

Lessard-Sams Outdoor Heritage Council

Fiscal Year 2022 / ML 2021 Request for Funding



Date: May 27, 2020

Program or Project Title: DNR Grassland Phase XIII - with Roving Crew (PRE01a)

Funds Requested: \$11,109,100

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County Locations: Aitkin, Benton, Big Stone, Brown, Cass, Chippewa, Clay, Cottonwood, Dakota, Douglas, Faribault, Fillmore, Freeborn, Goodhue, Googhue, Grant, Houston, Jackson, Kandiyohi, Kittson, Lac qui Parle, Lac Qui Parle, Lincoln, Lyon, Mahnomen, Marshall, Martin, Meeker, Mille Lacs, Morrison, Murray, Norman, Olmsted, Otter Tail, Pennington, Pipestone, Polk, Pope, Red Lake, Redwood, Renville, Roseau, Sherburne, Stevens, Swift, Todd, Traverse, Wabasha, Washington, Wilkin, and Yellow Medicine.

Eco regions in which work will take place:

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

Activity types:

- Restore
- Enhance

Priority resources addressed by activity:

- Wetlands
- Prairie
- Habitat

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, embedded wetlands, and oak savannas to increase wildlife populations. The Prairie Plan, Pheasant 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 parcels that are permanently protected and most open to public hunting, including DNR WMAs, SNAs, AMAs, Native Prairie Bank (NPB) easements, State Forests, as well as federal WPAs and NWRs.

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

Wildlife and pollinator populations are a fraction of what they were even a decade 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. 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.

This request is part of larger efforts among the grassland community. For instance, in July 2020, multiple partners worked together to submit a SAFE (State Acre For wildlife Enhancement) to FSA to boost CRP acres in Minnesota.

How does the proposal address habitats that have significant value for wildlife species of greatest conservation need, and/or threatened or endangered species, and list targeted species:

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 free of sediment and chemical pollutants. 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 is the degree of timing/opportunistic urgency and why it is necessary to spend public money for this work as soon as possible:

Traditionally, grasslands and wetlands have been seen primarily as wildlife habitat. We have Plans that tell us how to best do this work on the landscape. In recent years researchers in Minnesota and surrounding states are showing how strategic landscape planning for grassland/wetland work can improve water quality for wildlife and people. Water quality issues continue to be a economic and health problem in rural Minnesota. Combining wildlife and water plans shows how strategic planning can benefit wildlife and people at the same time.

Describe how the proposal uses science-based targeting that leverages or expands corridors and complexes, reduces fragmentation or protects areas identified in the MN County Biological Survey:

The projects in this proposal will be guided primarily by the Prairie Conservation Plan as well as the Pheasant and Duck 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 is telling us 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. The first Conservation Focus Area is in the prairie region of the state. Additionally, conservation partners (DNR, USFWS, TNC, and Audubon) recently received a grant through the USFWS to help us monitor habitat quality, wildlife abundance, and the response of wildlife to all OHF funded activities in these areas. Partners recently published a research paper on their first years of data. The DNR and our conservation partners take these funds, and the monitoring of outputs and outcomes, seriously.

Which sections of the Minnesota Statewide Conservation and Preservation Plan are applicable to this project:

- H1 Protect priority land habitats
- H5 Restore land, wetlands and wetland-associated watersheds

Which other plans are addressed in this proposal:

- Long Range Plan for the Ring-Necked Pheasant in MN
- Minnesota Prairie Conservation Plan

Describe how your program will advance the indicators identified in the plans selected:

The Prairie Plan, Pheasant Plan, and Duck Plan identify target acreages for enhancement and help guide where on the landscape those activities should occur. These funds, combined with other DNR funds and funding through the USFWS, as well as other grants to our conservation partners (ie. North American Wetland Conservation Act and others), are all part of the overall strategy among the conservation community for increasing the acres enhanced and restored of grasslands and associated wetlands in Minnesota.

These plans also help guide and focus that work where the science tells us we will have the biggest return in habitat quality and wildlife populations for the investment. Conservation partners in the prairie region continue to apply existing monitoring protocols such as the Grassland Monitoring Team (GMT) and work to develop statistically robust new monitoring protocols.

Which LSOHC section priorities are addressed in this proposal:

Prairie:

- Restore or enhance habitat on public lands

Forest / Prairie Transition:

- Protect, enhance, and restore rare native remnant prairie

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

Metro / Urban:

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

Southeast Forest:

- Protect, enhance, and restore remnant goat prairies

Describe how your program will produce and demonstrate a significant and permanent conservation legacy and/or outcomes for fish, game, and wildlife as indicated in the LSOHC priorities:

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, 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.

Relationship to other funds:

- Not Listed

Describe the relationship of the funds:

Not Listed

Does this program include leverage in funds:

No

Per MS 97A.056, Subd. 24, Any state agency or organization requesting a direct appropriation from the

OHF must inform the LSOHC at the time of the request for funding is made, 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.

Describe the source and amount of non-OHF money spent for this work in the past:

Appropriation Year	Source	Amount
2019	Game and Fish (Wildlife Operations)	24196000
2019	Dedicated Accounts (Duck Stamp, Pheasant Stamp, etc)	3919000
2019	Heritage Enhancement Acct	3466000

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 DNR and USFWS. 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).

Explain the things you will do in the future to maintain project outcomes:

Year	Source of Funds	Step 1	Step 2	Step 3
2024	Those listed above and OHF	Monitor subset of projects	Document results	Determine capacity for traditional funds to meet results
2025 and beyond	Those listed above and OHF	Continue monitoring	adapt results to future projects	seek funding for continued monitoring

Identify indicator species and associated quantities this habitat will typically support:

Pheasant

By looking at the ratios of CRP acres in Minnesota to pheasant harvest, we can estimate that every three acres of grassland habitat has the potential to produce one harvested pheasant rooster.

Prairie Chickens

According to the research literature and personal observations in Minnesota, prairie chickens require a minimum of 320 acres of high quality grasslands with no areas hostile to grassland wildlife (woodlots, farmsteads, etc) near these grasslands. For every 320 acre patch of high quality grassland in the prairie chicken range in the northwest part of the state, we can expect there to be a lek, or booming ground. The average size of booming grounds in Minnesota is 11 males.

Bobolink and Grasshopper Sparrow

The breeding territory size of bobolinks and grasshopper sparrows is 1.7 and 2.1 acres respectively in high quality habitat in Wisconsin. If all of the habitat was occupied, a 100 acres of habitat could potentially hold approximately 60 and 48 pairs of bobolinks and grasshopper sparrows respectively.

Monarch Butterfly

Research from the University of Minnesota has shown that it takes approximately 30 milkweed result in one monarch butterfly contributing to the overwintering Mexican population. Grasslands can have between 100-250 milkweed stems per acre. An acre of restored or enhanced grassland could potentially contribute 3 to 8 monarchs to the population.

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 - **Yes (WMA, WPA, SNA, AMA, Permanently Protected Conservation Easements, Refuge Lands, State Forests)**

Do you anticipate federal funds as a match for this program - **No**

Land Use:

Will there be planting of corn or any crop on OHF land purchased or restored in this program - **Yes**

Explain

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 G MO, 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.

Land Use:

Have you received OHF dollars in the past through LSOHC? - **Yes**

Past appropriations and spending to date:

Apprp Year	Approp Amount Received	Approp Amount Spent to Date	Leverage as Reported in AP/th>	Leverage Realized to Date	Total Acres Affected in AP	Total Acres Affected to Date	Program Complete and Final Report Approved?
2015	4880000	3751600			20950	20613	
2016	3983000	2386700			64060	40665	
2017	3950000	2214600			30170	43630	
2018	4007000	1045900			21100	5663	

Accomplishment Timeline

Activity	Approximate Date Completed
WMA Enhancement / Restoration - contracts	6/30/2026
SNA / NPB Enhancements	6/30/2026
Roving Crew Enhancement / Restorations	6/30/2026

Budget Spreadsheet

Total Amount of Request: \$11,109,100

Budget and Cash Leverage

BudgetName	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Personnel	\$3,284,500	\$0		\$3,284,500
Contracts	\$5,033,900	\$0		\$5,033,900
Fee Acquisition w/ PILT	\$0	\$0		\$0
Fee Acquisition w/o PILT	\$0	\$0		\$0
Easement Acquisition	\$0	\$0		\$0
Easement Stewardship	\$0	\$0		\$0
Travel	\$1,221,800	\$0		\$1,221,800
Professional Services	\$0	\$0		\$0
Direct Support Services	\$367,700	\$0		\$367,700
DNR Land Acquisition Costs	\$0	\$0		\$0
Capital Equipment	\$0	\$0		\$0
Other Equipment/Tools	\$13,000	\$0		\$13,000
Supplies/Materials	\$1,188,200	\$0		\$1,188,200
DNR IDP	\$0	\$0		\$0
Total	\$11,109,100	\$0	-	\$11,109,100

Personnel

Position	FTE	Over # of years	LSOHC Request	Anticipated Leverage	Leverage Source	Total
SNA Contract and Project Mtg	0.03	4.00	\$9,000	\$0		\$9,000
SNA-NPB Specialists and Technicians	2.69	4.00	\$754,000	\$0		\$754,000
SNA Laborers and Seasonal Crew	0.39	4.00	\$54,000	\$0		\$54,000
Wildlife Roving Crew	6.00	5.00	\$2,467,500	\$0		\$2,467,500
Total	9.11	17.00	\$3,284,500	\$0	-	\$3,284,500

Amount of Request: \$11,109,100

Amount of Leverage: \$0

Leverage as a percent of the Request: 0.00%

DSS + Personnel: \$3,652,200

As a % of the total request: 32.88%

Easement Stewardship: \$0

As a % of the Easement Acquisition: -%

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.

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.

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:

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

I understand and agree that lodging, meals, and mileage must comply with the current MMB Commissioner Plan: - No

Describe and explain leverage source and confirmation of funds:

Not Listed

Does this proposal have the ability to be scalable? - Yes

Tell us how this project would be scaled and how administrative costs are affected, describe the “economy of scale” and how outputs would change with reduced funding, if applicable:

Because this programmatic request consists of a number of smaller projects, we can scale our number of projects and resulting acres up or down. Administrative costs would be refigured to address a different budget.

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.

For the Roving Crews have been supported with OHFs since their inception. The funding for this Crew is ending and this proposal would continue them for additional years.

Output Tables

Table 1a. Acres by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	0	1,315	0	0	1,315
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	33,378	0	0	33,378
Total	0	34,693	0	0	34,693

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

Type	Native Prairie
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

Table 2. Total Requested Funding by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	\$0	\$708,000	\$0	\$0	\$708,000
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	\$10,401,100	\$0	\$0	\$10,401,100
Total	\$0	\$11,109,100	\$0	\$0	\$11,109,100

Table 3. Acres within each Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore	82	155	351	427	300	1,315
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	136	1,108	2,874	29,238	22	33,378
Total	218	1,263	3,225	29,665	322	34,693

Table 4. Total Requested Funding within each Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore	\$44,100	\$83,300	\$189,000	\$230,200	\$161,400	\$708,000
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	\$73,200	\$596,600	\$1,547,900	\$8,171,800	\$11,600	\$10,401,100
Total	\$117,300	\$679,900	\$1,736,900	\$8,402,000	\$173,000	\$11,109,100

Table 5. Average Cost per Acre by Resource Type

Type	Wetlands	Prairies	Forest	Habitats
Restore	\$0	\$538	\$0	\$0
Protect in Fee with State PILT Liability	\$0	\$0	\$0	\$0
Protect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$0
Protect in Easement	\$0	\$0	\$0	\$0
Enhance	\$0	\$312	\$0	\$0

Table 6. Average Cost per Acre by Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest
Restore	\$538	\$537	\$538	\$539	\$538
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	\$538	\$538	\$539	\$279	\$527

Automatic system calculation / not entered by managers

Target Lake/Stream/River Feet or Miles

0

I have read and understand Section 15 of the Constitution of the State of Minnesota, Minnesota Statute 97A.056, and the Call for Funding Request. I certify I am authorized to submit this proposal and to the best of my knowledge the information provided is true and accurate.

Outcomes

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 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 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.*

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.*

Parcel List

Explain the process used to select, rank and prioritize the parcels:

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

Section 1 - Restore / Enhance Parcel List

No parcels with an activity type restore or enhance.

Section 2 - Protect Parcel List

No parcels with an activity type protect.

Section 2a - Protect Parcel with Bldgs

No parcels with an activity type protect and has buildings.

Section 3 - Other Parcel Activity

Aitkin

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Gun Lake WMA	04825204	180	\$96,188	Yes	Yes	Not Applicable

Benton

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Graham WMA: Main Unit	03830201	24	\$19,500	Yes	Yes	Not Applicable

Big Stone

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Akron 13-1 NPB	12044213	50	\$7,000	yes	No	Not Applicable
Clinton Prairie SNA	12347216	45	\$7,400	Yes	No	Not Applicable
Foster 34-1 NPB	12348234	25	\$8,000	yes	No	Not Applicable
Johnson NPB	12247201	75	\$8,000	yes	No	Not Applicable
Lac qui Parle WMA: Main Unit	11943224	208	\$200,000	Yes	Yes	Not Applicable
Lac qui Parle WMA: Main Unit	12044214	40	\$30,000	Yes	Yes	Not Applicable

Brown

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Joseph A. Tauer Prairie SNA	10931035	20	\$6,200	Yes	Yes	Not Applicable

Cass

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Meadow Brook WMA	13531222	53	\$44,540	Yes	Yes	Not Applicable

Chippewa

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Burbank WMA	11840205	1,325	\$100,000	Yes	Yes	Not Applicable
Lac qui Parle WMA: Controlled Hunting Zone	11841206	276	\$150,000	Yes	Yes	Not Applicable
Lac qui Parle WMA: Controlled Hunting Zone	11842201	5	\$12,000	Yes	Yes	Not Applicable
Lac qui Parle WMA: Controlled Hunting Zone	11842213	9	\$18,000	Yes	Yes	Not Applicable
Lac qui Parle WMA: Controlled Hunting Zone	11942234	5	\$15,000	Yes	Yes	Not Applicable
Lac qui Parle WMA: Controlled Hunting Zone	11942236	70	\$28,000	Yes	Yes	Not Applicable

Clay

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Blanket Flower SNA	13744214	10	\$25,000	Yes	No	Not Applicable
Blanket Flower SNA	13744214	20	\$10,000	Yes	No	Not Applicable
Blanket Flower SNA	13744214	20	\$16,000	Yes	No	Not Applicable
Blue Mounds 10-1 NPB	12439210	35	\$10,000	Yes	No	Not Applicable
Felton Prairie SNA- Assinaboia Unit	14245220	10	\$25,000	Yes	No	Not Applicable
Felton Prairie SNA- Assinaboia Unit	14245220	40	\$12,000	Yes	No	Not Applicable
Felton Prairie SNA- Bicentennial Units	14145205	5	\$5,000	Yes	Yes	Not Applicable
Felton Prairie SNA- Bicentennial Units	14145205	20	\$10,000	Yes	Yes	Not Applicable
Felton Prairie SNA- Dakota Skipper & County Prairie Units	14245231	5	\$18,000	Yes	Yes	Not Applicable
Felton Prairie SNA- Dakota Skipper & County Prairie Units	14245231	35	\$10,000	Yes	Yes	Not Applicable
Felton Prairie SNA- Shrike Unit	14245230	20	\$10,000	Yes	No	Not Applicable
Strand N & S NPB	14244219	25	\$10,000	Yes	No	Not Applicable
Ulen 29-1 NPB	14244229	15	\$10,000	Yes	No	Not Applicable
Ulen 29-1 NPB	14244229	15	\$15,000	Yes	No	Not Applicable

Cottonwood

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Bennett WMA	10129206	1,737	\$80,000	Yes	Yes	Not Applicable
Four Corners WMA	10332231	33	\$23,000	Yes	Yes	Not Applicable
Lac qui Parle WMA: Main Unit	10538219	200	\$200,000	Yes	Yes	Not Applicable
String Lakes WMA	10536229	542	\$103,000	Yes	Yes	Not Applicable

Dakota

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Chimney Rock SNA	11417231	5	\$14,000	Yes	No	Not Applicable
Chimney Rock SNA	11417231	7	\$6,000	Yes	No	Not Applicable

Douglas

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Lund 21-1 NPB	13040221	10	\$10,000	Yes	No	Not Applicable
Lund 2-1 NPB	13040202	30	\$10,000	Yes	No	Not Applicable

Faribault

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Rice Lake WMA	10 427221	27	\$27,000	Yes	Yes	Not Applicable
Walnut Lake WMA	10 225201	100	\$50,000	Yes	Yes	Not Applicable

Fillmore

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Cherry Grove Blind Valley SNA	10 112203	15	\$33,500	Yes	No	Not Applicable
Choice WMA	10 208214	70	\$56,000	Yes	Yes	Not Applicable
Choice WMA	10 212221	140	\$88,000	Yes	Yes	Not Applicable
Peterson SF complex	10 408228	100	\$50,000	yes	Yes	Not Applicable
Pin Oak Prairie SNA	10 412231	10	\$28,000	Yes	Limited	No
Pin Oak Prairie SNA	10 412231	15	\$11,000	Yes	Limited	No
Rushford Sand Barrens SNA	10 408228	20	\$55,000	Yes	Yes	Not Applicable
Rushford SF complex	10 408214	100	\$60,000	yes	Yes	Not Applicable

Freeborn

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Boyd Sartell WMA: Main Unit	10 114205	1,500	\$250,000	Yes	Yes	Not Applicable

Goodhue

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Buck Family Memorial WMA	10 514230	80	\$120,000	Yes	Yes	Not Applicable
Gordon W. Yeager WMA: Nelson Unit	10 515204	100	\$180,000	Yes	Yes	Not Applicable
River Terrace Prairie SNA	11 217201	9	\$25,000	Yes	No	Not Applicable
River Terrace Prairie SNA	11 217201	40	\$28,000	Yes	No	Not Applicable
Spring Creek Prairie SNA	11 315234	13	\$27,000	Yes	No	No
Spring Creek Prairie SNA	11 315234	40	\$29,000	Yes	No	No

Googhue

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Cannon River Turtle Preserve SNA	11 316225	5	\$6,500	Yes	Yes	No

Grant

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Elk Lake 19-1 NPB	12 841219	1	\$7,000	Yes	No	Not Applicable
Olsen NPB	12 841206	15	\$10,000	Yes	No	Not Applicable
Pelican Lake-27-1 NPB	130 41227	5	\$5,000	Yes	No	Not Applicable
Pelican Lake-27-1 NPB	130 41227	20	\$10,000	Yes	No	Not Applicable
Woodke A & B NPB	12 741232	20	\$10,000	Yes	No	Not Applicable

Houston

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Hokah SF complex	10 40 5234	100	\$125,000	yes	Limited	Not Applicable
Jefferson SF complex	10 10 4219	200	\$200,000	yes	Yes	Not Applicable
Reno SF complex	10 10 4202	100	\$20,000	yes	Yes	Not Applicable
Vinegar Ridge SF complex	10 40 7215	700	\$100,000	yes	Yes	Not Applicable
Wetbark SF complex	10 30 7211	300	\$80,000	yes	Yes	Not Applicable
Yucatan WMA	10 30 7230	30	\$77,000	Yes	Yes	Not Applicable

Jackson

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Belmont 6-1 NPB	10 33520 6	4	\$10,000	yes	No	Not Applicable
Belmont 6-1 NPB	10 33520 6	60	\$6,000	yes	No	Not Applicable
Caraway WMA: Main Unit	10 136215	77	\$70,000	Yes	Yes	Not Applicable

Kandiyohi

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Burbank WMA	12234226	42	\$130,000	Yes	Yes	Not Applicable
Norway Lakes 5-1 NPB	1223620 5	40	\$9,000	yes	No	Not Applicable
Oleander WMA	12236216	47	\$66,000	Yes	Yes	Not Applicable
Ringo-Nest WMA	12134230	31	\$50,000	Yes	Yes	Not Applicable
Willmar WMA	120 35236	29	\$30,000	Yes	Yes	Not Applicable

Kittson

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Lake Bronson Parkland SNA	16146225	10	\$8,000	Yes	No	Not Applicable
Lake Bronson Parkland SNA	16146225	40	\$12,000	Yes	No	Not Applicable
Norway 1-1 NPB	160 4620 1	15	\$10,000	Yes	No	Not Applicable
Norway 1-1 NPB	160 4620 1	20	\$10,000	Yes	No	Not Applicable

Lac qui Parle

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Agassiz 11-1 NPB	120 45211	8	\$8,000	yes	No	Not Applicable
Hantho 17-1 NPB	11943217	25	\$7,000	yes	No	Not Applicable
Hantho 25-1 NPB	11943225	20	\$7,000	yes	No	Not Applicable
Lac qui Parle 36-1 NPB	11842236	50	\$10,000	yes	No	Not Applicable
Odden NPB	11645216	30	\$7,000	yes	No	Not Applicable

Lac Qui Parle

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Lac qui Parle WMA: Controlled Hunting Zone	11842210	10	\$30,000	Yes	Yes	Not Applicable

Lincoln

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Bosque WMA	11244236	40	\$30,300	Yes	Yes	Not Applicable
Chain-O-Sloughs WMA	10 946222	95	\$75,600	Yes	Yes	Not Applicable
Chain-O-Sloughs WMA	11145216	39	\$29,250	Yes	Yes	Not Applicable
Prairie Dell WMA	11345216	38	\$15,000	Yes	Yes	Not Applicable
Sio uxLo okout WMA	110 45231	80	\$24,000	Yes	Yes	Not Applicable

Lyon

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Clifton 32-1 NPB	11140232	1	\$7,000	yes	No	Not Applicable
Gabriel Anderson WMA	11340206	10	\$7,500	Yes	Yes	Not Applicable

Mahnomen

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Lake Grove 31-1 NPB	14341231	20	\$10,000	Yes	No	Not Applicable
Popples Grove 36-1 NPB	14342236	20	\$10,000	Yes	No	Not Applicable

Marshall

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Marsh Grove 36-1 NPB	15645236	25	\$10,000	Yes	No	Not Applicable
Viking 4 NPB	15445204	15	\$13,500	Yes	No	Not Applicable

Martin

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Rooney Run WMA	10332228	230	\$10,000	Yes	Yes	Not Applicable
Seymour Lake WMA	10332220	76	\$10,000	Yes	Yes	Not Applicable

Meeker

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Alice Hamm WMA	11826201	610	\$76,150	Yes	Yes	Not Applicable
Kingston WMA	12129228	30	\$40,000	Yes	Yes	Not Applicable

Mille Lacs

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Mille Lacs WMA	04125229	100	\$115,000	Yes	Yes	Not Applicable

Morrison

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Sponsa WMA	12831231	12	\$31,700	Yes	Yes	Not Applicable

Murray

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Dovray 7-1 NPB	10739207	25	\$6,000	yes	No	Not Applicable
Holly 17-1 NPB	10839217	15	\$5,000	yes	No	Not Applicable
Moulton 19-1 NPB	10543219	50	\$9,000	yes	No	Not Applicable
Moulton 8-1 NPB	10543208	5	\$10,000	yes	No	Not Applicable

Norman

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Prairie Smoke Dunes SNA	14644217	10	\$22,000	Yes	Yes	Not Applicable
Prairie Smoke Dunes SNA	14644217	40	\$12,000	Yes	Yes	Not Applicable
Sandpiper Prairie SNA	14445233	40	\$12,000	Yes	No	Not Applicable

Olmsted

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Whitewater WMA: Callahan Unit	10610201	75	\$127,600	Yes	Yes	Not Applicable
Whitewater WMA: Callahan Unit	10610201	1,000	\$123,000	Yes	Yes	Not Applicable

Otter Tail

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Nidaros 21-1 NPB	13239221	20	\$10,000	Yes	No	Not Applicable
Otter Tail Prairie SNA	13144217	25	\$10,000	Yes	No	Not Applicable
Wallace NPB	13140235	25	\$10,000	Yes	No	Not Applicable

Pennington

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Pembina WMA: Pennington County Unit	15345217	20	\$50,000	Yes	Yes	Not Applicable

Pipestone

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Eden WMA	10546224	135	\$96,000	Yes	Yes	Not Applicable

Polk

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Agassiz Dunes SNA	14844230	20	\$10,000	Yes	No	Not Applicable
Garfield 30-1 NPB	14744230	30	\$10,000	Yes	No	Not Applicable
Gentilly 27-1 NPB	15045227	20	\$10,000	Yes	No	Not Applicable
Godfrey 7-1 NPB	14844207	10	\$10,000	Yes	No	Not Applicable
Liberty WMA	14745216	75	\$30,000	Yes	Yes	Not Applicable
Pembina Trail SNA- Crookston Prairie Unit	14944213	40	\$12,000	Yes	No	Not Applicable
Pembina Trail SNA- Foxboro Unit	14845203	10	\$8,000	Yes	No	Not Applicable
Pembina Trail SNA- Foxboro Unit	14845203	40	\$12,000	Yes	No	Not Applicable

Pope

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Fibranz NPB	12647206	25	\$10,000	Yes	No	Not Applicable
Lake Johanna 31-2 NPB	12335231	5	\$18,000	Yes	No	Not Applicable
Langhei Prairie SNA	12339232	10	\$10,000	Yes	No	Not Applicable
Minnewaska 1-1 NPB	12538201	10	\$8,500	Yes	No	Not Applicable

Red Lake

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Lake Pleasant 22-1 NPB	15044222	10	\$10,000	Yes	No	Not Applicable

Redwood

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Cedar Mountain SNA	11234214	40	\$6,100	Yes	Limited	Not Applicable
Cedar Rock WMA: South East Unit	11336210	87	\$90,000	Yes	Yes	Not Applicable
Swedes Forest 20-1 NPB	11437220	50	\$6,000	yes	No	Not Applicable

Renville

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Chetomba Creek WMA	11637217	80	\$35,500	Yes	Yes	Not Applicable
Granite Prairie WMA	11335218	28	\$56,000	Yes	Yes	Not Applicable
Lower Flora 3-1 NPB	11336203	10	\$6,000	Yes	No	Not Applicable
River Warren Outcrops SNA	11436233	17	\$84,000	Yes	Yes	Yes

Roseau

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Two Rivers Aspen Parkland SNA	160 44217	20	\$19,000	Yes	Yes	Not Applicable
Two Rivers Aspen Parkland SNA	160 44217	40	\$12,000	Yes	Yes	Not Applicable

Sherburne

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Uncas Dunes SNA	03427228	15	\$13,000	Yes	Yes	Not Applicable

Stevens

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Verlyn Marth Memorial Prairie SNA	12642206	1	\$7,000	Yes	No	Not Applicable

Swift

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Appleton 19-1 NPB	120 43219	2	\$5,000	Yes	No	Not Applicable
Appleton 19-1 NPB	120 43219	35	\$8,800	Yes	No	Not Applicable
Lac qui Parle WMA: Main Unit	120 43217	32	\$32,000	Yes	Yes	Not Applicable
Lac qui Parle WMA: Main Unit	120 43220	12	\$20,000	Yes	Yes	Not Applicable

Todd

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Hartford WMA	130 33224	14	\$32,300	Yes	Yes	Not Applicable
Iona WMA	130 34228	66	\$27,000	Yes	Yes	Not Applicable
Lasher Lake WMA	12833206	22	\$19,500	Yes	Yes	Not Applicable
Long Prairie River WMA: North Unit	13133214	71	\$171,100	Yes	Yes	Not Applicable
Owen-Hinz WMA	12835212	63	\$50,500	Yes	Yes	Not Applicable

Traverse

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Walls 18-1 NPB	12648218	20	\$10,000	Yes	No	Not Applicable
Walls 7-1 NPB	12647207	25	\$10,000	Yes	No	Not Applicable
Walls 7-2 NPB	12647207	20	\$10,000	Yes	No	Not Applicable
Walls 8-1 NPB	12647208	3	\$18,000	Yes	No	Not Applicable
Walls 8-1 NPB	12647208	10	\$10,000	Yes	No	Not Applicable
Windsor 13-1 NPB	12648213	25	\$10,000	Yes	No	Not Applicable

Wabasha

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Kellogg Weaver Dunes SNA	10909207	30	\$82,000	Yes	No	Not Applicable
Kellogg Weaver Dunes SNA	10909207	80	\$55,000	Yes	No	Not Applicable
Whitewater WMA complex	10710202	200	\$100,000	yes	Yes	Not Applicable

Washington

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Bayport WMA	02920222	16	\$45,600	Yes	Yes	Not Applicable
Bayport WMA	02920222	75	\$270,125	Yes	Yes	Not Applicable
Grey Cloud Dunes SNA	02721229	9	\$25,000	Yes	No	Not Applicable
Grey Cloud Dunes SNA	02721229	14	\$29,000	Yes	No	Not Applicable
Grey Cloud Dunes SNA	02721229	20	\$15,000	Yes	No	Not Applicable
Lost Valley Prairie SNA	02720220	4	\$9,000	Yes	No	Not Applicable
Lost Valley Prairie SNA	02720220	9	\$25,000	Yes	No	Not Applicable
Lost Valley Prairie SNA	02720220	10	\$9,000	Yes	No	Not Applicable
St. Croix Savanna SNA	02920215	10	\$21,000	Yes	No	Not Applicable
St. Croix Savanna SNA	02920215	30	\$22,000	Yes	No	Not Applicable

Wilkin

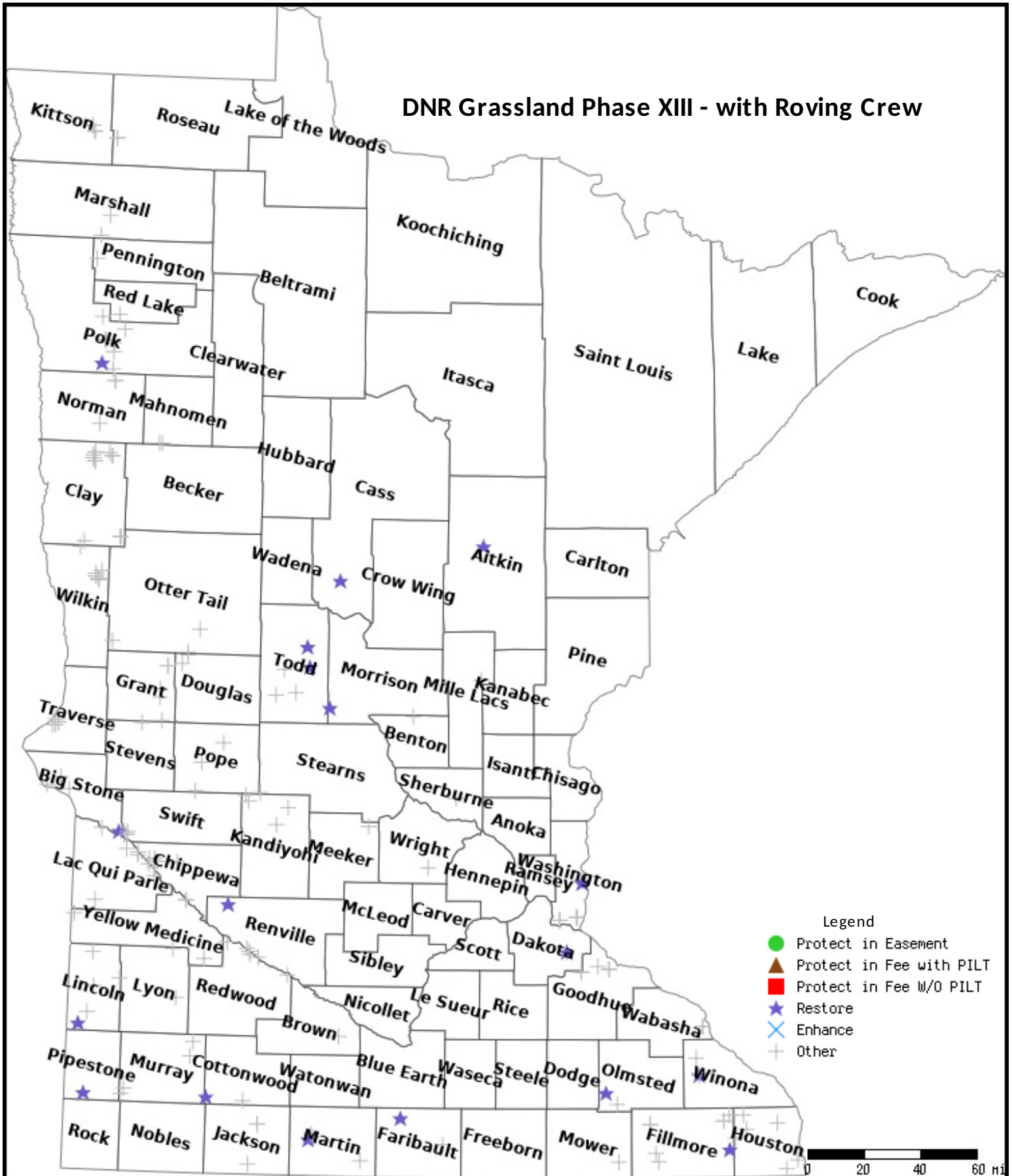
Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Atherton 5-1 NPB	13646205	10	\$10,000	Yes	No	Not Applicable
Bilden NPB	13545215	10	\$10,000	Yes	No	Not Applicable
Tanberg 20-1 NPB	13545220	25	\$10,000	Yes	No	Not Applicable
Tanberg 20-1 NPB	13746227	5	\$18,000	Yes	No	Not Applicable
Tanberg 21-1 NPB	13545233	10	\$10,000	Yes	No	Not Applicable
Tanberg 28-1 NPB	13545233	10	\$10,000	Yes	No	Not Applicable
Tanberg 29-1 NPB	13545229	20	\$10,000	Yes	No	Not Applicable
Tanberg 29-2 NPB	13545229	25	\$10,000	Yes	No	Not Applicable
Tanberg 33-1 NPB	13545233	5	\$18,000	Yes	No	Not Applicable
Tanberg 33-1 NPB	13545233	25	\$10,000	Yes	No	Not Applicable

Yellow Medicine

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Mo und Springs WMA	11546208	196	\$45,000	Yes	Yes	Not Applicable
Posen WMA	11339224	22	\$16,000	Yes	Yes	Not Applicable
Stony Run 11-1 NPB	11640211	3	\$6,000	yes	No	Not Applicable
Stony Run 11-1 NPB	11640211	15	\$15,000	yes	No	Not Applicable

Parcel Map

DNR Grassland Phase XIII - with Roving Crew



Data Generated From Parcel List

DNR Grasslands Phase XIII With Roving Crew

Enhance and restore 34,700 acres
\$11,109,100

WHAT

Enhancement of Permanently Protected Grasslands
Focus on Prairie Plan Core Areas and Pheasant Action Plan Habitat Complexes

WHY

Landscape level approach to conservation
Game species, songbirds, pollinators, SGCN, T&E species
Grasslands, Clean Water, and Wildlife are all connected

HOW

Prescribed Fire, Tree Removal, Invasive Species Control
Diverse, Local Ecotype Seed Mixes

WHERE

DNR WMAs, SNAs, and Native Prairie Bank
USFWS Refuges and WPAs
BWSR Rim easements





Local contractors help agency staff collect large volumes of local ecotype seed from the prairie.



Roving crews and their specialized equipment have dramatically increased our capacity for habitat enhancement.



Snowseeding the mix of dozens of grasses and wildflower seed.



When trees get too large, they must be removed mechanically.



The FINAL PRODUCT, a diverse stand of local ecotype plants providing nesting cover for wildlife as well as nectar and pollen for pollinators.