Request for Funding

Lessard-Sams Outdoor Heritage Council
Fiscal Year 2016 / ML 2015

Program or Project Title: Sargent Creek Streambank Stabilization for Aquatic Habitat and Restoration

Funds Requested: $640,000

Manager's Name: Chris Kleist
Title:
Organization: City of Duluth
Street Address: 411 West First Street Room 211
City: Duluth, MN 55802
Telephone: 218-730-4063
E-Mail: ckleist@duluthmn.gov
Organization Web Site:

County Locations: St. Louis

Ecological Planning Regions:

- Northern Forest

Activity Type:

- Restore

Priority Resources Addressed by Activity:

- Habitat

Abstract:

The Sargent Creek Streambank Stabilization for Aquatic Habitat and Restoration project will address specific issues resulting from the 2012 Duluth 500-year rain event in which streambanks experienced serious erosion and aquatic habitat was adversely affected.

Design and Scope of Work:

In June 2012, extensive damage occurred when the City of Duluth experienced a 500-year rain event, the resulting flooding from the massive deluge overwhelmed storm sewers, damaging or washing out utility infrastructure, bridges, storm sewers, streets, and culverts. Apart from these infrastructure issues, the City also sustained considerable damage to its public lands, riparian areas, streams, and shoreline. Stream channels along Duluth's steep escarpment were ravaged, many other terrestrial areas were severely eroded, watercourses and drainages altered. Debris and sediment deposition threatened underlying benthic habitat and water quality alike. Fluvial sediments were particularly devastating to aquatic habitat; the need for resource rehabilitation and conservation is urgent. The Sargent Creek Streambank Stabilization for Aquatic Habitat and Restoration project seeks to remedy degradation of the aquatic ecosystem and provide a plan to promote and sustain riparian rejuvenation while allowing for public cultural, educational, and recreational uses throughout the Sargent Creek corridor. Across a one-year timeframe (from notice of funding approval), we will utilize stream habitat designers in partnership with local resource experts and stakeholders to determine and implement optimum solutions. Our goals are to re-establish native vegetation, stabilize severely eroded stream banks to prevent excess future sedimentation, restore natural stream channel geometry, minimize any further land erosion and degradation in water quality, and improve habitat to create a stable stream corridor once again.

How the request addresses MN habitats:

Rivers and streams feeding Lake Superior have long been crucial habitat for both game and non-game species. Furthermore, small watershed ecosystems are important safe havens for most terrestrial wildlife. The Minnesota

Department of Natural Resources at present lists over one hundred and thirty species of fauna—amphibians, birds, fishes, insects, mammals, mollusks, reptiles, spiders—as at least being of special concern, if not threatened or endangered outright. Many on the list call the Northern Forest region home. Lake Superior's headwater tributary, the St Louis River, has been designated as an "Area of Concern". City of Duluth property and drainage-ways have an enormous impact on the aquatic habitats of the small trout streams like Sargent Creek as well as the St. Louis River. Benefits to assuring the health of the Sargent Creek watershed will be tremendous. Beyond an immediate and tangible improvement to aquatic biodiversity and water quality, implementation of the Sargent Creek Streambank Stabilization for Aquatic Habitat and Restoration project will contribute directly to the success of goals stipulated in the Lake Superior Lakewide Management Plan.

Please explain the nature of urgency:

Duluth's infrastructure repair and replacement has thus far received the overwhelming majority of State and Federal monies awarded, while out-of-sight watercourses have remained damaged. Bio-diverse ecologic communities can recover only if immediate attention is paid to stabilizing and conserving degraded areas before additional degradation of water quality occurs.

Planning

MN State-wide Conservation Plan Priorities:

- H2 Protect critical shoreland of streams and lakes
- H5 Restore land, wetlands and wetland-associated watersheds

Plans Addressed:

- Minnesota DNR Strategic Conservation Agenda
- Upper Mississippi River and Great Lakes Region Projects Joint Ventures Plan

Please describe the science based planning and evaluation model used:

The City of Duluth has noted generally that during the June 2012 flood, stream reaches with strong vegetative growth and stable natural channels withstood the extreme flows of the flood better that confined and embanked stream channel segments. Therefore, we propose to utilize native vegetation plantings and very minor channel alignments to re-establish a strong stream corridor with improved terrestrial and aquatic habitat.

LSOHC Northern Forest Section Priorities:

- Protect shoreland and restore or enhance critical habitat on wild rice lakes, shallow lakes, cold water lakes, streams and rivers, and spawning areas

Accelerates or Supplements Current Efforts:

The City of Duluth has worked since the June 2012 flood to stabilize and restore City property along our trout streams and riparian areas. The City understands the critical role that proper riparian zone management play in sustaining high quality trout streams. The City has worked with other State agencies to fund bank stabilization projects where infrastructure is threatened, and now that many of those needs have been met, we are looking to stabilize areas of natural streams with severe bank erosion to protect water quality and minimize excess sedimentation. These funds will for immediate action to be taken in 2015.

Non-OHF Money Spent in the Past:

Appropriation Year	Source	Amount

Sustainability and Maintenance:

The goal of a natural channel stream is that it functions well, naturally, with little or no maintenance. The project will get stronger over time is vegetation grows and the stream channel stabilizes. However, a natural stream will tend to move over time and this is normal and expected.

Maintain Project Outcomes:

Year	Source of Funds	Step 1	Step 2	Step 3
2015	City Funding	Maintain stream banks	Maintain and report on habitat	Continue to monitor erosion and stream flow.

Applicable Criteria:

If funded, this proposal will meet all applicable criteria set forth in MS 97A.056? - **Yes**

Best Management Practice:

Will restoration and enhancement work follow best management practices including MS 84.973 Pollinator Habitat Program? - **Yes**

Permanent Protection:

Is the activity on permanently protected land per 97A.056, subd 13(f), tribal lands, and/or public waters per MS 103G.005, Subd. 15? - **Yes (County/Municipal)**

Accomplishment Timeline

Activity	Approximate Date Completed
Publically bid and award design engineering contract	January 2015
Publically bid design construction documents and specs	Summer 2015
Construction complete	Summer/fall 2015

Outcomes

Programs in the northern forest region:

- Improved availability and improved condition of habitats that have experienced substantial decline

Relationship to Other Funds:

- BWSR Flood recovery grant

Approximately $40,000 for streambank stabilization immediately downstream of this proposed project site

Budget Spreadsheet

Total Amount of Request: $640,000

Budget and Cash Leverage

Budget Name	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Personnel	$0	$0		$0
Contracts	$540,000	$0		$540,000
Fee Acquisition w/ PILT	$0	$0		$0
Fee Acquisition w/o PILT	$0	$0		$0
Easement Acquisition	$0	$0		$0
Easement Stewardship	$0	$0		$0
Travel	$0	$0		$0
Professional Services	$96,000	$0		$96,000
Direct Support Services	$0	$0		$0
DNR Land Acquisition Costs	$0	$0		$0
Capital Equipment	$0	$0		$0
Other Equipment/Tools	$0	$0		$0
Supplies/Materials	$4,000	$0		$4,000
DNR IDP	$0	$0		$0
Total	$640,000	$0	-	$640,000

Amount of Request: $640,000
Amount of Leverage: $0
Leverage as a percent of the Request: 0.00%

Output Tables

Table 1a. Acres by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	0	0	0	4	4
Protect in Fee with State PILT Liability	0	0	0	0	0
Protect in Fee W/O State PILT Liability	0	0	0	0	0
Protect in Easement	0	0	0	0	0
Enhance	0	0	0	0	0
Total	0	0	0	4	4

Table 2. Total Requested Funding by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	$0	$0	$0	$640,000	$640,000
Protect in Fee with State PILT Liability	$0	$0	$0	$0	$0
Protect in Fee W/O State PILT Liability	$0	$0	$0	$0	$0
Protect in Easement	$0	$0	$0	$0	$0
Enhance	$0	$0	$0	$0	$0
Total	$0	$0	$0	$640,000	$640,000

Table 3. Acres within each Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore	0	0	0	0	4	4
Protect in Fee with State PILT Liability	0	0	0	0	0	0
Protect in Fee W/O State PILT Liability	0	0	0	0	0	0
Protect in Easement	0	0	0	0	0	0
Enhance	0	0	0	0	0	0
Total	0	0	0	0	4	4

Table 4. Total Requested Funding within each Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore	$0	$0	$0	$0	$640,000	$640,000
Protect in Fee with State PILT Liability	$0	$0	$0	$0	$0	$0
Protect in Fee W/O State PILT Liability	$0	$0	$0	$0	$0	$0
Protect in Easement	$0	$0	$0	$0	$0	$0
Enhance	$0	$0	$0	$0	$0	$0
Total	$0	$0	$0	$0	$640,000	$640,000

Table 5. Average Cost per Acre by Resource Type

Type	Wetlands	Prairies	Forest	Habitats
Restore	$0	$0	$0	$160,000
Protect in Fee with State PILT Liability	$0	$0	$0	$0
Protect in Fee W/O State PILT Liability	$0	$0	$0	$0
Protect in Easement	$0	$0	$0	$0
Enhance	$0	$0	$0	$0

Table 6. Average Cost per Acre by Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest
Restore	$0	$0	$0	$0	$160,000
Protect in Fee with State PILT Liability	$0	$0	$0	$0	$0
Protect in Fee W/O State PILT Liability	$0	$0	$0	$0	$0
Protect in Easement	$0	$0	$0	$0	$0
Enhance	$0	$0	$0	$0	$0

Target Lake/Stream/River Feet or Miles

3,000

Parcel List

Section 1 - Restore / Enhance Parcel List

No parcels with an activity type restore or enhance.

Section 2 - Protect Parcel List

No parcels with an activity type protect.

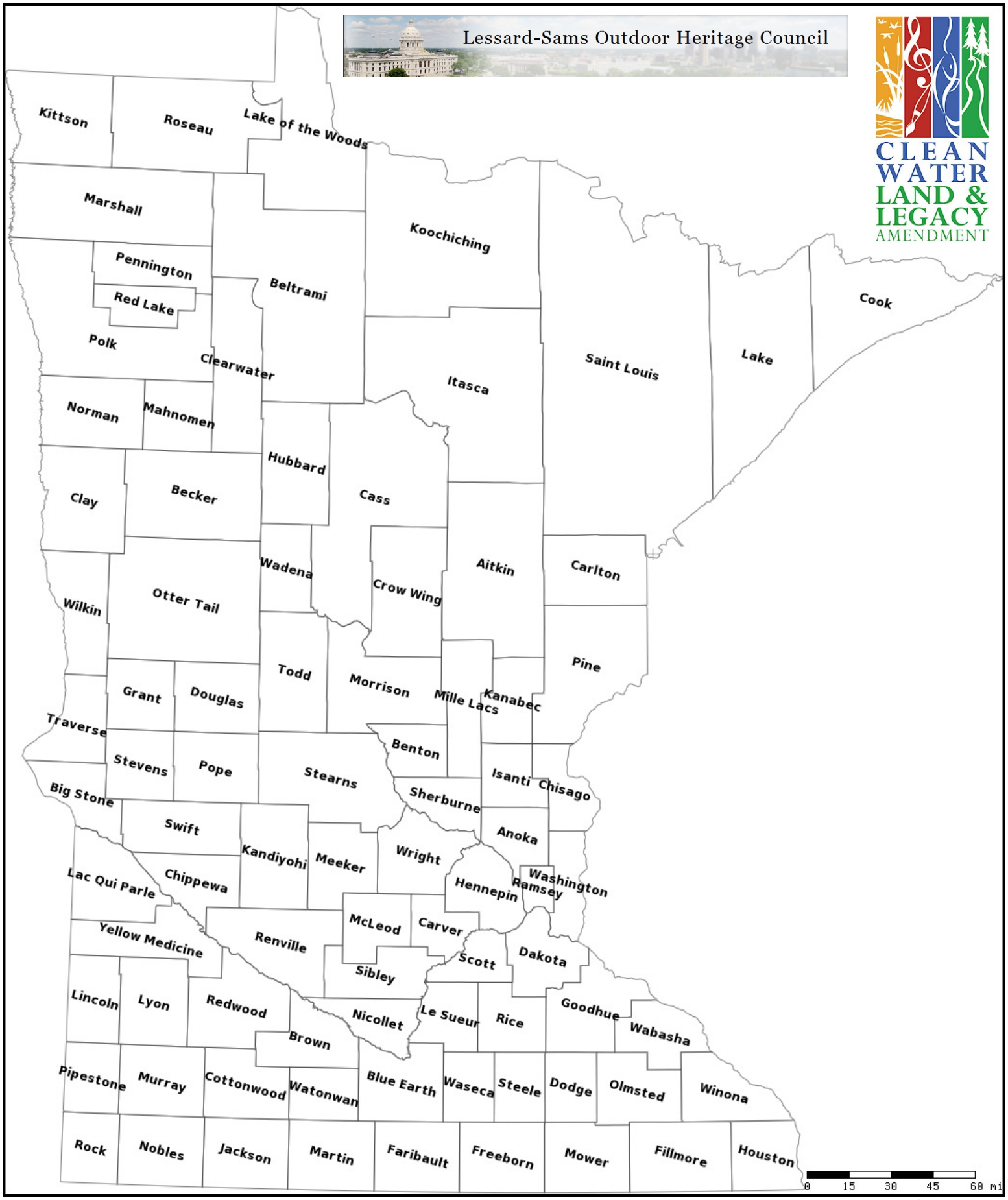
Section 2a - Protect Parcel with Bldgs

No parcels with an activity type protect and has buildings.

Section 3 - Other Parcel Activity

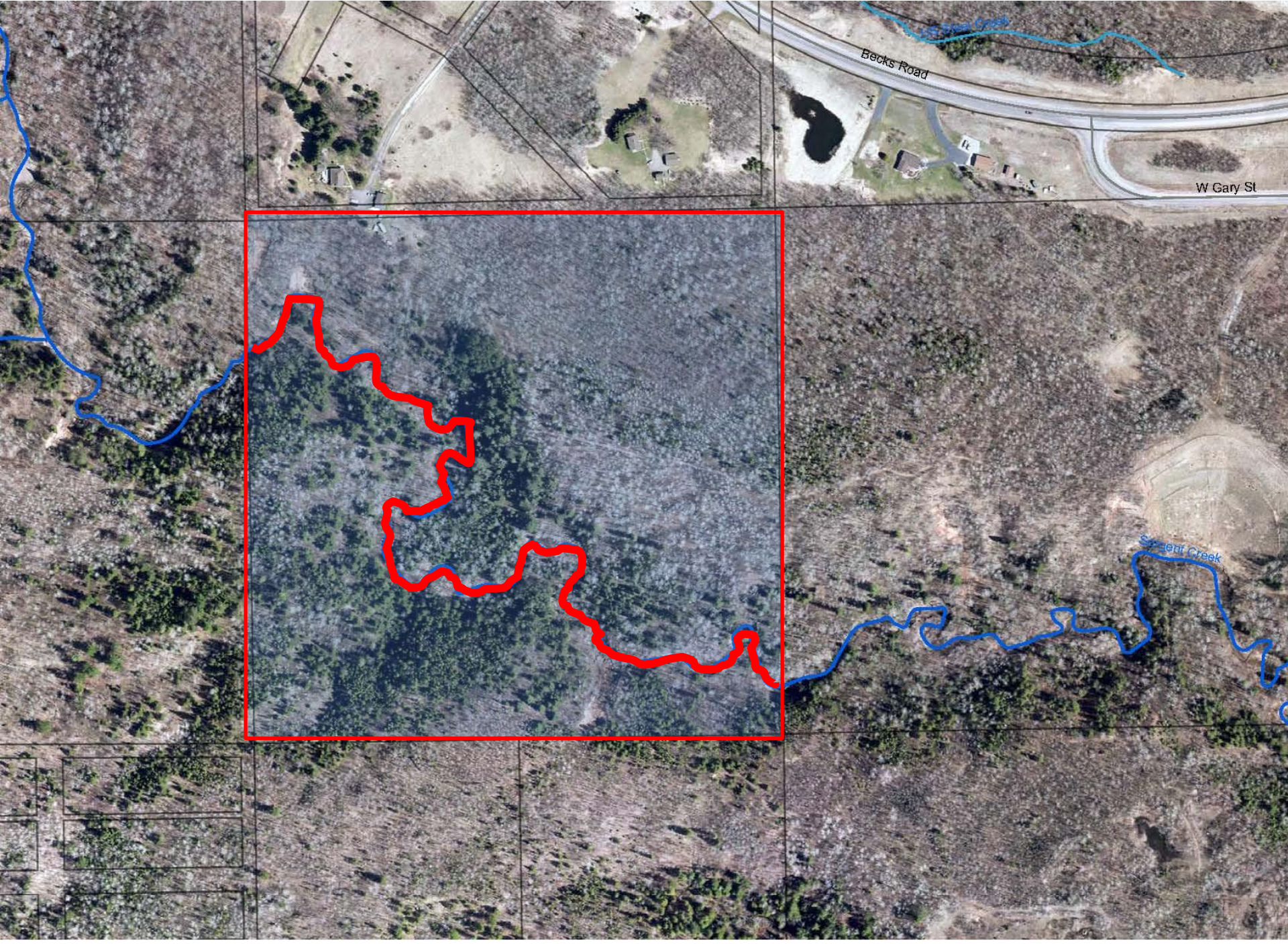
St. Louis

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
City of Duluth	04815204	4	$640,000	Yes	Not Applicable	Full



Sargent Creek Streambank Stabilization for Aquatic Habitat and Restoration

Data Generated From Parcel List


Becks Road
W Gary St
Sargent Creek