Lessard-Sams Outdoor Heritage Council Laws of Minnesota 2014 Accomplishment Plan

Date: October 17, 2013

Program or Project Title: Northeastern Minnesota Sharp-tailed Grouse Habitat Partnership

Funds Recommended: \$ 3,150,000

Manager's Name: Ward Julien Title: Board Member & Treasurer

Organization: Minnesota Sharp-tailed Grouse Society

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Organization Web Site: www.sharptails.org

Legislative Citation:

Appropriation Language:

County Locations: Aitkin, Carlton, Kanabec, Pine, and St. Louis.

Ecological Planning Regions:

Northern Forest

Activity Type:

- Enhance
- Protect in Fee
- Restore

Priority Resources Addressed by Activity:

Habitat

Abstract:

This partnership will protect, restore and enhance 2,769 acres, primarily brushland, in northeastern Minnesota. Habitat will be added to the WMA system and enhanced on existing public lands for species in greatest conservation need, outdoor recreation, and environmental benefits.

Design and Scope of Work:

Problem and Scope:

Until the 1880s, most of Minnesota was inhabited by sharp-tailed grouse where suitable open and brushland habitat, such as prairies, savannas, sedge meadows and open bogs, occurred. This indigenous grouse was once one of Minnesota's most abundant game birds, with over 100,000 harvested annually in the 1940's. Loss, degradation and fragmentation of open and brushland habitat within Minnesota due to natural succession and conversion to other land uses (cropland and tree plantations) has lead to a long term decline in this unique grouse's population (estimated harvest of 16,800 in 2010), causing its listing as a species in greatest conservation need. Today its remaining range in northern Minnesota, which is less than one-third of its historic range, is in jeopardy of additional fragmentation and degradation.

In east central Minnesota, research results have shown that genetic diversity of the sharp-tailed grouse population may be declining due to increasing isolation of subpopulations. In nearby Wisconsin, genetic diversity has declined so greatly that Wisconsin DNR has translocated sharp-tailed grouse to create a genetic infusion to increase the likelihood of population persistence. Increasing the amount of protected brushland habitat in northeastern Minnesota will be critical to the sustainability of the local sharp-tailed grouse population and gene exchange between Minnesota and Wisconsin populations.

Specific habitat that will be affected and how actions will directly restore, enhance, and/or protect them:

Specific habitats to be affected will include up to 2,769 acres of openland, brushland, cropland and forest habitat. Acquisition of the habitats and their transfer to MDNR for management as state WMA, will protect them. Natural habitats will include wet meadow, sedge meadow, shrub wetland, bog, grassland, and aspen and northern hardwoods forest. They will be enhanced with prescribed burning, mowing, shearing, timber harvest, and possibly grazing, biomass harvest and occasional haying. Other land includes hay, pasture and crop land that will be restored to open and brushland habitat through establishment of native vegetation, prescribed burning and natural succession.

Multiple benefits:

Multiple benefits of the above protection, enhancement and restoration actions will include increased plant and animal diversity, carbon sequestration, water retention and filtration, opportunities for biomass harvest, access to public lands for recreation, increases eco-tourism opportunities, economic benefits, and secure habitat for sharp-tailed grouse and other open and brushland species in greatest conservation need.

Wildlife species that will benefit:

In addition to sharp-tailed grouse, several other species that use or depend upon open and brushland habitats are also in decline, listed as species in greatest conservation need, and will benefit from this project, including bobolinks, loggerhead shrikes, short-eared owls, yellow rails, eastern meadowlarks, American bittern, northern harrier, golden-winged warblers, Henslow's sparrow, Le Conte's sparrow, Nelson's sharp-tailed sparrow, and American woodcock. Six of these species are state listed as endangered, threatened or special concern.

Game species that will benefit include white-tailed deer, waterfowl (mallards, blue-winged teal, Canada geese, and more species during migration), wild turkey, American woodcock, common snipe, ruffed grouse, cottontail rabbit, snowshoe hare, fox, raccoon, and bobcat. Many nongame species such as the Eastern bluebird, American kestrel, brown thrasher, gray catbird, common yellowthroat, sora rail, sedge wren, spring peeper and sandhill crane will benefit.

Urgency and opportunity:

If not acquired while the opportunities exist (i.e., willing sellers and funding opportunities), the chance to protect these priority tracts permanently from land practices incompatible as open and brushland wildlife habitat, and from fragmentation, parcelization and development may be lost. Incompatible land uses, such as building sites, tree plantings, and uncontrolled natural succession, on a tract not only negatively impacts the tract directly, but also surrounding habitat by fragmenting the open character of the land and impacting area-sensitive wildlife species, such as sharp-tailed grouse that are adapted to large open vistas.

How priorities were set / Parcel selection and scoring process:

For consideration of protection and enhancement efforts by the partnership, open and brushland tracts must be located within or at the edge of an ECS landtype association identified as a priority open landscape through DNR's SFRMP landscape planning process. Further criteria to prioritize which tracts are most critical include a ranking system based upon county location, distance to active sharp-tailed grouse lek, tract size, and distance to protected brushland. A sharp-tailed grouse habitat use model (attached) is being used to target brushland habitat for protection, restoration and enhancement.

Science-based strategic planning and evaluation:

This proposal is based on science-based strategic planning and evaluation. Biological planning, conservation design, delivery, monitoring and research, and adjustments in strategies as needed are used to maintain an

adaptive approach.

Sharp-tailed grouse leks (dancing grounds) are the essential hubs of subpopulations. Nesting and brooding rearing occur in suitable habitat within approximately a two-mile radius of leks. All but one of the parcels proposed for protection have active leks either located on them or within 3/4 mile away.

All tracts will be critical to sustaining nesting and brood rearing habitat for subpopulations of sharp-tailed grouse. Research by Stanley Temple in Wisconsin suggests that suitable habitat patches of 4000 ha (roughly 10,000 acres, $15\frac{1}{2}$ sq. miles, or a 2.2 mile radius circle) are needed for a sharp-tailed grouse population to survive.

A pilot study in Aitkin County was conducted in 2009 to examine habitat selection, nest success and survival of sharp-tailed grouse. Data from this study and a two-year study currently underway will provide addition information for adaptive management.

Annual spring surveys of sharp-tailed grouse leks allow for monitoring of local populations and the effect of habitat protection and enhancement and other land management activities on them.

Level of stakeholder opposition and involvement:

No stakeholder opposition to proposed acquisitions has been encountered. Proposals to protect land and manage them as public conservation lands are locally-driven by conservation groups, hunters, conservation agency staff, and willing sellers due to the multiple benefits such land protection and management can provide. Local government has been or will be contacted and their support sought.

Planning:

MN State-wide Conservation Plan Priorities:

- H1 Protect priority land habitats
- H3 Improve connectivity and access to recreation
- H5 Restore land, wetlands and wetland-associated watersheds
- H7 Keep water on the landscape
- LU8 Protect large blocks of forest land

Plans Addressed:

- A Vision for Wildlife and Its Use -- Goals and Outcomes 2006-2012
- Minnesota DNR Nongame Wildlife Plans
- Minnesota DNR Strategic Conservation Agenda
- Minnesota Forest Resource Council Landscape Plans
- Minnesota's Wildlife Management Area Acquisition The Next 50 Years
- Outdoor Heritage Fund: A 25 Year Framework
- Partners in Flight Conservation Plans for States and Physiographic Regions
- State Comprehensive Outdoor Recreation Plan
- Tomorrow's Habitat for the Wild and Rare
- U.S. Fish and Wildlife Service Strategic Habitat Conservation Model

LSOHC Statewide Priorities:

- Address Minnesota landscapes that have historical value to fish and wildlife, wildlife species of greatest conservation need, Minnesota County Biological Survey data, and rare, threatened and endangered species inventories in land and water decisions, as well as long-term or permanent solutions to aquatic invasive species
- Are ongoing, successful, transparent and accountable programs addressing actions and targets of one or more of the ecological sections
- Ensures activities for "protecting, restoring and enhancing" are coordinated among agencies, non profits and others while doing this important work; provides the most cost-effective use of financial resources; and where possible takes into consideration the value of local outreach, education, and community engagement to sustain project outcomes

- Leverage effort and/or other funds to supplement any OHF appropriation
- Produce multiple enduring conservation benefits
- Provide Minnesotans with greater public access to outdoor environments with hunting, fishing and other outdoor recreation opportunities
- Restore or enhance habitat on permanently protected land
- Use a science-based strategic planning and evaluation model to guide protection, restoration and enhancement, similar to the United States Fish and Wildlife Service's Strategic Habitat Conservation model

LSOHC Northern Forest Section Priorities:

- Provide access to manage habitat on landlocked public properties or protect forest land from parcelization and fragmentation through fee acquisition, conservation or access easement
- 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
- Restore forest-based wildlife habitat that has experienced substantial decline in area in recent decades

Relationship to Other Constitutional Funds:

No Relationships Listed

Accelerates or Supplements Current Efforts:

Relationship to Other Constitutional Funds: The partnership will coordinate with other conservation organizations receiving Constitutional Funding to ensure projects are compatible and complementary, do not have duplicated efforts and together address the Council's statewide and section priorities.

Of the Environment and Natural Resources Trust Fund, Clean Water Fund, Parks and Trail Fund, and Outdoor Heritage Fund, this project is best suited to apply for funds from the latter because it is a habitat-based project. This project will have multiple natural resource, economic and social benefits, but its greatest benefit is in the habitat it will provide for a unique, native game bird that is also a species in greatest conservation need, the entire suite of plants and wildlife that also inhabit the same brushland communities, and the outdoor enthusiasts who enjoy and utilize them.

How this proposal accelerates or supplements current efforts: This partnership greatly accelerates and supplements protection, restoration and enhancement of brushland habitat. Prior to the availability of Outdoor Heritage grants, very little additional brushland habitat could be protected and opportunities were lost. Limited funds within DNR for acquisition were typically directed to western and southern Minnesota for protection of wetland and grassland habitat.

Sustainability and Maintenance:

The proposed parcels will be part of the state WMA system, being sustained and managed by local DNR Wildlife Area staff involved in the partnership. Maintenance will be funded through the DNR budget, grants and funds provided by partners. Partner funds will be derived from conservation organization's general membership and grants, such as Outdoor Heritage and Conservation Partnership Legacy grants.

Stewardship plans for these tracts entail maintenance as integral portions of priority open landscapes. After initial protection and enhancement is completed, the primary habitat management technique will be prescribed burning. It will be used as needed, roughly once every three to seven years, to maintain their open structure and stimulate native vegetation. Brushland prescribed burn costs range from \$10-30/acre, depending upon burn unit size and equipment and personnel needed. Other habitat management techniques may be involve prescribed grazing or haying through cooperative agreements (no cost) or mechanical treatment of woody vegetation such as mowing (\$120/acre), shearing (\$70/acre), timber harvest (no cost), or biomass harvest.

Government Approval:

Will local government approval be sought prior to acquisition? - Yes

Permanent Protection:

Is the land you plan to acquire free of any other permanent protection? - Yes

Hunting and Fishing Plan:

Is this land open for hunting and fishing? - Yes

No variation from State of Minnesota regulations.

Permanent Protection:

Is the activity on permanently protected land and/or public waters per MS 103G.005, Subd. 15? - Yes (WMA, State Forests)

Accomplishment Timeline

Activity	Approximate Date Completed
Protection begins - Order appraisals for proposed acquisitions	July 2014
Enhancement begins - Mechanical brush treatments begin on public lands	July 2014
Protection completed - All tracts acquired and transferred to MDNR for WMA system	March 2015
Restoration begins - Native vegetation seeded on public land	June 2015
Enhancement underway - Initial site development completed	Sept. 2015
Enhancement underway - Prescribed burns completed; Restoration completed - Native vegetation seeded	June 2016
Enhancement underway - Summer mechanical brushland treatments completed on new acquisitions	Sept. 2016
Enhancement underway - Additional firebreaks cleared	March 2017
Enhancement completed - Additional prescribed burns completed	June 2017

Outcomes

Programs in the northern forest region:

- Forestlands are protected from development and fragmentation *Protected forestlands will be measured in acres added to the WMA system. Evaluation is not necessary as the lands will be permanent conservation lands.*
- Healthy populations of endangered, threatened, and special concern species as well as more common

- species Surveys (such as lek, predator scent post, winter track, and small game hunter) will measure and evaluate sharp-tailed grouse and brushland wildlife populations.
- Increased availability and improved condition of riparian forests and other habitat corridors *Habitat acres* added which enhance corridors, habitat patch size and connectivity can be measured and evaluated for habitat quality and wildlife use through surveys.
- Landlocked public properties have increased access for land managers Newly protected habitat acres and the public habitat acres they help access can be measured and evaluated for habitat quality and wildlife use through surveys.
- Greater public access for wildlife and outdoors-related recreation More habitat acres open to hunting and additional access points will be available. Number of hunters can be estimated from license sales and hunter surveys.
- Improved availability and improved condition of habitats that have experienced substantial decline Addition brushland habitat acres protected, restored and enhanced can be measured and evaluated for improved conditions and wildlife use through surveys.
- Addresses the "special concern of the conditions of brushlands within the forestlands."

Budget Spreadsheet

Budget reallocations up to 10% do not require an amendment to the Accomplishment Plan

Total Amount of Request: \$ 3150000

Budget and Cash Leverage

Budget Name	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Personnel	\$15,000	\$0		\$15,000
Contracts	\$239,500	\$0		\$239,500
Fee Acquisition w/ PILT	\$2,540,000	\$0		\$2,540,000
Fee Acquisition w/o PILT	\$0	\$0		\$0
Easement Acquisition	\$0	\$0		\$0
Easement Stewardship	\$0	\$0		\$0
Travel	\$0	\$0		\$0
Professional Services	\$28,000	\$0		\$28,000
Direct Support Services	\$0	\$0		\$0
DNR Land Acquisition Costs	\$21,500	\$0		\$21,500
Capital Equipment	\$0	\$0		\$0
Other Equipment/Tools	\$0	\$0		\$0
Supplies/Materials	\$306,000	\$5,000	Private Source	\$311,000
DNR IDP	\$0	\$26,000	DNR in kind service	\$26,000
Total	\$3,150,000	\$31,000		\$3,181,000

Personnel

Position	FTE	Over # of years	LSOHC Request	Anticipated Leverage	Leverage Source	Total
PF Director of Conservation	0.08	3.00	\$9,000	\$0		\$9,000
PF Regional Representative	0.04	3.00	\$2,200	\$0		\$2,200
PF Grants Staff	0.08	3.00	\$3,800	\$0		\$3,800
Total	0.20	9.00	\$15,000	\$0		\$15,000

Output Tables

Table 1. Acres by Resource Type

Туре	Wetlands	Prairies	Forest	Habitats	Total
Restore	0	0	0	50	50
Protect in Fee with State PILT Liability	0	0	0	1,685	1,685
Protect in Fee W/O State PILT Liability	0	0	0	0	0
Protect in Easement	0	0	0	0	0
Enhance	0	0	0	1,034	1,034
Total	0	0	0	2,769	2,769

Table 2. Total Requested Funding by Resource Type

Туре	Wetlands	Prairies	Forest	Habitats	Total
Restore	\$0	\$0	\$0	\$40,000	\$40,000
Protect in Fee with State PILT Liability	\$0	\$0	\$0	\$2,967,000	\$2,967,000
Protect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$0	\$0
Protect in Easement	\$0	\$0	\$0	\$0	\$0
Enhance	\$0	\$0	\$0	\$143,000	\$143,000
Total	\$0	\$0	\$0	\$3,150,000	\$3,150,000

Table 3. Acres within each Ecological Section

Туре	Metro Urban	Forest Prairie	SE Forest	Prairie	N Forest	Total
Restore	0	0	0	0	50	50
Protect in Fee with State PILT Liability	0	0	0	0	1,685	1,685
Protect in Fee W/O State PILT Liability	0	0	0	0	0	0
Protect in Easement	0	0	0	0	0	0
Enhance	0	0	0	0	1,034	1,034
Total	0	0	0	0	2,769	2,769

Table 4. Total Requested Funding within each Ecological Section

Туре	Metro Urban	Forest Prairie	SE Forest	Prairie	N Forest	Total
Restore	\$0	\$0	\$0	\$0	\$40,000	\$40,000
Protect in Fee with State PILT Liability	\$0	\$0	\$0	\$0	\$2,967,000	\$2,967,000
Protect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$0	\$0	\$0
Protect in Easement	\$0	\$0	\$0	\$0	\$0	\$0
Enhance	\$0	\$0	\$0	\$0	\$143,000	\$143,000
Total	\$0	\$0	\$0	\$0	\$3,150,000	\$3,150,000

Table 5. Target Lake/Stream/River Miles

0 miles

Parcel List

For restoration and enhancement programs ONLY: Managers may add, delete, and substitute projects on this parcel list based upon need, readiness, cost, opportunity, and/or urgency so long as the substitute parcel/project forwards the constitutional objectives of this program in the Project Scope table of this accomplishment plan. The final accomplishment plan report will include the final parcel list.

Section 1 - Restore / Enhance Parcel List

Aitkin

Name	TRDS	Acres	Est Cost	Existing Protection?
Aitkin WMA Mow	04726203	56	\$6,400	Yes
Great River Mow	04826213	173	\$19,900	Yes
Thumb Island Mow	04823225	148	\$17,000	Yes
Wagner East Bog Mow	05026212	280	\$32,200	Yes
Wagner West Bog Mow	05026211	160	\$18,400	Yes

Carlton

Name	TRDS	Acres	Est Cost	Existing Protection?
East Cross Lake Mow	04920222	38	\$4,400	Yes
Kettle Lake East Shear	04819215	576	\$34,800	Yes
Kettle Lake West Shear	04819218	257	\$15,500	Yes
Wrenshall WMA Mow	04716207	38	\$4,400	Yes

Pine

Name	TRDS	Acres	Est Cost	Existing Protection?
Rutledge WMA Natives Seeding	04420236	50	\$31,200	Yes

St. Louis

Name	TRDS	Acres	Est Cost	Existing Protection?
Cherry-Morrow Mow	05619216	75	\$8,600	Yes
Floodwood WMA Mow	05121211	38	\$4,400	Yes
Sax-Zim Mow	05518222	75	\$8,600	Yes

Section 2 - Protect Parcel List

Aitkin

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Herlache	05025215	40	\$39,800	No	No	No
Lawrence	05025214	160	\$130,800	No	No	No
Parchuc	04823213	40	\$43,400	No	No	No
Rezac	04726209	159	\$151,300	No	No	No

Carlton

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Baars	04920221	40	\$43,200	No	No	No
Bennett	04920228	40	\$51,200	No	No	No
Casey	04920228	40	\$56,700	No	No	No
Eder	04920220	40	\$51,400	No	No	No
French	04920228	40	\$51,200	No	No	No
Graf	04920211	80	\$84,300	No	No	No
Klimek	04716207	20	\$41,200	No	No	No
Richards	04920221	37	\$48,400	No	No	No
Senese	04920220	20	\$25,400	No	No	No
T. Olson	04920229	40	\$51,200	No	No	No

Kanabec

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
Linder	04223235	806	\$1,070,600	No	No	No

Pine

Name	Name TRDS		Est Cost	Existing Protection?	Hunting?	Fishing?
Slade	04419220	480	\$563,900	No	No	No

Section 2a - Protect Parcel with Bldgs

Aitkin

Name	TRDS	Acres	Est Cost	# Bldgs?	Bldg Imrpove Desc		Disposition of Improvements
Thompson	04825204	760	\$2,841,800	5	Old house, shed, hay barn and two grain bins	\$10,000	

Carlton

Name	TRDS	Acres	Est Cost	# Bldgs?	Bldg Imrpove Desc		Disposition of Improvements
J. Olson	04920221	280	\$296,400		Old house and garage.	\$8,000	

Section 3 - Other Parcel Activity

No parcels with an other activity type.