

**Environment and Natural Resources Trust Fund
2016 Request for Proposals (RFP)**

Project Title:

ENRTF ID: 175-G

SNA Acquisition, Restoration, Enhancement & Public Engagement

Category: G. Land Acquisition for Habitat and Recreation

Total Project Budget: \$ 9,324,826

Proposed Project Time Period for the Funding Requested: 2 years, July 2016 to June 2018

Summary:

Sites of biodiversity significance will be permanently protected as state designated Scientific and Natural Areas, their quality improved, and public support for and involvement in their conservation will be increased.

Name: Margaret (Peggy) Booth

Sponsoring Organization: MN DNR

Address: 500 Lafayette Road N, Box 25
St. Paul MN 55155-4025

Telephone Number: (651) 259-5088

Email peggy.booth@state.mn.us

Web Address mndnr.gov/snas

Location

Region: Statewide

County Name: Statewide

City / Township:

Alternate Text for Visual:

Statewide map of proposed SNA acquisition & restoration sites along with SNA Conservation Opportunity Areas

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



PROJECT TITLE: SNA Acquisition, Restoration, Enhancement & Public Engagement

I. PROJECT STATEMENT

Sites of biodiversity significance identified by the Minnesota Biological Survey (MBS) and the new SNA Strategic Plan would be permanently protected as state Scientific and Natural Areas (SNAs), their quality improved, and public support for and involvement in their conservation will be increased by a suite of tools through the DNR SNA Program. About 1000 acres of at risk, high quality native plant communities and wildlife habitat of state significance would be acquired and designated as SNAs. Native habitat restoration, enhancement, and site improvement activities would be implemented on about 1000 acres of SNAs threatened by human impacts, invasives, and lack of natural disturbance regimes. Furthermore, to address gaps in sustaining SNAs and to increase citizen and student knowledge and skills about biodiversity conservation, the SNA outreach initiative would achieve about 100 naturalist-led events and a network of SNA site stewards at about 120 SNAs.

II. DESCRIPTION OF PROJECT ACTIVITIES

Activity 1: Protection of Sites of Biodiversity Significance

Budget: \$6,673,341

The SNA Program will protect and buffer MBS-recommended sites of biodiversity significance by acquisition and SNA designation of ~ 1000 acres. Proactive landowner contacts will be targeted 10 high priority opportunity areas identified in the new SNA Strategic Plan, including prairie core areas in the Minnesota Prairie Conservation Plan. 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 and must be part of a MBS-mapped biodiversity significance site (or be a geological feature of statewide significance). All such sites are predominantly MBS-mapped native plant communities and contain habitat for rare species and Species of Greatest Conservation Need. In addition, SNA applies an evaluation system to determine which candidate sites to pursue. The attached map and acquisition list identifies priority projects for this appropriation. DNR may request to add other qualifying sites to the list. Most acquisition will be of fee title, but if more appropriate, acquisition will be of a SNA-administered conservation easement with SNA designation. Monitoring will be done of about 8 SNA conservation easements. The SNA Program manages 18 SNA conservation easements at 10 designated SNAs. The SNA Strategic Plan (initiated through a 2011 ENRTF appropriation) will incorporate new MBS and other resource data into the GIS-based analysis to refine priorities and increase coordinated rare resource protection with partners and to implement State Wildlife Action Plan (SWAP). Natural Area Registry agreements will be established about 9 biodiversity significance sites.

Outcome	Completion Date
1a. acquisition as SNA of ~1000 acres of high quality habitat	6/30/17
1b. proactive landowner contact in ~10 priority areas for protection	6/30/17
1c. monitoring for ~8 SNA conservation easements	6/30/17
1d. SNA/rare resource protection strategic prioritization – Phase 4	6/30/17
1e. ~9 Natural Area Registry agreements on biodiversity significant sites	6/30/17

Activity 2: Native Habitat Restoration, Enhancements & Improvements

Budget: \$1,960,212

Native habitat restoration and site improvements activities would be completed on about 1000 acres at about 50 SNAs. Interpretive signs-kiosks would be developed and installed at about 10 SNAs. SNA staff will provide ecological and technical guidance and on-site verification for 10 projects implemented by partners on SNAs. Management plans will be completed for about 20 SNAs (including sites acquired through these funds). Ecological resources and management practices at about 24 SNAs would be monitored to identify adaptive management process improvements needed to achieve better habitat for rare species and Species of Greatest Conservation Need. Restoration and improvement activities – including bringing sites acquired up to minimum



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2016 Main Proposal

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standards – will be carried out by DNR staff- SNA crews, Conservation Corps Minnesota, Sentence to Service, volunteers, and/or contractors. Activities include seed collection, site preparation, planting and aftercare, invasives control, woody encroachment removal, site clean-up, signing, interpretive kiosks, fencing, prescribed burns (or alternative prescribed disturbance for ecological management purposes, such as prescribed haying, mowing or grazing, necessary where use of fire is limited), management plan preparation, monitoring, and coordination-oversight of projects implemented by partners. All restoration will use seeds/plants of a local ecotype, collected from onsite or within 25 miles. Restoration and enhancement of degraded and rare land features helps implement the Minnesota’s State Wildlife Action Plan and achieve Habitat Recommendation 5 of the SCPP. This activity and its funding would include all work needed to bring up to the Department’s minimum standards those SNA parcels acquired through this funding and will include that restoration and improvements of newly acquired sites which is ecologically advisable and feasible within the appropriation period.

Outcome	Completion Date
2a. ~30 acres of restoration of forest, prairie, & outcrop sites	6/30/17
2b. ~370 acres of woody removal & exotics species treatment	6/30/17
2c. ~710 acres of prescribed burns	6/30/17
2d. ~10 SNA interpretive kiosks installed AND development work on ~50 sites	6/30/17
2e. ecological/technical guidance for ~10 partnership projects	6/30/17
2f. management plans completed for ~20 SNAs	6/30/17
2g. adaptive management monitoring on ~24 SNA sites	6/30/17

Activity 3: Public Engagement in Natural Areas

Budget: \$691,273

The SNA Outreach Initiative will engage residents, students, and other interested people in ecological recreation and education activities on SNAs. This includes supporting a network of about 120 SNA volunteer site stewards; co-sponsoring and coordinating about 100 events including volunteer site restoration and management work days and recreation-educational events (guided nature hikes, citizen-science activities, etc) and evaluating the effectiveness of these actions. New and refined electronic/social media communications tools, maps and interpretive information will be developed and disseminated to increase/ enhance recreationist’s use of SNAs.

Outcome	Completion Date
3a. SNA website, e-book, social media, maps & other interpretive info	6/30/17
3b. ~ 100 volunteer events (site management work days & rec.-ed. events)	6/30/17
3c. network of ~120 volunteer site stewards	6/30/17

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

The SNA Strategic Land Protection Plan targets protection of an additional 136,000 acres as SNAs over the next 85 years. Ongoing ecological management of SNAs and public engagement is also needed. Thus, the DNR could utilize 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, 2016 through June 30, 2018) is requested to provide multiple field seasons for restoration and development work and to take protection projects through basic improvements needed.

2016 Detailed Project Budget

Project Title: SNA Acquisition, Restoration, Enhancement & Public Engagement

IV. TOTAL ENRTF REQUEST BUDGET 2 years

<u>BUDGET ITEM</u>	<u>AMOUNT</u>
Personnel: ~ 12.1 FTE for direct project activities spread across ~25 classified & unclassified staff paid primarily through grants (e.g. LCCMR, LSOHC, etc.) including ~15-20% fringe benefits as per state union contracts: 2.0 FTE coordinators (acquisition, outreach, management) & planner/GIS (~\$351,900) 7.1 FTE specialists, naturalists, technicians, full time laborers (~\$994,700) 3.0 FTE part time laborers & seasonal crews (~\$210,000)	\$ 1,556,600
Contracts - Professional-technical: e.g. mgmt plan prep, monitoring, video/photo, etc. (~\$148,000) CCM & Field Operations: e.g. invasives, woody removal, RxBurn; & CCM for outreach assistance (~\$535,500)	\$ 678,500
Equipment/Tools/Supplies: e.g. posts, signs, fencing, safety supplies, equipment repair/parts, herbicide, seed cleaning/testing, field tools, outreach materials, etc.	\$ 136,300
Acquisition (Fee Title or Permanent Easements): 700 acres to be designated SNA & administered by SNA program; in fee or conservation easement; includes transaction costs	\$ 6,405,000
Travel: DNR fleet charges (for operation of trucks, cars, & special fieldwork equipment) & instate travel costs (as per state contracts)	\$ 226,800
Additional Budget Items: printing (designation orders, interpretive kiosk graphics, & info. materials (~\$24,100) MNIT database/website development & support (~\$35,000) DNR's direct and necessary costs (~\$262,526 total) pay for activities that are directly related to and necessary for accomplishing appropriated programs/projects. In addition to itemized costs captured in our proposal budget, direct and necessary costs cover HR Support (~\$35,210), Safety Support (~\$8,300), Financial Support (~\$32,930), Communication Support (~\$6,180), IT Support (~\$50,850), Planning Support (~\$4,150), Procurement Support (~\$1,180), and division and regional program management (~\$123,730) that are necessary to accomplishing funded programs/projects.	\$ 321,626
TOTAL ENVIRONMENT AND NATURAL RESOURCES TRUST FUND \$ REQUEST =	\$ 9,324,826

V. OTHER FUNDS

<u>SOURCE OF FUNDS</u>	<u>AMOUNT</u>	<u>Status</u>
Other Non-State \$ Being Applied to Project During Project Period: Potential: partial landowner donations; any actual \$s would be reported & accomplishments pro-rated.	\$ -	
Other State \$ Being Applied to Project During Project Period: No other state funds are proposed for the same purposes; 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).	\$ -	
Funding History FY2012-2016 (SNA portion of the following appropriations only): <u>LCCMR appropriations:</u> 2011 SNA Acquisition & Restoration \$1,640,000 2013 SNA Conservation, Restoration, Enhancement & Citizen Engagement \$1,500,000 2014 SNA Acquisition, Restoration, Improvements & Citizen Engagement \$2,540,000 <u>LSOHC appropriations:</u> 2011 SNA Acquisition \$702,100 2011 Prairie Restoration & Enhancement \$229,400; 2012 DNR Prairie/Grassland Habitat Restoration & Enhancement \$276,900 2013 DNR Accelerated Prairie Grassland Restoration & Enhancement \$144,200 2013 WMA, SNA & NPB Acquisition \$246,500 2014 DNR Accelerated Prairie Grassland Restoration & Enhancement \$360,800 2014 WMA & SNA Acquisition \$1,070,000 2015 DNR Accelerated Prairie Grassland Restoration & Enhancement \$762,000 (pending) 2015 WMA & SNA Acquisition \$1,000,000 (pending). <u>Bonding:</u> none. <u>Federal:</u> State Wildlife Grants 2012 \$49,800	\$ 10,521,700	some of these funds will be expended in FY17
Remaining \$ from Current ENRTF Appropriation: BALANCES AS OF 4/20/15: 2013 SNA Cons., Resto., Enhance & Citizen Engage. - Balance: \$460,200; most to be spent in FY15 2014 SNA Acq., Resto., Improvements & Citizen Engagement - Balance: \$1,167,600 2015 SNA Acquisition, Restoration, Enhancement & Public Engagement \$4,000,000 (pending)	\$ 5,627,800	significant portions to be spent in FY15 & early FY16

**Environment and Natural Resources Trust Fund
ML16 / FY17 Proposed Acquisition/Restoration List**

Project Title: SNA Acquisition, Restoration, Enhancement & Public Engagement

Project Manager Name: Margaret (Peggy) Booth

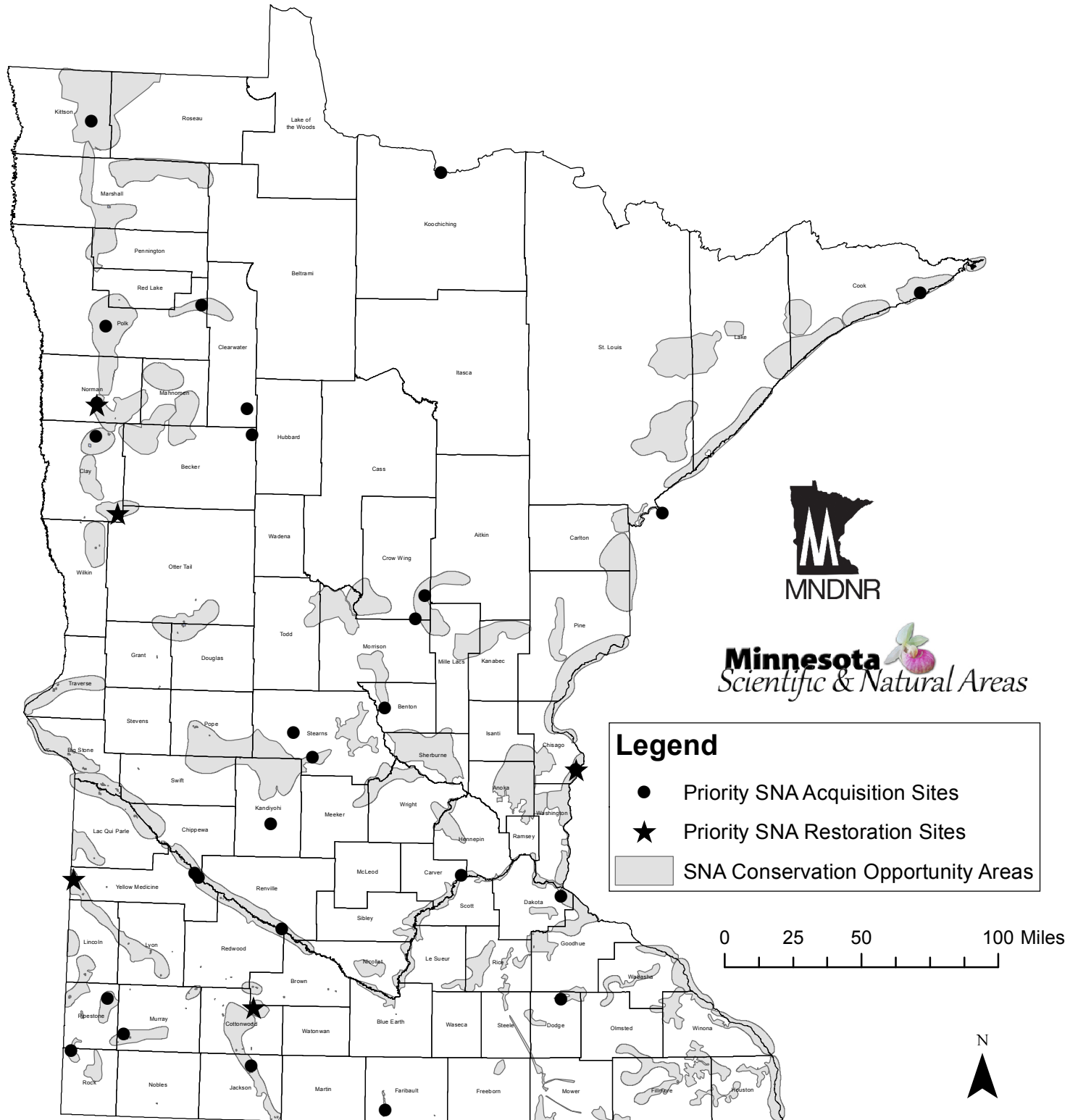
Organization: MnDNR

ENRTF \$ Request: \$9,324,826

#	Acquisition or Restoration	Geographic Coordinates		Estimated Cost	County	Ecological Significance	Activity Description	# of Acres	# of Shoreline	Type of Landowner	Proposed Fee Title or	
		Latitude	Longitude									
1	Blue Devil SNA addition	44° 47' 32.4"	95° 32' 36.7"	\$ 800,000	Yellow Medicine	MBS-mapped prairie/outcrop with rare features	fee title acquisition	200		private ind/trust	DNR-SNA	
2	Cedar Mountain SNA addition	44° 30' 22"	94° 54' 16"	\$ 800,000	Redwood	MBS-mapped prairie/outcrop with rare features	fee title acquisition	200		private ind/trust	DNR-SNA	
3	Chanarambie Creek	43° 54' 22.4"	96° 1' 51.9"	\$ 480,000	Murray	MBS-mapped dry hill prairie & prairie meadow	fee title acquisition	120		private ind/trust	DNR-SNA	
4	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 ind/trust	DNR-SNA	
5	Dinner Creek SNA	47° 4' 21.5"	95° 12' 7.5"	\$ 356,700	Becker	white cedar swamp, aspen-birch-basswood forest, Jack pine woodland, red-white pine woodland	fee title acquisition	242		private	DNR-SNA	
6	Drake Woods	43° 33' 54.0"	94° 6' 23.51"	\$ 1,500,000	Fairbault	best intact MBS mapped hardwood forest in south central MN	fee title acquisition	300		private ind/trust	DNR-SNA	
7	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	
8	Felton Prairie SNA addition	46° 52' 1.6"	94° 8' 53.2"	\$ 800,000	Clay	wet-mesic or dry prairie	fee title acquisition	200		private	DNR-SNA	
9	Franconia Bluffs SNA addition	45° 22' 4.9"	92° 41' 53.6"	\$ 480,000	Chisago	forested St. Croix bluff	fee title acquisition	80		private	DNR-SNA	
10	Glacial Ridge	47° 36' 44.7"	96° 22' 25.4"	\$ 450,000	Polk	wet-mesic prairie	fee title acquisition	150		private	DNR-SNA	
11	Gneiss Outcrops SNA addition	44° 46' 52.2"	95° 30' 28.7"	\$ 400,000	Chippewa	MBS-mapped rock outcrop	fee title acquisition	100	0.5	private ind/trust	DNR-SNA	
12	Gully Fen SNA addition	47° 46' 58.7"	95° 38' 0.6"	\$ 754,800	Polk	fen - wetland-Forest	fee title acquisition	1200		private	DNR-SNA	
13	Hastings Sand Coulee SNA addition	44° 41' 41.9"	92° 49' 22.5"	\$ 250,000	Dakota	prairie	fee title acquisition	16		private	DNR-SNA	
14	Iron Springs Bog SNA	47° 15' 38.8"	95° 13' 22.7"	\$ 60,000	Clearwater	rich tamarack swamp, wet meadow carr; Mississippi R frontage	fee title acquisition	63	0.4	private	DNR-SNA	
15	Lake Bronson SNA addition	48° 43' 28.6"	96° 35' 54.5"	\$ 24,000	Kittson	wet-mesic brush prairie; Two Rivers river frontage	fee title acquisition	40	0.3	private	DNR-SNA	
16	Little Kandiyohi-Wakanda Lakes Peninsula Forest	45° 3' 53.2"	94° 58' 46.9"	\$ 1,560,000	Kandiyohi	MBS-mapped forest communities	fee title acquisition	260	7	private ind/trust	DNR-SNA	
17	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	
18	Minnesota Point Pine Forest SNA addition**	46° 43' 15.9"	92° 2' 27.8"	\$ 500,000	St. Louis	4 critically imperiled (S1) communities incl. white pine woodland & beachgrass dune	fee title acquisition	10	0.2	public	DNR-SNA	
19	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	
20	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	
21	Platte Lake Island	46° 9' 41.5"	93° 55' 30.7"	\$ 400,000	Crow Wing	forest	fee title acquisition	44	0.5	private	DNR-SNA	
22	Prairie Coteau SNA addition	44° 7' 14.0"	96° 8' 58.5"	\$ 1,000,000	Pipestone	MBS-mapped dry hill prairie & critical habitat for skippers.	fee title acquisition	200		private ind/trust	DNR-SNA	
23	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	
24	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 ind/trust	DNR-SNA	
25	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	
26	Seminary Fen SNA addition	44° 55' 15.4"	93° 18' 27.8"	\$ 120,000	Carver	calcareous fen	fee title acquisition	20		private	DNR-SNA	
27	Spring Hill Fen	45° 33' 16.2"	94° 49' 29.6"	\$ 600,000	Stearns	calcareous fen	fee title acquisition	150		private	DNR-SNA	
28	Watrous Island	48° 30' 53.8"	93° 45' 55.7"	\$ 120,000	Koochiching	lowland forest; Rainy R	fee title acquisition	45	2.7	private	DNR-SNA	
				\$ 16,416,500								
29	Blanket Flower Prairie SNA	46° 41' 7.7"	96° 12' 18.1"	\$ 36,000	Clay	dry gravel prairie	restore prairie	36		public	DNR-SNA	
30	Franconia Bluffs SNA	45° 22' 4.9"	92° 41' 53.6"	\$ 60,000	Chisago	St Croix River bluff	restore prairie	20		public	DNR-SNA	
31	Mound Springs Prairie SNA	44° 45' 54.8"	96° 27' 3.8"	\$ 15,000	Yellow Medicine	restore mesic prairie comparable to adjoining MBS mapped prairie	restore mesic prairie	10		public	DNR-SNA	
32	Rock Ridge SNA	44° 5' 49.5"	95° 4' 14.5"	\$ 12,000	Cottonwood	restore mesic prairie comparable to adjoining MBS mapped prairie	restore mesic prairie	8		public	DNR-SNA	
33	Sandpiper Prairie	47° 14' 32.2"	96° 24' 16.3"	\$ 40,000	Norman	wet-mesic prairie	restore prairie	40		public	DNR-SNA	
				\$ 163,000								

NOTES: ** also part of a Duluth Airport Authority proposal

2016 Environment and Natural Resources Trust Fund SNA Acquisition, Restoration, & Public Engagement Proposed Acquisition & Restoration Sites



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 160 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).

