

**Environment and Natural Resources Trust Fund
2018 Request for Proposals (RFP)**

Project Title:

ENRTF ID: 199-G

SNA Habitat Restoration, Public Engagement, and Strategic Acquisition

Category: G. Land Acquisition, Habitat and Recreation

Total Project Budget: \$ 6,760,265

Proposed Project Time Period for the Funding Requested: 2 years, July 2018 to June 2020

Summary:

Scientific and Natural Area (SNA) habitat restoration and improvements (1000+ acres), increased public involvement, and strategic acquisition (700+ acres) will conserve Minnesota's most unique and rare resources for everyone's benefit.

Name: Peggy Booth

Sponsoring Organization: MN DNR

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St Paul MN 55155-4025

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Email peggy.booth@state.mn.us

Web Address mndnr.gov/snas

Location

Region: Statewide

County Name: Statewide

City / Township:

Alternate Text for Visual:

Map: SNA restoration priorities are located in existing or proposed SNAs across the state and the acquisition priorities are located in Conservation Opportunity Areas. Photo: Two girls examining big blue stem grass on SNA

_____ Funding Priorities	_____ Multiple Benefits	_____ Outcomes	_____ Knowledge Base
_____ Extent of Impact	_____ Innovation	_____ Scientific/Tech Basis	_____ Urgency
_____ Capacity Readiness	_____ Leverage	_____ TOTAL	_____ %



PROJECT TITLE: SNA Habitat Restoration, Public Engagement, and Strategic Acquisition

I. PROJECT STATEMENT

The unique and vital role of state Scientific and Natural Areas (SNAs) will be increased through wildlife habitat restoration and improvements, increased public involvement, and strategic acquisition. About 1000 acres of native habitat restoration, enhancement, and site improvement activities will be targeted at SNAs threatened by human impacts, invasive species, and lack of natural disturbance regimes and to provide nature-based recreation. In cooperation with Conservation Corp of Minnesota, outreach and citizen science actions will result in public participation at 120 SNA events and a network of volunteer site stewards at 140 SNAs. About 700 acres will be acquired and designated as SNAs in order to strategically protect at risk native plant communities and wildlife habitat of state significance identified by the Minnesota Biological Survey (MBS) and the updated SNA Strategic Land Protection Plan.

II. PROJECT ACTIVITIES AND OUTCOMES

Activity 1: Native Habitat Restoration, Enhancements and Improvements on 1000 acres Budget: \$1,770,371

Native habitat restoration and site improvements activities will be completed on about 1000 acres at about 50 SNAs as guided by ecological data and monitoring. Management plans will be completed for about 10 SNAs (including sites acquired through these funds). About 20 SNAs will be monitored to improve management of habitat for rare species and Species of Greatest Conservation Need and about 5 of the 18 conservation easements on SNAs will have compliance monitoring. Interpretive signs-kiosks will be developed and installed at about 10 SNAs. SNA staff will provide ecological and technical guidance and on-site verification for 8 projects implemented by partners on SNAs. Restoration and improvement activities will be carried out by DNR staff-SNA crews, Conservation Corps of Minnesota, Sentence to Service, volunteers, and/or contractors. Activities include seed collection, site preparation, planting and aftercare, invasive species control, woody encroachment removal, site clean-up, signing, interpretive kiosks, fencing, prescribed burns (or alternative prescribed disturbance for ecological purposes, such prescribed haying, mowing or grazing, necessary where use of fire is limited), management plan preparation, monitoring, and coordination-oversight of projects implemented by partners. Restoration uses seeds of a local ecotype, collected from onsite or within 25 miles. Restoration and enhancement of degraded and rare land features helps implement the Minnesota Wildlife Action Plan. This activity includes work to bring acquired parcels up to the DNR’s minimum standards and includes restoration and improvements of acquired sites if ecologically advisable and feasible within the appropriation period.

Outcome	Completion Date
1a. ~40 acres of restoration of forest, prairie, & outcrop sites	6/30/20
1b. ~380 acres of woody removal & invasive species treatment	6/30/20
1c. ~670 acres of prescribed burns	6/30/20
1d. ~10 SNA interpretive kiosks installed AND development work on ~30 sites	6/30/20
1e. ecological/technical guidance for ~8 partnership projects	6/30/20
1f. management plans completed for ~10 SNAs	6/30/20
1g. adaptive management & conservation easement monitoring on ~25 SNA sites	6/30/20

Activity 2: Public Engagement, Outreach & Citizen Science in Natural Areas Budget: \$725,488

More Minnesotans will be involved in volunteer habitat conservation and education activities on SNAs and in the conservation of other key natural areas. A full-time team of 3 Conservation Corps of Minnesota people, 2 SNA field naturalists and 1 outreach coordinator made possible through this funding will: sustain a network of 140 SNA volunteer site stewards who help care for SNAs and organize about 120 events focusing volunteer work



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days, recreation-educational events (guided nature hikes, etc.), and citizen science monitoring and bio-blitzes. New and refined electronic/social media communications tools, maps and interpretive information will be developed and disseminated to advance the public’s understanding of Minnesota’s wild places and biodiversity and to enhance nature-based recreational use of SNAs. Natural Area Registry agreements will be established on about 4 biodiversity significance sites to promote conservation of natural areas owned by others.

Outcome	Completion Date
2a. SNA website, e-book, social media, maps & other interpretive info	6/30/20
2b. ~ 120 citizen science & volunteer events (management work days & ed. events)	6/30/20
2c. network of volunteer site stewards at ~140 SNAs	6/30/20
2d. ~4 Natural Area Registry agreements to conserve biodiversity significance sites	6/30/20

Activity 3: Strategic Acquisition of Sites with Biodiversity Significance – 700 acres Budget: \$4,264,406

Acquisition and designation of about 700 acres as state SNAs will protect and buffer the most important MBS-recommended sites of biodiversity significance with landowners willing to sell. Proactive landowner contacts will be targeted in 10 high priority opportunity areas identified in the SNA Strategic Plan, including prairie core areas in the Minnesota Prairie Conservation Plan. In order to be acquired and designated as SNA, the site must be recommended for SNA designation in an Ecological Evaluation report which serves as the site’s baseline assessment for fee acquisitions. Candidate sites are numerically evaluated with priority to MBS-mapped biodiversity significance sites that are predominantly MBS-mapped native plant communities with habitat for rare species and Species in Greatest Conservation Need. The attached map and acquisition list identifies priority projects for this appropriation. The DNR may request to add other qualifying sites to the list. Most acquisition will be of fee title, but if more appropriate, acquisition could be of an SNA-administered conservation easement with SNA designation. New MBS and other scientific data will be incorporated into an updated SNA Strategic Plan GIS maps which will increase strategic prioritization of SNA acquisitions, coordination with partners, and implementation of the Mn Wildlife Action Plan.

Outcome	Completion Date
3a. acquisition as SNA of ~700 acres of high quality habitat	6/30/20
3b. proactive landowner contact in ~10 priority areas for acquisition/protection	6/30/20
3c. acquisition prioritization – refinement of acquisition decision tools/Plan	6/30/20

III. PROJECT STRATEGY

A. Project Team/Partners

This proposal includes the DNR’s work and funding to be used by the SNA Program towards partnership project work on SNAs. Partners include entities, such as The Nature Conservancy, Friends of the Mississippi River, Great River Greening, Sugarloaf Northshore Stewardship Assn., local units of governments, and other non-profits.

B. Project Impact and Long-Term Strategy

Without SNA conservation actions, one-of-a-kind natural areas, habitats for rare species, and the highest quality biodiversity sites are likely to be lost forever. The SNA Strategic Land Protection Plan calls for adding up to 136,000 more acres (on existing public land or through acquisition) to the current system of 191,000 acres of SNAs. Achieving SNA habitat management, public engagement, and acquisition goals depends upon ongoing support from the Environment and Natural Resources Trust fund of \$5M to \$10M per biennium. Annual/biennial appropriations will also be sought from the Outdoor Heritage Fund and state bonding.

C. Timeline Requirements

Two years (July 1, 2018 through June 30, 2020) provides multiple field seasons for restoration and site improvement work and evaluation and to take protection projects through basic improvements needed.

2018 Detailed Project Budget

Project Title: SNA Habitat Restoration, Public Engagement, and Strategic Acquisition

IV. TOTAL ENRTF REQUEST BUDGET 2 years

BUDGET ITEM	AMOUNT
Personnel: ~ 10.7 FTE (for 2 years each) for direct project activities spread across ~25 classified & unclassified staff paid primarily through grants (e.g. LCCMR, LSOHC, etc.) including ~15-25% fringe benefits as per state union contracts: 1.8 FTE (for 2 years) coordinators (acquisition, outreach, management) & planner/GIS (~\$324,180) 7.3 FTE (for 2 years) specialists, naturalists, technicians, full time laborers (~\$1,016,960) 1.6 FTE (for 2 years) seasonal laborers & crews (~\$113,400)	\$ 1,454,540
Contracts - Professional-technical: e.g. mgmt plan prep, monitoring, video/photo, etc. (~\$59,000) Conservation Corps MN: Act. 1 e.g. invasives, rxburn (\$148K) & Act. 2 outreach (\$228K) (~\$376,000) Other Field Operations contracts: e.g. invasives, woody removal, rxburn (~\$241,000)	\$ 676,000
Equipment/Tools/Supplies: Act. 1 - e.g. safety, equip. repair/parts, herbicide, seed cleaning/testing, field tools (~\$31,100) Act. 1 - interpretive signs/kiosks and site development (posts, signs, fencing, etc) (~\$46,000) Act. 2 - volunteer, outreach & citizen science - tools, safety supplies & materials (~\$20,350)	\$ 97,450
Acquisition (Fee Title or Permanent Easements): 700 acres acquired by DNR & designated SNA; primarily fee title (possibly conservation easement); includes transaction costs	\$ 4,100,000
Travel: DNR fleet charges (for operation of trucks, cars, & special fieldwork equipment) & instate travel costs (as per state contracts)	\$ 254,660
Additional Budget Items: printing (designation orders, interpretive kiosk graphics, & info. materials (~\$26,300) MNIT Adaptive Management database ecological data & monitoring upgrades (~\$5,000) Conservation Corps Mn individual placement office/computer (~\$2,050) DNR's direct and necessary costs (~\$144,265 total) pay for activities that are directly related to and necessary for accomplishing appropriated programs/projects. Direct and necessary costs cover HR Support (~\$31,709), Safety Support (~\$7,285), Financial Support (~\$27,894), Communication Support (~\$6,353), IT Support (~\$65,664), and Planning Support (~\$5,359) that are necessary to accomplishing funded programs/projects.	\$ 177,615
TOTAL ENVIRONMENT AND NATURAL RESOURCES TRUST FUND \$ REQUEST =	\$ 6,760,265

V. OTHER FUNDS

SOURCE OF FUNDS	AMOUNT	Status
Other Non-State \$ Being Applied to Project During Project Period: Potential: partial landowner & partner donations; any actual \$s would be reported & accomplishments pro-rated.	\$ -	
Other State \$ Being Applied to Project During Project Period: Some SNA acquisitions are funded with a combination of state appropriations (e.g. OHF and RIM). If any activities are split funded their accomplishment acres will be pro-rated.	\$ -	
In-kind Services During Project Period: DNR office facilities, copiers, computer, communications; supervisor & manager time (but contributions not tracked).	\$ -	
Past and Current ENRTF Appropriation: 2013 SNA Conservation, Restoration, Enhancement & Citizen Engagement \$1,500,000 (completed) 2014 SNA Acquisition, Restoration, Improvements & Citizen Engagement \$2,540,000 (complete 6/17) 2015 SNA Acquisition, Restoration, Enhancement & Public Engagement \$4,000,000 2016 SNA Restoration \$1,386,000 2016 SNA Mn Point Pine Forest SNA Acquisition \$500,000 2017 SNA Acquisition, Restoration, Citizen Science & Engagement \$4,500,000 (pending)	\$ 13,926,000	Spent (incl expiring \$): \$4,876,100 Obligated: \$101,500 Unspent: \$4,948,400 Pending: \$4,500,000
Other Funding History (SNA portion of the following appropriations only): 2013 OHF DNR Accelerated Prairie Grassland Restoration & Enhancement \$144,165 2013 OHF WMA, SNA & NPB Acquisition \$246,500 2014 OHF DNR Accelerated Prairie Grassland Restoration & Enhancement \$360,800 2014 OHF WMA & SNA Acquisition \$0 (all funds moved to WMA) 2015 OHF DNR Accelerated Prairie Grassland Restoration & Enhancement \$762,000 2015 OHF WMA & SNA Acquisition \$638,000 2016 OHF DNR Accelerated Prairie Grassland Restoration & Enhancement \$622,900 2016 OHF WMA & SNA Acquisition \$228,000 2017 OHFDNR Accelerated Prairie Grassland Restoration & Enhancement \$579,800 (pending) 2017 OHF WMA & SNA Acquisition \$1,485,000 (pending)	\$ 5,067,165	Spent: \$1,041,000 Unspent (including obligated): \$1,961,365 Pending: \$1,485,000

**Environment and Natural Resources Trust Fund
2018 Proposed Acquisition/Restoration List**

Project Title: SNA Habitat Restoration, Public Engagement and Acquisition

Project Manager Name: Margaret (Peggy) Booth

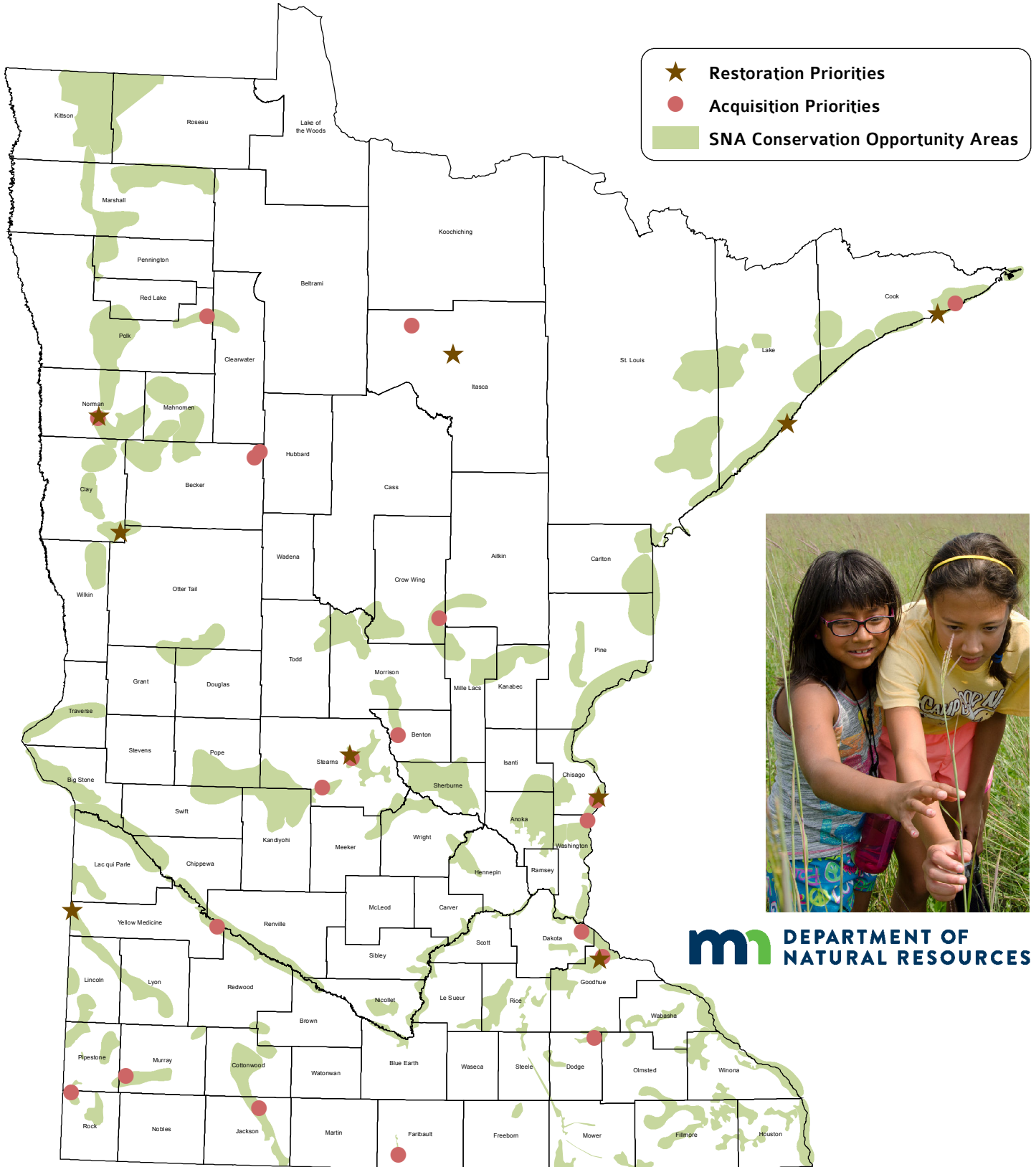
Organization: Mn Department of Natural Resources

ENRTF \$ Request: \$6,760,265

#	Acquisition or Restoration Parcel Name	Geographic Coordinates Format: [Deg.]° [Min.]' [Sec.]" [Hemis.]		Estimated Cost	County	Ecological Significance	Activity Description	# of Acres	# of Shoreline Miles	Type of Landowner	Proposed Fee Title or Easement Holder (if applicable)
		Latitude	Longitude								
1	Avon Hills Forest SNA	45° 38' 7.0"	94° 30' 6.7"	\$ 46,500	Stearns	sand gravel prairie (towards succession to oak savanna/forest)	restore prairie	15		public	DNR-SNA
2	Blanket Flower Prairie SNA	46° 41' 7.7"	96° 12' 18.1"	\$ 36,000	Clay	dry gravel prairie	restore prairie	36		public	DNR-SNA
3	Cannon River Turtle Preserve SNA	44° 34' 22.1"	92° 40' 42.1"	\$ 23,000	Chisago	bedrock bluff prairie	restore prairie	7		public	DNR-SNA
4	Franconia Bluffs SNA	45° 22' 4.9"	92° 41' 53.6"	\$ 46,500	Chisago	St Croix River bluff	restore prairie	20		public	DNR-SNA
5	Icelandite Coastal Fen SNA (proposed)	47° 47' 46.6"	90° 7' 1.8"	\$ 4,000	Cook	gravel-cobble beach & shrub rich fen	restore shoreline vegetation	1		public	DNR-SNA
6	Iona's Beach SNA	47° 10' 3.7"	91° 25' 19.7"	\$ 4,000	Lake	lake superior rocky shore plant community, beach composed of pink rhyolite or felsite	restore shoreline vegetation	1		public	DNR-SNA
7	Little Too Much Lake SNA	47° 37' 35.4"	93° 46' 27.4"	\$ 4,000	Itasca	aspen-birch red maple forest	restore forest	2		public	DNR-SNA
8	Mound Springs Prairie SNA	44° 46' 27.4"	96° 26' 12.4"	\$ 15,000	Yellow Medicine	dry hill & mesic prairie	restore prairie	10		public	DNR-SNA
9	Sandpiper Prairie	47° 14' 32.2"	96° 24' 16.3"	\$ 40,000	Norman	wet-mesic prairie	restore prairie	40		public	DNR-SNA
10	Avon Hills Forest SNA addition	45° 36' 16.1"	94° 28' 45.3"	\$ 500,000	Stearns	Un-fragmented forest of outstanding biodiversity significance. One of the best remaining unprotected blocks of native forest in the county. Red Shouldered Hawk and Cerulean Warbler habitat	fee title acquisition	125		private	DNR-SNA
11	Cannon River Turtle Preserve SNA addition	44° 34' 44.5"	92° 37' 19.4"	\$ 280,000	Goodhue	Floodplain forest of Outstanding biodiversity significance harboring rare turtles and birds.	fee title acquisition	100	0.5	private	DNR-SNA
12	Chanarambie Creek	43° 54' 22.4"	96° 1' 51.9"	\$ 480,000	Murray	dry hill prairie & prairie meadow	fee title acquisition	120		private	DNR-SNA
13	Crystal Spring SNA addition	45° 15' 30.1"	92° 45' 56.9"	\$ 1,000,000	Washington	Mesic hardwood forest communities with Butternut trees, gensing, Louisiana Waterthrush, and Red-shouldered hawks.	fee title acquisition	40	0.25	private	DNR-SNA
14	Des Moines River SNA addition	43° 44' 38.5"	95° 4' 8.7"	\$ 200,000	Jackson	buffer to SNA to aide in mgmt. of native prairie	fee title acquisition	50		private	DNR-SNA
15	Dinner Creek SNA addition	47° 4' 21.5"	95° 12' 7.5"	\$ 320,000	Becker	white cedar swamp, aspen-birch-basswood forest, Jack pine woodland, red-white pine woodland	fee title acquisition	160	0.5	private	DNR-SNA
16	Drake Woods	43° 33' 54.0"	94° 6' 23.51"	\$ 2,000,000	Faribault	best intact MBS mapped hardwood forest in south central MN	fee title acquisition	300	1.5	private	DNR-SNA
17	Englund Ecotone SNA addition	45° 41' 19.3"	94° 8' 53.2"	\$ 2,148,000	Benton	oak forest, oak savanna, sedge meadow	fee title acquisition	358		private	DNR-SNA
18	Franconia Bluffs SNA addition	45° 22' 4.9"	92° 41' 53.6"	\$ 480,000	Chisago	forested bluff along St. Croix River	fee title acquisition	80		private	DNR-SNA
19	Gully Fen SNA addition	47° 46' 58.7"	95° 38' 0.6"	\$ 150,000	Polk	fen - wetland-Forest	fee title acquisition	160		private	DNR-SNA
20	Hastings Sand Coulee SNA addition	44° 41' 41.9"	92° 49' 22.5"	\$ 250,000	Dakota	Dry sand gravel prairie with rare plants and snakes	fee title acquisition	16		private	DNR-SNA
21	Little Mantrap Lake	47° 6' 56.8"	95° 10' 25.4"	\$ 720,000	Becker	mixed mesic hardwood forest/peatland communities	fee title acquisition	230	0.5	private	DNR-SNA
22	Lost 40 SNA Addition	47° 46' 12.3"	94° 5' 4.3"	\$ 10,000	Itasca	Red pine/white pine woodland of high biodiversity significance. Designated old growth	fee title acquisition	10		private	DNR-SNA
23	Mille Lacs Moraine SNA addition	46° 16' 58.3"	93° 51' 10.9"	\$ 713,000	Crow Wing	MBS-mapped forest communities & habitat for rare birds	fee title acquisition	265	0.5	private	DNR-SNA
24	Myhr Creek Ridge SNA addition	47° 50' 17.8"	90° 0' 29.1"	\$ 160,000	Cook	black spruce jack pine woodland	fee title acquisition	80		private	DNR-SNA
25	Middle Fork Zumbro River Forest	44° 9' 8.4"	92° 48' 6.3"	\$ 1,000,000	Dodge	sugar maple - basswood-(butternut hickory) forest	fee title acquisition	300	4	private	DNR-SNA
26	Roscoe Prairie SNA addition	44° 7' 14.0"	94° 40' 37"	\$ 240,000	Stearns	wet prairie with rare butterfly habitat	fee title acquisition	40		private	DNR-SNA
27	Rose Dell Prairie	45° 25' 12.7"	96° 21' 15.5"	\$ 400,000	Pipestone	MBS-mapped prairie with rare features	fee title acquisition	80		private	DNR-SNA
28	Sandpiper Prairie SNA addition	47° 14' 32.2"	96° 24' 16.3"	\$ 100,000	Norman	wet-mesic prairie	fee title acquisition	100		private	DNR-SNA
29	Sioux Agency SNA	44° 42' 32.1"	95° 24' 40.9"	\$ 1,000,000	Yellow Medicine	MBS-mapped prairie with rare features	fee title acquisition	150	1	private	DNR-SNA

NOTES: Restorations listed are for reconstructing plant communities to replace agricultural fields or other damaged portions of SNAs. Not listed are invasive species and woody removal treatment, prescribed burning/disturbance, site development and monitoring projects under Activity 1 - which are targeted at improving sites identified as priorities as informed by management plans. New projects may be added to the list as higher priority, more urgent projects are identified.

ML18 Environment and Natural Resources Trust Fund Proposal SNA Habitat Restoration, Public Engagement, and Acquisition



mn DEPARTMENT OF NATURAL RESOURCES

SNA Habitat Restoration, Public Engagement, and Acquisition Project Manager Qualifications: Margaret (Peggy) Booth

WORK EXPERIENCE

MN DEPARTMENT OF NATURAL RESOURCES:

Ecological & Water Resources, Scientific & Natural Area (SNA) Program Supervisor (May 2006-present)

Manager and supervisor of SNA program – responsible for oversight of acquisition and management of system of about 165 state SNAs, the Natural Area Registry, and the Division's prairie work (including Native Prairie Bank Conservation Easements, and Prairie Tax Exemption); managing these program's annual operating and capital budgets totaling up to about \$12 million. LCCMR project manager of several SNA appropriations.

Regional Operations, Community Assistance Manager (Sept 2002-May 2006)

Including LCMR program manager of the Metro Conservation (Wildlife) Corridors partnership – Phase I & Phase II.

Forestry Division, Metro Region Forestry Manager (July 1997-Sept 2002)

Forestry Division, State Urban & Community Forestry Program Coordinator (April 1995-June 1997) Including LCMR program manager for Minnesota ReLeaf.

Forestry Division, Consultant (Oct 1992-April 1995)

Including providing technical assistance for LCMR-supported Minnesota ReLeaf Program and author of *Energy Conservation through Community Forestry*, and d) *Energy Conserving Landscapes: the Minnesota Homeowner's Guide*.

UNIVERSITY OF MINNESOTA, Department of Landscape Architecture:

Administrator/Director of Center for Community Studies (1983-1992)

Lecturer/Teaching Specialist (1982-92)

Research: Planting for Energy Conservation (1989-1992)

Including LCMR Project Manager for the University's \$199,450 research project (part of the \$1.25 million Minnesota ReLeaf program) entitled *Tree and Shrub Planting for Energy Conservation in Minnesota Communities*. Assisted DNR on *Minnesota ReLeaf Implementation Plan*, the Minnesota ReLeaf Implementation Plan Work Group, and *Carbon Dioxide Budgets in Minnesota and Recommendations for Reducing Emissions with Trees*. Author of *Planting for Energy Conservation in the North*.

CITY OF MINNEAPOLIS, Planning Department:

City Planner II – Urban Design (1975-1980)

EDUCATION

MASTER OF LANDSCAPE ARCHITECTURE, University of Minnesota Graduate School

BACHELOR OF LANDSCAPE ARCHITECTURE, University of Minnesota

Organization Description

MN Department of Natural Resources - Division of Ecological and Water Resources

SCIENTIFIC & NATURAL AREA (SNA) PROGRAM

Charged under MS 86A.05 to protect and perpetuate in an undisturbed natural state those natural features that possess exceptional scientific or education value. The program acquires, manages and facilitates public use of SNAs; oversees the Natural Area Registry; and provides native prairie stewardship assistance, including Native Prairie Bank conservation easements (MS 84.96 & 84.961).

