



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

Date of Report: December 4, 2015

Date of Next Status Update Report: February 1, 2017

Date of Work Plan Approval:

Project Completion Date: June 30, 2019

Does this submission include an amendment request? ___

PROJECT TITLE: Upland, Wetland, and Shoreline Restoration in Greater Metropolitan Area

Project Manager: Wiley Buck

Organization: Great River Greening

Mailing Address: 35 W. Water St., Ste. 201

City/State/Zip Code: St. Paul, MN 55107

Telephone Number: (651) 665-9500 x15

Email Address: wbuck@greatrivergreening.org

Web Address: www.greatrivergreening.org

Location: Anoka, Chisago, Dakota, Hennepin, Isanti, Ramsey, Scott, and Washington Counties

Total ENRTF Project Budget:

ENRTF Appropriation: \$509,000

Amount Spent: \$0

Balance: \$509,000

Legal Citation: M.L. 2016, Chp. xx, Sec. xx, Subd. xx

Appropriation Language:

I. PROJECT TITLE: Upland, Wetland, and Shoreline Restoration in Greater Metropolitan Area

II. PROJECT STATEMENT:

Greening will restore significant upland and shoreline habitat throughout the metro area, engage community volunteers, and apply innovative techniques, conduct evaluations, and implement corrective actions to advance restoration practices.

Nine ecologically significant restoration projects have been identified, including forests, prairies, woodlands, wetlands, and shorelines. By working with an array of local, state, federal, non-profit, and private partners, using ENRTF and matching funds, Greening will restore 153 acres, 0.15 miles of shoreline and engage 650 volunteers. These projects are exemplary of our continued engagement in the metro area, and specifically as a function of our active membership in the Metro Conservation Corridors (MeCC) partnership. To advance the practice of restoration, Greening will continue to develop applications for conservation haying/grazing, evaluate 18 of our projects, and implement corrective actions on an estimated 13 acres at one site.

III. OVERALL PROJECT STATUS UPDATES:

Project Status as of February 1, 2017:

Project Status as of August 1, 2017:

Project Status as of February 1, 2018:

Project Status as of August 1, 2018:

Project Status as of February 1, 2019:

Overall Project Outcomes and Results:

IV. PROJECT ACTIVITIES AND OUTCOMES:

ACTIVITY 1: Restore Upland, Wetland, & Shoreline Habitat; Engage Volunteers

Description: We will restore 153 acres of forest, prairie, woodland, and wetland; and 0.15 miles of riparian shoreline in nine projects located within the mapped Metro Conservation Corridors. Application of conservation haying/grazing, with monitoring, will be employed in two Painters Creek projects. At Wolsfeld Woods SNA, the habitat is being degraded by erosion from the trails; for this project, trail surface, routing, and erosion control improvements will be an integral part of the site restoration. We will engage 650 volunteers in appropriate, meaningful tasks as part of these restorations. All projects will include a management plan and initial restoration evaluation at the end of the grant period.

Summary Budget Information for Activity 1:

ENRTF Budget: \$ 448,000
Amount Spent: \$ 0
Balance: \$ 448,000

Outcome	Completion Date
1. Restore 153 acres incl. management plan and initial evaluation; implement conservation haying/grazing on >5ac; improve trails in 60 acres	June 30, 2019
2. Restore 0.15 miles of shoreline	June 30, 2019
3. Engage 650 volunteers	June 30, 2019

Activity Status as of February 1, 2017:

Activity Status as of August 1, 2017:

Activity Status as of February 1, 2018:

Activity Status as of August 1, 2018:

Activity Status as of August 19, 2019:

Final Report Summary:

ACTIVITY 2: Advance Restoration Practices with Evaluations and Corrective Actions

Description: Greening will develop our ‘third year’ restoration evaluation protocol, based on the U of M findings and protocol (‘Restoration Evaluations’ ML 2013 subd. 04I) and possibly other sources. We will then evaluate our 18 projects from our ML 2011 Trust Fund appropriation and write an overall report on our findings, for dissemination to MeCC partners, and U of M. The goals of these evaluations are to assess the condition of the projects, identify any corrective actions that are warranted, and to improve restoration practices and guide future restoration projects.

Evaluations previously conducted on our Pilot Knob Hill restoration project greater than three years old reveals an underperforming restoration on approximately 13 acres of 24 total, despite sustained maintenance activities. Greening, with landowner, stakeholder, and peer input, will develop a revised management plan based on the evaluations and initial approach, and guided by the results of the grazing trials underway and pending bumblebee surveys. Greening will then implement these corrective actions at this site, and conduct an initial evaluation of these corrective actions at the end of the grant period.

Summary Budget Information for Activity 1:

ENRTF Budget: \$ 61,000
Amount Spent: \$ 0
Balance: \$ 61,000

Outcome	Completion Date
1. Revise management plan and identify corrective actions at Pilot Knob	August 15, 2016
2. Implement Pilot Knob corrective actions; evaluate	June 30, 2019
3. Evaluate 18 restoration projects from 2011 appropriation	June 30, 2019

Activity Status as of February 1, 2017:

Activity Status as of August 1, 2017:

Activity Status as of February 1, 2018:

Activity Status as of August 1, 2018:

Activity Status as of August 19, 2019:

Final Report Summary:

V. DISSEMINATION:

Description:

Greening anticipates periodic reporting on this project through our various electronic media outlets: The Greening monthly e-newsletter (reaches 7,000) (subscribe at www.greatrivergreening.org); Facebook (1175 likes) (Like us on Facebook <https://www.facebook.com/greatrivergreening>); and Twitter (475 followers) (Follow us on Twitter <https://twitter.com/greatrivergreen>).

Results of this ninth phase of the Metro Conservation Corridors (MeCC) partnership appropriation will also be shared with colleagues including the seven other organizations in the MeCC partnership; our landowning partners; and other avenues as the opportunity arises.

Status as of February 1, 2017:

Status as of August 1, 2017:

Status as of February 1, 2018:

Status as of August 1, 2018:

Status as of February 1, 2019:

Final Report Summary:

VI. PROJECT BUDGET SUMMARY:

A. ENRTF Budget Overview:

Budget Category	\$ Amount	Overview Explanation
Personnel:	\$ 125,000	Staff time for oversight, volunteer events, restoration implementation, procuring services, vegetation monitoring, soil sampling. Project Manager / Ecologist: \$21,000; 12% FTE for 3 years. Grant Management Assistant: \$7,000 5.6% FTE for 3 years. 2 Ecologists: \$33,000; 9% FTE each for 3 years. Director of Conservation Programs: \$4,000; 2% FTE for 3 years. Volunteer Manager: \$10,000; 6.3% FTE for 3 years. Field Coordinator: \$16,000; 13% FTE for 3 years. 3 Restoration Technicians: \$24,000; 9% FTE each for 3 years. Director of Finance: \$8,000; 3.3% FTE for 3 years. Administrative Assistant: \$2,000. 1.3% FTE for 3 years.
Professional/Technical/Service Contracts:	\$216,000	\$188,000 for habitat restoration/enhancement activities. \$23,000 for erosion control, trail routing and surface improvements at Wolsfeld Woods SNA. \$5,000 for vegetation monitoring for conservation haying/grazing application. Vendor(s) TBD (competitive bid process with consideration to CCM).
Equipment/Tools/Supplies:	\$148,000	\$3,000 for restoration tools. \$145,000 for restoration supplies including seed, plants, mulch, herbicide, fencing.
Travel Expenses in MN:	\$10,000	In-state vehicle mileage
Other: Volunteer Event Supplies	\$10,000	650 volunteers total @≤\$11/volunteer for

		approved healthy food/beverage, gloves, safety glasses, boot brushes, table/chair/portable toilet rentals, hand tools; plus 5 lg tent rentals @ \$450 each, and 3 overnight security contracted services @ \$200 ea.
TOTAL ENRTF BUDGET:		\$509,000

Explanation of Use of Classified Staff: N/A

Explanation of Capital Expenditures Greater Than \$5,000: N/A

Number of Full-time Equivalents (FTE) Directly Funded with this ENRTF Appropriation: 1.9

Number of Full-time Equivalents (FTE) Estimated to Be Funded through Contracts with this ENRTF Appropriation: 1.3

B. Other Funds:

Source of Funds	\$ Amount Proposed	\$ Amount Spent	Use of Other Funds
Non-state			
City of Lindstrom (cash)	\$ 20,000	\$	Allemansratt Park
City of St. Louis Park (cash)	\$ 20,000	\$	Westwood Nature Center II
Minnesota Valley Trust (cash)	\$ 15,000	\$	Old Cedar Avenue Bridge
Minnesota Valley National Wildlife Refuge / USFWS (in-kind)	\$ 7,000	\$	Old Cedar Avenue Bridge: Field implementation for bulk of woody invasive removal; trail and viewing platform installation including bathroom facilities; adjacent parking lot improvements; coordination with City of Bloomington.
City of St. Paul Park (cash)	\$ 5,000	\$	Lions Levee Park
South Washington Watershed District (cash)	\$ 5,000	\$	Lions Levee Park
Minnehaha Creek Watershed District (cash)	\$ 30,000	\$	Mud Lake, Painters Creek I, II, III
City of Mendota Heights (cash)	\$ 10,000	\$	Pilot Knob Hill
Private Donors, TBD (cash)	\$ 5,000	\$	Volunteer Events
Volunteers (in-kind)	\$ 24,000	\$	650 volunteers at 2.5 hours each
State			
MN-DNR SNA Program (in-kind)	\$ 3,000	\$	Wolsfeld Woods SNA coordination, invasives control
TOTAL OTHER FUNDS:	\$ 144,000	\$	

VII. PROJECT STRATEGY:

A. Project Partners:

Contributing Partners

City of Lindstrom (Allemansratt Park): Non-state funding

MN-DNR SNA Program (Wolsfeld Woods SNA): State in-kind services

City of St. Louis Park (Westwood Nature Center II): Non-state funding

Minnesota Valley Trust (Old Cedar Avenue Bridge): Non-state funding
 Minnesota Valley National Wildlife Refuge (Old Cedar Avenue Bridge): Non-state in-kind services
 City of St. Paul Park (Lions Levee Park): Non-state funding
 South Washington Watershed District (Lions Levee Park): Non-state funding
 Minnehaha Creek Watershed District (Mud Lake, Painters Creek): Non-state funding
 City of Mendota Heights (Pilot Knob Hill): Non-state funding
 Private Donors (tbd): Non-state funding and in-kind services
 Volunteers (tbd): Non-state in-kind services

Dissemination and Coordination

Metro Conservation Corridors Partnership (MeCC) organizations: In-kind project development, dissemination.
 Minnesota Land Trust: MeCC Partnership coordination, funded by 2015 Trust Fund allocation.

B. Project Impact and Long-term Strategy:

Much of our remaining habitat in the metro area is threatened by conversion, fragmentation, altered hydrology, invasive species, and a public that is spending less time in natural areas. Restoration and management of these habitats is needed now and into the future to retain Minnesota’s natural heritage for generations, protect rare and declining species, protect our clean water, and reconnect habitat corridors. Advancing the practice and techniques for restoration will help to meet the need for effective restoration, now and into the future.

Engaging volunteers in meaningful, appropriate and transferrable outdoor restoration activities on natural areas will allow community members to learn, enjoy, and understand the restoration process, which are key elements for safeguarding our natural treasures through time.

At the site level, maintenance of the restoration becomes the landowner’s responsibility at the end of the grant period. We anticipate seeking future ENRTF funding to return to these projects to perform later evaluations. Opportunities to restore new sites, and subsequent phases covering additional acres/shoreline will likely continue into the future. The mapped Metro Conservation Corridors provide direction as to where our efforts are best focused, while lessons learned from evaluation and corrective actions will contribute to advancing restoration techniques and practices.

C. Funding History:

Funding Source and Use of Funds	Funding Timeframe	\$ Amount
ENRTF M.L. 2009. MeCC V: Restore/Enhance Significant Habitat	7/1/09-6/30/11	\$155,000
ENRTF M.L. 2009. MeCC V - TPL's Critical Land Protection Program (Allemansratt Park <i>Acquisition Portion</i>)	7/1/09-6/30/11	\$318,000
ENRTF M.L. 2011. MeCC VI: Restoring our Lands and Waters	7/1/11-12/1/14	\$400,000
ENRTF M.L. 2013. MeCC VII: Restoring our Lands and Waters	7/1/13-6/30/16	\$208,000
ENRTF M.L. 2014. Upland and Shoreline Habitat Restoration in the Greater Metropolitan Area	7/1/14-6/30/17	\$300,000
ENRTF M.L. 2015. MeCC VIII: Enhancing Restoration Techniques for Improved Climate Resilience and Pollinator Conservation	7/1/15-6/30/18	\$400,000

VIII. FEE TITLE ACQUISITION/CONSERVATION EASEMENT/RESTORATION REQUIREMENTS:

A. Parcel List:

See Attached

B. Acquisition/Restoration Information:

All restoration activities completed with these funds will occur on land permanently protected by a conservation easement or public ownership.

Restoration and management plans will, to the extent practical, be consistent with the highest quality conservation and ecological goals for the restoration site. In determining the restoration target community, consideration will be given to soil, geology, topography, historic vegetation, existing conditions, anticipated future conditions, size, and location. Plans will include the proposed timetable for implementing the restoration, including site preparation, establishment of diverse plant species, maintenance, and additional enhancement to establish the restoration; identify long-term maintenance and management needs of the restoration and how the maintenance, management, and enhancement will be financed; and take advantage of the best available science and include innovative techniques to achieve the best restoration. These plans will be stored electronically in project folders.

All restoration projects and habitat improvements will follow the Board of Soil and Water Resources "Native Vegetation Establishment and Enhancement Guidelines" when developing specifications for RFPs and contracts; and developing species lists for contracts, volunteer events, and field staff implementation. Implementation of the latest developments in pollinator habitat management will be achieved by periodically reviewing various species lists, latest research results, and with a current emphasis on early spring food sources, nesting habitat, and identifying and maintaining invertebrate refugia during the restoration process.

Maintenance of the restorations becomes the responsibility of the landowners after the grant period; Greening requires a statement accepting that responsibility to be signed by the landowners.

Greening will continue to give consideration to CCM for restoration activities, particularly their summer youth crews.

Evaluations will be completed at the site of each restoration activity, upon activity completion and three years after completion. Refining Greening's protocol for 'third year' evaluations is central to the purpose of Activity 2. Restorations will be evaluated relative to the stated goals and standards in the restoration plan, current science, and, when applicable, the Board of Water and Soil Resources' native vegetation establishment and enhancement guidelines. Evaluations will determine whether the restorations are meeting planned goals, identify any problems with the implementation of the restorations, and, if necessary, give recommendations on improving restorations. The evaluations will focus on improving future restorations.

IX. VISUAL COMPONENT or MAP(S):

See Attached.

X. RESEARCH ADDENDUM:

N/A

XI. REPORTING REQUIREMENTS:

Periodic work plan status update reports will be submitted no later than February 1, 2017, August 1, 2017, February 1, 2018, August 1, 2018 and February 1, 2019. A final report and associated products will be submitted between June 30 and August 15, 2019.

**Environment and Natural Resources Trust Fund
M.L. 2016 Project Budget**



Project Title: Upland, Wetland, and Shoreline Restoration in Greater Metropolitan Area

Legal Citation:

Project Manager: Wiley Buck

Organization: Great River Greening

M.L. 2016 ENRTF Appropriation: \$509,000

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

Date of Report: December 4, 2015

ENVIRONMENT AND NATURAL RESOURCES TRUST FUND BUDGET	Activity 1 Budget	Amount Spent	Activity 1 Balance	Activity 2 Budget	Amount Spent	Activity 2 Balance	TOTAL BUDGET	TOTAL BALANCE
BUDGET ITEM	<i>Restore Upland, Wetland, & Shoreline Habitat; Engage Volunteers</i>		<i>Advance Restoration Practices with Evaluations and Corrective Actions</i>					
Personnel (Wages and Benefits)	\$105,000		\$105,000	\$20,000		\$20,000	\$125,000	\$125,000
Project Manager / Ecologist: \$21,000 (78% salary, 22% benefit); 12% FTE for 3 years.								
Grant Management Assistant: \$7,000 (80% salary, 20% benefit) 5.6% FTE for 3 years.								
2 Ecologists: \$33,000 (85% salary, 15% benefits); 9% FTE each for 3 years								
Director of Conservation Programs: \$4,000 (93% salary, 7% benefits); 2% FTE for 3 years.								
Volunteer Manager: \$10,000 (87% salary, 13% benefits); 6.3% FTE for 3 years.								
Field Coordinator: \$16,000 (86% salary, 14% benefits); 13% FTE for 3 years.								
3 Restoration Technicians: \$24,000 (93% salary, 7% benefits); 9% FTE each for 3 years.								
Director of Finance: \$8,000 (81% salary, 19% benefits); 3.3% FTE for 3 years.								
Administrative Assistant: \$2,000 (86% salary, 14% benefits). 1.3% FTE for 3 years.								
Professional/Technical/Service Contracts								

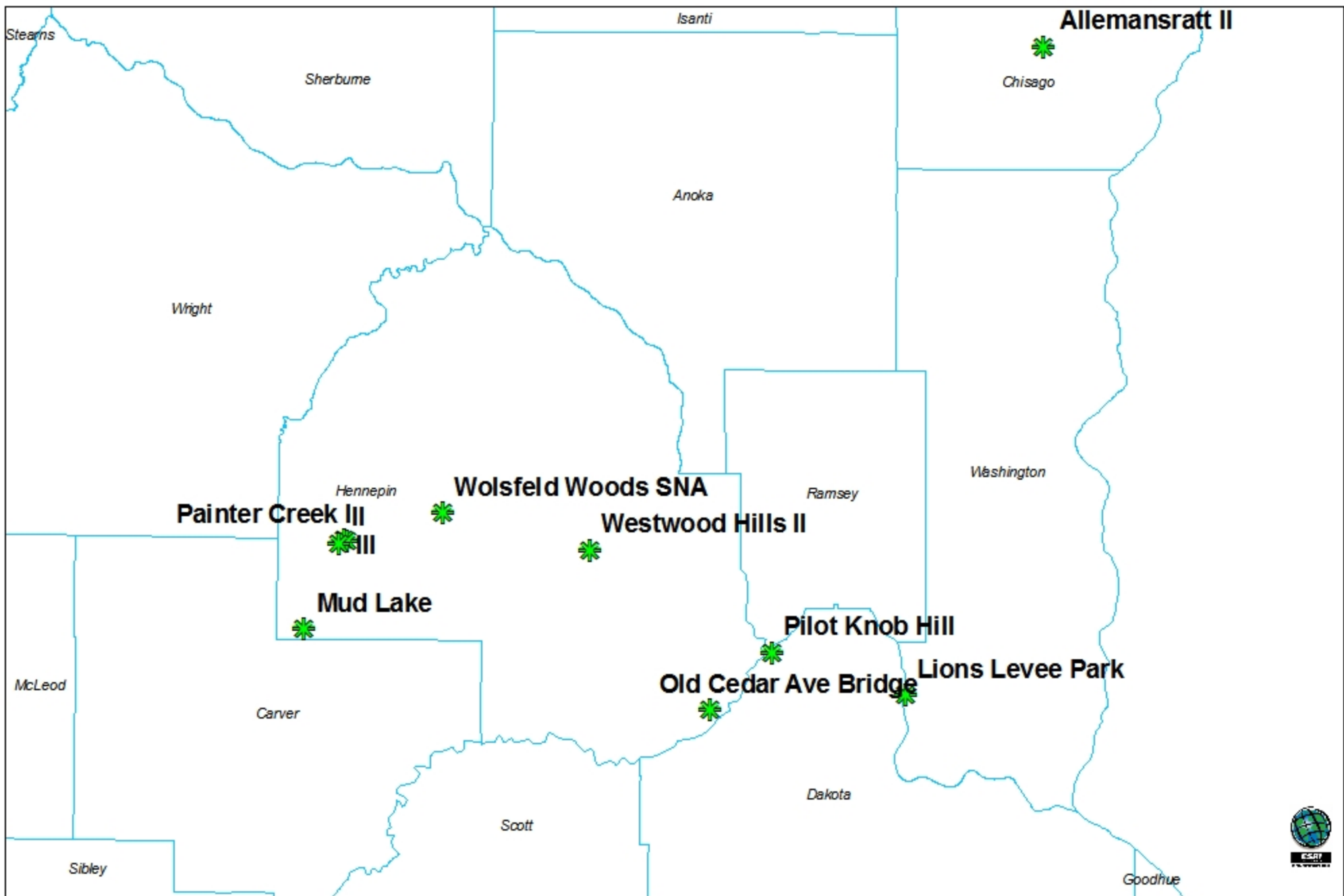
Habitat restoration/enhancement activities including site preparation, seed installation, earthwork, invasive species control, mowing/haying, grazing services, prescribed burning, planting, watering, fencing, mowing. Vendors TBD (competitive bid process with consideration to CCM).	\$153,000		\$153,000	\$35,000		\$35,000	\$188,000	\$188,000
Erosion control, trail routing and surface improvements at Wolsfeld Woods SNA. Vendor(s) TBD (competitive bid process with consideration to CCM).	\$23,000		\$23,000			\$0	\$23,000	\$23,000
Vegetation monitoring for conservation haying/grazing application. Vendor(s) TBD (competitive bid process with consideration to CCM).	\$5,000		\$5,000			\$0	\$5,000	\$5,000
Equipment/Tools/Supplies								
Restoration tools: Purchase of personal protective equipment; repair and maintenance of mowers, ATV, UTV, sprayers.	\$3,000		\$3,000			\$0	\$3,000	\$3,000
Restoration supplies: Seed, plants, mulch, herbicide, fencing	\$140,000		\$140,000	\$5,000		\$5,000	\$145,000	\$145,000
Travel expenses in Minnesota								
In-state vehicle mileage to/from sites, meetings, purchases	\$9,000		\$9,000	\$1,000		\$1,000	\$10,000	\$10,000
Other								
Volunteer Event Supplies: 650 volunteers total @≤\$11/volunteer for approved healthy food/beverage, gloves, safety glasses, boot brushes, table/chair/portable toilet rentals, hand tools; plus 5 lg tent rentals @ \$450 each, and 3 overnight security contracted services @ \$200 ea.	\$10,000		\$10,000			\$0	\$10,000	\$10,000
COLUMN TOTAL	\$448,000	\$0	\$448,000	\$61,000	\$0	\$61,000	\$509,000	\$509,000

**Environment and Natural Resources Trust Fund
M.L. 2016 Parcel List**

Project Title: Upland, Wetland, and Shoreline Restoration in Greater Metropolitan Area
Legal Citation:
Project Manager Name: Wiley Buck
Organization: Great River Greening
M.L. 2016 ENRTF Appropriation: \$ 509,000
Project Length and Completion Date: 3 Years, June 30, 2019
Date of Report: December 4, 2015

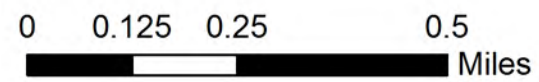
#	Acquisition or Restoration Parcel Name	Geographic Coordinates Format: [Deg.]° [Min.]' [Sec.]" [Hemis.]		Estimated Cost	County	Site Significance	Activity Description	# of Acres	# of Shoreline Miles	Type of Landowner	Proposed Fee Title or Easement Holder (if applicable)	Status
		Latitude	Longitude									
1	Allemansratt Park III	45°23'58.72" N	92°50'42.408" W	\$ 56,000	Chisago	High quality mosaic of forest and wetland	Woody invasive removal, understory enhancement	20		Municipal		Phase I and II underway
2	Wolsfeld Woods SNA II	45 0' 10.21"	93 34' 14.02"	\$ 142,000	Hennepin	Primarily Oak Maple Basswood forest	Trail design and improvements to help alleviate sheet erosion; buckthorn control; 2ac oak woodland restoration; garlic mustard reduction and containment; community outreach and engagement.	60		State		Phase I underway
3	Westwood Hills Nature Center II	44 58 15.972 N	93 23' 15.15 W	\$ 59,000	Hennepin	FIN Lake, Maple Baswood, Oak Savanna, Shoreland, Demonstrations, Pollinator Patches.	Restoration of Oak Savanna, Shorelands, Maple Basswood Woodland, Demonstrations, Pollinator Patches	18	0.06	Municipal		Developing
4	Lions Levee Park	44 50' 42.95"	93 0' 26.1"	\$ 11,000	Washington	Mississippi River terrace; oaks.	Woody invasive removal; prairie restoration from turf.	5		Municipal		Shoreline underway with other funds
5	Old Cedar Ave Bridge Trailhead	44°49'54.658 "N	93°14'37.914 "W	\$ 65,000	Hennepin	Located in the MN River Valley NWR. Wildlife habitat.	Intensive restoration of highly disturbed site to Native species habitat with emphasis on underserved community engagement, as part of trail master plan.	12		Federal		Site prep underway with landowner in-kind
6	Mud Lake	44°54'0.05"N	93°43'59.087 "W	\$ 6,000	Hennepin	Large wetland complex with surrounding upland.	Prairie restoration of old field	3		Watershed District		Developing
7	Painters Creek I	44°58'37.399 "N	93°40'59.557 "W	\$ 47,000	Hennepin	Sedge meadow, wet prairie, and wet-mesic woodland	Woody invasive removal. Target community to be determined with mgmt plan, due to unique existing conditions, adjacency, and working lands considerations.	16		Watershed District		Developing
8	Painters Creek II	44°58'27.209 "N	93°41'23.442 "W	\$ 22,000	Hennepin	Oak-maple-basswood forest	Forest and wetland edge restoration.	10		Watershed District		Developing
9	Painters Creek III	44°58'34.487 "N	93°41'9.775" W	\$ 40,000	Hennepin	Upland and wetland mosaic; hydrologically connected to Lk Minnetonka. Potential riparian buffer demonstration site for landowner	Upland and shoreland restoration, cattail management to increase diversity, all with a monitored haying component.	9	0.11	Watershed District		Developing
10	Restoration Evaluations	various	various	\$ 18,000	Anoka, Dak., Henn., Isanti, Ramsey, Scott, Wash.	Advance restoration practices and techniques, by returning to sites and evaluating restorations	'Third Year' Restoration evaluations on 18 projects from 2011 (MeCC VI) appropriation	0		Public, and Private with Easement		Developing
11	Pilot Knob Hill	44°52'54.796 "N	93°10'7.336" W	\$ 43,000	Dakota	Located in big river confluence, in township identified with need for savanna and prairie for SGCN	Revise management plan, implement corrective actions on portions of restoration that are not meeting goals	13		Municipal		Developing

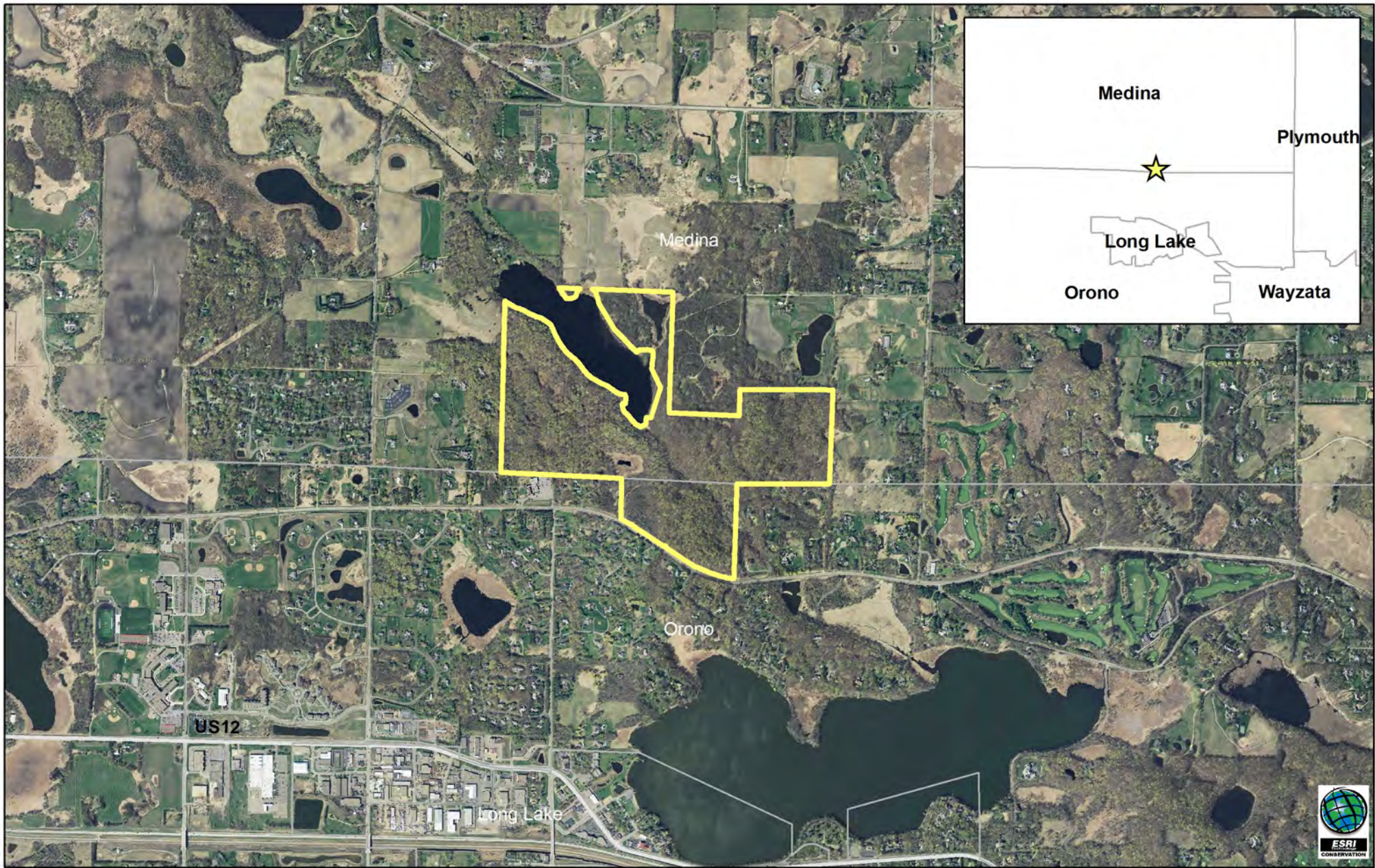
NOTES: Projects 1-9 comprise Activity 1; 10-11 comprise Activity 2.





Allemansratt III

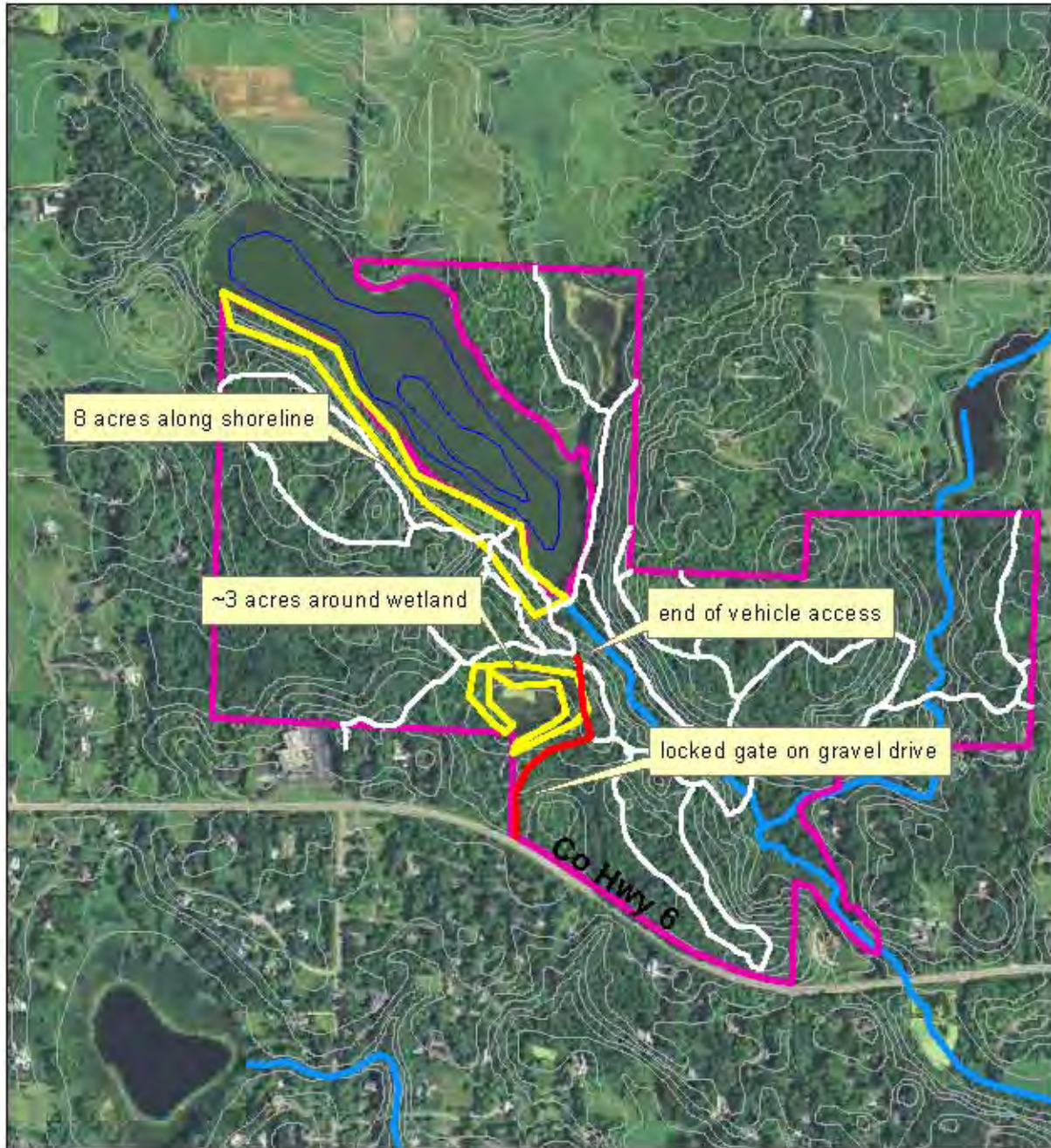




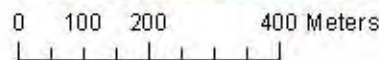
Wolsfeld Woods SNA II







**Wolsfeld Woods SNA : Proposed Buckthorn Removal Areas
Winter 2015-2016**



Twp 118N R23W, Sections 26 & 27



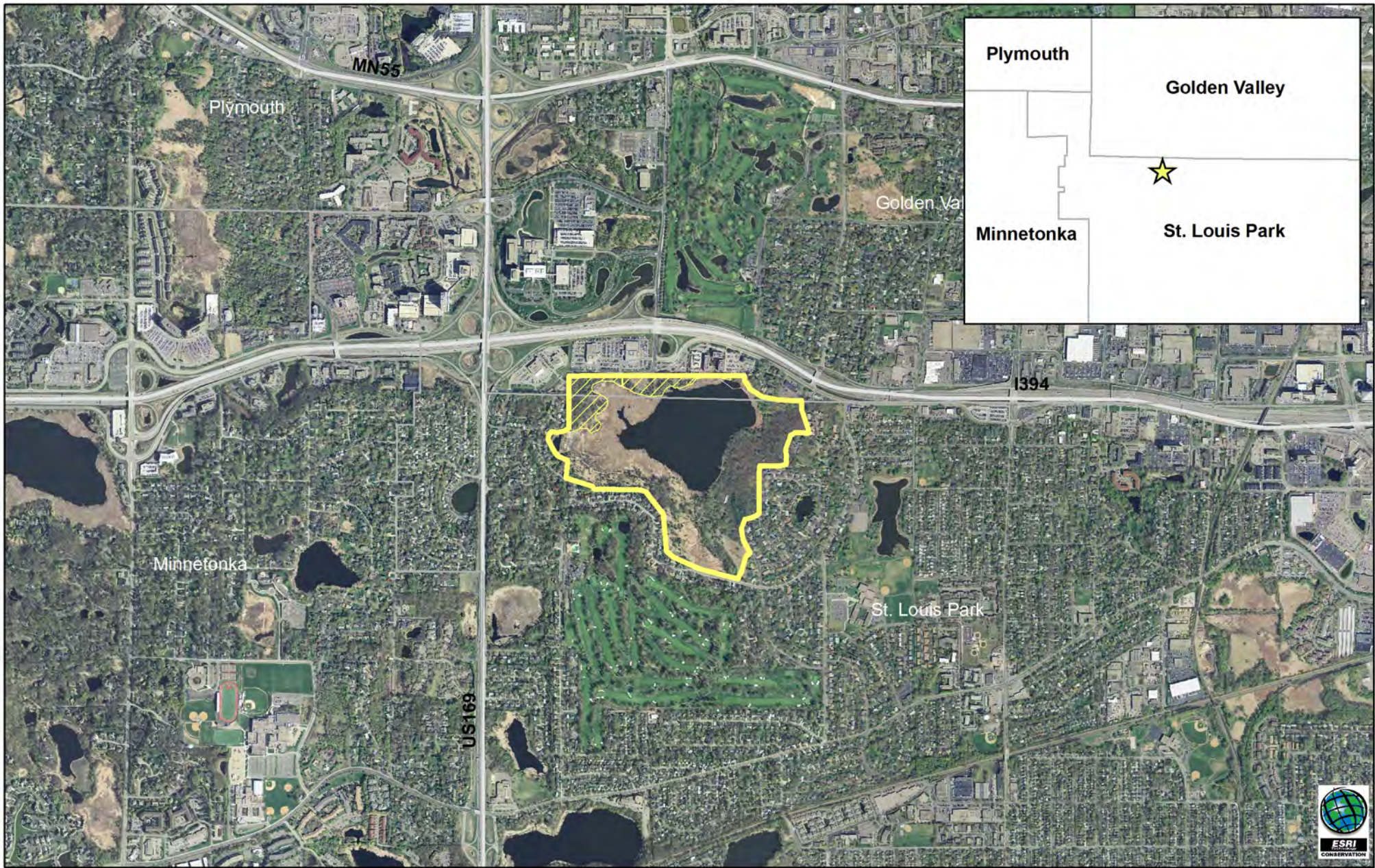
Legend

-  Wolsfeld Woods Trail System
-  Buckthorn removal
-  Wolsfeld Woods SNA (220 ac)
-  Gravel drive through locked gate

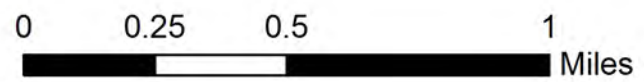
Proposed project areas for buckthorn removal by Great River Greening with their LCCMR grant. Work to be contracted by GRG.

Both glossy and common buckthorn in project areas.

Map prepared 11/17/15, L. Mottl

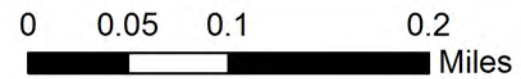


Westwood Hills Nature Center II



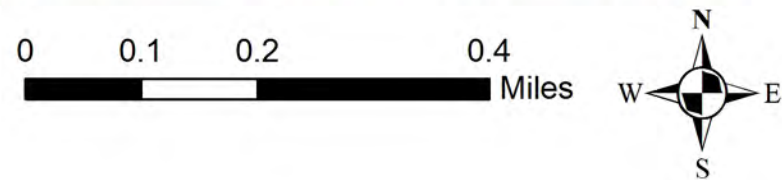


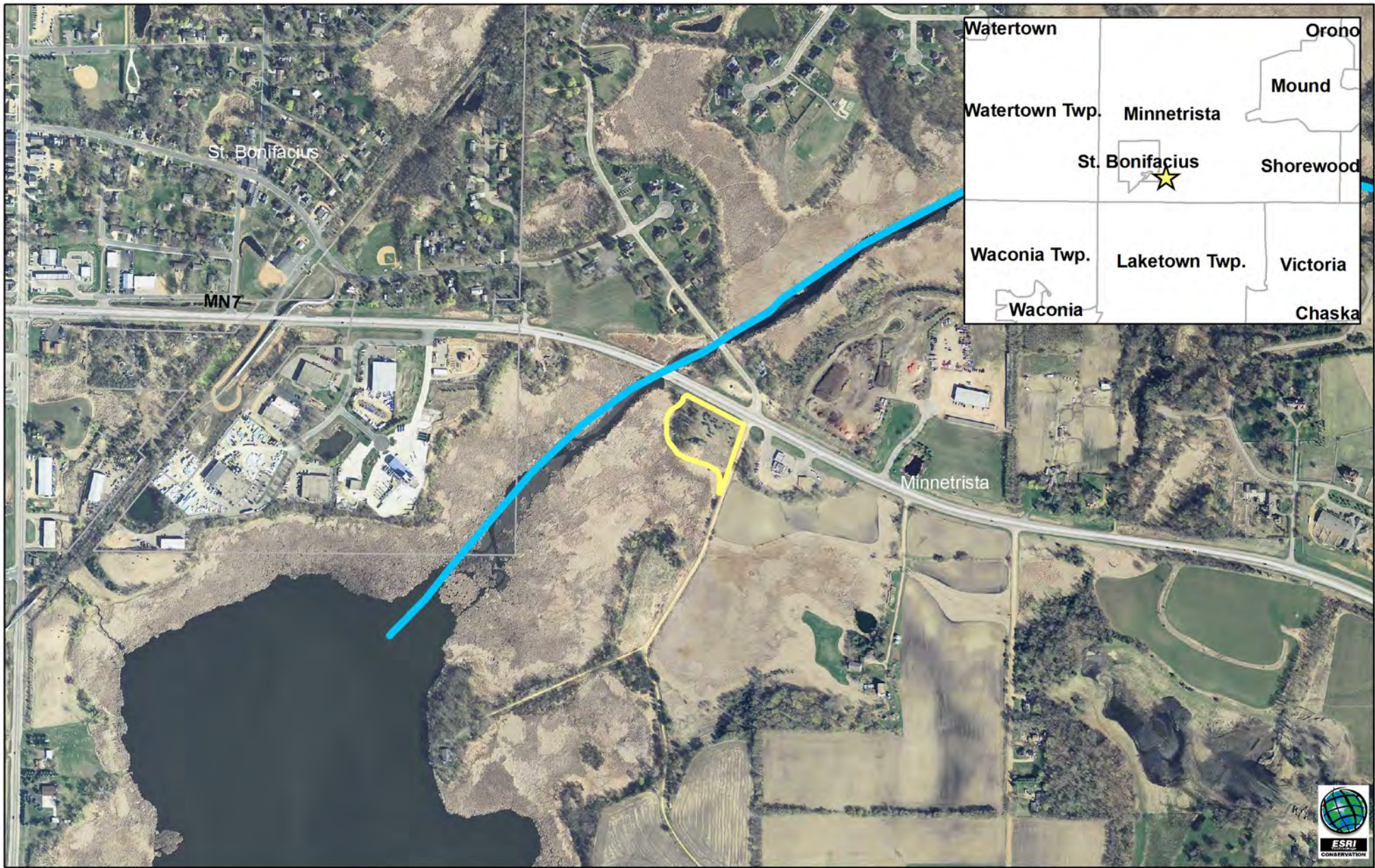
Lions Levee Park



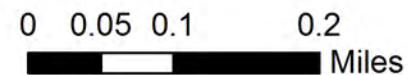


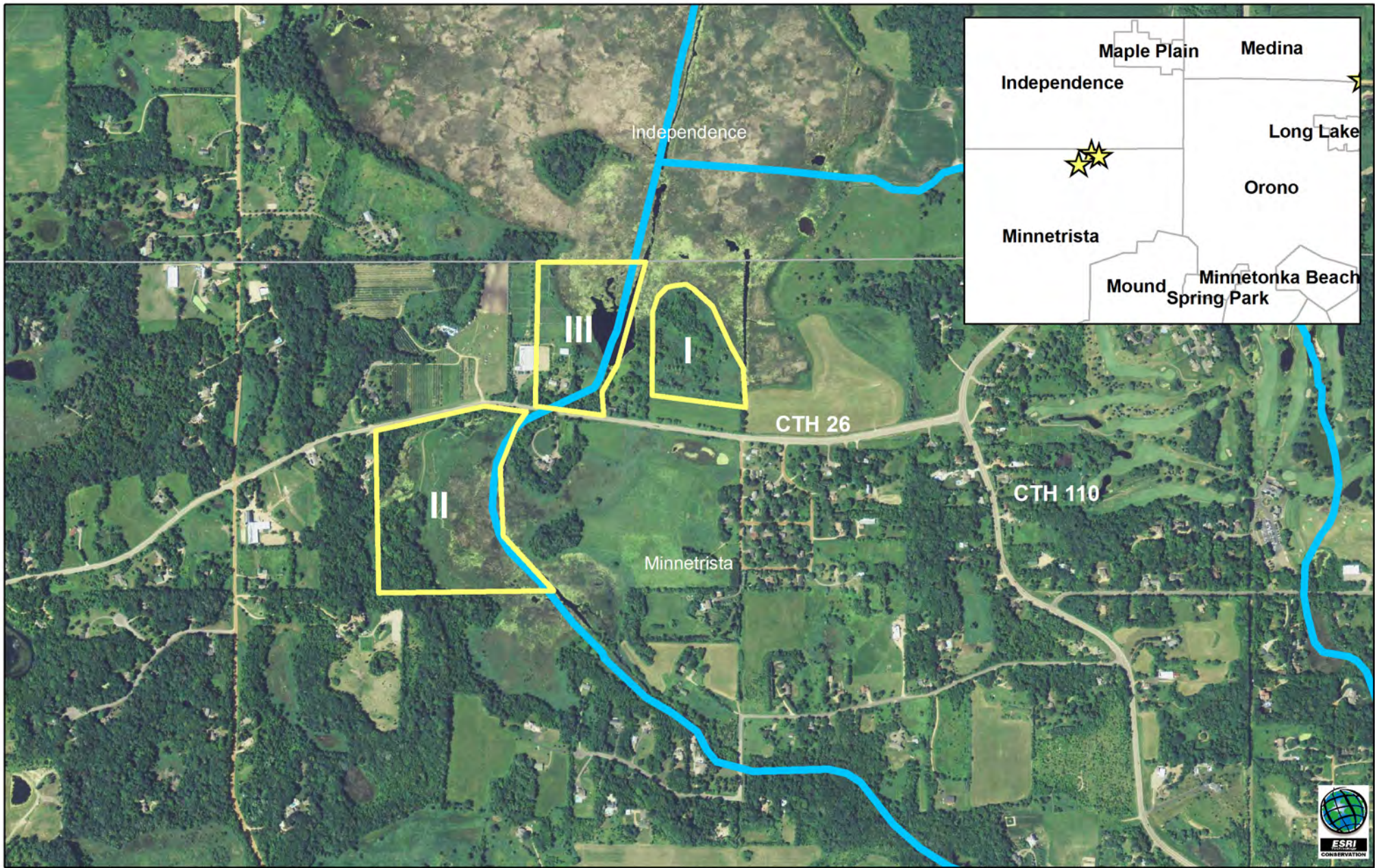
Old Cedar Ave Bridge



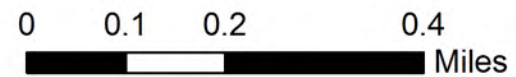


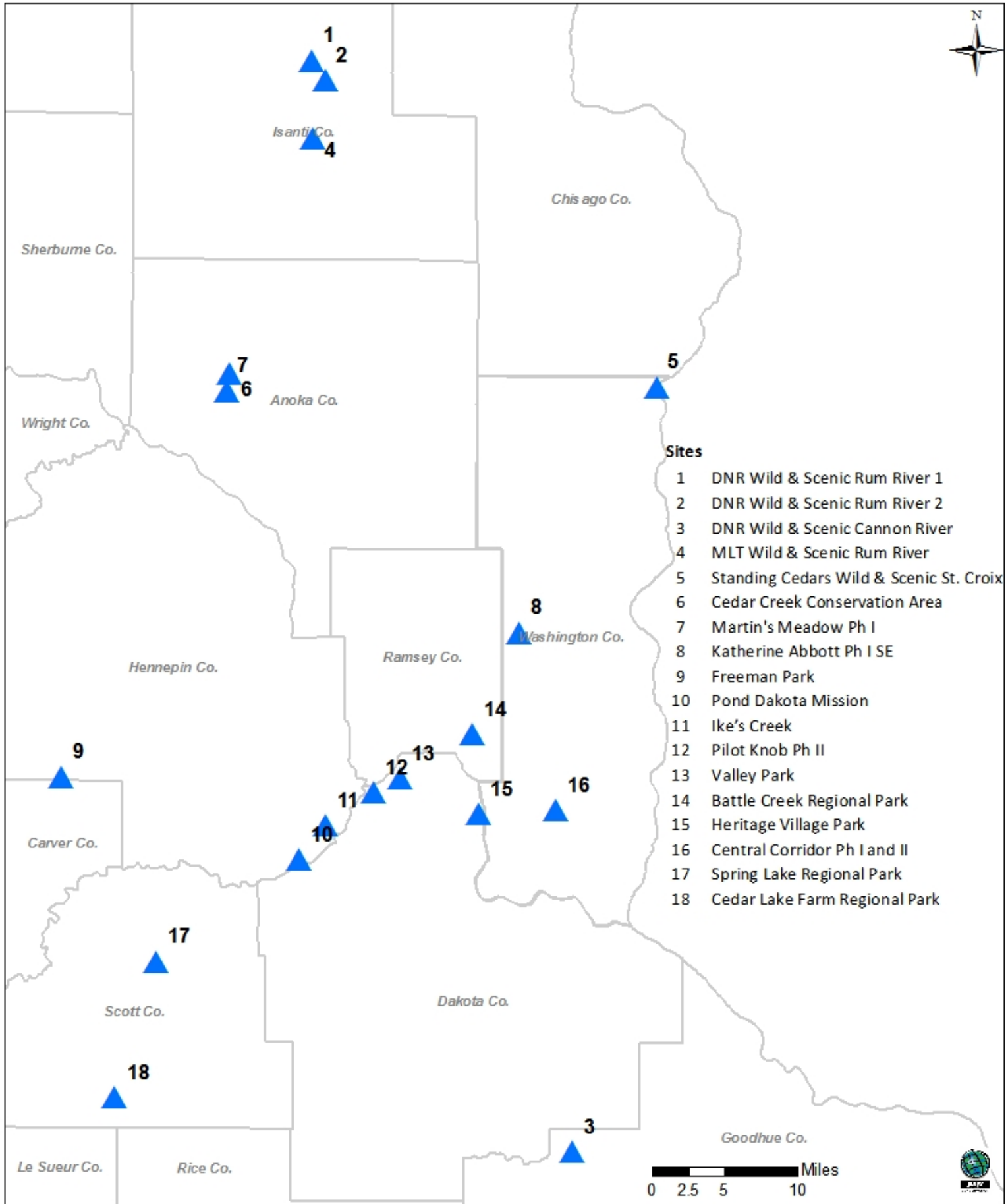
Mud Lake





Painter's Creek I-III







Pilot Knob Hill Revisited

