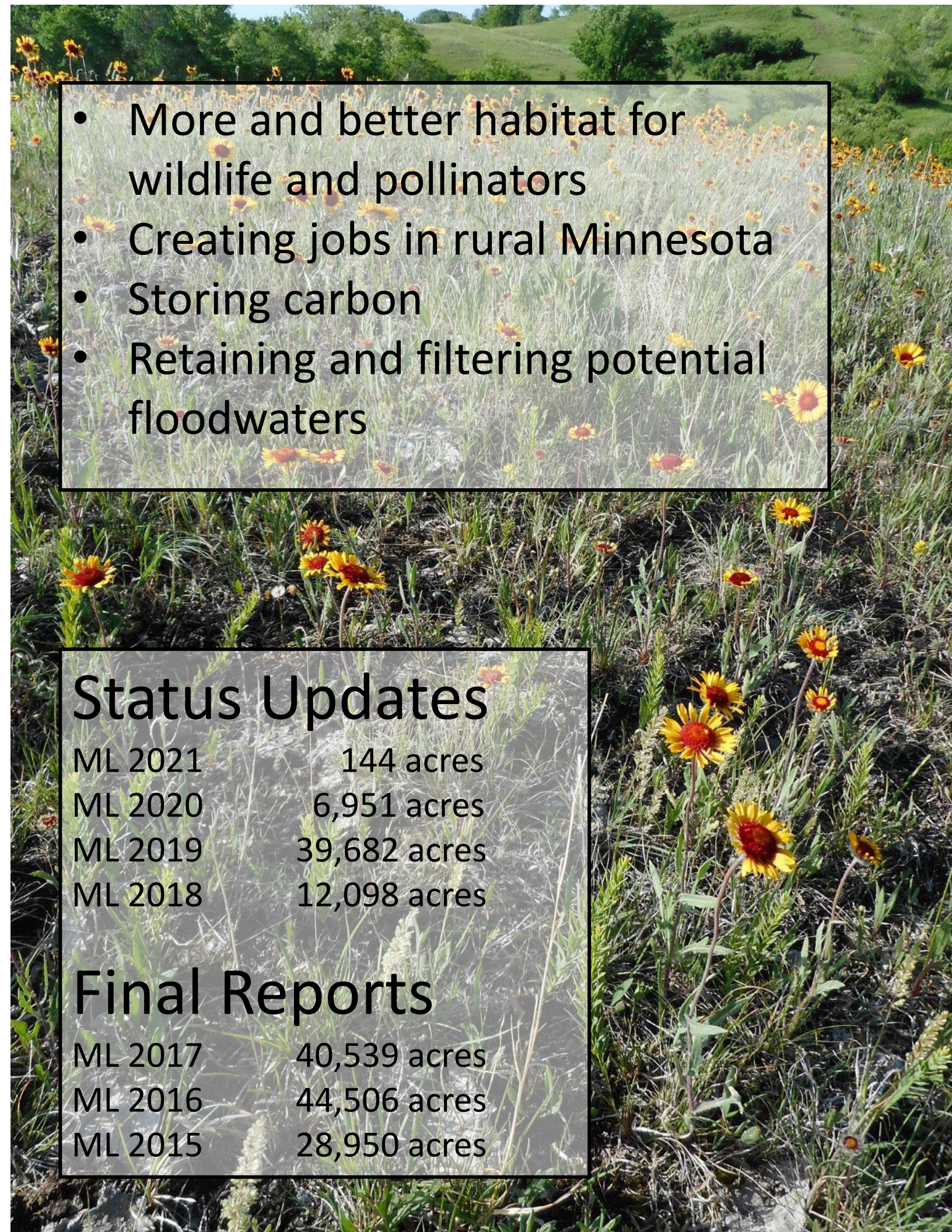


- Protect in Easement
- ▲ Protect in Fee with PILT
- Protect in Fee W/O PILT
- ★ Restore
- ✕ Enhance
- ⊕ Other

DNR Grassland Enhancement Phase 16

Restore 799
Enhance 12,806
\$6,828,600



- 
- More and better habitat for wildlife and pollinators
 - Creating jobs in rural Minnesota
 - Storing carbon
 - Retaining and filtering potential floodwaters

Status Updates

ML 2021	144 acres
ML 2020	6,951 acres
ML 2019	39,682 acres
ML 2018	12,098 acres

Final Reports

ML 2017	40,539 acres
ML 2016	44,506 acres
ML 2015	28,950 acres