

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

Date of Report: May 29, 2016

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. 186, Sec. 2, Subd. 08g

Appropriation Language:

\$509,000 the second year is from the trust fund to the commissioner of natural resources for an agreement with Great River Greening to restore approximately 150 acres of forest, prairie, woodland, and wetland and 0.15 miles of shoreline throughout the greater Twin Cities metropolitan area, using volunteers, and to conduct restoration evaluation on previously restored parcels. A list of proposed restorations and evaluations must be provided as part of the required work plan. Plant and seed materials must follow the Board of Water and Soil Resources' native vegetation establishment and enhancement guidelines. This appropriation is available until June 30, 2019, by which time the project must be completed and final products delivered.

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 144 acres, 0.25 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 144 acres of forest, prairie, woodland, and wetland; and 0.25 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 149 acres incl. management plan and initial evaluation; implement	June 30, 2019
conservation haying/grazing on >5ac; improve trails in 60 acres	
2. Restore 0.25 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. 04l) 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	<i>1</i> 1.	2017:
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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 BUDGE	T: \$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: 2.6

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

B. Other Funds:

	\$ Amount	\$ Amount	
Source of Funds	Proposed	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	7/1/09-6/30/11	\$155,000
Habitat		
ENRTF M.L. 2009. MeCC V - TPL's Critical Land Protection	7/1/09-6/30/11	\$318,000
Program (Allemansratt Park Acquisition Portion)		
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	7/1/14-6/30/17	\$300,000
the Greater Metropolitan Area		
ENRTF M.L. 2015. MeCC VIII: Enhancing Restoration	7/1/15-6/30/18	\$400,000
Techniques for Improved Climate Resilience and Pollinator		
Conservation		

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

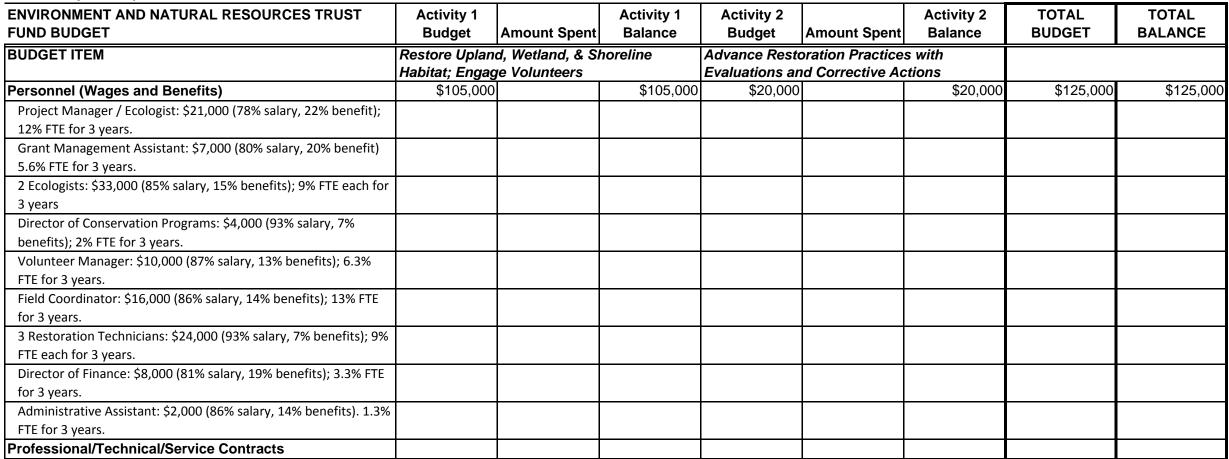
Legal Citation: M.L. 2016, Chp. 186, Sec. 2, Subd. 08g

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: May 29, 2016



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COLUMN TOTAL	\$448,000	\$0 \$448	000 \$61,000	\$0	\$61,000	\$509,000	\$509,000
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				V o	ψ10,000	Ψ10,000
Volunteer Event Supplies: 650 volunteers total @≤\$11/volunteer	\$10,000	\$10.	000		\$0	\$10,000	\$10,000
Other							
In-state vehicle mileage to/from sites, meetings, purchases	\$9,000	\$9,	\$1,000		\$1,000	\$10,000	\$10,000
Travel expenses in Minnesota							
Restoration supplies: Seed, plants, mulch, herbicide, fencing	\$140,000	\$140	\$5,000		\$5,000	\$145,000	\$145,000
Restoration tools: Purchase of personal protective equipment; repair and maintenance of mowers, ATV, UTV, sprayers.	\$3,000	\$3,	000		\$0	\$3,000	\$3,000
Equipment/Tools/Supplies	\$2,000	ው ሳ	200		\$0	\$2,000	#2.000
consideration to CCM).							
Vegetation monitoring for conservation haying/grazing application. Vendor(s) TBD (competitive bid process with	\$5,000	\$5,	000		\$0	\$5,000	\$5,000
Wolsfeld Woods SNA. Vendor(s) TBD (competitive bid process with consideration to CCM).	# 5.000	0.5	200		0.0	45.000	45.000
Erosion control, trail routing and surface improvements at	\$23,000	\$23	000		\$0	\$23,000	\$23,000
bid process with consideration to CCM).							
planting, watering, fencing, mowing. Vendors TBD (competitive							
control, mowing/haying, grazing services, prescribed burning,							
Habitat restoration/enhancement activities including site preparation, seed installation, earthwork, invasive species	\$153,000	\$153	\$35,000		\$35,000	\$188,000	\$188,000

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

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

Legal Citation: M.L. 2016, Chp. 186, Sec. 2, Subd. 08g 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: May 29, 2015

	Acquisition or Restoration	Format: [De	Coordinates eg.]° [Min.]' [Hemis.]	Es	stimated					# of Shoreline	Type of	Proposed Fee Title or Easement Holder	
#	Parcel Name	Latitude	Longitude		Cost	County	Site Significance	Activity Description	# of Acres	Miles	Landowner	(if applicable)	Status
								Woody invasive removal including					
		45°23'58.72"					High quality mosaic of forest and	volunteer event; understory					Phase I and II
1.1	Allemansratt Park III	N	8"W	\$	56,000	Chisago	wetland	enhancement	25		Municipal		underway
								Trail design and improvements to					
								help alleviate sheet erosion;					
								buckthorn control; 2ac oak					
								woodland restoration; garlic					
	\A/= =f= = \A/=== = CN A		93 34'				Driversily Oak Martle Bearing	mustard reduction and					Dhasa I
4.2	Wolsfeld Woods SNA	45 01 40 24 11		Ś	4.42.000		Primarily Oak Maple Basswood	containment; community outreach	50		CI.I.		Phase I
1.2	II	45 0' 10.21"	14.02"	\$	142,000	Hennepin	forest FIN Lake, Maple Baswood, Oak	and engagement. Restoration of Oak Savanna,	50		State		underway
							Savanna, Shoreland,	Shorelands, Maple Basswood					
	Westwood Hills	44 58 15.972	02 22' 15 15				Demonstrations, Pollinator	Wooodland, Demonstrations,					
13	Nature Center II	N 13.372	W	\$	59,000	Hennepin	Patches.	Pollinator Patches	18	0.06	Municipal		Developing
1.3	racare center ii	44 50'	**	ب	33,000	псипери	i decires.	5ac Woody invasive removal; prairie	10	0.00	iviailicipai		Unlikely to
1 4	Lions Levee Park	42.95"	93 0' 26.1"	Ś	_	Washington	Mississippi River terrace; oaks.	restoration from turf.	0		Municipal		move forward.
	Elolis Ecvec i dik	.2.33	33 0 20.1	· ·		***d5:migcon	imississippi iiivei terracej cansi	Intensive restoration of highly					ove ro. wara.
								disturbed site to Native species					
								habitat with emphasis on					Site prep
								underserved community					underway with
	Old Cedar Ave Bridge	44°49'54.65	93°14'37.91				Located in the MN River Valley	engagement, as part of trail master					landowner in-
1.5	Trailhead	8"N	4"W	\$	65,000	Hennepin	NWR. Wildlife habitat.	plan.	12		Federal		kind
		44°54'0.05"	93°43'59.08				Large wetland complex with				Watershed		
1.6	Mud Lake	N	7"W	\$	6,000	Hennepin	surrounding upland.	Prairie restoration of old field	3		District		Developing
								Woody invasive removal. Target					
								community to be determined with					
								mgmt plan, due to unique existing			l		
			93°40'59.55	١.			Sedge meadow, wet prairie, and	conditions, adjacency, and working			Watershed		
1.7	Painters Creek I	9"N	7"W	\$	47,000	Hennepin	wet-mesic woodland	lands considerations.	16		District		Developing
4.0	0.1.1		93°41'23.44	_	22 000			Forest and wetland edge	10		Watershed		B
1.8	Painters Creek II	9"N	2"W	\$	22,000	Hennepin	Oak-maple-basswood forest Upland and wetland mosaic;	restoration.	10		District		Developing
							hydrologically connected to Lk	Upland and shoreland restoration,					
							Minnetonka. Potential riparian	cattail management to increase					
1		44°58'34.48	93°41'9.775"				buffer demonstration site for	diversity, all with a monitored			Watershed		
1 9	Painters Creek III	7"N	93 41 9.773 W	Ś	40,000	Hennepin	landowner	haying component.	9	0.11	District		Developing
1.5	. acrs creek iii	,		_	40,000	стперт	in a control	Shoreland planting incl. volunteer		0.11	2.561166		2 creioping
								event, for habitat and					
		44° 57'	93° 50'					demonstration, with fishing					
1.10	Rick Johnson Park	56.1558"	38.763"	\$	6,000	Carver	Crow River shoreline site	structures.		0.08	WMO		Developing
							Urban lake with high water	Convert turf to prairie-savanna;					
1		44° 50'	-93° 22'				quality and low shoreline	install shoreland vegetation incl.					
1.11	Bush Lake	24.936"	52.7154"	\$	5,000	Hennepin	development.	volunteer event.	1	0.05	Municipal		Developing
1						Anoka, Dak.,							
1						Henn., Isanti,	Advance restoration practices and	'Third Year' Restoration evaluations			Public, and		
١.,	Restoration	l .	l .	١,	40.00-	Ramsey, Scott,	techniques, by returning to sites	on 18 projects from 2011 (MeCC VI)	_		Private with		
2.1	Evaluations	various	various	\$	18,000	Wash.	and evaluating restorations	appropriation Revise management plan,	0		Easement		Developing
		1					Located in big river confluence, in	implement corrective actions on					
1		44°52'54.79	93°10'7.336"				township identified with need for	portions of restoration that are not					
2.2	Pilot Knob Hill	6"N	W	Ś	43,000	Dakota	savanna and prairie for SGCN	meeting goals	13		Municipal		Developing
Z.Z		I N	1 * *	ب	45,000	Dakota	Savarina ana prame noi 3001	meeting goals	15	L	iviumcipai	1	Perciohing



Project Locations - Restoring our Lands and Waters





