

**Environment and Natural Resources Trust Fund
2012-2013 Request for Proposals (RFP)**

Project Title:

ENRTF ID: 023-B

Conservation Grazing to Improve Wildlife Habitat on WMAs

Topic Area: B. Forestry/Agriculture/Minerals

Total Project Budget: \$ 1,200,000

Proposed Project Time Period for the Funding Requested: 3 yrs, July 2013 - June 2016

Other Non-State Funds: \$ 300,000

Summary:

Disturbance invigorates grasslands and livestock grazing is one management tool. This project provides infrastructure to support conservation grazing on 10,000 acres of targeted WMAs in partnership with local livestock producers.

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Sponsoring Organization: MN DNR

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Location

Region: NW, Central, SW, SE

County Name: Becker, Big Stone, Blue Earth, Brown, Chippewa, Clay, Douglas, Faribault, Grant, Kittson, Lac qui Parle, Mahnomon, Norman, Otter Tail, Polk, Pope, Redwood, Stearns, Stevens, Traverse, Wilkin

City / Township:

<input type="checkbox"/> Funding Priorities	<input type="checkbox"/> Multiple Benefits	<input type="checkbox"/> Outcomes	<input type="checkbox"/> Knowledge Base
<input type="checkbox"/> Extent of Impact	<input type="checkbox"/> Innovation	<input type="checkbox"/> Scientific/Tech Basis	<input type="checkbox"/> Urgency
<input type="checkbox"/> Capacity Readiness	<input type="checkbox"/> Leverage	<input type="checkbox"/> Employment	<input type="checkbox"/> TOTAL <input type="checkbox"/> %



Environment and Natural Resources Trust Fund (ENRTF) 2012-2013 Main Proposal

PROJECT TITLE: Conservation Grazing to Improve Wildlife Habitat on WMAs

I. PROJECT STATEMENT

This proposal addresses LCCMR 2012-13 funding priorities two and six. Periodic disturbances, such as grazing and fire, are necessary to invigorate grasslands. While fire has been used for decades, DNR Wildlife Managers are beginning to use conservation grazing as a management tool to increase habitat diversity for the benefit of game and nongame wildlife. Many suitable grazing areas lack boundary fencing. This project will **provide needed infrastructure to implement conservation grazing on 10,000 acres of targeted Wildlife Management Areas (WMAs).**

Grazing animals were a crucial part of the original prairie ecosystem. Grazing increase the diversity in the plant community and provides structural diversity. The shorter grass of grazed areas enhances habitat for several prairie obligate birds of high conservation interest, including greater prairie chicken, marbled godwit, upland sandpiper, western meadowlark, loggerhead shrike, and chestnut-collared longspur. Grazing infrastructure will provide the capability to use grazing as a management tool (10,000 acres represents less than 1% of the WMA acreage). With the option of grazing on state grasslands, wildlife manager can form agreements with livestock producers to rest their pastures thus improving the quality of habitat on private lands. These public-private partnerships will benefit local economies and habitat.

Current grazing on WMAs is administered through Cooperative Farm Agreements (CFAs). These contracts outline the condition and terms for using state property. For purposes of this three year LCCMR grant, the grazers will provide bartered services (i.e. installation of temporary fences, maintenance etc.) and there will be no cash fee. The value to the producers will be calculated on per/acre or per Animal Unit Month (AUM) basis (*see attached sample CFA*).

1. GOALS and OUTCOMES

- a) Improve habitat quality; reduce management costs; replicate natural processes/disturbances to increase natural diversity through the careful and well-timed placement of livestock on WMAs.
- b) Increase the amount of grazing on state WMAs from the current 10,179 acres to approximately 20,000 acres. Our long-term goal is to have conservation grazing on 50,000 acres.
- c) MN WMAs belong to the public and must be managed to maintain their long-term ecological integrity. Therefore, grazing will occur where it is most needed to achieve management objectives.
- d) Provide economic benefits to local grass-based livestock operators and beginning/organic farmers.
- e) Provide private jobs through contracts for installing the fencing and other needed infrastructure.
- f) Monitoring will be instituted on a sample of grazing sites in order to provide information that will help develop grazing plans that ultimately result in desired ecological conditions.
- g) Monitoring will also provide information critical to ensuring that adverse impacts are minimized. Conservation grazing needs to be managed to ensure that overgrazing does not occur. Overgrazing may cause erosion, habitat destruction, soil compaction, or reduced biodiversity. Grazing will be terminated when necessary.
- h) Minimize the potential for invasive species.

2. **HOW the project will achieve those goals:** The main obstacle to implementing grazing is the lack of permanent perimeter fencing, gates and a stable, clean water supply. Target areas will be based on the MN Prairie Conservation Plan, Working Lands areas, and other precision conservation/grazing areas. Fencing/grazing will occur on non-native grasslands, restored prairie, degraded native prairie,

or brushland. High quality native prairie will not be grazed at this time.

3.

II. DESCRIPTION OF PROJECT ACTIVITIES

Activity 1: Private livestock producers will graze about 10,000 acres of WMA land. Budget: \$1,071,600

Outcome	Completion Date
1. Identify the conservation objectives (wildlife focus) and develop grazing plans.	March 2014
2. Grazing infrastructure will be installed. Fence 117mi @ \$1.30/ft +gates +solar	July 2014
3. Grazing agreements will be executed with private livestock producers (mainly beef cattle and cow/calf). <i>See sample Cooperative Farm Agreement.</i>	July 2015 & 2015
4. Approximately 10,000 acres of public land will be grazed to enhance habitat.	July 2016

Activity 2: Measure the ecological response of grazing on habitat condition and wildlife species. Communicate monitoring results and adjust management practices. Evaluate livestock producers' response to conservation grazing. Budget: \$ 103,400

Outcome	Completion Date
1. Existing habitat condition, as measured by the diversity and abundance of native plants and wildlife, is maintained or improved.	July 2016
2. The heterogeneity in the targeted prairie supports a broad base of grassland birds and wildlife as a result of the grazing.	July 2016
3. The barriers and benefits livestock producers encounter when grazing public land are well understood.	July 2016
4. Local resource managers are equipped to measure if conservation objectives have been met.	July 2016

Activity 3: Collaborate with Future Farmers of America to develop a teaching tool for Conservation Grazing and educate the public about the objectives of conservation grazing. Budget: \$25,000

Outcome	Completion Date
1. Develop conservation grazing curriculum that meets high school science standards for FFA classes. Encourage students to do projects on WMAs.	July 2016
2. Share curriculum with others for their Prairie training programs.	July 2016
3. Public users understand why the DNR is implementing conservation grazing.	July 2015

III. PROJECT STRATEGY

A. Project Team/Partners

Funds for this project will go to the DNR, primarily for contracts. Project assistance will be provided by: the Minnesota Department of Agriculture (MDA), Minnesota Grazing Lands Conservation Association, Minnesota State Cattlemen’s Association, Board of Water and Soil Resources (BWSR), Natural Resource Conservation Service (NRCS), U.S. Fish and Wildlife Service (USFWS), Soil and Water Conservation Service (SWCD), The Nature Conservancy, and the Land Stewardship Project in helping locate prospective grazing partners. Pheasants Forever, Ducks Unlimited, Minnesota Prairie Chicken Society, and other conservation groups have offered to help educate our interest groups about this new management practice and the resource benefits.

B. Timeline Requirements

This project will be completed in 36 months.

C. Long-Term Strategy and Future Funding Needs

Adaptive grazing will continue on these 40 sites and protocols will be applied to additional sites.

2012-2013 Detailed Project Budget

Conservation Grazing to Improve Wildlife Habitat on WMAs

IV. TOTAL ENRTF REQUEST BUDGET 3-years

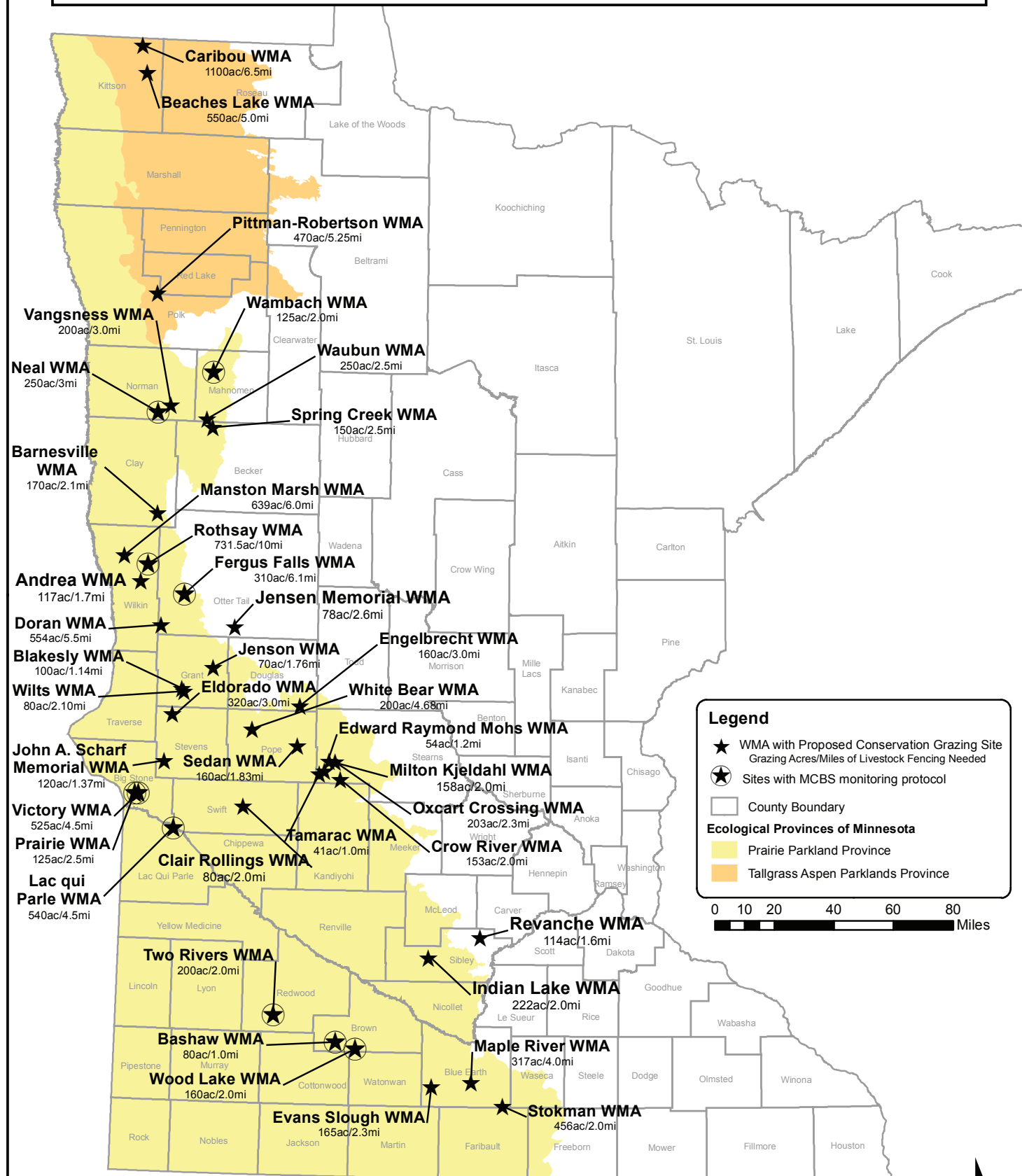
BUDGET ITEM	AMOUNT
Personnel: 0.50- FTE project coordinator/ contractor administrator @ \$30,000 salary and fringe/year for 3 years=(\$90,000). 10% of MCBS time for planning and field set-up 2013/\$6,200 and data management & analysis 2014/\$6,200=\$12,400.	\$ 102,400
Contracts: Contract for conservation grazing Contract for brush clearing w/ dozer for 10miles @ \$1,200/mile=\$12,000; Fencing contracts for purchase & installation of 117 miles of fence @ 1.30/ft x5280ft/mi=\$803,100 (includes grass mowing and small brush clearing with an ASV with mowing head and grinding head), Installation of approx 100 gates16-ft & hunter access gates @ \$285 for both=\$28,500; Installation of electric hookup or solar energizers & solar panels (\$800ea/40=\$32,000) Installation of 42 cattle enclosure fences for monitoring @ 10 WMAs \$430each=\$18,000. Two Botanist Teams for 2 years = \$70,000; Contract for curriculum writer=\$25,000	\$ 988,600
Equipment/Tools/Supplies: At least 160 Aluminum Grazing notification signs required by law @ \$6/ea=\$1,000; \$6,000/yr for 3 yrs for coordinator communications, supplies, computer services, postage, etc=\$18,000.	\$ 19,000
Travel: For habitat monitoring \$3,000; For Project coordinator 3 years \$9,000 travel – fleet and other travel expenses	\$ 12,000
Additional Budget Items: Direct Support Services- DNR uses a rate of 6.5% to calculate costs for direct support services, which are DNR's direct and necessary business services required to support this proposal.	\$ 78,000
TOTAL ENVIRONMENT AND NATURAL RESOURCES TRUST FUND \$ REQUEST =	\$ 1,200,000

V. OTHER FUNDS

SOURCE OF FUNDS	AMOUNT	Status
Other Non-State \$ Being Applied to Project During Project Period: a) NRCS Grazing Specialists to write Grazing Plans at approximately \$30/acre for 10,000 acres=\$300,000. This includes writing, travel, time spent meeting with representatives of DNR, etc. b) A National Fish & Wildlife Foundation (NFWF)- Conservation Partner 2012 conservation grazing proposal has been submitted requesting \$250,000 for landowner technical assistance and cost-share opportunities in the prairie region to expand conservation grazing for water quality improvement and habitat restoration on private land (develop conservation grazing plans on private land owned by our grazing partners).	\$550,000	a) secure b) pending
Other State \$ Being Applied to Project During Project Period: MN Dept. of Agriculture Livestock Development Team - mapping, promotions and outreach to livestock producers to find cooperators at 40 locations x 10 hrs ea. x \$35/hr = \$14,000. Field demonstration days, conservation walks, and workshops to train partners on livestock and conservation grazing four programs in 2 yrs x 40 hrs x \$35 = \$5,600.	\$ 19,600	secure
In-kind Services During Project Period: Livestock cooperators will provide temporary interior fencing and installation at 40 sites for \$1/ft 5,280ft/mi of approximately 100 miles=\$528,000 and water tanks(40 @ \$100 ea) \$4,000 and approx. 3,000 ft of water lines @ \$0.75/ft x 40 sites = \$90,000. The cooperator will maintain fences, gates, and provide needed mowing. The cooperator's labor will be subtracted from his services due. DNR Staff will provide approximately 50 hrs/yr/40sites x 3 years x \$35/hr=\$210,000	\$ 832,000	pending
	\$1,401,600	/

Conservation Grazing to Improve Wildlife Habitat on WMAs

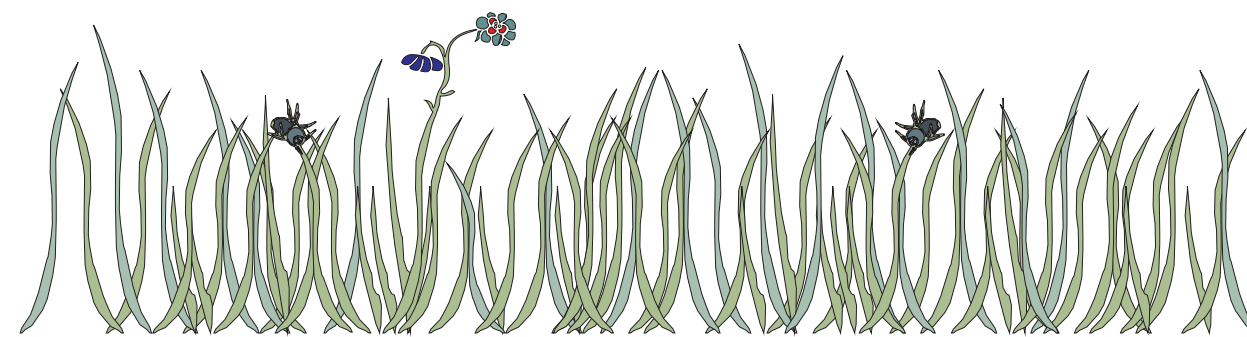
Locations where Grazing Management will Enhance Ecological Function



Total proposed conservation grazing acreage: approximately 10,000 acres.
 Total acreage of all WMAs statewide: 1.3 million acres. Grazing management will be accomplished through partnerships with livestock producers.

05/04/2012

Date: 3/8/2012



Ungrazed – undisturbed

- Dominant species crowd out other species
- 90% of biomass is grass but 90% of diversity is forbs
- Good nesting cover for many species – mallard, blue-winged teal, pheasant, & bobolink



Light or Conservation grazing – intermediate disturbance

- 85-95% of grazers diet is grass (Plumb and Dodd 1993)
- Removing grass allows more species to have room to grow and creates more niches
- More plants = more invertebrates = more bird food
- Structural diversity = more nesting niches – greater prairie chicken, upland sand piper, marbled godwit, meadowlark, loggerhead shrike, chestnut-collared longspur, pheasant, & bobolink

Bill Penning is the Prairie Habitat Team Supervisor for the Minnesota Department of Natural Resources – Section of Wildlife. He coordinates the Section's Farm Bill activities, is on the steering committee for the Farm Bill Assistance Partnership, and is the program manager on three active Lessard-Sams Outdoor Heritage Council Prairie/Grassland Habitat Improvement grants. Bill also supervises the Walk In Access program. He has degrees in Biology, Anthropology, and Wildlife Conservation from the University of Minnesota.

The mission of the Minnesota Department of Natural Resources is to work with citizens to conserve and manage the state's natural resources, to provide outdoor recreation opportunities, and to provide for commercial uses of natural resources in a way that creates a sustainable quality of life. Within the Division of Fish and Wildlife, the Prairie Habitat Team is responsible for addressing project, policy and fiscal issues needed to manage grassland habitat for wildlife in the Prairie and Transition Zones of Minnesota. With less than 1% of native prairie remaining in Minnesota, conservation and management of grassland habitats is a priority for the Department of Natural Resources. This proposal addresses the urgent need to increase grassland management capacity using sound science and defined objectives that will benefit wildlife populations, plant diversity and lower overall management costs.