Lessard-Sams Outdoor Heritage Council
Laws of Minnesota 2014 Final Report

Date: March 02, 2020

Program or Project Title: Minnesota Trout Unlimited Coldwater Fish Habitat Enhancement & Restoration

Funds Recommended: $1,900,000

Manager's Name: John Lenczewski
Organization: Minnesota Trout Unlimited
Address: P O Box 845
City: Chanhassen, MN 55317
Office Number: 612-670-1629
Mobile Number: 612-670-1629
Email: jlenczewski@comcast.net
Website: www.mntu.org

Legislative Citation: ML 2014, Ch. 256, Art. 1, Sec. 2, Subd. 5(f)

Appropriation Language: $1,900,000 in the second year is to the commissioner of natural resources for an agreement with Minnesota Trout Unlimited to restore and enhance habitat for trout and other species in and along coldwater rivers and streams in Minnesota. A list of proposed land restorations and enhancements must be provided as part of the required accomplishment plan.

County Locations: Becker, Carlton, Cook, Dakota, Fillmore, Lake, St. Louis, and Wabasha.

Eco regions in which work was completed:

- Northern Forest
- Southeast Forest
- Metro / Urban

Activity types:

- Enhance

Priority resources addressed by activity:

- Habitat

Summary of Accomplishments:

Minnesota Trout Unlimited enhanced in-stream and riparian habitat for trout and other wildlife along coldwater streams located on public lands and Aquatic Management Area easements across the state. We completed 12 separate projects encompassing 118 acres and 9.3 miles of stream habitat. Leveraging other funding and efficiently contracting projects allowed us to increase the scope of some projects and adjust to changing conditions. We enhanced more acres of habitat and more stream length than originally proposed.

Process & Methods:

Using FY2015 funding from the Outdoor Heritage Fund (“OHF”), Minnesota Trout Unlimited (MNTU) completed twelve projects enhancing fish habitat in and along the following public waters (in these counties):

Spring Valley Creek (Fillmore)
Vermillion River (Dakota)
East Indian Creek (Wabasha)
Lynch Creek (Fillmore)
Trout Run Creek (Fillmore)

Blackhoof River (Carlton)
Coffee Creek (St. Louis)
Kadunce River (Cook)
Little Devil Track River (Cook)
Stewart River (Lake)
Straight River (Becker)

We also completed design work on a Chester Creek project in Duluth, MN.

These projects were completed used methods similar to those used on projects completed by MNTU chapters in the past several years and also incorporated new research to improve project designs and fish and wildlife benefits.

The specific methods used on each stream varied depending upon the distinct natural resource characteristics of each watershed and ecological region, the limiting factors identified for each stream, and the variations in the type and magnitude of poor land uses practices within each watershed. Methods were tailored accordingly, using the best available science, in close consultation with resource professionals within the Minnesota Department of Natural Resources (MNDNR).

Purposes: Each project was designed and completed using techniques selected to accomplish one or more of the following purposes: (a) increase or maintain adult trout abundance; (b) reduce stream bank erosion and associated sedimentation downstream; (c) reconnect streams to their floodplains to reduce negative resource impacts from severe flooding; (d) increase natural reproduction of trout and other aquatic organisms; (e) increase habitat and biodiversity for both invertebrates and other non-game species; (f) be long lasting with minimal maintenance required; (g) improve angler access and participation; and (h) protect productive trout waters from invasive species.

Habitat enhancement methods: Methods used on each project included one or more of the following techniques: (1) sloping back stream banks to both remove accumulated sediments eroded from uplands areas and better reconnect the stream to its floodplain; (2) removing undesirable woody vegetation (invasive box elder, buckthorn, etc.) from riparian corridors to enable removal of accumulated sediments, reduce competition with desirable plant and grass species, and allow beneficial energy inputs (sunlight) to reach the streams; (3) stabilizing eroding stream banks using vegetation and/or rock; (4) selectively installing overhead and other in-stream cover for trout; (5) installing soil erosion prevention measures; (6) mulching and seeding exposed stream banks (including with native prairie plant species where appropriate and feasible); (7) improving or maintaining stream access roads and stream crossings to reduce erosion; (8) fencing grassy riparian corridors, including in such a way as to facilitate managed grazing, in order to prevent damage from over grazing; (9) placing large logs in northern forested streams to restore cover logs removed a half century or more ago; and (10) in northern forested watersheds with little cold groundwater, planting desirable trees in riparian areas to provide shade for the stream channel, help cool the water, and provide a source of future cover logs.

Agricultural area example: Many streams in the agricultural areas of southern and central Minnesota have been negatively impacted by many decades of poor land management practices. The projects in southeast Minnesota used the following approach to address this:

Erosion has led to wider, shallower and warmer streams, as well as excessive stream side sediments which regularly erode, covering food production and trout reproduction areas. In many cases shallow rooted invasive trees have taken over the riparian corridors, out competing native vegetation which better secures soils, and reducing energy inputs to the stream ecosystem. To remedy this, a typical enhancement project will involve several steps. First, invasive trees are removed from the riparian zone and steep, eroding banks are graded by machinery to remove excess sediments deposited here from upland areas. Importantly, this reconnects the stream to its floodplain. Since many of these agricultural watersheds still experience periodic severe flooding, select portions of the stream banks are then reinforced with indigenous rock. In lower gradient watersheds, or watersheds where flows are more stable, little or no rock is used. After enhancement work is completed the streams flow faster and become deeper, keeping them cooler and providing natural overhead cover through depth and the scouring of sediments deposited by decades of erosion.

Second, overhead cover habitat is created. Bank degradation and the removal of native prairie or hardwoods have dramatically decreased protective overhead cover in the riparian zone. Two methods are used to remedy this situation: increasing the stream's depth, which alone provides natural cover to trout, and installing overhead cover structures in select stream banks. Wooden structures or tree trunks are often installed into banks in hydraulically suitable locations and reinforced with rock as a way to restore or recreate the undercut banks which had existed before settlement and agricultural land use altered the more stable flows which had gradually created and maintained them.

Finally, vegetation is reestablished in the re-graded riparian corridor to further stabilize banks and act as buffer strips to improve water quality. Depending upon the specific site conditions, landowner cooperation, and agricultural use, native prairie grasses may be planted along the stream corridors, although often mixed with fast sprouting annual grains to anchor soils the first year. 2019 flooding demonstrated that, due to the unique soils in southeast valley floors, indigenous rock often must be added at the toes of the stream banks.

Taken together, these actions directly enhance physical habitat, and typically increase overall trout abundance, population structure, the number of larger trout, and levels of successful natural reproduction. In addition to the benefits to anglers of increased trout habitat and trout abundance, project benefits extending well downstream include reduced erosion and sedimentation, cooler water temperatures, improved water quality and numerous benefits to aquatic and terrestrial wildlife populations.

Explain Partners, Supporters, & Opposition:

The DNR Fisheries Section was an important partner on every project. We also partnered with the National Fish & Wildlife Foundation, City of Duluth, and others to leverage and spend an additional $507,000 on Fy2015 projects. This allowed us to enhance more acres of habitat than originally proposed, and to deal with drastically changed conditions caused by severe flooding. There was no opposition to any of the projects, but much support and encouragement.

Additional Comments:

Exceptional challenges, expectations, failures, opportunities, or unique aspects of program

Exceptionally rainy years slowed construction and required more follow up re-seeding and maintenance. Thankfully, we have added two year extended vegetation management and maintenance ("warranty") provisions to our contracts. On one southeast project, the unusual 2019 conditions revealed the need for additional enhancements to increase durability. These were made and all work completed within the original budget.

We secured major federal funding for the Blackhoof River. This allowed us to complete more, and larger scale, work. The tradeoff was delay implementing a major channel stabilization/habitat restoration project. The more complicated design (and permitting delays), short construction window (July 1 to September 14), and wet years combined to delay completion until summer 2019.

The flexibility and patience of LSOHC staff to allow us to change work plans to capture leverage, shift work sites, and adjust internal budget category targets was essential to enabling us to maximize habitat outcomes.

Other Funds Received:

- Not Listed

How were the funds used to advanced the program:

Not Listed

What is the plan to sustain and/or maintain this work after the Outdoor Heritage Funds are expended:

Each enhancement project was designed for long-term ecological and hydraulic stability. Once riparian vegetation becomes well established, no significant maintenance is usually required in order to sustain the habitat outcomes for several decades. Reconnected floodplains allow floodwater to quickly spread out and dissipate energy, reducing the destructive impact of floods. Flood waters typically flatten stream side vegetation temporarily and do not damage the in-stream structures. However, vegetation capable of holding soils well during floods can take 3 years, or longer (especially) in the thin mineral soils of northeast MN. For this reason, our construction contracts have evolved to provide for inspection, maintenance and repair in the second and third years.

We anticipate that long-term monitoring of the integrity of the improvements will be done in conjunction with routine inspections and biological monitoring conducted by local MNDNR staff, Trout Unlimited members, or landowners as appropriate. If there are significant maintenance needs on a project, potential sources of funding and volunteer labor include Trout Unlimited, MNDNR AMA maintenance funding, and other grant funds and organizations. Trout Unlimited volunteers will help provide long-term monitoring and periodic labor.

Outcomes:

The original accomplishment plan stated the program would

Programs in the northern forest region:

- Improved aquatic habitat indicators

How will the outcomes be measured and evaluated?

Improved aquatic habitat indicators can be measured over time through periodic fish population surveys conducted by the MNDNR.

The amount or percentage of exposed coarse substrates, such as gravel and cobble (versus sand and silt), can also be used measure improved aquatic habitat. These coarser substrates provide habitat for aquatic insects, small fish and early life stages of trout. Numerous studies have established the link between increased amounts or percentages of exposed gravel and cobble and increased aquatic health, including increased trout numbers.

Programs in metropolitan urbanizing region:

- A network of natural land and riparian habitats will connect corridors for wildlife and species in greatest conservation need
- Improved aquatic habitat indicators

How will the outcomes be measured and evaluated?

The Vermillion River project enhanced riparian habitat along a key segment connecting the warmer main stem of the river with a major coldwater refuge. Originally prairie-oak savanna, it had become a thick “forest” of buckthorn and short-lived, shallow rooted trees. The buckthorn was removed, as were most riparian trees. We will be able to measure the number and density of prairie grasses and forbes over time.

Improved aquatic habitat indicators will be measured over time through annual fish population surveys conducted by the MNDNR, with assistance from trout Unlimited volunteers.

Programs in southeast forest region:

- Rivers, streams, and surrounding vegetation provide corridors of habitat

How will the outcomes be measured and evaluated?

Our focus is on enhancing trout and other aquatic and riparian habitat. The five southeast projects improved both the in-stream habitat and riparian vegetation along more than 4 miles of stream corridor. The ultimate measure will be the response of trout populations over time, through periodic fish population surveys conducted by the MNDNR. Since regional environmental factors such as spring flooding or drought can influence trout numbers in all streams in southeast MN, periodic population surveys, including of index stations, will be needed to show the population increases attributable to improve habitat.

Budget Spreadsheet

Final Budget line item reallocations are allowed up to 10% and do not need require an amendment to the Accomplishment Plan

Total Amount: $1,900,000

Budget and Cash Leverage

Budget Name	Request	Spent	Cash Leverage (anticipated)	Cash Leverage (received)	Leverage Source	Total (original)	Total (final)
Personnel	$90,000	$65,000	$0	$0		$90,000	$65,000
Contracts	$975,000	$980,300	$70,000	$322,400	Federal; MNTU; City of Duluth	$1,045,000	$1,302,700
Fee Acquisition w/ PILT	$0	$0	$0	$0		$0	$0
Fee Acquisition w/o PILT	$0	$0	$0	$0		$0	$0
Easement Acquisition	$0	$0	$0	$0		$0	$0
Easement Stewardship	$0	$0	$0	$0		$0	$0
Travel	$20,000	$200	$0	$0		$20,000	$200
Professional Services	$314,000	$302,200	$100,000	$0	included with contracts above	$414,000	$302,200
Direct Support Services	$0	$0	$0	$0		$0	$0
DNR Land Acquisition Costs	$0	$0	$0	$0		$0	$0
Capital Equipment	$0	$0	$0	$0		$0	$0
Other Equipment/Tools	$0	$0	$0	$0		$0	$0
Supplies/Materials	$501,000	$552,300	$30,000	$185,000	Federal; City of Duluth	$531,000	$737,300
DNR IDP	$0	$0	$0	$0		$0	$0
Total	$1,900,000	$1,900,000	$200,000	$507,400		$2,100,000	$2,407,400

Personnel

Position	FTE	Over # of years	Spent	Cash Leverage	Leverage Source	Total
Program manager	0.40	2.00	$51,500	$0		$51,500
Watershed director	0.10	2.00	$12,800	$0		$12,800
Program assistant	0.25	2.00	$700	$0		$700
Total	0.75	6.00	$65,000	$0		$65,000

Explain any budget challenges or successes:

The program was a huge success. We exceeded our acreage and stream length targets! However, we had many challenges, including changing project conditions, the need to substitute better project sites, slow permitting, and changing circumstances of partners. Some project cost more than expected due to increased scope, while others cost less. Despite these challenges we leveraged more than $500,000 from unexpected partners. The flexibility and patience of LSOHC staff to allow us to change work plans to capture leverage, shift work to better sites, and adjust internal budget category targets was essential to enabling us to maximize habitat outcomes.

All revenues received by the recipient that have been generated from activities on land with money from the OHF:

Total Revenue: $0

Revenue Spent: $0

Revenue Balance: $0

- E. This is not applicable as there was no revenue generated.

Output Tables

Table 1a. Acres by Resource Type

Type	Wetlands (original)	Wetlands (final)	Prairies (original)	Prairies (final)	Forest (original)	Forest (final)	Habitats (original)	Habitats (final)	Total (original)	Total (final)
Restore	0	0	0	0	0	0	0	0	0	0
Protect in Fee with State PILT Liability	0	0	0	0	0	0	0	0	0	0
Protect in Fee W/O State PILT Liability	0	0	0	0	0	0	0	0	0	0
Protect in Easement	0	0	0	0	0	0	0	0	0	0
Enhance	0	0	0	0	0	0	109	118	109	118
Total	0	0	0	0	0	0	109	118	109	118

Table 2. Total Funding by Resource Type

Type	Wetlands (original)	Wetlands (final)	Prairies (original)	Prairies (final)	Forest (original)	Forest (final)	Habitats (original)	Habitats (final)	Total (original)	Total (final)
Restore	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Protect in Fee with State PILT Liability	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Protect in Fee W/O State PILT Liability	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Protect in Easement	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Enhance	$0	$0	$0	$0	$0	$0	$1,900,000	$1,900,000	$1,900,000	$1,900,000
Total	$0	$0	$0	$0	$0	$0	$1,900,000	$1,900,000	$1,900,000	$1,900,000

Table 3. Acres within each Ecological Section

Type	Metro Urban (original)	Metro Urban (final)	Forest Prairie (original)	Forest Prairie (final)	SE Forest (original)	SE Forest (final)	Prairie (original)	Prairie (final)	N Forest (original)	N Forest (final)	Total (original)	Total (final)
Restore	0	0	0	0	0	0	0	0	0	0	0	0
Protect in Fee with State PILT Liability	0	0	0	0	0	0	0	0	0	0	0	0
Protect in Fee W/O State PILT Liability	0	0	0	0	0	0	0	0	0	0	0	0
Protect in Easement	0	0	0	0	0	0	0	0	0	0	0	0
Enhance	23	8	0	0	48	49	0	0	38	61	109	118
Total	23	8	0	0	48	49	0	0	38	61	109	118

Table 4. Total Funding within each Ecological Section

Type	Metro Urban (original)	Metro Urban (final)	Forest Prairie (original)	Forest Prairie (final)	SE Forest (original)	SE Forest (final)	Prairie (original)	Prairie (final)	N Forest (original)	N Forest (final)	Total (original)	Total (final)
Restore	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Protect in Fee with State PILT Liability	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Protect in Fee W/O State PILT Liability	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Protect in Easement	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Enhance	$210,000	$478,600	$0	$0	$1,100,000	$840,900	$0	$0	$590,000	$580,500	$1,900,000	$1,900,000
Total	$210,000	$478,600	$0	$0	$1,100,000	$840,900	$0	$0	$590,000	$580,500	$1,900,000	$1,900,000

Automatic system calculation / not entered by managers

Target Lake/Stream/River Feet or Miles (original)

8

Target Lake/Stream/River Feet or Miles (final)

9.3 miles

Explain the success/shortage of acre goals:

We exceeded the acreage and mileage targets due to contracting efficiencies as well as collaborations with partners. This would not be possible without flexibility to adjust budget category amounts.

Parcel List

Section 1 - Restore / Enhance Parcel List

Becker

Name	TRDS	Acres	Total Cost	Existing Protection?	Description
Straight River	14036233	6	$11,000	Yes	Enhance habitat by narrowing and deepening channnel

Carlton

Name	TRDS	Acres	Total Cost	Existing Protection?	Description
Blackhoof River	04717210	40	$118,700	Yes	Enhanced habitat for steelhead, brook trout and brown trout in river section which had been destroyed by 2012 flood.

Cook

Name	TRDS	Acres	Total Cost	Existing Protection?	Description
Kadunce River	06102102	3	$57,400	Yes	Enhance hbaitat for steelhead and brook trout in 1,500 reach of popular North Shore river
Little Devil Track River	06101107	3	$9,000	Yes	Enhance habitat for wild brook trout within 1,500 reach

Dakota

Name	TRDS	Acres	Total Cost	Existing Protection?	Description
Vermillion River	11418229	8	$478,600	Yes	Enhance habitat in rare metro area trout stream; part of larger project.

Fillmore

Name	TRDS	Acres	Total Cost	Existing Protection?	Description
Lynch Creek	10411211	11	$372,300	Yes	Enhance habitat for brook and brown trout on 4,700 reach of stream.
Spring Valley Creek	10312218	9	$68,300	Yes	Enhance in-stream habitat for brown trout in 3,900 feet of stream.
Spring Valley Creek	10312218	10	$23,100	Yes	Enhance habitat along 4,600 reach of trout stream.
Trout Run Creek	10410204	9	$41,200	Yes	Enhance habitat for wild brown trout along 3,800 long reach

Lake

Name	TRDS	Acres	Total Cost	Existing Protection?	Description
Stewart River	05310219	6	$250,900	Yes	Enhance trout habitat which had been destroyed by severe 2012 flood.

St. Louis

Name	TRDS	Acres	Total Cost	Existing Protection?	Description
Chester Creek	05014216	1	$103,500	Yes	Enhance native brook trout habitat by re-meandering and reconnecting segment previously ditched. Portion of larger project with Fy16 project.
Coffee Creek	04915229	2	$30,000	Yes	Enhance wild brook trout stream in City of Duluth.

Wabasha

Name	TRDS	Acres	Total Cost	Existing Protection?	Description
East Indian Creek	10909221	10	$336,000	Yes	Enhance habitat for native, wild brook trout along 4,300 segment of stream.

Section 2 - Protect Parcel List

No parcels with an activity type protect.

Section 2a - Protect Parcel with Bldgs

No parcels with an activity type protect and has buildings.

Section 3 - Other Parcel Activity

No parcels with an other activity type.

Completed Parcel: Blackhoof River

# of Total Acres:	40
County:	Carlton
Township:	047
Range:	17
Direction:	2
Section:	10
# of Acres: Wetlands/Upland:	
# of Acres: Forest:	
# of Acres: Prairie/Grassland:	
Amount of Shorline:	17600 (Linear Feet)
Name of Adjacent Body of Water (if applicable):	Blackhoof River
Has there been signage erected at the site:	Yes
Total cost of Restoration/Enhancement:	$118,700

Completed Parcel: Chester Creek

# of Total Acres:	1
County:	St. Louis
Township:	050
Range:	14
Direction:	2
Section:	16
# of Acres: Wetlands/Upland:	
# of Acres: Forest:	
# of Acres: Prairie/Grassland:	
Amount of Shorline:	450 (Linear Feet)
Name of Adjacent Body of Water (if applicable):	Chester Creek
Has there been signage erected at the site:	Yes
Total cost of Restoration/Enhancement:	$103,500

Completed Parcel: Coffee Creek

# of Total Acres:	2
County:	St. Louis
Township:	049
Range:	15
Direction:	2
Section:	29
# of Acres: Wetlands/Upland:	
# of Acres: Forest:	
# of Acres: Prairie/Grassland:	
Amount of Shorline:	800 (Linear Feet)
Name of Adjacent Body of Water (if applicable):	Coffee Creek
Has there been signage erected at the site:	Yes
Total cost of Restoration/Enhancement:	$30,000

Completed Parcel: East Indian Creek

# of Total Acres:	10
County:	Wabasha
Township:	109
Range:	09
Direction:	2
Section:	21
# of Acres: Wetlands/Upland:	
# of Acres: Forest:	
# of Acres: Prairie/Grassland:	
Amount of Shorline:	4300 (Linear Feet)
Name of Adjacent Body of Water (if applicable):	East Indian Creek
Has there been signage erected at the site:	Yes
Total cost of Restoration/Enhancement:	$336,000

Completed Parcel: Kadunce River

# of Total Acres:	3
County:	Cook
Township:	061
Range:	02
Direction:	1
Section:	02
# of Acres: Wetlands/Upland:	
# of Acres: Forest:	
# of Acres: Prairie/Grassland:	
Amount of Shorline:	1500 (Linear Feet)
Name of Adjacent Body of Water (if applicable):	Kadunce River
Has there been signage erected at the site:	Yes
Total cost of Restoration/Enhancement:	$57,400

Completed Parcel: Little Devil Track River

# of Total Acres:	3
County:	Cook
Township:	061
Range:	01
Direction:	1
Section:	07
# of Acres: Wetlands/Upland:	
# of Acres: Forest:	
# of Acres: Prairie/Grassland:	
Amount of Shorline:	1500 (Linear Feet)
Name of Adjacent Body of Water (if applicable):	Little Devil Track River
Has there been signage erected at the site:	Yes
Total cost of Restoration/Enhancement:	$9,000

Completed Parcel: Lynch Creek

# of Total Acres:	11
County:	Fillmore
Township:	104
Range:	11
Direction:	2
Section:	11
# of Acres: Wetlands/Upland:	
# of Acres: Forest:	
# of Acres: Prairie/Grassland:	
Amount of Shorline:	4700 (Linear Feet)
Name of Adjacent Body of Water (if applicable):	Lynch Creek
Has there been signage erected at the site:	Yes
Total cost of Restoration/Enhancement:	$372,300

Completed Parcel: Spring Valley Creek

# of Total Acres:	10
County:	Fillmore
Township:	103
Range:	12
Direction:	2
Section:	18
# of Acres: Wetlands/Upland:	
# of Acres: Forest:	
# of Acres: Prairie/Grassland:	
Amount of Shorline:	4600 (Linear Feet)
Name of Adjacent Body of Water (if applicable):	Spring Valley Creek
Has there been signage erected at the site:	Yes
Total cost of Restoration/Enhancement:	$23,100

Completed Parcel: Spring Valley Creek

# of Total Acres:	9
County:	Fillmore
Township:	103
Range:	12
Direction:	2
Section:	18
# of Acres: Wetlands/Upland:	
# of Acres: Forest:	
# of Acres: Prairie/Grassland:	
Amount of Shorline:	3900 (Linear Feet)
Name of Adjacent Body of Water (if applicable):	Spring Valley Creek
Has there been signage erected at the site:	Yes
Total cost of Restoration/Enhancement:	$68,300

Completed Parcel: Stewart River

# of Total Acres:	6
County:	Lake
Township:	053
Range:	10
Direction:	2
Section:	19
# of Acres: Wetlands/Upland:	
# of Acres: Forest:	
# of Acres: Prairie/Grassland:	
Amount of Shorline:	2600 (Linear Feet)
Name of Adjacent Body of Water (if applicable):	Stewart River
Has there been signage erected at the site:	Yes
Total cost of Restoration/Enhancement:	$250,900

Completed Parcel: Straight River

# of Total Acres:	6
County:	Becker
Township:	140
Range:	36
Direction:	2
Section:	33
# of Acres: Wetlands/Upland:	
# of Acres: Forest:	
# of Acres: Prairie/Grassland:	
Amount of Shorline:	2640 (Linear Feet)
Name of Adjacent Body of Water (if applicable):	Straight River
Has there been signage erected at the site:	Yes
Total cost of Restoration/Enhancement:	$11,000

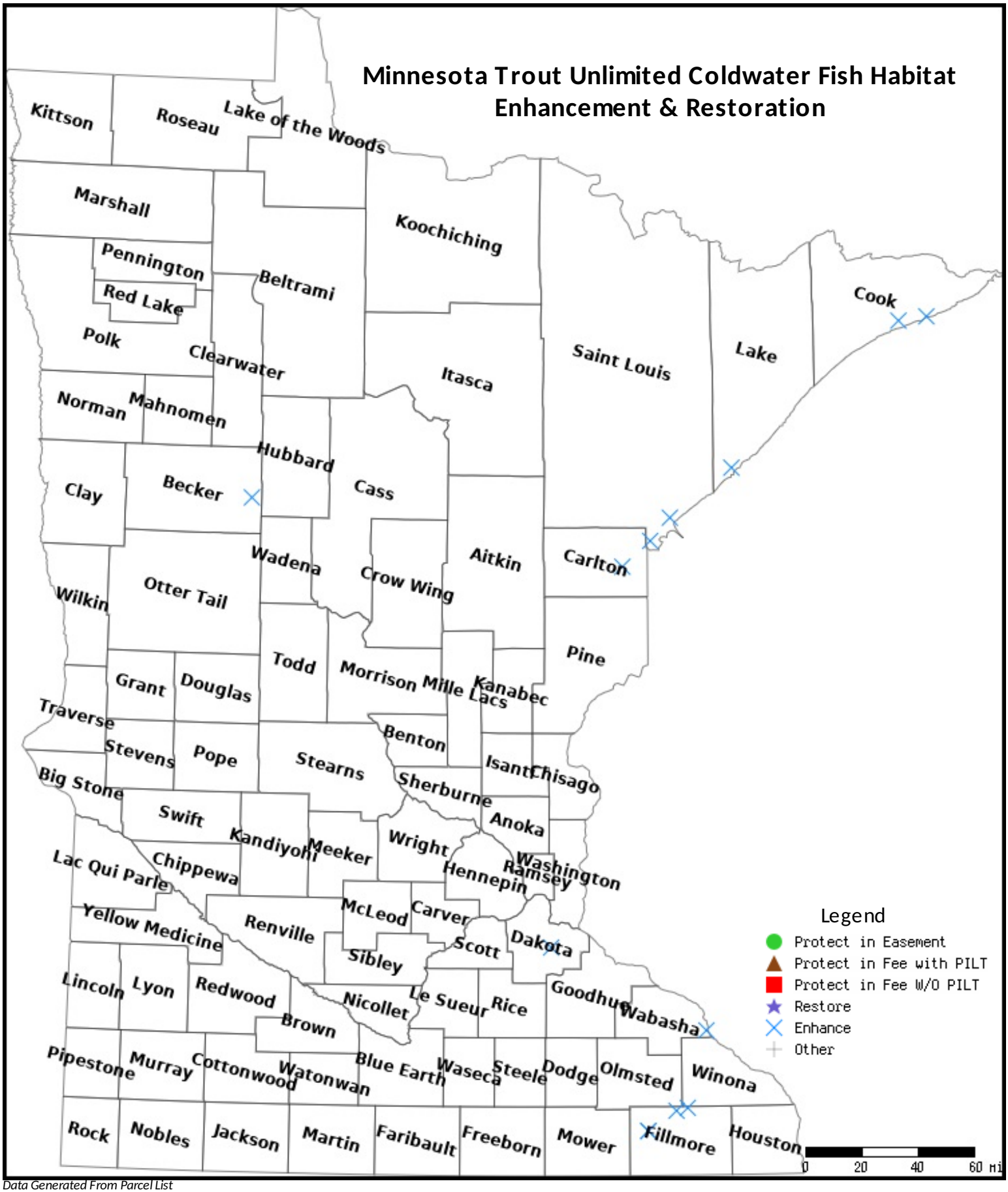
Completed Parcel: Trout Run Creek

# of Total Acres:	9
County:	Fillmore
Township:	104
Range:	10
Direction:	2
Section:	04
# of Acres: Wetlands/Upland:	
# of Acres: Forest:	
# of Acres: Prairie/Grassland:	
Amount of Shorline:	3800 (Linear Feet)
Name of Adjacent Body of Water (if applicable):	Trout Run Creek
Has there been signage erected at the site:	Yes
Total cost of Restoration/Enhancement:	$41,200

Completed Parcel: Vermillion River

# of Total Acres:	8
County:	Dakota
Township:	114
Range:	18
Direction:	2
Section:	29
# of Acres: Wetlands/Upland:	
# of Acres: Forest:	
# of Acres: Prairie/Grassland:	
Amount of Shorline:	3500 (Linear Feet)
Name of Adjacent Body of Water (if applicable):	Vermillion River
Has there been signage erected at the site:	Yes
Total cost of Restoration/Enhancement:	$478,600

Parcel Map



Data Generated From Parcel List