

Project Title: Northeastern Minnesota Sharp-tailed Grouse Habitat Partnership

**Request for Funding Form
Lessard-Sams Outdoor Heritage Council
Fiscal Year 2011**

Project Title: #14 Northeastern Minnesota Sharp-tailed Grouse Habitat Partnership

Date: November 2, 2009

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	Council Funding Request	Out-Year Projections of Needs		
Funds Requested	FY 2011	FY 2012	FY 2013	FY 2014
Outdoor Heritage Fund	\$3,759,400	0	0	0

A. Summary – This sharp-tailed grouse habitat partnership will protect, enhance and restore up to 2,267.4 acres of open and brushland habitat and 165 acres of forest habitat in northeastern Minnesota, provide access to additional public lands for recreation, provide multiple environmental benefits, and benefit sharp-tailed grouse and other open and brushland species in greatest conservation need (several of which are state listed as endangered, threatened or special concern) by acquiring priority land parcels in Aitkin, St. Louis and Kanabec Counties for addition to the WMA system. As noted in the LSOHC's Northern Forest Section Vision, the condition of brushlands within forest lands is of special concern. The partnership, including Minnesota Sharp-tailed Grouse Society, Pheasants Forever, Minnesota Waterfowl Association, Ruffed Grouse Society, Minnesota Deer Hunters Association, Central Lakes College Natural Resource Club and Minnesota DNR, is collaborating to ensure that landscapes important to the

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sustainability of sharp-tailed grouse and other native, open and brushland wildlife, and the multiple benefits they provide, persist in the future.

B. Background Information

1. What is the problem or opportunity being addressed?

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 14,000 in 2008), 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.

In east central Minnesota, recent preliminary 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 (allelic diversity and heterozygosity) has declined so greatly that Wisconsin DNR will be translocating sharp-tailed grouse to create a genetic infusion to increase the likelihood that populations will persist. 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.

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, and spring peeper will benefit, as well as the sandhill crane which is expanding its range.

If not acquired while the opportunities exist, the chance to protect these priority tracts permanently from land practices incompatible as open and brushland

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wildlife habitat, and from fragmentation, development and parcelization may be lost.

2. What action will be taken?

The partnership will seek funding, provide matching funds, and cooperate with willing landowners in Aitkin, St. Louis and Kanabec Counties to acquire and donate priority lands to DNR for designation as WMAs. Initial management action to prepare the WMAs for public use and to enhance and restore open and brushland habitats on them will include boundary surveys and posting, access and parking areas, fence and building removal, prescribed burning, shearing or mowing, and seeding.

3. Who will take action and when?

The partnership (Minnesota Sharp-tailed Grouse Society, Pheasants Forever, Minnesota Waterfowl Association, Ruffed Grouse Society, Minnesota Deer Hunters Association, Central Lakes College Natural Resource Club and Minnesota DNR) has taken action by visiting with landowners, contacting County Board members, preparing acquisition plans, and pledging funds. DNR Division of Fish and Wildlife managers have submitted the proposed tracts for approval by their Division Management Team. Upon securing sufficient funds, action will include land appraisals and the acquisition process. DNR will oversee enhancement, restoration, and management of the WMAs. Because these tracts will be purchased from willing sellers and purchase opportunities may change, some variation from the list of proposed tracts to protect may occur.

4. How will you coordinate this program with the other Constitutional Funding?

The partnership will coordinate with other conservation organizations receiving Constitutional Funding to ensure projects are compatible and complimentary, do not have overlapping efforts and together address the Council's priority actions.

5. What specific habitat changes will occur if this item is funded? Be specific about and list multiple benefits if they exist.

Specific habitat changes will include the protection and addition of up to 2,267.4 acres of open and brushland habitat and 165 acres of forest habitat to the WMA system in northeastern Minnesota. Natural habitats on these priority lands include sedge meadow, shrub wetland, grassland, marsh, river and aspen forest. They will be managed with prescribed burning, mowing, shearing, timber harvest, and possibly grazing, biomass harvest and occasional haying to maintain the open and brushland landscape. Other habitats include excavated ponds, and crop, hay and pasture land that will be

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encouraged to revert back to natural open and brushland habitat either by seeding and/or allowing natural succession to occur.

Multiple benefits of the protected, enhanced and restored habitats will include increased plant and animal diversity, carbon sequestration, water retention and filtration, opportunities for biomass harvest, access to public lands for recreation and secure habitat for sharp-tailed grouse and other open and brushland species in greatest conservation need.

6. Will your Outdoor Heritage Fund dollar request complete the planned accomplishments?

 X YES

 NO

7. How will you pay for the maintenance of the accomplishments?

These parcels will become part of the WMA system and be maintained and managed by local DNR Wildlife Area staff involved in the partnership. The partnership will pay for their maintenance through the DNR budget and funds provided by partners. Partner funds will come from conservation organization's general membership and grants, such as LSOHC and Heritage Enhancement grants.

8. How does this action directly restore, enhance, or protect prairies, wetlands, forests or habitat for fish, game, and wildlife?

This project directly protects, enhances and restores open and brushland habitats by acquiring them for addition to and management under the WMA system. In northeastern Minnesota, open and brushland habitats are typically imbedded within the larger forest landscape. As noted in 1. several game and nongame species in greatest conservation need, and listed as state endangered, threatened or special concern, with benefit.

9. If you are restoring or enhancing property, is the activity on permanently protected land?

 X YES

 NO

Restoration and enhancement activities would occur on priority parcels recently designated as WMA.

10. How will you ensure transparency and provide information about your work and use of Outdoor Heritage Fund dollars.

Regular project updates and accomplishment and financial reports will be shared with all partners and the Council.

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11. When do you expect to see these changes?

Changes will be seen after the tracts are designated as WMAs.

12. Why will this strategy work?

This strategy will work because it has a proven track record. Numerous, instances of these partners successfully collaborating on past projects to secure funding to acquire land for addition to the WMA system exist.

13. Who might make decisions that assist or work against achieving the expected impact program?

All project partners will participate in decisions affecting the project.

14. If this is acquisition of land, has the local government formally approved the acquisition?

The Watters tract in Aitkin County has had formal County Board approval. The remaining three tracts in Aitkin County and one tract in Kanabec County have not had formal approval, but local County Commissioners have been contacted and their initial support successfully sought. Support from St. Louis County is currently being sought.

15. If this is fee simple acquisition of land, is the land free of any other permanent protection such as a conservation easement?

☒ YES

☐ NO

16. If this is an easement acquisition, will the eased land be open for public use? If so what kind of use? Not applicable.

17. If easement acquisition, will the easement be a permanent conservation easements as described in MS 2009, Chapter 84C.01, specifically protecting the natural resource values of real property forever? Not applicable.

☐ YES

☐ NO

18. If you are proposing funding for a new or ongoing program how long into the future do you expect this program to operate? Not applicable.

Years

19. Which planning sections will you work in? Check all that apply in the list below.

- ☒ Northern Forest
- ☐ Forest/Prairie Transition
- ☐ Southeast Forest
- ☐ Prairie
- ☐ Metropolitan Urbanizing Area

20. Does the request address an urgent conservation opportunity that will be lost if not immediately funded?

☒ YES

☐ NO

If these open and brushland tracts are not acquired while the opportunities exist, the chances to protect them permanently from land practices incompatible as open and brushland wildlife habitat, development and parcelization may be lost.

21. Does the request restore and/or enhance habitat on existing state-owned Wildlife or Aquatic Management Areas or Scientific and Natural Areas?

☐ YES

☒ NO

22. Is this request based on assessment through a science based strategic planning and evaluation model similar to the United States Fish and Wildlife Service's Strategic Habitat Conservation model?

☒ YES

☐ NO

In 2002, DNR Division of Wildlife completed "An Assessment of Open Landscapes for Management of Brushland Wildlife Habitat in Northern and Central Minnesota" to provide information on open landscape wildlife locations, pre-settlement vegetation, land use and cover and landowner/administration to resource managers for identification and prioritization of large, open landscapes. The assessment is being used in DNR's landscape planning effort, Subsection Forest Resource Management Planning, and priority open landscapes (ECS landtype associations) are being identified through the planning process. All of the open and brushland tracts proposed for acquisition lie within or at the edge of these priority open landscapes.

A sharp-tailed grouse habitat model that is nearly complete will help further refine open landscape management and acquisition decisions made within the priority open landscapes.

Also, a pilot study in Aitkin County was conducted in spring/summer 2009 as part of a planned long term study that will examine habitat selection, nest success and

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survival of sharp-tailed grouse. Data from this study and the subsequent long term study will provide addition information that will continually improve and keep management adaptive.

23. Explain the scientific foundation for your project, and the benefits it will produce.

In addition to the information and benefits explained in 1. and 21., the following also provides scientific foundation for this project:

- 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. A study in 1999 revealed 13 sharp-tailed grouse leks in northeastern Minnesota that had the greatest potential (based on longevity and number of birds using the leks) to be maintained as large active leks and serve as core populations. Two of the brushland tracts in Aitkin County proposed for acquisition have either one of these 13 leks located on it or immediately adjacent to it, and a third is within 1¾ mile. Both tracts in St. Louis County are within 1¼ miles of one of these leks.

- All of the tracts will be critical to providing suitable patches of nesting and brood rearing habitat for subpopulations of sharp-tailed grouse in northeastern Minnesota. Research by Stanley Temple in Wisconsin suggests that suitable habitat patches of 4000 ha (roughly 10,000 acres, 15½ sq. miles, or a 2.2 mile radius circle) are needed for a sharp-tailed grouse population to survive. Opportunities to protect and connect suitable patches of this size are dwindling due to development, parcelization and other landscape change pressures.

24. How do you set priorities?

To consider an open or brushland tract for purchase and designation as a WMA, it must be located within an ECS landtype association identified as a priority open landscape through DNR's landscape planning process and the local County Board must give approval. Further criteria to prioritize which tracts are most critical to acquire include:

1. Location within LSOHC Northern Forest Section –
 - Within Carlton, Aitkin, St. Louis, or Koochiching County – 5 points
 - Within Pine or Kanabec County – 10 points
2. Distance to active sharp-tailed grouse lek -
 - > 2 miles – 0 points
 - 1 mile ≤ 2 miles – 5 points
 - ½ mile ≤ 1 mile – 8 points
 - < ½ mile - 10 points

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3. Tract size -
 - < 40 acres – 2 points
 - 40 acres ≤ 160 acres – 4 points
 - 160 acres ≤ 320 acres – 6 points
 - 320 acres ≤ 640 acres – 8 points
 - >640 acres – 10 points
4. Distance to protected brushland -
 - > 5 miles – 0 points
 - 2 miles ≤ 5 miles – 2 points
 - 1 mile ≤ 2 miles – 4 points
 - ½ mile ≤ 1 mile – 6 points
 - 0 miles ≤ ½ mile - 8 points
 - Adjacent - 10 points

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

- **Minnesota Statewide Conservation and Preservation Plan, 2008** – This partnership will address and advance the Habitat Recommendations of 1. Protect priority land habitats (p. 63), 3. Improve connectivity and access to outdoor recreation (p. 74), 5. Restore land, wetlands, and wetland-associated watershed (p. 80), and 7. Keep water on the landscape (p.84).
- **MDNR Tomorrow's Habitat for the Wild and Rare, 2006** – Lists sharp-tailed grouse and other open and brushland wildlife species that are species in greatest conservation need (App. B) and key habitats which occur in brushland ecosystems (wetland-nonforest, shrub/woodland-upland, forest-lowland conifer) of the Tamarack Lowland and Mille Lacs Upland ECS Subsections (profiles on pages 184 and 154, respectively) where the proposed open and brushland tracts to acquire are located. The goal of stabilizing and increasing populations of species in greatest conservation need will be addressed.
- **MDNR A Strategic Conservation Agenda, 2009-2013**

Trend: Changes Related to Energy and Climate

Conservation-based Energy Sources (p. 19, key measure on DNR-administered lands) – Biomass harvesting has great potential to serve as a management tool in open and brushlands habitats.

Trend: Landscape Changes from Growth and Development

Integrated Public and Private Land Management (p. 29, key measure of number of protected WMAs) – This project will add WMAs to the system.

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- **Minnesota's Wildlife Management Area Acquisition (2002) – The Next 50 Years – Habitat is the Key** – This partnership will help meet goals of additional WMA acres in Ecological Sections 5 (p.10, Northern Lakes) and 8 & 9 (p. 15, Superior Uplands) in which sharp-tailed grouse are noted as a focus species.

D. Budget Request

Budget Item	Fiscal Year 11	Fiscal Year 12	Fiscal Year 13
Personnel (PF staff, details below)	\$17,500	\$12,500	
Contracts (boundary surveys, parking lot development, fence & building removal, shearing, seeding)	\$15,000	\$120,000	
Equipment/Tools/Supplies (posts, signs, wire, fleet, seed)		\$50,000	
Fee Acquisition	\$3,502,400		
Easement Acquisition			
Easement Stewardship			
Professional Services			
Partnership – appraisals	\$30,000		
DNR – closing costs	\$12,000		
Travel			
Additional Budget Items			
TOTAL	\$3,576,900	\$182,500	

E. Personnel Details

PF Staff (Director of Conservation Programs, Regional Wildlife Biologist, and Director of Public Finance/Assistant) - \$30,000

Only documented expenditures direct to this project would be eligible for reimbursement.

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F. All Leverage

Source	Fiscal Year 11 (Protection)	Fiscal Year 12 (Enhancement & Restoration)	Fiscal Year 13
Minnesota Sharp-tailed Grouse Society	\$1,000		
Pheasants Forever			
- State	\$5,000		
- Kanabec Co.	\$5,000		
- Other Chapters	\$5,000		
(Additional contributions are expected)			
Minnesota Waterfowl Association			
- Hill River	\$6,300		
Ruffed Grouse Society			
- State	\$1,000		
Minnesota Deer Hunters Association	TBD		
(Contributions are expected)			
Central Lakes College			
- Natural Resource Club	\$300		
Minnesota DNR			
- Division of Fish & Wildlife		\$25,000	
(staff time/salaries)			
TOTAL	\$23,600	\$25,000	

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G. Outcomes:

Table 1 Accomplish- ments	Wetlands *	Prairies	Forests *	Habitats for Fish, Game and Wildlife
Restore	<i>100 ac</i>		<i>179.7 ac brushland</i>	<i>279.7 ac</i>
Protect	<i>766.3 ac</i>		<i>1501.1 brushland, 165 ac forest</i>	<i>2,432.4 ac</i>
Enhance	<i>666.3 ac</i>		<i>1321.4 ac brushland, 165 ac forest</i>	<i>2,152.7 ac</i>

** Wetland acres are predominantly open and brushland habitats.*

** Forest acres are upland. Because brushlands in the Northern Forest are not part of prairie ecosystems, they are placed under the Forest category along with the open land habitats intermixed with them.*

Table 2 Sections Impacted and Impact Quantifier	Wetlands	Prairies	Forests	Habitats for Fish, Game and Wildlife
Restore	<i>Northern Forest</i>		<i>Northern Forest</i>	<i>Northern Forest</i>
Protect	<i>Northern Forest</i>		<i>Northern Forest</i>	<i>Northern Forest</i>
Enhance	<i>Northern Forest</i>		<i>Northern Forest</i>	<i>Northern Forest</i>

Table 3 Recommend Fund Allocation	Wetlands	Prairies	Forests	Habitats for Fish, Game and Wildlife
Restore	<i>\$30,700</i>		<i>\$55,300</i>	<i>\$86,000</i>
Protect	<i>\$1,127,000</i>		<i>\$2,449,900</i>	<i>\$3,576,900</i>
Enhance	<i>\$30,000</i>		<i>\$66,500</i>	<i>\$96,500</i>

Table 4 Leverage \$	Wetlands	Prairies	Forests	Habitats for Fish, Game and Wildlife
Restore	<i>\$700</i>		<i>\$1,300</i>	<i>\$2,000</i>
Protect	<i>\$7,400</i>		<i>\$16,200</i>	<i>\$23,600</i>
Enhance	<i>\$7,100</i>		<i>\$15,900</i>	<i>\$23,000</i>

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Table 5 Acquisition Data	Wetlands	Prairies	Forests	Habitats for Fish, Game and Wildlife
Acquired in Fee with State PILT Liability	766.3 ac		1501.1 ac brushland, 165 ac forest	2,432.4 ac
Acquired in Fee without State PILT Liability				
Permanent Easement				

H. Accomplishment Time Table (see map on next page for acquisition locations)

Measure	Milestone	Date
Complete acquisition of seven open and brushland habitat tracts		June 30, 2011
Complete initial restoration and enhancement activities		June 30, 2012

I. Relationship to Your Current Budget

A budget does not currently exist for this project.

J. How Will the Habitat Improvements Be Sustained?

Initial activities to prepare tracts for use as WMAs and enhancement and restoration of open and brushland habitats will be funded through this grant. Habitat improvements will be sustained through the DNR budget and funds provided through the partnership. Partner funds will come from their general membership and grants, such as LSOHC and Heritage Enhancement grants.

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K. List of Proposed Open and Brushland Tracts to Protect (from Highest to Lowest Priority) (see map on next page):

Kanabec County

1. Tumbler tract (T42N R22W, parts of Sec. 20, 28, 29, 31 & 32)
- 1,285 acres; \$2,700,000 estimate

Aitkin County

2. Thompson tract (T48N R25W, E1/2 Sec. 5)
- 279.7 acres; \$280,000 estimate
3. Rono tract (T50N R25W, W½ Sec. 18, W½ Sec. 19)
- 596.4 acres; \$358,000 estimate
4. Watters tract (T50N R25W, E1/2SW Sec. 11)
- 80 acres; \$56,000 estimate
5. Rezac tract (T47N R26W, Sec. 9)
- 158.5 acres; \$109,000 estimate

St. Louis County

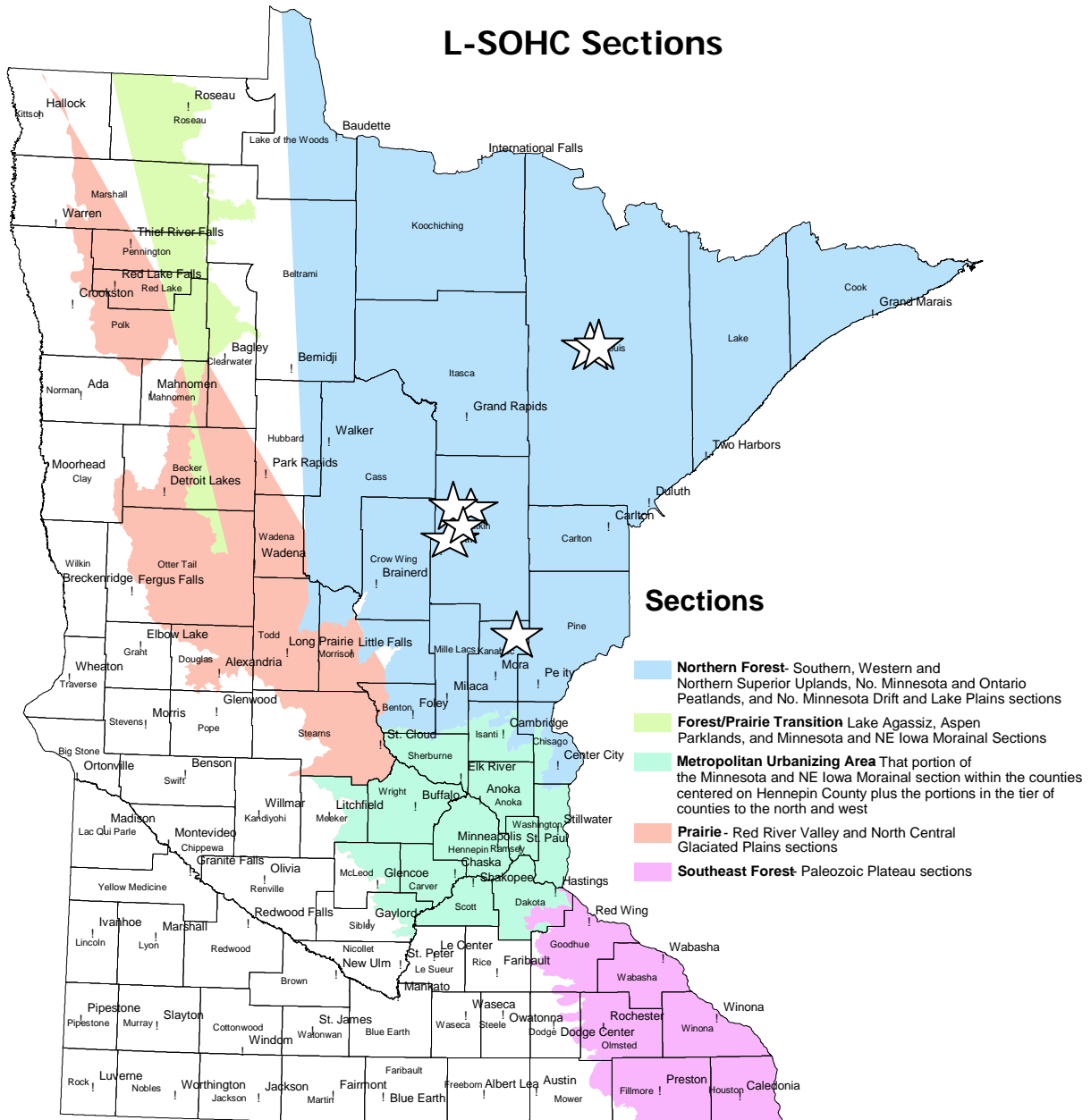
6. Thomas tract (T55N R18W, SW Sec. 27)
- 20 acres; \$14,000 estimate
7. Palusky tract (T55N R18W, NE Sec. 27)
- 12.8 acres; \$9,000 estimate

Total fee acquisition estimate = \$3,526,000

Partnership leverage toward fee acquisition = \$23,600

Total request for fee acquisition = \$3,502,400

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