



Environment and Natural Resources Trust Fund (ENRTF) M.L. 2016 Work Plan

Date of Report: May 29, 2016
Date of Next Status Update Report: November 1, 2016
Date of Work Plan Approval: June 7, 2016
Project Completion Date: June 30, 2019
Does this submission include an amendment request?

PROJECT TITLE: Scientific and Natural Area Restoration

Project Manager: Margaret (Peggy) Booth
Organization: Minnesota Department of Natural Resources, Division of Ecological & Water Resources
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Location: statewide

Total ENRTF Project Budget:	ENRTF Appropriation:	\$1,386,000
	Amount Spent:	\$0
	Balance:	\$1,386,000

Legal Citation: M.L. 2016, Chp. 186, Sec. 2, Subd. 09a

Appropriation Language:

\$1,386,000 the second year is from the trust fund to the commissioner of natural resources to restore and improve approximately 750 acres of scientific and natural areas. A list of proposed restorations must be provided as part of the required work plan. This appropriation is available until June 30, 2019, by which time the project must be completed and final products delivered.

I. PROJECT TITLE: Scientific and Natural Area Restoration

II. PROJECT STATEMENT:

Minnesota’s Scientific and Natural Areas (SNAs) are established to protect and perpetuate in an undisturbed natural state those natural features which possess exceptional scientific or educational value (MS 86A.05, Subd. 5). This requires ongoing restoration, including invasive species control, prescribed burning, and other improvements, in order to sustain endangered, threatened, and other rare species and the plant communities that support them. Through this appropriation, native habitat restoration, including habitat-focused site improvement activities, will be implemented on about 750 acres of SNAs threatened by human impacts, invasive species, and lack of natural disturbance regimes.

III. OVERALL PROJECT STATUS UPDATES:

Project Status as of November 1, 2016:

Project Status as of April 1, 2017:

Project Status as of November 1, 2017:

Project Status as of April 1, 2018:

Project Status as of November 1, 2018:

Project Status as of April 1, 2019 (if needed):

Overall Project Outcomes and Results:

IV. PROJECT ACTIVITIES AND OUTCOMES:

ACTIVITY 1: Native Habitat Restoration & Improvements

Description:

Native habitat restoration, including habitat-focused site improvement activities, will be completed on about 750 acres at ~40 state designated SNAs. For purposes of this appropriation, restoration includes the full suite of ecological management tools needed to restore sites and sustain or improve their ecology. The tools include baseline inventory and monitoring of ecological conditions to guide management practices, adaptive management plans, plant community reconstruction and rehabilitation, woody encroachment and invasive species control, prescribed burning and other prescribed site disturbance, and additional post-management monitoring in order to refine further management practices.

Site development improvements will be completed as part of restoration projects (such as protective fencing) and as needed in order for sites newly acquired with ENRTF to meet minimal standards. Interpretive signs-kiosks will be developed and installed at ~8 SNAs acquired or restored with this or recent ENRTF appropriations. These interpretive signs communicate the significance of the ENRTF-supported acquisition and the role of ENRTF-supported restoration in sustaining or improving habitat quality. SNA staff will provide ecological and technical guidance and on-site verification for ~9 restoration-related projects implemented on SNAs by partner organizations.

Adaptive Management Plans will be completed for ~12 SNAs (including sites acquired through these funds as timing permits); these plans will serve as ecological restoration and management plans as described below.

Restoration projects will be based upon ecological restoration and management plans and/or project plans with goals for reconstructing plant communities that are native to the site that are 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. Long-term management costs (e.g. invasive species treatments, prescribed fire, and monitoring/evaluation) will be covered by a combination funding sources, including, but not limited to, ENRTF, Outdoor Heritage Fund (OHF), federal grants, and other funds as appropriated. Restoration projects will be evaluated in terms of project goals and to ascertain how well the native plants have been established and non-natives controlled.

Ecological features and restoration/management practices at ~22 SNAs will be monitored to establish baseline conditions and/or identify adaptive management process improvements needed to achieve better habitat for rare species and Species of Greatest Conservation Need (SGCN). The Adaptive Management Spatial Database (AMSD) was initially developed with ENRTF support in order to accurately map and document implementation of restoration and enhancement projects done at SNAs and linking these accomplishments to specific project funding. Through this appropriation, improvements will be made to the database to add or link restoration/management plans, ecological monitoring data, and other Natural Heritage Information System (e.g. MBS data) to the database. Through this, restoration activities will be more accurately and fully informed and improved by the best available science.

Practices to be done under Activity 2 of this appropriation will be carried out by DNR staff-SNA crews, Conservation Corps Minnesota (CCM), Sentence to Service (STS), volunteers, and/or contractors. Practices may include seed collection, site preparation, planting and establishment period care; invasive species control, woody encroachment removal; prescribed burns (or alternative prescribed disturbance for ecological management purposes, such prescribed haying, mowing, browsing, or grazing, necessary for sites or conditions where use of fire is limited); site development for recent ENRTF acquisitions and/or restoration-related work: site clean-up, sign and interpretive kiosks installation, fencing (removal or installation), unpaved parking areas and visitor access-safety improvements (and associated measures to protect native habitat); management plan preparation; baseline ecological feature assessments and ecological monitoring; and technical/ecological oversight and field verification of restoration-related projects implemented by partners.

All restoration will use seeds/plants of a local ecotype, collected from onsite or within 25 miles. Restoration and improvements of degraded and rare land features (particularly native prairie, savanna, and forest) help implement the SWAP and achieve Habitat Recommendation 5 of the SCPP. This activity and its funding will include those restoration and improvements of newly acquired sites when that work is ecologically advisable and feasible within the appropriation period. The attached ML 2016 Parcel List and ML16 SNA Restoration Projects map set identify priority sites for SNA plant community reconstruction and rehabilitation for this appropriation. Reconstruction is when a plant community which would be native to the site is planted on bare ground (e.g. former agricultural field or removed conifer plantation). Rehabilitation is the interseeding of a degraded plant community; this may follow a woody removal or invasive species control project.

Summary Budget Information for Activity 1:

ENRTF Budget: \$ 1,386,000
Amount Spent: \$ 0
Balance: \$ 1,386,000

Outcome	Completion Date
1a. ~34 acres of reconstruction or rehabilitation of forest & prairie sites	6/30/19
1b. ~260 acres of woody removal & exotics species treatment	6/30/19
1c. ~480 acres of prescribed burns or other prescribed disturbance	6/30/19
1d. acquisition & restoration-related site development work on ~15 sites & ~8 SNA interpretive kiosks installed	6/30/19
1e. ecological/technical guidance for ~10 partnership restoration-related projects	6/30/18

1f. restoration/management plans completed for ~12 SNAs	6/30/18
1g. ecological/adaptive management monitoring on ~22 SNA sites	6/30/19

Note: total budget for this Activity includes \$73,657 for direct & necessary services which are prorated across all costs except budgets for CCM contracts and MNIT service level agreement (SLAs); no direct & necessary charges are budgeted for the estimated \$88K in CCM contracts and \$25K in MNIT SLAs; actual charges will be based on actual expenditures.

Activity Status as of November 1, 2016:

Activity Status as of April 1, 2017:

Activity Status as of November 1, 2017:

Activity Status as of April 1, 2018:

Activity Status as of November 1, 2018:

Activity Status as of April 1, 2019 (if needed):

Final Report Summary:

V. DISSEMINATION:

Description:

Dissemination will primarily be achieved through the SNA webpage on the DNR website: mndnr.gov/snass, through the SNA Facebook page, and through *Nature Notes* – the SNA Program e-newsletter distributed through GovDelivery.com to over 3900 subscribers and possibly through Tweets on the DNR Twitter site. Announcements of some restoration-related activities will be posted on the SNA Facebook page.

Status as of November 1, 2016:

Status as of April 1, 2017:

Status as of November 1, 2017:

Status as of April 1, 2018:

Status as of November 1, 2018:

Status as of April 1, 2019 (if needed):

Final Report Summary:

VI. PROJECT BUDGET SUMMARY:

A. ENRTF Budget Overview:

Budget Category	\$ Amount	Overview Explanation
Personnel:	\$ 749,600	Coordinators (0.5 FTE for 2 yrs); spec's, tech's & naturalists (3.5FTE for 2 yrs); laborers & seasonal field crews (2.4 FTE for 2 yrs)
Professional/Technical/Service Contracts:	\$ 281,100	Contractors will be selected following state procurement & bidding processes: <u>Professional/Technical Contracts</u> – interpretive

		kiosks research & design; mgmt. plans; adaptive mgmt. monitoring; <u>Service Contracts</u> (including Conservation Corps Minnesota) - woody encroachment removal & invasives control; prescribed burning, haying, mowing, browsing, & grazing; site development (fences, signs, etc)
Contract	\$ 25,000	IT Services (Mn.IT service agreements) Adaptive Management Spatial Database upgrades to integrate restoration planning/ecological data, implementation & monitoring
Equipment/Tools/Supplies:	\$ 89,693	parts, tools, repair costs & supplies for restoration, invasives control, prescribed burning, haying, mowing or grazing, management plans, & monitoring; interpretive displays, signs & posts, fencing, & other site development tools & supplies
Printing:	\$ 5,000	printing of interpretive sign panels
Travel Expenses in MN:	\$ 161,950	Fleet charges for trucks, cars, & equipment (e.g. mowers, seeders), mileage, lodging & meals as per state contracts. The fleet charges are use charges (by mile traveled or monthly charge which we pro-rate) for the specific equipment utilized for this project.
Other:	\$ 73,657	Direct & Necessary Services for the appropriation
TOTAL ENRTF BUDGET:	\$ 1,386,000	

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 mostly 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.

Direct and Necessary expenses include both Department Support Services (Human Resources, IT Support, Safety, Financial Support, Communications Support, Planning Support, and Procurement Support) and Division Support Services. Department Support Services are described in the agency Service Level Agreement, and billed internally to divisions based on rates that have been developed for each area of service. These services are directly related to and necessary for the appropriation. Department leadership services (Commissioner's Office and Regional Directors) are not assessed. Division Support Services include costs associated with Division 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, land acquisitions, and funds that are passed-thru to other entities are not assessed Direct and Necessary costs for those activities. For this work plan, CCM contracts (~\$88,000), and MnIT service level agreement (~\$25,000) have not been assessed Direct and Necessary costs. In addition to itemized costs captured in our proposal budget, direct and necessary costs cover HR Support (\$18,624), Safety Support (\$4,390), Financial Support (\$16,791), Communication Support (\$6,180), IT Support (\$22,352), Planning Support (\$4,145), and Procurement Support (\$1,175) that are necessary to accomplishing funded programs/projects.

Explanation of Capital Expenditures Greater Than \$5,000: NA

Number of Full-time Equivalents (FTE) Directly Funded with this ENRTF Appropriation: 6.4 FTE each for two years spread over 25-35 positions – for a total of 12.8 FTEs

Number of Full-time Equivalents (FTE) Estimated to Be Funded through Contracts with this ENRTF Appropriation: up to 0.4 FTE for 1 year for professional technical contract; & up to 2 FTE for 1 year for CCM & fieldwork contractors – for a total of 2.4 FTEs

B. Other Funds:

Source of Funds	\$ Amount Proposed	\$ Amount Spent	Use of Other Funds
Non-state	\$0	\$0	If any other funds are used for projects funded with this appropriation, accomplishments will be pro-rated by the actual expenditures per funding source.
State**	\$0**	\$0**	If any other funds are used for projects funded with this appropriation, accomplishments will be pro-rated by the actual expenditures per funding source. In-kind contributions by the project manager to administer this project will not be tracked.
TOTAL OTHER FUNDS:	\$50,000	\$0	

** As indicated below, Outdoor Heritage Fund appropriations for prairie restoration and enhancement occur concurrently with this ENRTF appropriation. These OHF funds are used for similar but separate projects as the ENRTF funding. Because of the multiple, overlapping appropriations, it would not be accurate to list those as match here. Also, the SNA program typically annually receives an internal general fund grant for about \$30,000 for similar but separate invasive species projects.

VII. PROJECT STRATEGY:

A. Project Partners:

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

B. Project Impact and Long-term Strategy:

The *SNA Strategic Land Protection Plan*’s primary goal is “the state’s natural heritage is not lost from any ecological region of Minnesota” with 6 objectives: 1) 5 occurrences of each existing native plant community are within designated SNAs within each ecological subsection; 2) 3 occurrences of each existing species of plant and animal are within designated SNAs within each ecological subsection; 3) 1 of each type of geological feature in the state is within a designated SNA; 4) 10% of the state’s high priority conservation areas are protected through SNAs; other landowners and managers conserve the natural heritage within high priority conservation areas; 5) SNAs contribute ecological values in key watersheds; and 6) the SNAs’ natural features and public benefit are sustained over time. Ongoing restoration, including invasive species control, prescribed burning, and other improvements, are necessary to sustain rare species and the plant communities that support them. This restoration work is based upon adaptive management plans which are refined over time through ecological monitoring and tracking through the Adaptive Management Spatial Database. The SNA Program is largely dependent on grant funds (predominantly ENRTF and some OHF) for SNA acquisition, restoration, and outreach.

Thus, the DNR could utilize support from the Environment and Natural Resources Trust fund of \$10M to \$20M per biennium over the next 20 years.

C. Funding History:

This includes funding for acquisition and public engagement as well as restoration.

Funding Source and Use of Funds	Funding Timeframe	\$ Amount
ENRTF ML11, 1SS, Ch2, Art3, Sec2, Subd 4e: SNA acquisition, restoration, enhancement & public engagement	July 2011-June 2014	\$ 1,640,000
ENRTF ML13, Ch 52, Sec 2, Subd 4b: SNA acquisition, restoration, enhancement & public engagement	July 2013-June 2016	\$ 1,500,000
ENRTF ML14, Ch226, Subd 7a: SNA acquisition, restoration, enhancement & public engagement	July 2014-June 2017	\$ 2,540,000
ENRTF ML15, Ch76, Sec 2, Subd 9c: SNA acquisition, restoration, enhancement & public engagement	July 2015-June 2018	\$ 4,000,000
OHF ML11, 1SS, Ch6, Art1, Sec2, Subd 4b: Accelerated Prairie – SNA prairie restoration & enhancement (estimated SNA portion only)	July 2011-June 2016	\$ 229,370
OHF ML11, 1SS, Ch6, Art1, Sec2, Subd 4a: SNA & NPB acquisition (estimated SNA portion only)	July 2011-June 2016+	\$ 702,100
OHF ML12, Ch262, Art1, Sec2, Subd 4h: Accelerated Prairie – SNA prairie restoration & enhancement (estimated SNA portion only)	July 2012-June 2017	\$ 276,940
OHF ML13, Ch137, Art1, Sec2, Subd 4g: Accelerated Prairie – SNA prairie restoration & enhancement (estimated SNA portion only)	July 2013-June 2018	\$ 144,170
OHF ML13, Ch137, Art1, Sec2, Subd 4c: SNA & NPB acquisition (estimated SNA portion only)	July 2013-June 2018+	\$ 246,500
OHF ML14, Ch256, Art1, Sec2, Subd 4h: Accelerated Prairie – SNA prairie restoration & enhancement (estimated SNA portion only)	July 2014-June 2019	\$ 285,650
OHF ML14, Ch256, Art1, Sec2, Subd 4a: SNA acquisition	July 2014-June 2019+	\$ 1,070,000
OHF ML15, 1SS, Ch1, Art1, Sec2, Subd 2a: SNA acquisition	July 2015-June 2020+	\$ 1,000,000
OHF ML15, 1SS, Ch1, Art1, Sec2, Subd 2k: Accelerated Prairie – SNA prairie restoration & enhancement (estimated SNA portion only)	July 2015-June 2020	\$ 762,000
State Wildlife Grant (federal) – SNA management plans	March 2012-August 2013	\$ 49,800

VIII. RESTORATION REQUIREMENTS:

A. Parcel List: See attached list.

B. Acquisition/Restoration Information:

Restoration

- 1. Provide a statement confirming that all restoration activities completed with these funds will occur on land permanently protected by a conservation easement or public ownership.**
All restoration-related activities done with this appropriation are on lands designated as SNA which the state owns in fee or easement.
- 2. Summarize the components and expected outcomes of restoration and management plans for the parcels to be restored by your organization, how these plans are kept on file by your organization, and overall strategies for long-term plan implementation.**

Each restoration project will be based upon an ecological restoration and management plan and/or project plan with goals for reconstructing plant communities that are native to the site that are 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. Each restoration and management plan and project plan is kept in a DNR internal shared electronic filing system accessible to all SNA staff.

3. Describe how restoration efforts will utilize and follow the Board of Soil and Water Resources “Native Vegetation Establishment and Enhancement Guidelines” in order to ensure ecological integrity and pollinator enhancement.

The SNA Program follows or exceeds the recommendations found in the BWSR “Native Vegetation Establishment and Enhancement Guidelines”. SNA restorations typically follow the current BOWSR Guidelines, including Project Guidance, Plant Community Restoration, Temporary Cover and Forest/Woodlands. The SNA Program follows the general direction of the BWSR Guidelines for “Recommended Steps for Obtaining Plant Materials”, and has additional and more restrictive requirements for restoration material sources. Specifically, restoration and management of DNR lands are governed by DNR Operational Order #124 on “Plant Material Standards for Native Plant Community Restoration” and #130 on “Pollinator Habitat” (which include BMPs).

4. Describe how the long-term maintenance and management needs of the parcel being restored with these funds will be met and financed into the future.

Long-term management costs (e.g. invasive species treatments, prescribed fire/disturbance, and monitoring/evaluation) will be covered by a combination funding sources, including, but not limited to, ENRTF, Outdoor Heritage Fund (OHF), federal grants, and other funds as appropriated.

5. Describe how consideration will be given to contracting with Conservation Corps of Minnesota for any restoration activities.

DNR has a standing general contract with CMM under which the SNA Program often does project or activity specific agreements. For restoration projects, CCM has been and will continue to be used when appropriate for hand seed harvest. CCM also does some invasives species control on SNAs and will be considered on restoration projects for post-planting weed control.

6. Provide a statement indicating that evaluations will be completed on parcels where activities were implemented both 1) initially after activity completion and 2) three years later as a follow-up. Evaluations should analyze improvements to the parcel and whether goals have been met, identify any problems with the implementation, and identify any findings that can be used to improve implementation of future restoration efforts at the site or elsewhere.

Plant community reconstruction and rehabilitation projects will be evaluated and a report submitted to the LCCMR to ascertain how well the native plants have been established and non-natives controlled. The evaluation reports include a summary of management plan outcomes, activities completed through the project, maps of the project area, a statement of ongoing management needs and funding, and a summary of the evaluation.

IX. VISUAL COMPONENT or MAP(S): See attached ML16 SNA Restoration Projects map set.

X. RESEARCH ADDENDUM: NA

XI. REPORTING REQUIREMENTS:

Periodic work plan status update reports will be submitted not later than November 1, 2016, April 1, 2017, November 1, 2017, April 1, 2018, November 1, 2018, and April 1, 2019. A final report and associated products will be submitted before September 15, 2019 (as necessary for state FY closeout data to be available and summarized).



Environment and Natural Resources Trust Fund

M.L. 2016 Project Budget

Project Title: Scientific and Natural Area Restoration

Legal Citation: M.L. 2016, Chp. 186, Sec. 2, Subd. 09a

Project Manager: Margaret (Peggy) Booth

Organization: MnDNR

M.L. 2015 ENRTF Appropriation: \$1,386,000

Project Length and Completion Date: 3 Years, June 30, 2019

Date of Report: May 29, 2016

ENVIRONMENT AND NATURAL RESOURCES TRUST FUND BUDGET	Activity 1 Budget	Amount Spent	Activity 1 Balance	TOTAL BUDGET	TOTAL BALANCE
BUDGET ITEM	Native Habitat Restoration & Improvements				
Personnel (Wages and Benefits)	\$749,600	\$0	\$749,600	\$749,600	\$749,600
Position Type 1: Coordinators & Planner - Activity 1: ~0.4 FTE acquisition for 2 yrs; Activity 2: ~0.5 FTE resto-related for 2 yrs - all spread over ~5 positions					
Position Type 2: Specialists, Technicians, & Naturalists - Activity 1: ~0.6 FTE acquisition for 2 yrs; Activity 2: ~3.6 FTE resto-related for 2 yrs - all spread over about ~12 positions					
Position Type 3: Laborers & Seasonal Field Crews - all Activity 2: ~2.4 FTE for 2 yrs - spread over ~9-15 positions					
Professional/Technical/Service Contracts	\$281,100	\$0	\$281,100	\$281,100	\$281,100
<u>Professional/Technical Contracts</u>					
Act. 2d. ~12 interpretive kiosk panel research & design (~\$7K) - contractors to be selected following state procurement & bidding processes					
Act. 2f. ~8 mgmt. plans (~\$40K) - contractors to be selected following state procurement & bidding processes					
Act. 2g. adaptive mgmt. monitoring at ~5 SNAs (~\$19K);					
<u>Service Contracts</u>					
Act. 2 including 2c. restoration-related activities (~\$27K at ~\$2000-\$5000/ac) - priority given to CCM; contractors to be selected following state procurement & bidding processes					
Act. 2b. woody encroachment removal & invasives control (~\$155K at ~\$1000-\$5000/ac) - priority given to CCM; contractors to be selected following state procurement & bidding processes					
Act 2c. prescribed burning, haying, mowing, browsing or grazing (~\$29.7K at ~\$100-\$700/ac - priority given to CCM; contractors to be selected following state procurement & bidding processes					
Act 2d. site development (fences, signs, etc) (~\$4.1K) - priority given to CCM; contractors to be selected following state procurement & bidding processes					
Contract: IT Services (Mn.IT service agreements) Adaptive Management Spatial Database upgrades to integrate restoration planning/ecological data, implementation & monitoring	\$25,000	\$0	\$25,000	\$25,000	\$25,000
Equipment/Tools/Supplies	\$89,693	\$0	\$89,693	\$89,693	\$89,693
Activity 2: parts, tools, repair costs & supplies for restoration, invasives control, prescribed burning, etc (this is largely for SNA tools, such as chain saws, pump cans, drip torches, fire racks, pulaskis, other handtools, backpack sprayers, portable pumps & hose, personal protective equipment, etc, & supplies such as herbicides, spreading oils, flagging, stakes, etc) (~\$33.6K); signs (entry, boundary & rules signs), posts/hardware, fencing, gravel, & other site development tools & supplies (~\$47.2K); monitoring supplies & materials (~\$8.208K).					
Printing	\$5,000	\$0	\$5,000	\$5,000	\$5,000
Activity 2: interpretive sign panels.					
Travel expenses in Minnesota	\$161,950	\$0	\$161,950	\$161,950	\$161,950
Fleet charges for trucks, cars, & equipment (e.g. mowers, seeders), mileage, lodging & meals as per state contracts					
Other	\$73,657	\$0	\$73,657	\$73,657	\$73,657
DNR's direct and necessary costs (\$73,657 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 People/HR Support (\$18,624), Safety Support (\$4,390), Financial Support (\$16,791), Communication Support (\$6,180), IT Support (\$22,352, Planning Support (\$4,145) and Procurement Support (\$1,175) that are necessary to accomplishing funded programs/projects.					
COLUMN TOTAL	\$1,386,000	\$0	\$1,386,000	\$1,386,000	\$1,386,000

Environment and Natural Resources Trust Fund

M.L. 2016 Parcel List

Project Title: Scientific and Natural Area Restoration

Legal Citation: M.L. 2016, Chp. 186, Sec. 2, Subd. 09a

Project Manager: Margaret (Peggy) Booth

Organization: Minnesota Department of Natural Resources, Division of Ecological & Water Resources

M.L. 2016 ENRTF Appropriation: \$1,386,000

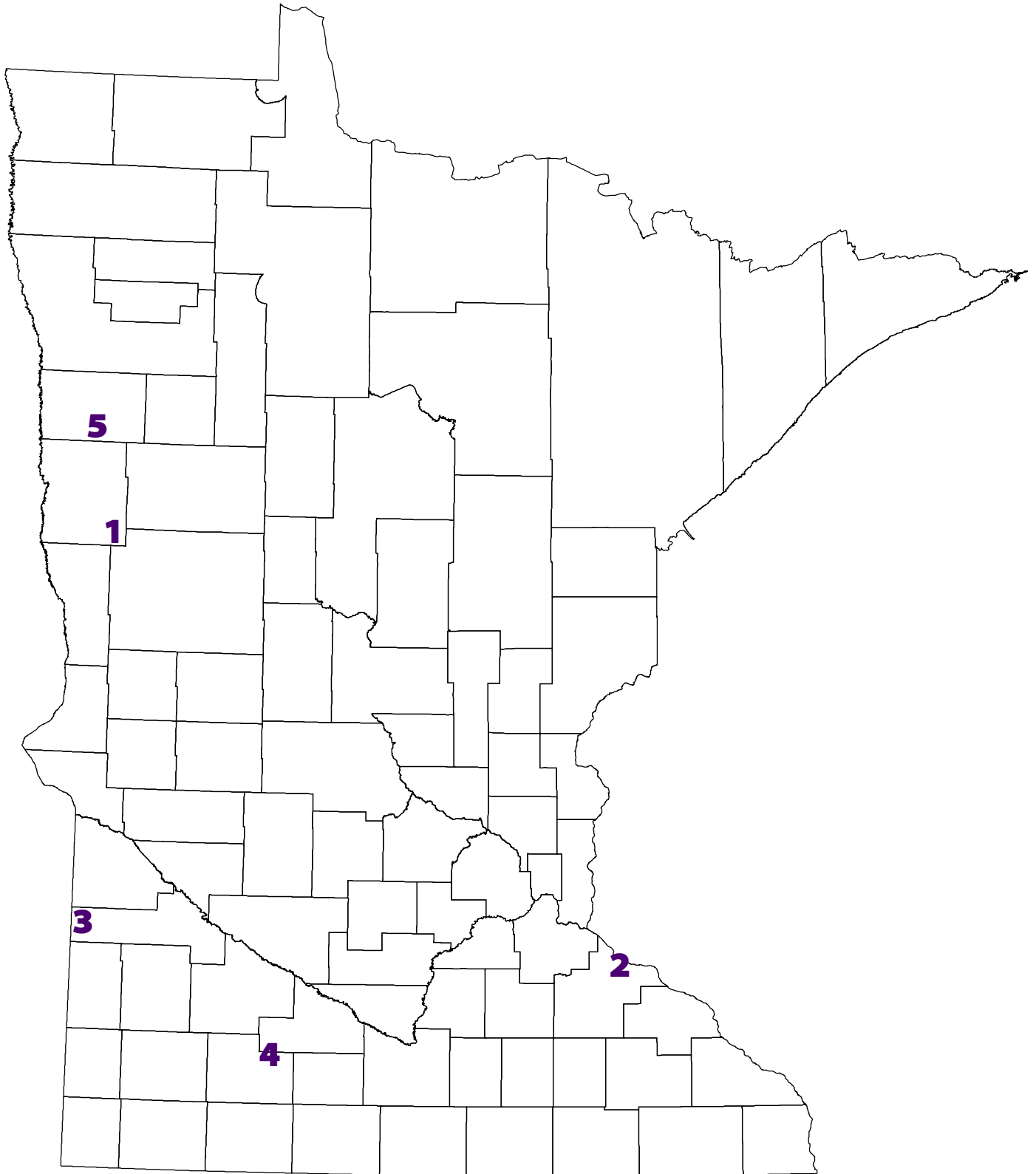
Project Length and Completion Date: 3Years, June 30, 2019

Date of Report: May 29, 2016

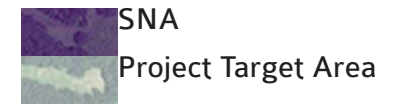
#	Acquisition or Restoration Parcel Name	Coordinates Format: [Deg.]° [Min.]' [Sec.]" [Hemis.]		Estimated Cost	Estimated Annual PILT Liabilities	County	Site Significance	Activity Description	# of Acres	# of Shoreline Miles	Type of Landowner	Proposed Fee Title or Easement Holder (if applicable)	Status
		Latitude	Longitude										
1	Blanket Flower Prairie SNA	46° 41' 7.7"	96° 12' 18.1"	\$ 36,000		Clay	reconstruct dry gravel prairie	restore prairie	36		public	DNR-SNA	
2	Cannon River Turtle Preserve	44° 34' 22.1"	92° 40' 42.1"	\$ 60,000		Chisago	reconstruct bedrock bluff prairie	restore prairie	20		public	DNR-SNA	
3	Mound Springs Prairie SNA	44° 45' 54.8"	96° 27' 3.8"	\$ 15,000		Yellow Medicine	reconstruct mesic prairie comparable to adjoining MBS mapped prairie	restore prairie	10		public	DNR-SNA	
4	Rock Ridge SNA	44° 5' 49.5"	95° 4' 14.5"	\$ 12,000		Cottonwood	reconstruct mesic prairie comparable to adjoining MBS mapped prairie	restore prairie	8		public	DNR-SNA	
5	Sandpiper Prairie	47° 14' 32.2"	96° 24' 16.3"	\$ 40,000		Norman	reconstruct wet-mesic prairie	restore prairie	40		public	DNR-SNA	

Note: prescribed burning, invasive species control, and other site improvements will occur on designated SNAs not listed above.

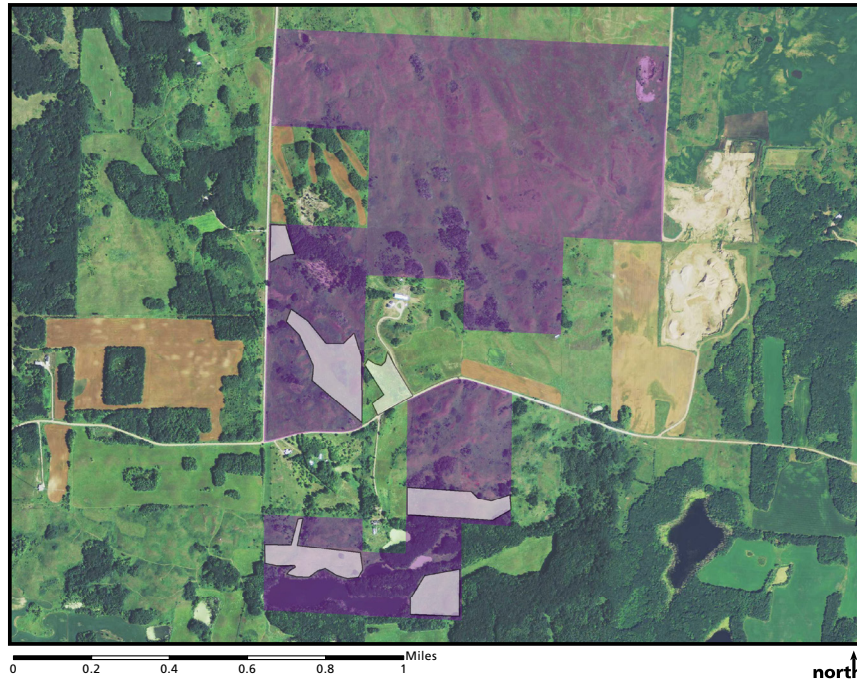
ML15 SNA Restoration Projects



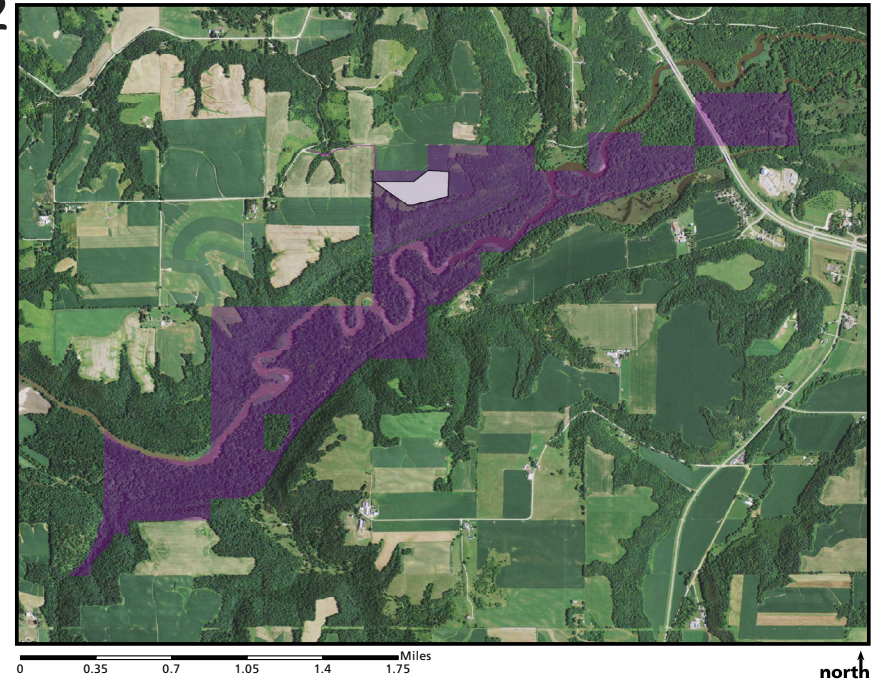
ML16 SNA Restoration Projects



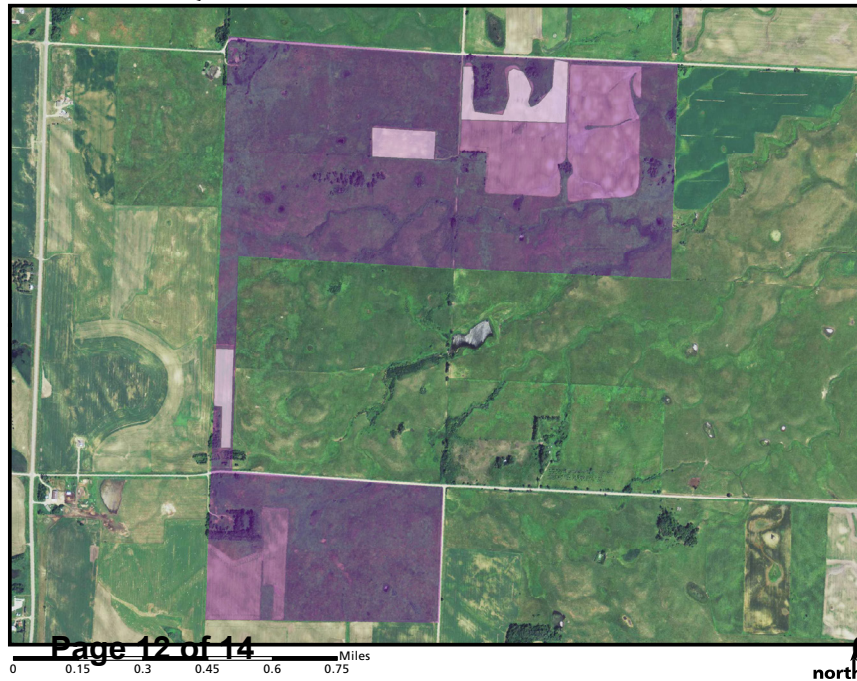
1 **Blanket Flower Prairie Restoration Project**



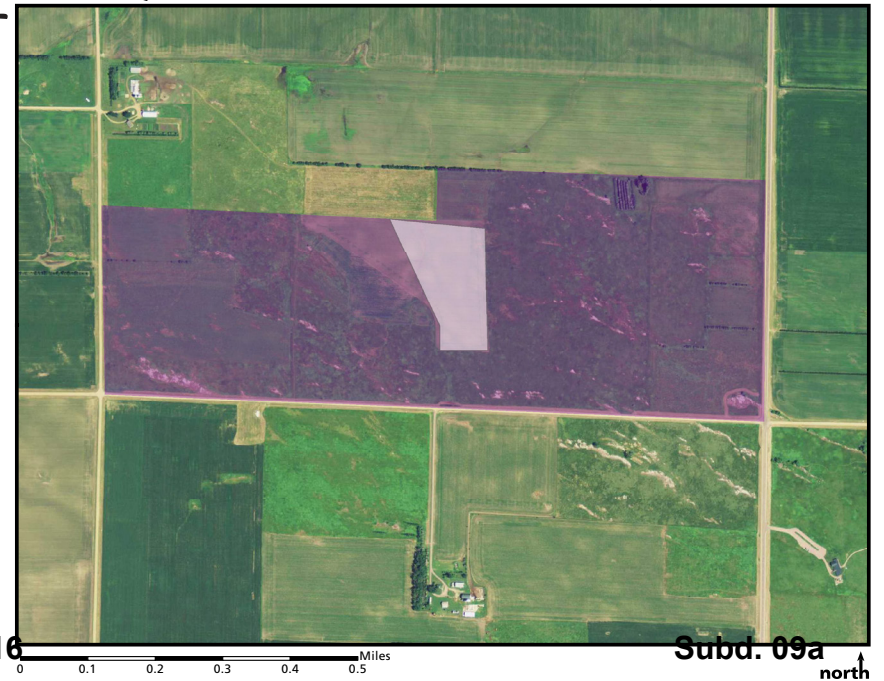
2 **Cannon River Turtle Preserve Restoration Project**



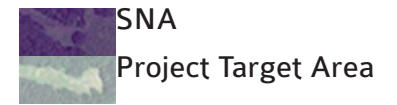
2 **Mound Springs Prairie SNA Prairie Restoration Project**



4 **Rock Ridge Prairie SNA Prairie Restoration Project**



ML16 SNA Restoration Projects



5 Sandpiper Prairie Restoration Project



0 0.3 0.6 0.9 1.2 1.5 Miles

north ↑

