Lessard-Sams Outdoor Heritage Council

FY 2010 Accomplishment Plan and Site List

Project or Program Title: Accelerated Prairie Grassland Restoration and Management (P13)

Date: 9/15/2009

Manager's Name: Dennis Simon

Title: Wildlife Management Section Chief, MN DNR

Mailing Address: 500 Lafayette Road, St. Paul, MN 55155

Telephone: 651-259-5237 Fax: 651 297-4961

E-Mail: dennis.simon@state.mn.us

Web Site: www.dnr.state.mn.us

	Council Recommendation Funding	Out-Year Projections of Needs				
Funds Recommended (\$000s)	FY 2010	FY 2011 FY 2012 FY 2013				
Outdoor Heritage Fund	1,700,000	2,000,000 2,000,000 2,000,				

Summary This program will complete the initial WMA site development on 1,500 acres of land acquired in the Accelerated Prairie Grassland WMA and Accelerated Wetland WMA Acquisition programs to meet standards for inclusion in the Outdoor Recreation System. This program will also accelerate the restoration, enhancement and management of at least 5,180 acres of native prairie vegetation on existing public lands including a priority roadside corridor under MNDOT ownership. Prairie restoration efforts include site preparation, seeding of local ecotype seed, post-seeding management to assure success, and seed harvest of local ecotype seed for prairie restoration at other public land sites. Prairie management efforts will include prescribed burning, managing woody cover encroachment, mowing and interseeding of diverse grass and forb species.

Background

Native grasslands are a rarity in Minnesota, less than one percent remains. Prairie ecosystems have evolved with fire disturbance, and much of the prairie vegetation and prairie obligate wildlife species depend upon it. Grassland birds, for example, have had a steeper more consistent and widespread population declines than any other group of North American avifauna. Prairie ecosystems are also threatened by the encroachment and dominance of woody species and exotic plants.

Since settlement, most prairie sites in the targeted areas have not been exposed to natural ecological processes (such as fire and grazing) needed for sustaining or enhancing prairie plant communities. Furthermore, many existing grassland sites on state-owned public lands need to be restored to native prairie vegetation to improve wildlife habitat and reduce long-term maintenance costs. Creation of accelerated prairie management teams would address a long-standing "back log" of management needs by implementing intensive prairie stewardship practices.

Although Minnesota DNR has the training and know-how to restore and manage high quality prairie vegetation currently funding has been insufficient to meet all needs. Minnesota DNR manages over 450,000 acres of grasslands and many sites on public lands are currently not being actively managed to realize full potential as a plant community or wildlife habitat. Re-establishing prairie on public lands requires periodic burning, inter-seeding grasslands with native species, and up to five years post-seeding management. Some state-owned grasslands consist of monotypic fields of brome that have low habitat values. Furthermore exotic and/or invasive plants are encroaching into them. Newly acquired areas and state-owned marginal croplands also need to be seeded and treated. Using high quality seed from established prairie sites to plant at other locations has proven to be highly cost-effective.

Managing and enhancing existing prairie vegetation on public lands requires periodic burning, grazing, and/or mowing. Woody cover encroachment is an especially troublesome problem that must be addressed. Removing trees and brush will be a major emphasis of this program at a cost of between \$5 and \$8 per tree - larger trees (> 20 feet tall) cost significantly more to remove than smaller trees. Prairie enhancement work is done during primarily in early spring, fall, and winter.

The Roadsides for Wildlife Program has been improving grassland habitat along Minnesota roadsides since 1984. On average, the DNR seeds native prairie on 50-300 acres of roadsides a year at 5-20 sites, typically on county and township roadsides. In contrast, lowa seeds approximately 3,000 acres a year. The DNR will continue to work with counties and townships but will also accelerate seeding on state-owned highway right-of-ways (ROW). Most of Minnesota's roadsides are presently dominated by smooth brome (a non-native grass) and are vectors of invasive species and disease. Native grasses and wildflowers are more beneficial to pollinators and wildlife.

New WMA Initial Site Development 1,500 acres \$300,000

New lands acquired through the Accelerated Prairie Grassland WMA and Accelerated Wetland WMA Acquisition programs (see site list for these programs) will require initial site development to make them functional WMAs. This initial development will include restoring bare ground to a diverse mix of native grasses and plants, surveying and signing the boundaries and developing user facilities to protect them from encroachment and uncontrolled intrusion, removing building and refuse sites and restoring to native vegetation, and closing all wells and septic systems to protect ground water integrity.

Roadsides for Wildlife 150 acres \$225,000

DNR will partner with Mn/DOT to plant native prairie along I-35 beginning at the lowa border and extending the full width of the road corridor for five miles. Mn/DOT will do some site prep in 2009 and then a contractor will finish up site prep and do the planting next spring. The contractor will also perform mowing and spot spraying as needed throughout the 2010 growing season. This area is on state owned Mn/DOT ROW and will showcase a diverse roadside planting. This five-mile stretch of road is highly visible as a major entry point to the state of Minnesota and the southern end of Minnesota's portion of the National Prairie Passage.

Prairie Restoration and Management \$1,411,000 5,029 acres (2,154 additional acres as budget allows)

The primary focus of this program encompasses 157 projects on 5,029 acres benefitting over 11,500 acres of planted and native grasslands. The attached spreadsheet lists 157 projects that will be completed in 2 years or less with a total projected cost of \$1.14 m. An additional 53 projects that will require 3 years or more to complete have been identified as reserve sites. The one and two year projects will be first priority. Should budgets allow additional work we would move down the list and begin implementation of longer duration projects. In these instances DNR will most likely submit subsequent phases in future years for additional funding so the projects can be completed.

Conservation Delivery

Grassland restoration work will be primarily through seeding either bare ground (e.g newly acquired agricultural fields) or old-field habitat (e.g. smooth brome). Techniques for this work include site preparation such as mowing, spraying or burning when necessary; direct seeding and aerial seeding (along some roadsides). Seed will be obtained from vendors of local seed and harvested from native or restored prairie to supplement when needed. Projects will be designed and managed by DNR personnel (except ROW projects which will be managed by DOT). Contract vendors will be used to the greatest extent possible although DNR staff may perform some work when suitable contractors are not available.

Grassland management and enhancement work uses a number of techniques to reinvigorate or increase diversity of existing prairie type grasslands. Without periodic disturbance such as burning, mowing or grazing, grasslands decline in vigor and species diversity over time. This portion of the project is designed to mimic natural disturbance, supplement species diversity when necessary and increase stand vigor. Techniques that will be employed include brush removal, chemical treatment, mowing, inter-seeding and burning. Again contractors will be used to the greatest extent possible except in the case of burning.

Relationship to the Minnesota Conservation and Preservation Plan and Other Published **Resource Management Plans**

- Minnesota Conservation and Preservation Plan, 2008 Page 63 and 66, identifies prairie and savannahs as critical lands areas in need of management and protection.
- MDNR Directions for Natural Resources, 2000 page 19, 22, and 24
- A Vision for Wildlife and its Use Goals and Outcomes 2003 2013 DNR Acquire, develop, and maintain WMAs for wildlife habitat, public hunting, and wildlife observation (page 26).
- Long Range Plan for the Ring-necked Pheasant in Minnesota, 2005.
- Roadsides for Wildlife Management Plan Page 86 action 3: "Should additional funds become available ... a Roadsides for Wildlife/Roadside Vegetation technician should be placed in each of the eight Mn/DOT district stations." - Page 92 action items 24-26 include: Brome grass conversion/nottill drilling; erosion control aerial seeding; and develop a showcase demonstration roadside.
- Mn/DOT Best Practices Handbook for Roadside Vegetation Management This document is devoted to improving vegetation along roadsides. Chapter 4 describes in detail the many benefits of using native prairie plants in roadsides.

- Minnesota Calling

- Duck Recovery Plan

- Tomorrow's Habitat for the Wild and Rare Habitat restoration and protection page 38

page 23-24 Habitat loss

Habitat restoration and protection pages 2-4

Budget

Budget Item	Fiscal Year 10	Fiscal Year 11	Fiscal Year 12
Personnel	20,000	40,000	
Contracts	817,000	817,000	
Equipment/Tools/Supplies	0		
Fee Acquisition	0		
Easement Acquisition	0		
Easement Stewardship	0		
Travel	3,000	3,000	
Additional Budget Items	0		
TOTAL	840,000	860,000	

Personnel Details

Title Name Amount.

Contract Specialist (Unclassified part-time) \$60,000

Leverage

Source of	Fiscal Year 10	Fiscal Year 11	Fiscal Year 12
Leverage			
TOTAL			

Accomplishments:

Table 1 Accomplish- ments	Wetlands	Prairies	Forests	Habitats for Fish, Game and Wildlife
Restore		Restore 1,010		
Kestore		acres		
Protect		Protect 1,500		
Enhance		Enhance 4,170		
Elliance		acres		

Table 2 Recommend Fund Allocation	Wetlands	Prairies	Forests	Habitats for Fish, Game and Wildlife
Restore		\$550,420		
Protect		\$300,000		
Enhance	_	\$849,580		

Table 3 Counties				Habitats for Fish, Game
Impacted	Wetlands	Prairies	Forests	and Wildlife
Restore		Kittson, Marshall, Red Lake, Polk, Norman, Mahnomen, Clay, Becker, Todd, Wilkin, Otter Tail, Traverse, Grant, Douglas, Big Stone, Stevens, Pope, Swift, Lac qui Parle, Stearns, Kandiyohi, Meeker, Chippewa, Yellow Medicine, Renville, McLeod, Sibley, Nicollet, Brown, Redwood, Lyon, Lincoln, Yellow Medicine, Pipestone, Murray, Cottonwood, Watonwan, Blue Earth, Waseca, Freeborn, Faribault, Martin, Jackson, Nobles, Rock, Clearwater, Morrison, Benton, Sherburne, Wright, Isanti, Chisago, Anoka, Washington, Isanti, Hennepin, Ramsey, Hennepin, Carver, Scott, Dakota, Goodhue, Wagasha, Rice, Le Sueur, Dodge, Olmstead, Winona, Mower, Fillmore, Houston, Kanabec,		
Protect		Same as above		
Enhance		Same as above		

Table 4 Non-State Leverage \$	Wetlands	Prairies	Forests	Habitats for Fish, Game and Wildlife
Restore		\$0		
Protect		\$0		
Enhance		\$0		

Table 5 Acquisition Data	Wetlands	Prairies	Forests	Habitats for Fish, Game and Wildlife
Acquired in Fee with State PILT Liability		0		
Acquired in Fee without State PILT Liability		0		
Permanent Easement		0		

Accomplishment Time Table

Milestone	Date	Measure
Identify prairie for restoration/ enhancement	October 30, 2009	6,680 acres
Complete initial prairie restoration/ enhancements	December 31, 2010	0 6,680 acres
Complete follow up management for restorations	December 31, 201	1 2000 acres

Relationship to Your Current Budget

This work will be a significant acceleration of what we normally do on public land prairie management work.

DNR wildlife spent the following on prairie management activities on public land in FY08 using state crews and equipment:

Prairie grassland management \$814, 432 – 6,486 acres Prescribed burns \$721,808 - 21,009 acres

Existing DNR staff will be used to identify work sites, assist with technical guidance on site-specific BMPs, and complete work site inspections and reports.

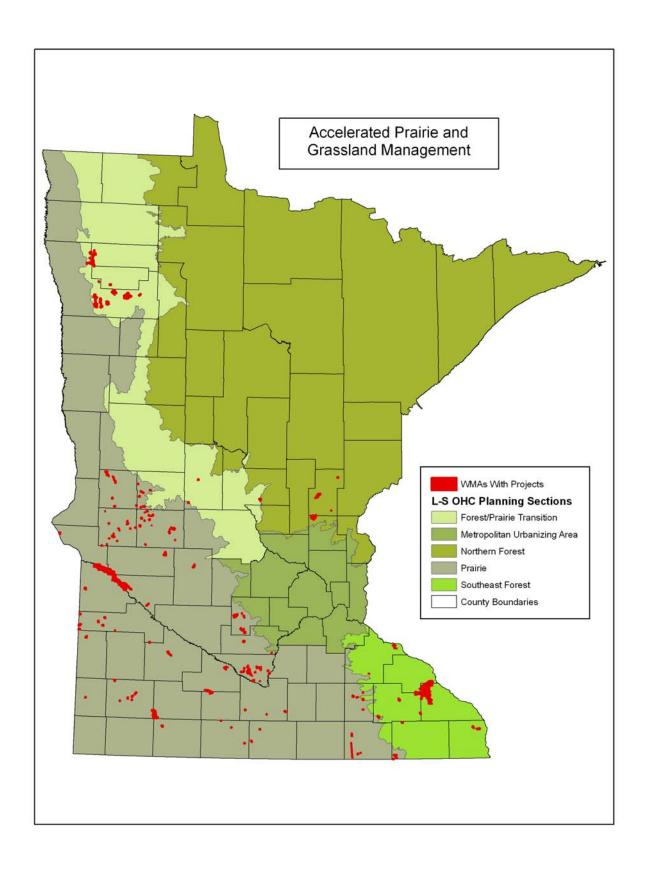
How Will the Habitat Improvements Be Sustained?

These restorations and enhancements will occur on public lands (primarily Wildlife Management Areas) which are owned in fee title by the state. Long-term maintenance will be incorporated into DNR's regular planning and maintenance schedule.

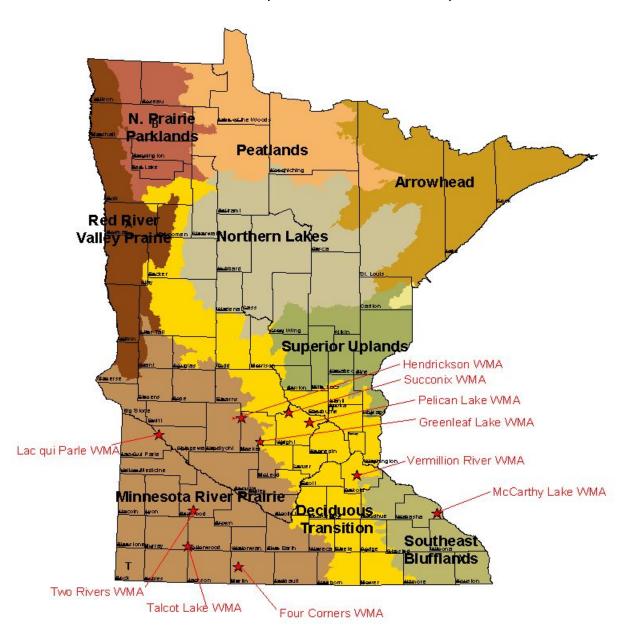
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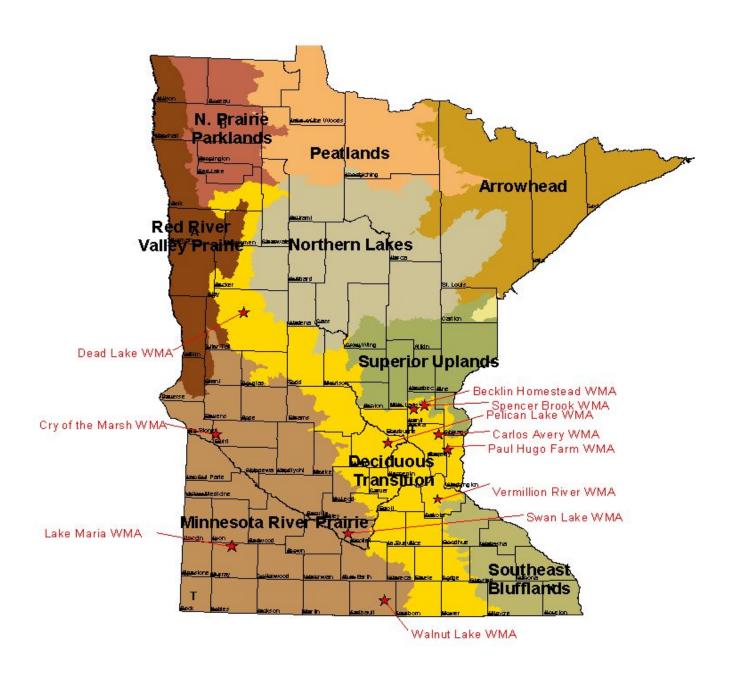
Site map.

Specific site list attached including alternate opportunities as time and budget allow.



Prairie WMA Acquisition Initial Site Development





WMA	County	Existing Cover Type	Benefitted Acres	Treated Acres	Restoration or Enhancement	Action(s) for this cycle	Target Cover Type (Note: It may take more than one funding cycle to reach the target cover type)	Difficulty	ECS Province	Est Total Cost
Primary Sites										
Hornstein WMA	Big Stone	Cropland	332	25	R	Conversion	Planted prairie	Low	Prairie Parkland	\$8,000
Teapail WMA	Dodge	Forest	15	6	R	Woody removal	Oak-aspen savanna	Medium	E. Broadleaf Forest	\$3,000
Wire Tree WMA	Kanabec	bean stubble & Hybrid Poplar stumps	32	32	R	Conversion	Planted prairie	Low	Laurentian Mixed Forest	\$11,100
Thorson Prairie	Polk	mix of native and cool season grasses	10	10	R	Conversion	Planted prairie	Medium	Aspen Parkland	\$4,000
Tympanuchus	Polk	mix of native and cool season grasses	10	10	R	Conversion	Planted prairie	Medium	Aspen Parkland	\$4,500
Alberta South WMA	Stevens	Non-native grassland	8	8	R	Woody removal	Planted prairie	Low	Prairie Parkland	\$2,700
Anderson	Douglas	Non-native grassland	20	20	R	Woody removal	Planted prairie	Low	Prairie Parkland	\$2,450
Anderson	Douglas	Tree Grove	3	3	R	Woody removal	Planted prairie	Low	Prairie Parkland	\$4,200
Blakesly	Grant	Tree Grove	3	3	R	Woody removal	Planted prairie	Low	Prairie Parkland	\$4,200

Boekholt Grove WMA	Stevens	Tree Grove	18	18	R	Woody removal	Planted prairie	Low	Prairie Parkland	\$22,000
						Woody	·		Prairie	
Brandon	Douglas	Tree Grove	5	5	R	removal	Planted prairie	Low	Parkland	\$7,000
	_					Woody			Prairie	
Brouillet WMA	Stevens	Non-native grassland	15	15	R	removal	Native prairie	Low	Parkland	\$4,100
						Woody			Prairie	
Chippewa Falls South	Pope	Tree Grove	10	10	R	removal	Planted prairie	Low	Parkland	\$14,000
						Woody			Prairie	
Chippewa Pond	Grant	Tree Grove	3	3	R	removal	Planted prairie	Low	Parkland	\$4,200
						Woody			Prairie	
Cin WMA	Stevens	Tree Grove	2.5	2.5	R	removal	Planted prairie	Low	Parkland	\$4,000
						Woody			Prairie	
Dolven WMA	Stevens	Non-native grassland	48	48	R	removal	Planted prairie	Low	Parkland	\$26,300
						Woody			Prairie	
Farwell Northeast	Pope	Non-native grassland	30	30	R	removal	Planted prairie	Low	Parkland	\$5,250
						Woody			Prairie	
Farwell Northeast	Pope	Tree Grove	2	2	R	removal	Planted prairie	Low	Parkland	\$2,800
						Woody			Prairie	
Hegg Lake	Douglas	Tree Grove	4	4	R	, removal	Planted prairie	Low	Parkland	\$5,600
						Woody			Prairie	
Heinks	Pope	Non-native grassland	10	10	R	removal	Planted prairie	Low	Parkland	\$2,800
	·					Woody	·		Prairie	
Hennen WMA	Stevens	Non-native grassland	30	30	R	removal	Planted prairie	Low	Parkland	\$5,850
						Woody	·		Prairie	
Hennen WMA	Stevens	Tree Grove	1.5	1.5	R	removal	Planted prairie	Low	Parkland	\$2,000
						Woody	'		Prairie	·_
Hoff	Pope	Tree Grove	3	3	R	removal	Planted prairie	Low	Parkland	\$4,200
		33 2.2.2	_			Woody	p		Prairie	+ -,
Hoff	Pope	Tree Grove	2	2	R	removal	Planted prairie	Low	Parkland	\$2,800
11011	. ομο				.,	Woody	. idited pidirie	2011	Prairie	ΨΞ,000
Jensen	Grant	Non-native grassland	40	40	R	removal	Planted prairie	Low	Prairie	\$2,800
GOLISELL	Grant	Tion hadive grassiana			- 11	TCHIOVAL	rance prairie	LOVV	TUTNICITU	72,000

Jensen	Grant	Tree Grove	5	5	R	Woody removal	Planted prairie	Low	Prairie Parkland	\$7,000
						Woody	·		Prairie	
John A. Scharf WMA	Stevens	Tree Grove	3.5	3.5	R	removal	Planted prairie	Low	Parkland	\$5,000
						Woody			Prairie	
Kensington	Douglas	Tree Grove	4.5	4.5	R	removal	Planted prairie	Low	Parkland	\$6,300
						Woody			Prairie	
Macsville	Grant	Non-native grassland	120	120	R	removal	Planted prairie	Low	Parkland	\$7,350
						Woody			Prairie	
Marple	Grant	Tree Grove	3.5	3.5	R	removal	Planted prairie	Low	Parkland	\$4,900
						Woody			Prairie	
Mathison WMA	Stevens	Non-native grassland	5	5	R	removal	Planted prairie	Low	Parkland	\$2,000
						Woody			Prairie	
Mathison WMA	Stevens	Tree Grove	3.5	3.5	R	removal	Planted prairie	Low	Parkland	\$5,000
						Woody			Prairie	
Mustinka North	Grant	Non-native grassland	10	10	R	removal	Native prairie	Low	Parkland	\$2,450
						Woody			Prairie	
Mustinka South	Grant	Non-native grassland	15	15	R	removal	Native prairie	Low	Parkland	\$3,850
						Woody			Prairie	
Nora	Pope	Non-native grassland	70	70	R	removal	Planted prairie	Low	Parkland	\$9,450
						Woody			Prairie	
Old Gravel Pit WMA	Stevens	Non-native grassland	6	6	R	removal	Planted prairie	Low	Parkland	\$2,700
						Woody			Prairie	
Red Rock	Douglas	Tree Grove	2.5	2.5	R	removal	Planted prairie	Low	Parkland	\$3,500
						Woody			Prairie	
Red Rock	Douglas	Tree Grove	2	2	R	removal	Planted prairie	Low	Parkland	\$2,800
						Woody	,		Prairie	· · · · · · · · · · · · · · · · · · ·
Robertson WMA	Stevens	Non-native grassland	4	4	R	removal	Planted prairie	Low	Parkland	\$4,600
		<u> </u>				Woody	•		Prairie	· ·
Schuck	Grant	Non-native grassland	10	10	R	removal	Planted prairie	Low	Parkland	\$2,450
		<u> </u>				Woody	' '		Prairie	. , -
Sedan	Pope	Tree Grove	8	8	R	removal	Planted prairie	Low	Parkland	\$11,200
					**		:	==		Ŧ ==/== U

Shuck	Grant	Tree Grove	3	3	R	Woody removal	Planted prairie	Low	Prairie Parkland	\$4,200
Onder	Grant	Tree drove				Woody	ridited prunie	LOW	Prairie	74,200
Skarpness	Pope	Tree Grove	3	3	R	removal	Planted prairie	Low	Parkland	\$4,200
						Woody			Prairie	
Urness East	Douglas	Tree Grove	2.5	2.5	R	removal	Planted prairie	Low	Parkland	\$3,500
Wade	Pope	Non-native grassland	40	40	R	Woody removal	Planted prairie	Low	Prairie Parkland	\$5,250
vvado	Горс	Tron native grassiana	10	10		Woody	Trancea prairie	2011	Prairie	75,250
Weiler WMA	Stevens	Non-native grassland	7	7	R	removal	Planted prairie	Low	Parkland	\$4,100
						Woody			Prairie	
Weiler WMA	Stevens	Tree Grove	2.5	2.5	R	removal	Planted prairie	Low	Parkland	\$4,000
Mhita Daor Laka	Dono	Non-native grassland	50	50	R	Woody	Planted prairie	Low	Prairie Parkland	¢4.200
White Bear Lake	Pope	Non-native grassianu	50	50	<u>n</u>	removal	Planteu praine	LOW		\$4,200
White Bear Lake	Pope	Tree Grove	2	2	R	Woody removal	Planted prairie	Low	Prairie Parkland	\$2,800
						Woody	·		Prairie	· · · · · · · · · · · · · · · · · · ·
White Bear Lake	Pope	Tree Grove	4	4	R	removal	Planted prairie	Low	Parkland	\$5,600
									Prairie	
Reserve WMA	Yellow Medicine	Crop	133	17.7	R	Conversion	Planted prairie	Low	Parkland	\$5,301
	_				_		21		Prairie	44.5=0
Rosenau-Lambrecht	Brown	Cropland	11	11	R	Conversion	Planted prairie	Low	Parkland	\$4,650
Turkey Foot	Redwood	Cropland	102	102	R	Conversion	Planted prairie	Low	Prairie Parkland	\$37,230
Turkey 100t	Neawood	Сгоріани	102	102	IV.	Woody	rianted praine	LOW	Prairie	737,230
Lac qui Parle WMA	Swift	Native Prairie	125	35	Е	removal	Native prairie	Low	Parkland	\$3,000
-						Woody	•		Prairie	. ,
Erie WMA	Yellow Medicine	Planted prairie	69	0.6	E	removal	Planted prairie	Low	Parkland	\$134
						Woody			Prairie	
Erie WMA	Yellow Medicine	Planted prairie	69	0.7	E	removal	Planted prairie	Low	Parkland	\$156
					_	Woody			Prairie	
Erie WMA	Yellow Medicine	Planted prairie	69	0.3	E	removal	Planted prairie	Low	Parkland	\$669

Erie WMA	Yellow Medicine	Planted prairie	69	1.2	E	Woody removal	Planted prairie	Low	Prairie Parkland	\$268
Middle Antelope Valley	Yellow Medicine	Native Grasses	220	8.9	E	Woody Removal	Native prairie	Low	Prairie Parkland	\$1,157
Middle Antelope Valley	Yellow Medicine	Native Grasses	220	5	E	Woody Removal	Native prairie	Low	Prairie Parkland	\$650
Middle Antelope Valley	Yellow Medicine	Native Grasses	220	3	E	Woody Removal	Native prairie	Low	Prairie Parkland	\$390
Mound Springs WMA	Yellow Medicine	Native Prairie	196	51.5	E	Woody Removal	Native prairie	Low	Prairie Parkland	\$6,438
Oshkosh WMA	Yellow Medicine	Planted prairie	44.7	44.7	E	Woody removal	Planted prairie	Low	Prairie Parkland	\$5,588
Timm's Lake WMA	Yellow Medicine	Planted prairie	202	0.6	E	Woody removal	Planted prairie	Low	Prairie Parkland	\$141
Timm's Lake WMA	Yellow Medicine	Planted prairie	202	0.9	E	Woody removal	Planted prairie	Low	Prairie Parkland	\$212
Timm's Lake WMA	Yellow Medicine	Planted prairie	202	4.1	Е	Woody removal	Planted prairie	Low	Prairie Parkland	\$964
Timm's Lake WMA	Yellow Medicine	Planted prairie	202	3.2	E	Woody removal	Planted prairie	Low	Prairie Parkland	\$752
Timm's Lake WMA	Yellow Medicine	Planted prairie	202	6.8	E	Woody removal	Planted prairie	Low	Prairie Parkland	\$1,598
Baker's Lake	McLeod	Planted Prairie	6	6	Е	Woody removal	Planted prairie	Low	Prairie Parkland	\$800
Courtland East (Swan Lake)	Nicollet	Planted prairie	45	45	E	Woody removal	Planted prairie	Low	Prairie Parkland	\$4,000
Deutsch	McLeod	Planted prairie	10	10	E	Woody removal	Planted prairie	Low	Prairie Parkland	\$900
Evans Slough	Blue Earth	Planted prairie	26	26	Е	Woody removal	Planted prairie	Low	Prairie Parkland	\$18,200
George & Elizabeth Lange	Blue Earth	Planted prairie	2.6	2.6	E	Woody removal	Planted prairie	Low	Prairie Parkland	\$1,820

Indian Lake	Nicollet	Planted prairie	10	10	E	Woody removal	Planted prairie	Low	Prairie Parkland	\$1,800
Lake Guckeen	Faribault	Planted prairie	46	46	E	Woody removal	Planted prairie	Medium	Prairie Parkland	\$32,200
Lost Marsh	Blue Earth	Planted prairie	17	17	E	Woody removal	Planted prairie	Hard	Prairie Parkland	\$11,900
Maple River - Traynor Tract	Blue Earth	Planted prairie	8	8	E	Woody removal	Planted prairie	Medium	Prairie Parkland	\$5,600
Mark & Ursel Smith	McLeod	Planted prairie	10	10	E	Woody removal	Planted prairie	Medium	Prairie Parkland	\$1,200
Penn	McLeod	Planted prairie	15	15	E	Woody removal	Planted prairie	Medium	Prairie Parkland	\$2,250
Prairie Heritage	McLeod	Planted prairie	25	25	E	Woody removal	Planted prairie	Low	Prairie Parkland	\$3,300
Rice Lake	Faribault	Planted prairie	21	21	E	Woody removal	Planted prairie	Low	Prairie Parkland	\$14,700
Sigler	Sibley	Planted prairie	13	13	E	Woody removal	Planted prairie	Low	Prairie Parkland	\$2,000
Spiering	McLeod	Planted prairie	3	3	E	Woody removal	Planted prairie	Low	Prairie Parkland	\$400
Sumter	McLeod	Planted prairie	6	6	E	Woody removal	Planted prairie	Low	Prairie Parkland	\$1,400
Wiwi Bay (Swan Lake)	Nicollet	Planted Prairie	15	15	E	Woody removal	Planted prairie	Low	Prairie Parkland	\$2,500
Bud Jensen WMA	Dodge	Wet brush prairie & woodland	102	55	E	Woody removal	Wet brush-prairie	Medium	E. Broadleaf Forest	\$8,800
	<u> </u>	Wet brush prairie &				Woody	·		E. Broadleaf	
Lena Larson WMA	Mower	woodland	175	54	Е	removal	Wet brush-prairie	Low	Forest E.	\$11,500
Lyle-austin WMA	Mower	Native Prairie (formerly railroad grade)	116	116	E	Woody removal	Native prairie	Medium	Broadleaf Forest	\$26,000

									Ł.	
						Woody			Broadleaf	
Naylor WMA	Dodge	Brushland & woodland	270	106	Е	removal	Mesic brush-praire	Low	Forest	\$16,500
		Wet brush prairie,							E.	
		woodland, seeded				Woody	Wet brush-prairie & mesic		Broadleaf	
Pheasants Forever WMA	Dodge	grassland	297	109	Ε	removal	brush-praiire	Low	Forest	\$19,000
									E.	
							Planted prairie/oak		Broadleaf	
Ramsey Mill Pond WMA	Mower	Planted prairie	335	100	Ε	Conversion	savanna	Low	Forest	\$23,000
									E.	
		Wet brush prairie &				Woody			Broadleaf	
Rose WMA	Mower	woodland	51	25	Ε	removal	Wet brush-prairie	Low	Forest	\$7,000
							·		E.	· ·
		Wet brush prairie &				Woody			Broadleaf	
Schletty WMA	Dodge	woodland	13	13	Ε	removal	Wet brush-prairie	Medium	Forest	\$2,600
	<u> </u>								E.	. ,
		Mesic brush prairie and				Woody			Broadleaf	
Wasioja WMA	Dodge	woodland	11	5	Е	removal	brush-prairie	Medium	Forest	\$7,500
							·		Prairie	7 1 /0 0 0
Cold Covings	Domillo	Demonstrate Ducinia /Coverse	0.0	0.0	_	Woody	Native prairie/oak	N A a alitana		¢20.000
Cold Springs	Renville	Remnant Prairie/Savanna	96	96	E	removal	savanna	Medium	Parkland	\$30,000
		Planted Grass, Remnant				Woody			Prairie	
Mulligan Slough	Brown	Prairie	240	240	E	removal	Native/planted prairie	Medium	Parkland	\$10,000
		Planted Grass, Remnant					Native prairie/oak		Prairie	
Wood Lake	Brown	Prairie	157	157	Ε	Burn	savanna	Medium	Parkland	\$12,000
									E.	
						Woody			Broadleaf	
Beaver Creek WMA	Fillmore	Planted prairie	710	100	Е	removal	Planted prairie	Low	Forest	\$6,170
		·					·		Ε.	. , ,
						Woody			Broadleaf	
High Forest WMA	Olmsted	Planted prairie	65	20	Ε	removal	Planted prairie	Medium	Forest	\$2,468
g orest vivi		riantea pranie				Terriovan	rantea prante	mediam	E.	Ψ2) 100
						Woody			Broadleaf	
Marian Marshall WMA	Olmsted	Planted prairie	60	20	Е	removal	Planted prairie	Low	Forest	\$1,234
THATIAIT WATSHAIL WIVIA	Jillistea	ridited prairie	- 00	20		Terriovar	ranca prame	LOVV	E.	71,237
						Woody			E. Broadleaf	
Mound Prairie WMA	Houston	Planted prairie	328	100	E	-	Planted prairie	Medium	Forest	¢12 2 <i>1</i> 1
IVIOUIIU FIAILIE WIVIA	HOUSTON	rianteu prante	320	100	С	removal	Fianteu prairie	ivieululii	ruiest	\$12,341

									Ł.	
						Woody			Broadleaf	
Murtaugh WMA	Goodhue	Planted prairie	96	40	Ε	removal	Planted prairie	Low	Forest	\$2,468
		•					·		E.	• •
						Woody			Broadleaf	
Nelson Fen WMA	Olmsted	Planted prairie	79	40	Е	removal	Planted prairie	Medium	Forest	\$4,937
TVCISOTI TETT VVIVIX	Omiseca	riantea prante	7.5			Terriovar	riantea prante	Wicarani	E.	γ-,,,,,,
						Woody			Broadleaf	
Nosek	Fillmore	Diantad prairie	137	40	Ε	•	Diantad prairie	Love		¢2.469
Nosek	rillillore	Planted prairie	157	40		removal	Planted prairie	Low	Forest	\$2,468
									E.	
	- "				_	Woody			Broadleaf	4
Perched Valley WMA	Goodhue	Planted prairie	233	60	E	removal	Planted prairie	Medium	Forest	\$7,404
									Ε.	
						Woody			Broadleaf	
Root River WMA	Houston	Planted prairie	443	100	E	removal	Planted prairie	Low	Forest	\$6,170
									E.	
						Woody			Broadleaf	
Suess WMA	Olmsted	Planted prairie	54	40	Ε	removal	Planted prairie	Medium	Forest	\$4,937
									E.	_
						Woody			Broadleaf	
Upper Iowa River WMA	Fillmore	Planted prairie	131	40	Ε	removal	Planted prairie	Low	Forest	\$2,468
		•					·		E.	
						Woody			Broadleaf	
Vermilya WMA	Olmsted	Planted prairie	197	40	Ε	removal	Planted prairie	Low	Forest	\$2,468
Terriniya tirini	• · · · · · · · · · · · · · · · · · · ·	rianted prante				removar	riantea prante	2011	E.	Ψ2) 100
						Woody			Broadleaf	
Woodbury WMA	Goodhue	Planted prairie	76	40	Е	removal	Planted prairie	Low	Forest	\$2,468
Woodbury WIVIA	Goodilac		70				riantea prante	LOW		72,400
		Planted Grass, Remnant				Woody			Prairie	
Nelson WMA	Murray	Prairie	30	30	E	removal	Planted prairie	Low	Parkland	\$3,750
						Woody			Prairie	
Peters WMA	Murray	Planted Grass	70	70	Ε	removal	Planted prairie	Low	Parkland	\$5,000
	•					Woody	·		Prairie	· · · · · · · · · · · · · · · · · · ·
Pipestone WMA	Pipestone	Remnant Prairie/Savanna	17	17	Е	removal	Remnant Prairie/Savanna	Low	Parkland	\$2,125
Tipestone WIVIA	ripestolle	Neilliant France/Savainid	1/	1/	Ľ	TEITIOVAL	Neilliant France/Savaillia	LUW	E	۷۷,۱۷۵
						14 /				
NA/1-11 1 NA/19 4 A	147	Note of dealers and	50	5 0	-	Woody	Note: Advantage and		Broadleaf	647.500
Whitewater WMA	Winona	Native/planted prairie	50	50	Е	Removal	Native/planted prairie	Low	Forest	\$17,500

Armbrust WMA	Martin	Wet Prairie	60	60	E	Woody Removal	Wet Prairie	Hard	Prairie Parkland	\$25,000
						Woody			Prairie	
Ewy WMA	Watonwan	Wet Prairie	70	70	E	Removal	Wet Prairie	Hard	Parkland	\$25,000
Leudtke WMA	Martin	Wet Prairie	90	90	E	Woody Removal	Wet Prairie	Hard	Prairie Parkland	\$25,000
Ledutke WIVIA	Ividitiii	wetrianie	30	30	<u> </u>		Wet Flaine	пати		\$23,000
Madelia WMA	Watonwan	Planted prairie	130	130	Е	Woody Removal	Wet Prairie	Hard	Prairie Parkland	\$25,000
Widdelia WIVIA	vvatoriwari	Flanteu pranie	130	130	<u> </u>		Wet Flaine	пати		\$23,000
Valleau WMA	Jackson	Wet Prairie	150	150	E	Woody Removal	Wet Prairie	Hard	Prairie Parkland	\$25,000
valleau WWA	Jackson	Wetrianie	130	130	L		Wetrianie	Tialu		\$25,000
Willow Creek WMA	Martin	Wet Prairie	40	40	E	Woody Removal	Wet Prairie	Hard	Prairie Parkland	\$25,000
WIIIOW CIEEK WIVIA	iviaitiii		40	40	L		vvetrianie	Halu		\$23,000
Maple Meadows	Polk	mix of native and cool season grasses	41	41	E	Woody removal	Planted prairie	Medium	Aspen Parkland	\$8,200
wapie weadows	FUIK	-	41	41	L		rianteu pranie	Mediaiii		\$8,200
Alberta North WMA	Stevens	Native and Non-native grassland	10	10	E	Woody removal	Native prairie	Low	Prairie Parkland	\$4,100
Alberta North WiviA	Stevens	grassianu	10	10	<u>L</u>		Native prairie	LOW		34,100
Alberta SE WMA	Stevens	Tree Grove	3.5	3.5	E	Woody removal	Planted prairie	Low	Prairie Parkland	\$5,000
Alberta SE WIVIA	Stevens	Tree Grove	3.3	3.3	<u> </u>		Planteu prante	LOW		\$3,000
Doncon Fast W/MA	Stovens	Dry Prairie	6	6	E	Woody	Native prairie	Low	Prairie Parkland	¢6.2E0
Benson East WMA	Stevens	Dry Frairie	0	0	Е.	removal	Native prairie	Low		\$6,350
Doson Most MAA	Ctovens	Trace with pative graces	1 -	15	_	Woody	Nativo prairio	Low	Prairie Parkland	Ć0 100
Beson West WMA	Stevens	Trees with native grasses	15	15	E	removal	Native prairie	Low		\$8,100
B	Const	Diameter di mattico	20	20	_	Woody	Diametral musicia	1	Prairie	¢2.500
Blakesly	Grant	Planted natives	20	20	Е	removal	Planted prairie	Low	Parkland	\$3,500
	Davis	Diameter di mattico	20	20	_	Woody	Diametral musicia	1	Prairie	ć7.000
Chippewa Falls North	Pope	Planted natives	20	20	Е	removal	Planted prairie	Low	Parkland	\$7,000
	_		2	_	_	Woody	DI		Prairie	42 000
Chippewa Falls North	Pope	Tree Grove	2	2	Е	removal	Planted prairie	Low	Parkland	\$2,800
			•	••	_	Woody	51		Prairie	A
Chippewa Pond	Grant	Planted natives	20	20	Е	removal	Planted prairie	Low	Parkland	\$4,550
					_	Woody			Prairie	40.40-
Cin WMA	Stevens	Dry Prairie	25	25	E	removal	Native prairie	Low	Parkland	\$8,100

Erickson WMA	Stevens	Mixed emergent marsh	35	35	E	Woody removal	Native wetland	Low	Prairie Parkland	\$8,100
	Stevens	wined emergene maron				Woody	Tutive Wedana	2011	Prairie	Ψ0,100
Eul WMA	Stevens	Marsh	3	3	E	removal	Native wetland	Low	Parkland	\$1,300
						Woody			Prairie	
Eul WMA	Stevens	Tree Grove	3	3	E	removal	Planted prairie	Low	Parkland	\$5,000
l la#	Dono	Planted natives	15	1 5	E	Woody	Planted prairie	Low	Prairie Parkland	¢2 900
Hoff	Pope	Planted flatives	15	15	Е	removal	Planted prairie	Low		\$2,800
Klason WMA	Stevens	Dry Prairie	40	40	E	Woody removal	Native prairie	Low	Prairie Parkland	\$13,700
					_	Woody			Prairie	τ == /: σ σ
Kube-swift E WMA	Grant	Planted natives	4	4	E	removal	Planted prairie	Low	Parkland	\$2,450
						Woody			Prairie	
Kube-swift SE WMA	Grant	Planted natives	3	3	E	removal	Planted prairie	Low	Parkland	\$1,750
						Woody			Prairie	
Kube-swift West	Grant	Tree Grove	7	7	E	removal	Planted prairie	Low	Parkland	\$9,800
			2	2	_	Woody	DI		Prairie	44.750
Kube-swift West WMA	Grant	Planted natives	3	3	E	removal	Planted prairie	Low	Parkland	\$1,750
Lowry Northeast	Pope	Planted natives	25	25	Е	Woody removal	Planted prairie	Low	Prairie Parkland	\$7,000
Lowry Northeast	горе	Flanteu flatives	23	23	L		Flanteu praine	LOW	Prairie	\$7,000
Lowry Southwest	Pope	Planted natives	15	15	Е	Woody removal	Planted prairie	Low	Prairie Parkland	\$2,800
						Woody	р. о		Prairie	+ -/
Muddy Creek WMA	Stevens	Dry Prairie	20	20	E	removal	Native prairie	Low	Parkland	\$15,800
		-				Woody	•		Prairie	
New Prairie	Pope	Planted natives	10	10	E	removal	Planted prairie	Low	Parkland	\$2,800
						Woody			Prairie	
New Prairie	Pope	Tree Grove	2.5	2.5	E	removal	Planted prairie	Low	Parkland	\$3,500
						Woody			Prairie	
Noordmans	Pope	Planted natives	100	100	E	removal	Planted prairie	Low	Parkland	\$11,200
	_		_		_	Woody			Prairie	4
Noordmans	Pope	Tree Grove	3	3	E	removal	Planted prairie	Low	Parkland	\$4,200

		Total Primary Sites	11,581	5,029						\$1,141,273
Sween WMA	Chippewa	Old pasture and seeded grasses	70	70	E	Woody Removal	Planted prairie	Medium	Prairie Parkland	\$14,000
Ringo	Kandiyohi	Native prairie and seeded grasses	38	38	E	Woody Removal	Native/planted prairie	Medium	Prairie Parkland	\$11,400
North Star (Swan Lake)	Nicollet	Native Prairie, Planted Prairie	45	45	E	Woody removal	Planted prairie	Hard	Prairie Parkland	\$15,000
Sioux Nation WMA	Yellow Medicine	Planted prairie	485	24.3	E	Woody removal	Planted prairie	Low	Prairie Parkland	\$2,430
Camp Kerk WMA	Swift	Native & exotic mix	1023	224	E	Woody removal	Native prairie	Low	Prairie Parkland	\$35,000
Urness SE	Douglas	Native Prairie	40	40	E	Woody removal	Native prairie	Low	Prairie Parkland	\$7,000
Urness NW	Douglas	Native Prairie	25	25	E	Woody removal	Native prairie	Low	Prairie Parkland	\$7,000
Starbuck	Pope	Native Prairie	5	5	E	Woody removal	Native prairie	Low	Prairie Parkland	\$1,400
Sedan Pond	Pope	Native and Non-native grassland	150	150	E	Woody removal	Planted prairie	Low	Prairie Parkland	\$13,300
Sedan	Pope	Planted natives	150	150	E	Woody removal	Planted prairie	Low	Prairie Parkland	\$13,300
Red Rock	Douglas	Planted natives	40	40	E	Woody removal	Planted prairie	Low	Prairie Parkland	\$7,000

Alternate Sites										
Belgium	Polk	tame grasses	18	18	R	Conversion	Planted prairie	Medium	Aspen Parkland	\$10,000
Burnham	Polk	native prairie	200	200	E	Woody removal	Native prairie	Medium	Aspen Parkland Aspen	\$18,000
Chicog	Polk	tame grasses	12	12	R	Conversion	Planted prairie	Medium	Parkland	\$6,600
Enerson	Polk	tame grasses	38	38	R	Conversion	Planted prairie	Medium	Aspen	\$20,900

									Parkland Aspen	
Maple Meadows	Polk	tame grasses	25	25	R	Conversion	Planted prairie	Medium	Parkland Aspen	\$13,750
Maple Meadows	Polk	tame grasses	6	6	R	Conversion	Planted prairie	Medium	Parkland Aspen	\$3,600
Mentor Prairie	Polk	tame grasses	7	7	R	Conversion	Planted prairie	Medium	Parkland	\$3,850
Mentor Prairie	Polk	mix of native and cool season grasses	11	11	R	Conversion	Planted prairie	Medium	Aspen Parkland	\$6,050
Mentor France	FUIK	mix of native and cool	11	11	IX.	Conversion	rianteu praine	Mediaiii	Aspen	Ş0,030
Mentor Prairie	Polk	season grasses	60	60	R	Conversion	Planted prairie	Medium	Parkland Aspen	\$31,000
Moran	Red Lake	trespass cropland	5	5	R	Conversion	Planted prairie	Medium	Parkland Aspen	\$3,300
Onstad	Polk	tame grasses	10	10	R	Conversion	Planted prairie	Medium	Parkland	\$6,000
	5.11	mix of native and cool			_	Woody			Aspen	440 =00
Pembina	Polk	season grasses	50	50	E	removal	Planted prairie	Medium	Parkland Aspen	\$13,500
Polk	Polk	tame grasses	6	6	R	Conversion	Planted prairie	Medium	Parkland	\$3,300
		mix of native and cool							Aspen	
Polk	Polk	season grasses	11	11		Conversion	Planted prairie	Medium	Parkland	\$5,500
Stipa	Polk	mix of native and cool	40	40	E	Woody removal	Planted prairie	Medium	Aspen Parkland	\$10,000
Stipa	POIK	season grasses	40	40	E	Temovai	Planteu praine	Medium	Prairie	\$10,000
Freeman WMA	Stevens	Cropland	25	25	R	Conversion	Planted prairie	Low	Parkland	\$9,000
						14 7 I			E.	
Iona WMA	Todd	Planted Prairie	42	3	E	Woody Removal	Planted prairie	Low	Broadleaf Forest	\$3,200
IONA WIVIA	Todd	Native Prairie, Planted	42	3	L	Woody	rianted praine	LOW	Prairie	73,200
Ras-Lynn	McLeod	Prairie	30	30	Е	removal	Planted prairie	Medium	Parkland	\$8,150
							,		E. Broadleaf	7 5,-2 5
Whitewater WMA	Winona	Ag or brome grass	30	30	R	Conversion	Planted prairie	Medium	Forest	\$13,350
							·		Aspen	
Erskine	Polk	cropland	20	20	R	Conversion	Planted prairie	Medium	Parkland	\$13,000

Marcoux	Red Lake	mix of native and cool season grasses	45	45	E	Woody removal	Planted prairie	Medium	Aspen Parkland	\$12,000
Pembina	Polk	tame grasses	65	65	R	Conversion	Planted prairie	Medium	Aspen Parkland	\$56,000
Anderson WMA	Douglas	Non-native grassland	20	20	R	Conversion	Planted prairie	Low	Prairie Parkland	\$7,000
Art Engelbrecht WMA	Douglas	Planted Prairie	140	140	E	Interseed	Planted prairie	Low	Prairie Parkland	\$61,600
Freeman WMA	Stevens	Planted Prairie	120	120	E	Interseed	Planted prairie	Low	Prairie Parkland	\$52,800
Lake Simon WMA	Pope	Planted Prairie	100	100	E	Interseed	Planted prairie	Low	Prairie Parkland	\$44,000
Lowry NE WMA	Pope	Non-native grassland	11	11	R	Conversion	Planted prairie	Low	Prairie Parkland	\$5,000
Lowry SW WMA	Pope	Non-native grassland	11	11	R	Conversion	Planted prairie	Low	Prairie Parkland	\$5,000
Nora WMA	Pope	Non-Native Grassland	70	70	R	Interseed	Planted prairie	Low	Prairie Parkland	\$30,800
Nora WMA	Pope	Non-native grassland	70	70	R	Conversion	Planted prairie	Low	Prairie Parkland	\$21,000
Sedan WMA	Pope	Planted Prairie	100	100	E	Interseed	Planted prairie	Low	Prairie Parkland	\$44,000
White Bear WMA	Pope	Planted Prairie	60	60	E	Interseed	Planted prairie	Low	Prairie Parkland	\$26,400
Lac qui Parle WMA (Nygard Tract)	Swift	Woodlot and exotic grass	12	12	R	Conversion	Planted prairie	Low	Prairie Parkland	\$7,800
David B. Vesall WMA	Lac Qui Parle	Non-native grassland	640	46	R	Conversion	Planted prairie	Low	Prairie Parkland	\$19,620
Daub's Lake	Redwood	Planted Grass	18	18	Е	Woody removal	Planted prairie	Medium	Prairie Parkland E.	\$7,400
Robina WMA	Hennepin	Timothy and Alfalfa	10	10	R	Conversion	Planted prairie	Medium	Broadleaf Forest	\$11,400

Talcot Lake WMA	Cottonwood	Planted Grasses	22	22	E	Improvement	Planted prairie	Medium	Prairie Parkland Laurentian	\$11,500
Ann Lake WMA	Kanabec	wetland & upland shrub invasion Willow and Alder	72	72	E	Woody removal	Native prairie	Medium	Mixed Forest	\$43,200
Quistorff WMA	Todd	Alfalfa Mix	89.7	6.7	R	Conversion	Planted prairie	Medium	Prairie Parkland E.	\$11,200
Rice Area Sportsmens Club WMA	Morrison	Non-native grassland	14	19	R	Conversion	Planted prairie	Medium	Broadleaf Forest	\$23,600
Benjamin Thovson Memorial WMA	Yellow Medicine	Сгор	152	48.1	R	Conversion	Planted prairie	Low	Prairie Parkland	\$13,468
Richard J. Dorer WMA	Lincoln	Non-native grassland	337.6	57.1	R	Woody removal	Planted prairie	Low	Prairie Parkland Prairie	\$23,861
Tatley WMA	Yellow Medicine	Crop	320	3.5	R	Conversion	Planted prairie	Low	Parkland Prairie	\$980
Tatley WMA	Yellow Medicine	Crop	320	20.6	R	Conversion	Planted prairie	Low	Parkland	\$5,768
Tatley WMA	Yellow Medicine	Crop	320	18.3	R	Conversion	Planted prairie	Low	Prairie Parkland	\$5,124
Tatley WMA	Yellow Medicine	Crop	320	34	R	Conversion	Planted prairie	Low	Prairie Parkland	\$9,520
Tatley WMA	Yellow Medicine	Crop	320	25.5	R	Conversion	Planted prairie	Low	Prairie Parkland	\$7,140
Tatley WMA	Yellow Medicine	Сгор	320	1.8	R	Conversion	Planted prairie	Low	Prairie Parkland E.	\$504
Beaver Creek WMA	Fillmore	Planted prairie	160	40	R	Conversion	Planted prairie	Medium	Broadleaf Forest E.	\$13,000
Chosen Valley WMA	Fillmore	pasture	60	5	R	Conversion	Planted prairie	Medium	Broadleaf Forest E.	\$3,100
Haverhill WMA	Olmsted	pasture	400	50 24	R	Conversion	Oak savanna	Medium	Broadleaf Forest	\$32,300

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Accelerated Prairie Grassland Restoration and Management Accomplishment Plan LSOHC

		Total Alternate Sites	5,590	2,154						\$950,385
Kroschel WMA	Kanabec	wet meadow	55	55	E	Woody removal	native wet prairie	Hard	Mixed Forest	\$55,750
Dalbo WMA	Isanti	wet meadow	170	170	E	Woody removal	native wet prairie	Hard	Mixed Forest Laurentian	\$76,500