



Environment and Natural Resources Trust Fund (ENRTF) M.L. 2013 Work Plan

Date of Status Update Report: July 1, 2013
Date of Next Status Update Report: September 15, 2013
Date of Work Plan Approval: June 25, 2013
Project Completion Date: June 30, 2016 **Is this an amendment request?** _____

PROJECT TITLE: Scientific and Natural Area Restoration, Enhancement & Citizen Engagement

Project Manager: Margaret (Peggy) Booth
Affiliation: Minnesota Department of Natural Resources, Division of Ecological & Water Resources
Mailing Address: 500 Lafayette Road, Box 25
City/State/Zip Code: St Paul, MN 55155-4025
Telephone Number: (651)259-5088
Email Address: peggy.booth@state.mn.us
Web Address: mndnr.gov/snas

Location: statewide

Total ENRTF Project Budget:	ENRTF Appropriation:	\$1,500,000
	Amount Spent:	\$0
	Balance:	\$1,500,000

Legal Citation: M.L. 2013, Chp. 52, Sec. 2, Subd. 04b

Appropriation Language:

\$1,500,000 the first year is from the trust fund to the commissioner of natural resources to conserve sites of biodiversity significance by restoring and enhancing lands established as scientific and natural areas as provided in Minnesota Statutes, section 86A.05, subdivision 5, and providing volunteer engagement and outreach. This appropriation is available until June 30, 2016, by which time the project must be completed and final products delivered.

I. PROJECT TITLE: SNA Conservation, Restoration, Enhancement & Citizen Engagement

II. PROJECT STATEMENT:

The effectiveness of the DNR Scientific and Naturals Area (SNA) Program in conserving and managing sites of biodiversity significance identified by the Minnesota Biological Survey (MBS) will be improved and public support for and involvement in their conservation will be increased. Native habitat restoration and enhancement activities would be implemented on about 1600 acres of SNAs threatened by human impacts, invasives, and lack of natural disturbance regimes. SNA monitoring and strategic targeting of conservation actions and agreements will achieve additional conservation of biodiversity significance sites. Furthermore, to sustain SNAs and to increase citizen and student knowledge and skills about biodiversity conservation, SNA naturalists will engage youth and volunteers in about 80 events and as SNA site stewards at about 100 SNAs.

III. PROJECT STATUS UPDATES:

Project Status as of September 15, 2013:

Project Status as of March 15, 2014:

Project Status as of September 15, 2014:

Project Status as of March 15, 2015:

Project Status as of September 15, 2015:

Project Status as of March 15, 2016:

IV. PROJECT ACTIVITIES AND OUTCOMES:

ACTIVITY 1: Biodiversity Conservation, Habitat Restoration & Enhancement

Description:

Restoration and enhancement activities will be completed on about 1600 acres at ~30 state designated SNAs. Interpretive kiosks will be developed and installed at ~10 SNAs. Restoration and enhancement projects will be based upon ecological restoration and management plans and/or project plans with goals for reconstructing or enhancing plant communities that are native to the site based upon soils, topography, geology, and other factors necessary to sustain the plant community. Each plan includes an implementation timetable which summarizes ongoing management needs and funding. Long-term management costs (e.g. invasives treatments, prescribed fire, and monitoring/evaluation) will be covered by a combination funding sources, including, but not limited to, ENRTF, OHF, federal grants, and other funds as appropriated. New Adaptive Management Plans will be completed for ~19 SNAs; also including the afore-mentioned ecological goals, considerations, and implementation table (see also below under AMSD).

Activities will be carried out by DNR staff- SNA crews, Conservation Corps Minnesota (CCM), Sentence to Service (STS), volunteers, and/or contractors. Activities include seed collection, planting, exotics control, woody encroachment removal, site clean-up, signing (including development & installation of interpretive kiosks), fencing, prescribed burns (or alternative prescribed disturbance for ecological management purposes, such as prescribed haying or mowing, necessary for sites or conditions where use of fire is limited) and management plan preparation, as well as the monitoring and evaluation, strategic analysis and prioritization, and accomplishment tracking discussed below. 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 (particularly

native prairie, savanna, and forest helps implement the SWAP and achieve Habitat Recommendation 5 of the SSCP. Priority sites for SNA restoration projects (plant community reconstruction or rehabilitation) are shown on the attached map series.

Management practices at ~9 SNAs would be monitored to identify adaptive management process improvements needed to achieve better habitat for rare species and Species of Greatest Conservation Need (SGCN). Monitoring will include the initial evaluation of restoration projects done through this appropriation and periodic subsequent evaluations based upon the monitoring protocols. Restoration project will be evaluated in terms of project goals and to ascertain how well the native plants have been established and non-natives controlled. In order to facilitate long term ecological and site management monitoring and more robust and accurate accomplishment reporting, the Adaptive Management Spatial Database (AMSD) was launched with ENRTF support. Through this appropriation, an updated computer application will be developed with dynamic resource links so that Adaptive Management Plans are actively developed and updated in AMSD and directly tied to project planning, accomplishment reporting, and monitoring. This will foster adaptive management and continuous process improvements by integrating the most current ecological and technical information with dynamic management/project plans, implementation, and monitoring.

Each of the 22 SNA-held conservation easements (protecting over 1510 acres within or adjoining 12 SNAs) that are scheduled for monitoring during this appropriation would be monitored; the goal of the SNA program is to monitor each easement every 2-3 years, so most easements would receive a formal on-site monitoring visit with results entered into the department land records, landowners will be contacted, management opportunities identified, and follow-up visits would be conducted if needed to address issues discovered. The *Scientific and Natural Area (SNA) Program Conservation Easement Long-Term Stewardship, Monitoring and Enforcement Plan* is available upon request. The second phase of the SNA/rare resource strategic prioritization (initiated through an 2011 ENRTF appropriation) will incorporate new information on water quality/watershed approaches, geological features of statewide significance, and new MCBS data into the GIS-based analysis to refine priorities and increase coordinated rare resource protection with other Divisions and partners and to implement State Wildlife Action Plan (SWAP). This tool will aid in targeting at least 9 biodiversity significance sites for SNA-guided management through Natural Area Registry Agreements.

Summary Budget Information for Activity 1:

ENRTF Budget: \$ 1,005,000
Amount Spent: \$ 0
Balance: \$ 1,005,000

Activity Completion Date:

Outcome	Completion Date	Budget
1a. ~30 acres of restoration of forest, prairie, & outcrop sites	6/30/16	\$ 65,510
1b. ~270 acres of woody removal & exotics species treatment	6/30/16	\$ 232,310
1c. ~1300 acres of prescribed burns or comparable prescribed disturbance	6/30/16	\$ 167,360
1d. ~10 SNA interpretive kiosks installed AND development work on ~25 sites	6/30/16	\$ 190,040
1e. management plans completed for ~19 SNAs	6/30/16	\$ 130,700
1f. adaptive management monitoring on ~9 SNA sites & AMSD management plan & monitoring software improvements	6/30/16	\$ 72,000
1g. monitoring of up to 18-22 SNA-held conservation easements	6/30/16	\$ 11,360
1h. strategic prioritization (Ph 2); natural area registry agreements on 9 sites	6/30/16	\$ 52,400

Note: total for this Activity includes \$83,830 for direct & necessary services; but individual outcome costs above do not.

Activity Status as of September 15, 2013:

Activity Status as of March 15, 2014:

Activity Status as of September 15, 2014:

Activity Status as of March 15, 2015:

Activity Status as of September 15, 2015:

Activity Status as of March 15, 2016:

Final Report Summary:

ACTIVITY 2: Citizen-Student Engagement in Natural Areas

Description:

The second phase of the SNA Outreach Initiative will engage residents, students, and other interested people in ecological recreation, stewardship, and education activities on SNAs. The site steward network will be expanded and sustained at least 100 SNA volunteer site stewards. Ecological and safety training, guidance, and support materials will be provided for site stewards as necessary to recruit and retain these volunteers and ensure their work on SNAs is safe and ecologically appropriate. About 80 events will be sponsored, co-sponsored or coordinated, including volunteer site restoration and management work days and recreation-educational events (guided nature hikes, birding visits, botanizing, citizen-science activities, etc) aimed at building long-lasting and action-based conservation ethics in the community. The key to engaging people in nature-based events and recruiting, training, supporting SNA site stewards and volunteers is to have a dispersed network of professional naturalists leading this work for the SNA Program. This appropriation makes this possible by funding the SNA-dedicated portions of naturalists shared with State Parks across the state. The effectiveness of site steward recruitment and retention, expansion of participation in SNA events, and other SNA outreach tools will be evaluated, including measuring progress towards meeting the Department's *Conservation That Works* Goal 2.

Additional visitor features will be added to the SNA web page, such as online site maps with topography, plant communities, and facilities. A new e-book version of the SNA guidebook for visitors will include information and interactive maps for each SNA and feature site-specific video and audio tracks. New or refined electronic/social media communications tools will be developed and disseminated to increase and enhance recreationist's use of SNAs.

Summary Budget Information for Activity 2:

ENRTF Budget: \$ 495,000
Amount Spent: \$ 0
Balance: \$ 495,000

Activity Completion Date:

Outcome	Completion Date	Budget
2a. e-book version of SNA guidebook for visitors, web upgrades & social media	6/30/15	\$ 137,970
2b. ~ 80 volunteer events led/coordinated by part-time naturalists & evaluation	6/30/16	\$ 146,400
2c. network of at least 100 volunteer site stewards coordinated by SNA staff & part-time naturalists ; safety & ecological training & evaluation	6/30/16	\$ 169,392

Note: total for this Activity includes \$41,038 for direct & necessary services; but individual outcome costs above do not.

Activity Status as of September 15, 2013:

Activity Status as of March 15, 2014:

Activity Status as of September 15, 2014:

Activity Status as of March 15, 2015:

Activity Status as of September 15, 2015:

Activity Status as of March 15, 2016:

Final Report Summary:

V. DISSEMINATION:

Description:

Dissemination will primarily be achieved through the SNA webpage on the DNR website: mndnr.gov/snas and through *Nature Notes* – the SNA Program e-newsletter distributed to SNA site steward and an other interested subscribers. All volunteer events will be listed at the webpage. The SNA webpage will continue to be updated and New or refined electronic/social media communications tools will be developed and disseminated to increase and enhance recreationist's use of SNAs. The SNA naturalists, other SNA staff, and contractors are expected to make presentations and lead field trips at SNAs and/or to promote involvement in SNAs; these will be publicized on the DNR website, via emails or local fliers, and as needed through press releases. The site steward kits will be disseminated to officially recognized site stewards. The new e-book version of the SNA guide for visitors is expected to be disseminated through DNR gift shops, DNR website, and potentially through the Minnesota Bookstore.

Status as of September 15, 2013:

Status as of March 15, 2014:

Status as of September 15, 2014:

Status as of March 15, 2015:

Activity Status as of September 15, 2015:

Activity Status as of March 15, 2016:

Final Report Summary:

VI. PROJECT BUDGET SUMMARY:

A. ENRTF Budget:

Budget Category	\$ Amount	Explanation
Personnel:	\$ 700,300	Position Type 1: Coordinators – 1.6 FTE for 2 yrs (~0.2 FTE mgmt; 1.0 FTE outreach; ~0.1 FTE planning; ~0.1 FTE AMSD; & ~0.2 FTE region) (~\$214.2) Position Type 2: Specialists, Technicians, & Seasonal Naturalists – 3.3 FTE spread over ~14 positions (~\$400K) Position Type 3: Laborers & Seasonal Field Crews – 1.1 FTE spread over ~9 to 15 positions (~\$65K) <i>Note: FTE's are calculated for two years only.</i>

Professional/Technical/Service Contracts:	\$ 493,000	Professional/Technical Contracts selected as per state purchasing requirements – Activity 1f. mgmt. plans (~\$60K); Act. 1g. adaptive mgmt. monitoring (~\$42K); Act. 2a. ebook videography etc & participant evaluation (~\$40K); Act. 2b. SNA events (~\$5K) Service Contracts – Activity 1 including 1a; native habitat restoration (~\$28K), 1b. woody encroachment removal & exotics control (~\$175K), 1c. prescribed burning (~\$78K); & 2d. site development (fences, signs, etc) (~\$65K)
	\$ 45,000	Contract: IT Services (Mn.IT service agreements) Adaptive Management Spatial Database, dynamic Adaptive Management Plans, strategic prioritization, & SNA website/interactive media software development, implementation, & IT technical support
Professional Services	\$ 124,358	Direct & Necessary Services for the Appropriation
Equipment/Tools/Supplies:	\$ 86,992	Activity 1 parts, tools, repair costs & supplies for restoration, invasives control, prescribed burning (or other prescribed disturbance for ecological purposes), management plans, & monitoring (~\$26.25K); interpretive displays, signs & posts, fencing, & other site development tools & supplies (~\$50K) Activity 2: volunteer & school events & site steward supplies (including safety items, handtools, training materials, maps, mailings, etc) (~\$10.74K). This includes computer fleet charges pro-rated for up to 5.9 FTE paid through this appropriation (estimated up to \$6K, about \$500/year/FTE).
Printing:	\$ 2,720	Maps, educational & volunteer materials
Travel Expenses in MN:	\$ 47,630	Fleet charges for trucks, cars, & equipment, e.g. mowers, seeders (~\$40.2K); mileage, lodging & meals as per state contracts (~\$7.43K)
Direct and necessary services:*	\$ 124,358	DNR costs for the appropriation
TOTAL ENRTF BUDGET:	\$1,500,000	

Explanation of Use of Classified Staff: Consistent with approved work plans for previous ENRTF appropriations for the SNA program, this funding will be used to pay project-associated costs for classified and unclassified staff paid almost exclusively with special project funds. These positions would not exist, but for special project funding received through the ENRTF and other funds. Each year these positions are assigned work based on the particular combination of soft funding available to address priority SNA Program activities. No funding from this appropriation will be used to cover personnel costs for this work program's Project Manager.

*Direct and Necessary expenses include both Department Support Services (Human Resources, IT, Financial Management, Communications, Procurement, and Facilities) and Division Support Services. Department Support Services are described in agency Service Level Agreements, and billed internally to divisions based on indices that have been developed for each area of service. Department leadership (Commissioner's Office and Regional Directors) are not assessed. Division Support Services include costs associated with Division and regional leadership, business offices, and clerical support. Those elements of individual projects that put little or no demand on support services such as large single-source contracts, large land acquisitions, and funds that are passed-thru to other entities are not assessed Direct and Necessary costs for those activities.

Explanation of Capital Expenditures Greater Than \$3,500: NA

Number of Full-time Equivalent (FTE) funded with this ENRTF appropriation: 5.9 FTE spread over 20-30 positions

Number of Full-time Equivalent (FTE) estimated to be funded through contracts with this ENRTF appropriation: 0.5 to 0.8 FTE professional technical contract; & 5 to 6 FTE CCM & fieldwork contractors;
Note: FTE's are calculated for two years only.

B. Other Funds:

Source of Funds	\$ Amount Proposed	\$ Amount Spent	Use of Other Funds
Non-state			none
	\$	\$	
State			none
	\$	\$	
TOTAL OTHER FUNDS:	\$	\$	

VII. PROJECT STRATEGY:

A. Project Partners: This proposal includes the DNR's work and funding to be used by the SNA program towards partnership project work on SNAs being submitted as separate, but coordinated LCCMR projects. This includes work with Metro Conservation Corridors (in lieu of SNA seeking funding). These efforts are complementary not redundant; all accomplishments on joint projects would be prorated.

B. Project Impact and Long-term Strategy: The SNA Long Range Plan goal is protection by SNA designation 5 occurrences of each native plant community and 3 occurrences of each natural heritage element per landscape. Thus, the Division could utilize support from the Environment and Natural Resources Trust fund of \$3M to \$10M per biennium over the next 20 years.

C. Spending History:

Funding Source (including acquisition & native prairie stewardship – when appropriations are combined)	M.L. 2007 or FY08	M.L. 2008 or FY09	M.L. 2009 or FY10	M.L. 2010 or FY11	M.L. 2011 or FY12-13
ENRTF	\$50,000 (4b) \$243,000 (4c)	\$37,500 (3c) \$515,000 (3a) \$1,000,000 (3f)	\$37,500 (4e) \$410,000 (4f) \$703,300 (4d)	\$31,500 (4f) \$1,046,700 (4b)	\$1,640,000 (4e)
OHF				\$2,058,800	\$1,519,000
Bonding		\$5,000,000			
State Wildlife Grant (federal)				\$137,000	\$49,800

VIII. ACQUISITION/RESTORATION LIST: See attached list.

IX. MAP(S): See attached map.

X. RESEARCH ADDENDUM: NA

XI. REPORTING REQUIREMENTS:

Periodic work plan status update reports will be submitted not later than September 15, 2013, March 15, 2014, September 15, 2014, March 15, 2015, and if needed, September 15, 2015 and March 15, 2016. A final report and associated products will be submitted between June 30 and September 15, 2016 (as necessary for state FY closeout data to be available & summarized) as requested by the LCCMR.

Environment and Natural Resources Trust Fund

M.L. 2013 Acquisition/Restoration List

Project Title: SNA Conservation, Restoration, Enhancement & Citizen Engagement

Project Manager Name: Margaret (Peggy) Booth

M.L. 2013 ENRTF Appropriation: \$1,500,000

#	Acquisition or Restoration Parcel Name	Geographic Coordinates		Estimated Cost	Estimated Annual PILT Liabilities	County	Ecological Significance	Activity Description	# of Acres	# of Shoreline Miles	Type of Landowner	Proposed Fee Title or Easement Holder (if applicable)	Status
		Latitude	Longitude										
1	Avon Hills Forest SNA	45.60446	-94.47926	\$28,000	NA	Stearns	MCS mapped oak forest & wetlands	forest reconstruction	8		DNR	SNA	candidate site
2	Blue Devil Valley SNA	44.80182	-95.55157	\$8,000	NA	Yellow Medicine	MBS-mapped granite rock outcrop with rare 5-lined skinks	prairie-outcrop rehabilitation	10		DNR	SNA	candidate site
3	Boot Lake SNA	45.33693	-93.12404	\$70,000	NA	Anoka	MBS-mapped oak & pine forest, wetlands, Boot Lake shore	forest reconstruction	20		DNR	SNA	candidate site
4	Cedar Mountain SNA	44.50473	-94.90201	\$11,000	NA	Redwood	MBS-mapped rock outcrop, forest, prairie,, wetlands, Mn River frontage	prairie-forest rehabilitation	14		DNR	SNA	candidate site
5	Rock Ridge SNA	44.09621	-95.07017	\$15,000	NA	Cottonwood	MBS-mapped mesic & dry prairie & outcrops	prairie reconstruction	10		DNR	SNA	candidate site
NOTES: Parcel lists for woody removal, exotics treatment and prescribed burning/disturbance projects are not known at this time and will be reported in work program updates.													

Attachment A: Budget Detail for M.L. 2013 Environment and Natural Resources Trust Fund Projects								
Project Title:	SNA Conservation, Restoration, Enhancement & Citizen Engagement							
Legal Citation:	M.L. 2013, Chp. 52, Sec. 2, Subd. 04b							
Project Manager:	Margaret (Peggy) Booth							
M.L. 2013 ENRTF Appropriation:	\$1,500,000							
Project Length and Completion Date:	3 years, June 30, 2016							
Date of Update:	7/1/2013							
ENVIRONMENT AND NATURAL RESOURCES TRUST FUND BUDGET	Activity 1 Budget	Amount Spent	Balance	Activity 2 Budget	Amount Spent	Balance	TOTAL BUDGET	TOTAL BALANCE
BUDGET ITEM	Biodiversity Conservation, Habitat Restoration & Enhancement			Citizen-Student Engagement in Natural Areas				
Personnel (Wages and Benefits)	\$ 336,300		\$ 336,300	\$ 364,000		\$ 364,000	\$ 700,300	\$ 700,300
Position Type 1: Coordinators - 1.6 FTE for 2 yrs (~0.2 FTE mgmt; 1.0 FTE outreach; ~0.1 FTE planning; ~0.1 FTE AMSD; & ~0.2 FTE region) (~\$214.2K)								
Position Type 2: Specialists, Technicians, & Seasonal Naturalists - 3.3 FTE for 2 yrs spread over ~14 positions (~\$400K)								
Position/Position Type 3: Laborers & Seasonal Field Crews - 1.1 FTE for 2 yrs spread over ~9 to 15 positions (~\$66K)								
Professional/Technical/Service Contracts Professional/Technical Contracts - Activity 1f. mgmt. plans (~\$60K); Act. 1g. adaptive mgmt. monitoring (~\$40K); Act. 2a. ebook videography etc & participant evaluation (~\$40K); Act. 2b. SNA events (~\$5K) Service Contracts - Activity 1 including 1a; native habitat restoration (~\$28K), 1b. woody encroachment removal & exotics control (~\$175K), 1c. prescribed burning (~\$78K); & 2d. site development (fences, signs, etc) (~\$65K)	\$ 446,000		\$ 446,000	\$ 47,000		\$ 47,000	\$ 493,000	\$ 493,000
Contract: IT Services (Mn.IT service agreements) spatial database, strategic prioritization, & SNA website/interactive media development & support	\$ 25,000		\$ 25,000	\$ 20,000		\$ 20,000	\$ 45,000	\$ 45,000
Equipment/Tools/Supplies Activity 1 parts, tools, repair costs & supplies for restoration, invasives control, prescribed burning, management plans, & monitoring (~\$26.25K); interpretive displays, signs & posts, fencing, & other site development tools & supplies (~\$50K) Activity 2: volunteer & school events & site steward supplies (including safety items, handtools, training materials, etc) (~\$10.74K). This includes computer fleet charges pro-rated for up to 5.9 FTE paid through this appropriation (estimated up to \$6K, about \$500/year/FTE).	\$ 76,250		\$ 76,250	\$ 10,742		\$ 10,742	\$ 86,992	\$ 86,992
Printing Maps, educational & volunteer materials			\$ -	\$ 2,720		\$ 2,720	\$ 2,720	\$ 2,720
Travel expenses in Minnesota Fleet charges for trucks, cars, & equipment, e.g. mowers, seeders (~\$40.2K); mileage, lodging & meals as per state contracts (~\$7.43K)	\$ 38,130		\$ 38,130	\$ 9,500		\$ 9,500	\$ 47,630	\$ 47,630
Other: Direct & Necessary Services for the Appropriation	\$ 83,320		\$ 83,320	\$ 41,038		\$ 41,038	\$ 124,358	\$ 124,358
COLUMN TOTAL	\$ 1,005,000	\$ -	\$ 1,005,000	\$ 495,000	\$ -	\$ 495,000	\$ 1,500,000	\$ 1,500,000



Minnesota Department of Natural Resources
Division of Ecological and Water Resources
Project Manager: Peggy Booth, Scientific and Natural Areas Program





