

Lessard-Sams Outdoor Heritage Council

Fiscal Year 2017 / ML 2016 Request for Funding



Date: June 04, 2015

Program or Project Title: Restoring Duluth's Cold Water Streams

Funds Requested: \$1,077,500

Manager's Name: Kathy Bergen

Title: Manager, Parks and Recreation

Organization: City of Duluth

Address: 402 West 1st Street

Address 2: Ground Floor

City: Duluth, MN 55802

Office Number: 218-730-4309

Mobile Number: 218-591-9655

Email: kbergen@DuluthMN.gov

Website: <http://www.duluthmn.gov/parks/>

County Locations: St. Louis

Regions in which work will take place:

- Northern Forest

Activity types:

- Restore
- Enhance
- Protect in Fee

Priority resources addressed by activity:

- Wetlands
- Forest
- Habitat

Abstract:

The City of Duluth will acquire, restore, and protect key natural resources, including a trout stream tributary and its source, to improve fish and wildlife habitat associated with two designated trout streams: Tischer Creek and Buckingham Creek.

Design and scope of work:

TISCHER CREEK TRIBUTARY 6.5

Scope

Tributary 6.5 Phase I: Acquisition. The City will acquire 19.24 acres adjoining Hartley Nature Preserve owned by ISD 709-Duluth Public Schools that are platted and marketed for development. An unnamed coldwater tributary, designated by DNR as Tributary 6.5, flows through these parcels with a stream length of approximately 0.4 miles (600 feet within the parcels).

Tributary 6.5 Phase II: Restoration. Terrestrial restoration will control and/or remove glossy and common buckthorn, reed canary grass, and Tansy, opening space and canopy for existing natives. An existing cleared area will be replanted with native forbs and grasses. The upper reach of the stream that was straightened will be restored to its original meandering course. Removing a culvert and fill over the source, redirecting the flow to the restored channel and reconnecting the new channel at the downstream end of Tributary 6.5 will restore connectivity and fish passage.

Prioritization

Approximately $\frac{1}{4}$ of Tributary 6.5 length is on the ISD-709 property, including its source. This coldwater tributary has significant flow, with a defined bed and banks, and is fed by small groundwater seeps as well as surface water runoff. Tributary 6.5 enters Tischer

approximately 200 yards south of an artificial impoundment and significantly improves the water quality downstream. Tributary 6.5 is consistently colder than the main stem of Tischer. The DNR indicated that this is a critical coldwater base flow source to Tischer and habitat downstream.

Urgency

If not acquired, the parcels are platted for residential development and will be sold. Acquisition and restoration will prevent additional detrimental impacts to water quality and channel stability in both Tributary 6.5 and the main stem of Tischer by preventing the additional impervious surface produced by residential development. Tischer is above the 10% impact threshold for impervious surface within the watershed.

Habitat affected

The acquired parcels include a mix of wetlands, Tributary 6.5, and upland forests. The parcels are on the northern border of the nature preserve and their health impacts the habitats within the preserve proper. Habitats include lowland grass, brush, and hardwoods, upland grass, hardwoods and conifers, vernal ponds, wetlands, a large pond, as well as Tischer and Tributary 6.5. The project will restore the acreage as close to pre-settlement condition as possible, eliminating invasive, exotic species, improving upland habitat and protecting water quality. The land will be added to the nature preserve and the protection permanent.

Parcel selection: The ISD 709 parcels were identified during the Nature Preserve Master Planning process.

Stakeholder involvement

Acquisition: Public dialogue was essential and shaped the recommendations. Six public meetings and three open houses facilitated a dialogue and collected feedback. The public could comment online before and after each meeting. Announcements for meetings and comment periods were mailed to over 1,000 adjoining property residents. People were clearly passionate about the nature preserve's identity as a nature-based park. Comments stressed the value of the natural settings and habitats, the wildlife, and the seclusion and sense of privacy. When asked how the preserve could be improved, the top answer was, "Acquire the IDS 709 property."

BUCKINGHAM CREEK

Scope

Buckingham will be restored to pre-settlement conditions where possible. The City, with technical assistance from DNR, will remove an artificial pond through which the stream currently flows and restore the original meandering course, riffles, small pools and riparian floodplain. The pond warms the water to detrimental temperatures and negatively impacts brook trout habitat downstream. Duluth draws 15-30 million gallons from the pond to water the municipal golf course greens and water levels are periodically entirely drawn down, dewatering the stream. Eliminating the dam removes a fish passage barrier at the pond outlet, reconnects the lower and upper portion of the trout stream, and corrects a portion that was straightened during golf course construction. The City will use OHF to leverage additional funds to build new storm water collection ponds and access groundwater to water the greens.

Prioritization

The existing situation severely harms trout and other cold water species:

1. Unsustainable volumes (15-30 million gallons) are used to water the greens;
2. Water warmed in the pond and discharged downstream is harmful to cold water species;
3. Chlorinated city water can enter the stream during high volume appropriation periods; and
4. Twin Lakes, a designated trout lake downstream is highly impacted by water quality in Buckingham, the Twin Lake's primary source. Water withdraws cuts off flow to the trout stream and the trout lake, increasing the risk of summerkill by high water temperatures and low oxygen.

Urgency

Trout habitat in the stream and lake downstream are heavily impacted by withdrawals from stream and runoff from the golf course. Duluth Streams.org notes that urban trout streams are especially sensitive to impacts from development: rising water temperature, increasing sediment, road, and construction runoff, openings in riparian cover, and impervious surfaces. The DNR indicated that impacts would likely be exacerbated by increased warming and frequency of severe storms that climate change models predict will persist and worsen.

Habitat affected

The restored meandering natural course improves trout habitat by increasing the availability of pool habitat throughout the entire reach which increases trout carrying capacity and improves overwinter survival. The restoration will improve ecological conditions and benefit trout populations in the entire 2.3 miles of stream. Continuous coldwater flow from Buckingham is essential to maintain Twin Lakes as an urban Rainbow Trout fishery. Restoration is within Enger Municipal Park and the protection is permanent.

Stakeholder involvement

DNR works with anglers to restore and enhance fishing opportunities. The Arrowhead Fly Fishers and Izaak Walton League are especially supportive of projects that provide urban angling opportunities for youth. Duluth partners with DNR fisheries staff and over many months worked to design a solution that benefits recreation and habitat. Jeff Tillma, DNR Fisheries, will provide design and

construction oversight additionally to the DNR staff leveraged in the budget. Mr. Tillma's salary is currently supported by OHF via DNR.

Crops:

Will there be planting of corn or any crop on OHF land purchased or restored in this program - **No**

How does the request address MN habitats that have: historical value to fish and wildlife, wildlife species of greatest conservation need, MN County Biological Survey data, and/or rare, threatened and endangered species inventories:

Tributary 6.5: DNR Natural & Cultural Heritage Information Systems identified portions of Harley Nature Preserve as a site of biodiversity with a significance ranking. The native plant communities lie within with the Land Type Association called the Tettegouche Till Plain. The large wet meadow and willow swamp complex is the largest wet meadow in Duluth and the region. The plant communities are among the best remnants of natural vegetation and the diversity of community types is in itself significant. Tributary 6.5 is a critical source of cold water base flow.

Buckingham: Buckingham has a self sustaining population of Brook Trout. Twin Lakes is a designated trout lake and an important and unique Rainbow Trout urban angling opportunity.

What is the nature of urgency and why it is necessary to spend public money for this work as soon as possible:

Tributary 6.5: The parcels are platted and for sale. If not acquired, they will be developed.

Buckingham: The existing situation is critical and severely harms trout and other cold water species downstream as well as Twin Lakes.

Describe the science based planning and evaluation model used:

Successful restoration factors include: site assessment, project planning, site preparation, species selection, quality plant stock and planting, matching of species to habitats, monitoring, and maintenance. Practice has demonstrated restorations must be targeted, strategic and repeated to reduce invasive exotic species infestations (Vaughn et al 2010, Nat'l. Invasive Species Council 2005).

Which sections of the Minnesota Statewide Conservation and Preservation Plan are applicable to this project:

- H1 Protect priority land habitats
- H6 Protect and restore critical in-water habitat of lakes and streams

Which other plans are addressed in this proposal:

- Minnesota DNR Nongame Wildlife Plans
- National Fish Habitat Action Plan

Which LSOHC section priorities are addressed in this proposal:

Northern Forest:

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

Relationship to other funds:

- Clean Water Fund

City of Duluth is committed the Buckingham restoration and will leverage \$250,000 in City funds as well as \$50,000 for Tributary 6.5 and Tischer Creek. The City will work with MN DNR and other partners to identify and secure funding sources to replace the storm water ponds responsible for the withdrawals and warming. The Clean Water Fund is one source. Other applications may include LCCMR, the Outdoor Recreation Program, and the NOAA Coastal Program.

How does this proposal accelerate or supplement your current efforts in this area:

This request is part of a long-term, comprehensive plan to create, upgrade, and restore Duluth's natural resource base. This ambitious

goal is funded by:

- 1.) Duluth Parks referendum: Duluth voters passed a 2011 \$2.6 million levy to fund nature-based operations and improvements.
- 2.) 1/2 & 1/2 tax from tourism facilities provides approximately \$18 million dollars for restoration and maintenance efforts within a legislatively determined geographic corridor along the St Louis River.
- 3.) An aggressive 3-year grant schedule includes state and federal sources in collaboration with partners and stakeholders.

Hartley Nature Preserve is a 640 acre natural site of biodiversity that includes a critical coldwater source within a major urban area. This is a unique and eminently valuable resource to increase public access and exposure to trout fishing, bow hunting, and other outdoor recreation. A first class nature center on-site increases exposure to outdoor recreation and nature to 15,000 children and families annually.

The National Fish Habitat Plan guides efforts to protect and restore fish habitats in lakes and streams. Central to success is increased coordination between DNRs and local governments. Duluth relies heavily on the DNR to prioritize, facilitate, and guide municipal habitat restoration projects.

Describe the source and amount of non-OHF money spent for this work in the past:

Appropriation Year	Source	Amount
2014	Legacy Parks and Trails (Nature preserve)	600,000
2014	FEMA , City of Duluth, Private (Nature Preserve)	91,000
2014	Local Taxlevy (Nature Preserve)	150,000

How will you sustain and/or maintain this work after the Outdoor Heritage Funds are expended:

Pollinator Best Management Practices, DNR Restoration and Enhancement guidelines, and best practices guide the restoration plan (Vaughn 2010). Properly established restoration sites are stable over the span of the native plant community's successional stage. Upland forest types are expected to be stable for 50-100 years barring catastrophic disturbance. Duluth and Hartley Nature Center staff and volunteers will monitor the restorations and mitigate any problems with the Tributary 6.5 restoration. DNR will assist in design and oversight of the Buckingham Creek restoration and provide monitoring. The dam will be removed, the original meandering course reestablished and the riparian area planted with appropriate native species to stabilize the banks and provide shade and habitat.

All restoration on publically owned land is designated in the Duluth Comprehensive Land Use Plan as recreation or preservation. These land uses include development limitations, including low intensity uses such as trails, viewshed protection, and water access for fishing, canoeing and kayaking. These designations are expected to remain in perpetuity.

Explain the things you will do in the future to maintain project outcomes:

Year	Source of Funds	Step 1	Step 2	Step 3
2019	Duluth/Nature Center/Stakeholder groups	Begin restoration monitoring at Tributary 6.5.		
2020	Duluth/Nature Center/Stakeholder groups		Mitigation where necessary and monitoring.	
2021	Duluth/Nature Center/Stakeholder groups			Mitigation where necessary and on-going monitoring.
2019	DNR/Duluth	Begin restoration monitoring at Buckingham.		
2020	DNR/Duluth		Mitigation where necessary and monitoring. Monitor new water collection sources to ensure appropriate function.	
2021	DNR/Duluth			Mitigation where necessary and on-going monitoring.

Activity Details:

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

Will local government approval be sought prior to acquisition - **Yes**

Is the land you plan to acquire free of any other permanent protection - **Yes**

Is this land currently open for hunting and fishing - **No**

Will the land be open for hunting and fishing after completion - **Yes**

Open to fishing. Property is within Duluth city limits and will be open to bow hunting only.

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

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
Acquire parcels	July 2017
Tributary 6.5 and upland restoration	July 2018
Remove Buckingham dam and drain pond.	July 2018
New storm water catchments and ground water access installed	July 2018
Buckingham stream bed restoration	July 2018
Monitoring begins at both locations in April 2019	June 2021 and ongoing
Mitigate any problems with the restorations. Begin April 2020	June 2021 and ongoing

Federal Funding:

Do you anticipate federal funds as a match for this program - **No**

Outcomes:

Programs in the northern forest region:

- Improved availability and improved condition of habitats that have experienced substantial decline *19.24 acres restored and permanently protected*
600 feet Tischer Tributary 6.5 restored and permanently protected
900 feet Buckingham creek restored
Improved aquatic habitat downstream in both Buckingham and Tischer Creeks as measured by water quality and quantity. DNR has 3 years of baseline data for Buckingham creek above and below Twin Lakes.

Budget Spreadsheet

Total Amount of Request: \$1,077,500

Budget and Cash Leverage

Budget Name	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Personnel	\$0	\$209,900	City of Duluth, City of Duluth, City of Duluth, Hartley Nature Center	\$209,900
Contracts	\$361,800	\$450,000	City of Duluth and other funds	\$811,800
Fee Acquisition w/ PILT	\$0	\$0		\$0
Fee Acquisition w/o PILT	\$393,300	\$0		\$393,300
Easement Acquisition	\$0	\$0		\$0
Easement Stewardship	\$0	\$0		\$0
Travel	\$0	\$0		\$0
Professional Services	\$72,400	\$100,000	City of Duluth and other funds	\$172,400
Direct Support Services	\$0	\$0		\$0
DNR Land Acquisition Costs	\$0	\$0		\$0
Capital Equipment	\$0	\$0		\$0
Other Equipment/Tools	\$1,500	\$0		\$1,500
Supplies/Materials	\$248,500	\$541,000	City of Duluth and other funds	\$789,500
DNR IDP	\$0	\$6,000	DNR oversight assistance and monitoring	\$6,000
Total	\$1,077,500	\$1,306,900		\$2,384,400

Personnel

Position	FTE	Over # of years	LSOHC Request	Anticipated Leverage	Leverage Source	Total
Duluth Property Personnel	0.01	1.00	\$0	\$7,500	City of Duluth	\$7,500
Duluth Parks and Recreation personnel	0.38	5.00	\$0	\$180,000	City of Duluth	\$180,000
Duluth Finance Personnel	0.05	5.00	\$0	\$21,300	City of Duluth	\$21,300
Volunteers and Nature Center Staff	0.00	3.00	\$0	\$1,100	Hartley Nature Center	\$1,100
Total	0.44	14.00	\$0	\$209,900		\$209,900

Amount of Request: \$1,077,500

Amount of Leverage: \$1,306,900

Leverage as a percent of the Request: 121.29%

Output Tables

Table 1a. Acres by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	0	0	0	3	3
Protect in Fee with State PILT Liability	0	0	0	0	0
Protect in Fee W/O State PILT Liability	0	0	0	19	19
Protect in Easement	0	0	0	0	0
Enhance	0	0	0	0	0
Total	0	0	0	22	22

Table 2. Total Requested Funding by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	\$0	\$0	\$0	\$200,500	\$200,500
Protect in Fee with State PILT Liability	\$0	\$0	\$0	\$0	\$0
Protect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$877,000	\$877,000
Protect in Easement	\$0	\$0	\$0	\$0	\$0
Enhance	\$0	\$0	\$0	\$0	\$0
Total	\$0	\$0	\$0	\$1,077,500	\$1,077,500

Table 3. Acres within each Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore	0	0	0	0	3	3
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	19	19
Protect in Easement	0	0	0	0	0	0
Enhance	0	0	0	0	0	0
Total	0	0	0	0	22	22

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	\$200,500	\$200,500
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	\$877,000	\$877,000
Protect in Easement	\$0	\$0	\$0	\$0	\$0	\$0
Enhance	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$0	\$0	\$0	\$0	\$1,077,500	\$1,077,500

Table 5. Average Cost per Acre by Resource Type

Type	Wetlands	Prairies	Forest	Habitats
Restore	\$0	\$0	\$0	\$66,833
Protect in Fee with State PILT Liability	\$0	\$0	\$0	\$0
Protect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$46,158
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	\$66,833
Protect in Fee with State PILT Liability	\$0	\$0	\$0	\$0	\$0
Protect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$0	\$46,158
Protect in Easement	\$0	\$0	\$0	\$0	\$0
Enhance	\$0	\$0	\$0	\$0	\$0

Target Lake/Stream/River Feet or Miles

1,400

Parcel List

Section 1 - Restore / Enhance Parcel List

St. Louis

Name	TRDS	Acres	Est Cost	Existing Protection?
010-0870-00020	05014228	1	\$0	Yes
010-0870-00030	05014228	1	\$0	Yes
137-010-0870-00020	05014228	4	\$0	Yes
137-010-0870-00030	05014228	1	\$0	Yes
137-010-0870-00090	05014228	1	\$0	Yes
137-010-0870-00090	05014228	1	\$0	Yes
137-010-0870-00110	05014228	1	\$0	Yes
137-010-2710-06530	05014228	1	\$0	Yes
137-010-2710-08200	05014228	1	\$0	Yes
137-Dedicated ROW	05014228	1	\$0	Yes

Section 2 - Protect Parcel List

St. Louis

Name	TRDS	Acres	Est Cost	Existing Protection?	Hunting?	Fishing?
010-2116-00190	05014202	1	\$1,300	No	Limited	Full
010-2116-00200	05014202	1	\$1,200	No	Limited	Full
010-2116-00210	05014202	1	\$1,300	No	Limited	Full
010-2116-00250	05014202	1	\$1,400	No	Limited	Full
010-2116-00260	05014202	1	\$1,400	No	Limited	Full
010-2116-00270	05014202	1	\$1,500	No	Limited	Full
010-2116-00280	05014202	1	\$1,600	No	Limited	Full
010-2116-00290	05014202	1	\$1,600	No	Limited	Full
010-2116-00300	05014202	1	\$1,600	No	Limited	Full
010-2116-00310	05014202	1	\$1,700	No	Limited	Full
010-2116-00320	05014202	1	\$1,900	No	Limited	Full
010-2116-00330	05014202	1	\$1,900	No	Limited	Full
010-2116-00340	05014202	1	\$2,700	No	Limited	Full
010-2116-00350	05014202	3	\$16,100	No	Limited	Full
010-2116-00650	05014202	12	\$356,500	No	Limited	Full

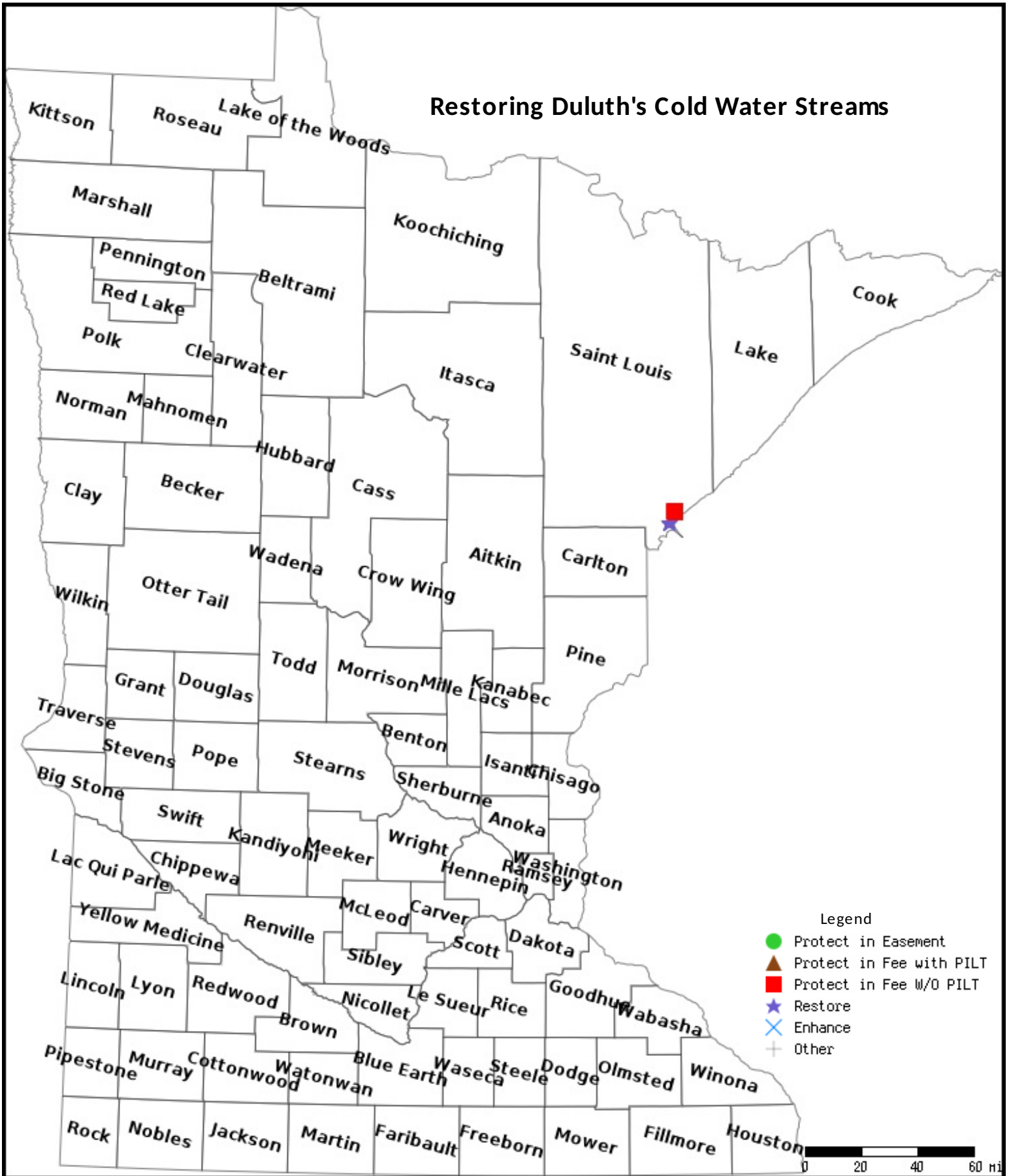
Section 2a - Protect Parcel with Bldgs

No parcels with an activity type protect and has buildings.

Section 3 - Other Parcel Activity

No parcels with an other activity type.



Parcel Map

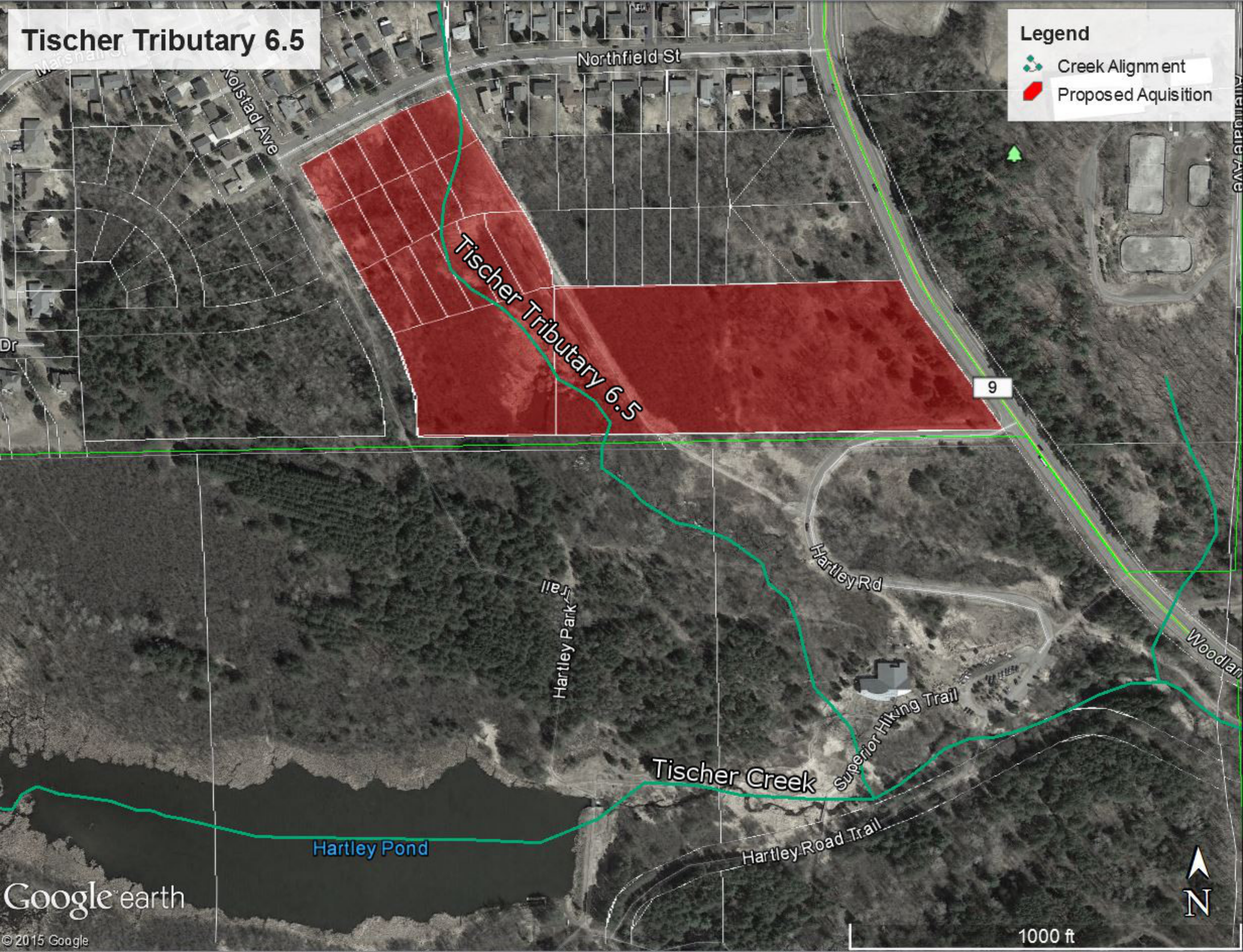


Data Generated From Parcel List

Tischer Tributary 6.5


Legend

-  Creek Alignment
-  Proposed Aquisition

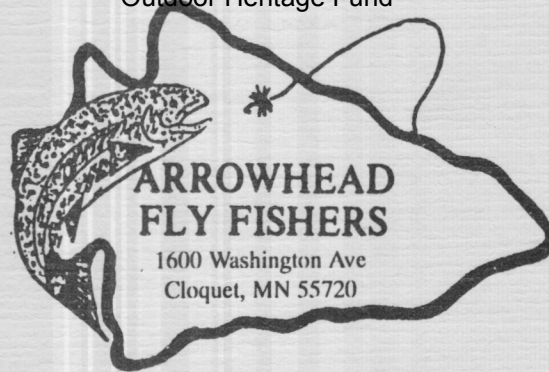




Buckingham Creek Restoration Project Boundaries
UTM: 566463, 5181232

 Buckingham Creek Project Area Outline





Lessard-Sams Outdoor Heritage Council
95 State Office Building
St. Paul, MN 55155

May 29, 2015

Re: City of Duluth application, *Restoring Duluth's Cold Water Streams*.

Dear Folks:

The Arrowhead Fly-Fishers' Club is dedicated to the preservation of fisheries throughout the Arrowhead and takes an active role in conservation. Projects are often in cooperation with the Minnesota Department of Natural Resources, the US Forest Service, and St. Louis County Land department. Club members planted 1,500 trees in riparian acres of several trout lakes in far northeastern Minnesota and collaborated to restore the Uskabwanka River south of Duluth.

Urban trout streams are especially sensitive to potential impacts from rising water temperature, runoff, poor riparian cover/canopy, impervious surfaces, road crossings, and construction runoff. Impacts from watershed disturbance caused by increased residential development adjoining Hartley would likely exacerbate the threat to Tischer Creek. The degraded condition of Buckingham Creek is an existing problem that impacts not only the creek but Twin Lakes as well and needs immediate attention.

Mainly, these small streams are places where kids having gotten off the sofa and bolted from the house can tramp along a watercourse and pursue trout with a rod and a lure. Indeed, it is the purpose of the Arrowhead Fly-Fishers' Club to encourage youngsters take up the fly-rod and to grow up to be advocates for a better environment. Fly-fishing makes for a tranquil spirit.

Thank you. I am

Truly Yours,

John L Connolly DDS

President of the Arrowhead Fly-Fishers; Club



Izaak Walton League of America
W. J. McCabe Chapter
PO Box 3063
Duluth, MN 55804

Lessard-Sams Outdoor Heritage Council
95 State Office Building
St. Paul, MN 55155

May 21, 2015

To whom it may concern:

The W. J. McCabe (Duluth) Chapter, of the Izaak Walton League of America, has been closely involved in the management and improvement of Hartley Park for many years. The "Ikes" hold our monthly meetings at Hartley Nature Center, and our chapter members work directly with the City of Duluth and the Director of Hartley Nature Center to guide the writing of the Master Plan for Hartley Park and to volunteer our assistance with on-the ground management of the park's natural resource values. We also host an annual Spring Youth Outdoor Expo held at the park every year in May.

We strongly support acquiring the parcels to the north of the park as well as adequate financial resources to restore and protect the park's natural features and to meet the growing demands being placed on the park for outdoor recreation and nature-based education and outreach.

The League is a "big picture" organization, working to protect whole watersheds, including the air and water quality, the fish and wildlife habitat, and to provide the opportunity for nature centered outdoor activities, especially for youth. Hartley Park presents a unique opportunity to restore and enhance a significant natural ecosystem and landscape within the City of Duluth. The Hartley Park Master Plan provides a comprehensive plan to improve the overall environment of the 640 acre park: providing an invaluable tool for education about conservation and preservation. Our central goal for this park is to provide nature centered outdoor experiences, and to manage the land in a way that prevents over-development and protects the valuable natural features of the park.

This application is a strong "next step" for the implementation of that plan and strongly complements the restoration and enhancement of park resources beginning shortly. The proposed acquisition and improvements increase the opportunities for public education about this valuable resource through improved accessibility and more occasions for interpretation and reflection.

Please give this application your strongest consideration.

Sincerely,

/s/ Rich Staffon
RICH STAFFON
President
W. J. McCabe Chapter, IWLA
(Email: rcstaffon@msn.com; phone: 218-879-3186)



Lessard-Sam's Outdoor Heritage Council,

May 27, 2015


The Minnesota Land Trust believes the City of Duluth's proposal for **Restoring Duluth's Cold Water Streams** widespread and significant effect for fish and wildlife species native to the St. Louis River and Lake Superior. In addition, these restoration projects will have positive outcomes for engaging Duluth's citizens in conservation and water quality initiatives.

The City of Duluth has 16 designated trout streams within the City boundary. These cold water streams are important habitat for native brook trout as well as supporting other fish and wildlife populations important for Lake Superior and along the north shore. The City of Duluth has been coordinating closely with state and federal agencies that are working to improve water quality and fish and wildlife resources in the region. As a major landowner the City has the opportunity to contribute large scale improvements to aquatic and riparian habitats along these tributary stream corridors.

The Land Trust is pleased to see the City of Duluth actively engage in habitat protection and restoration projects. We have been advancing protection and restoration projects in northeastern Minnesota for more than a decade. Our projects range from protection of old growth white pine forest on Park Point to dredging accumulated debris out of Radio Tower Bay. The Land Trust looks forward to continued work with Duluth to integrate conservation of recreational open space and wildlife habitat with Duluth's on-going revitalization initiatives.

The Land Trust encourages your support to begin this unique and innovative program to enable Duluth to begin protecting and restoring habitat on ecologically important City owned land.

Respectfully,



Kris Larson,
Executive Director

2356 University Avenue West, Suite 240
St. Paul, Minnesota 55114
(651) 647-9590 phone • (651) 647-9769 fax
www.mnland.org

Recycled paper: 100% post-consumer waste & processed chlorine-free
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Lessard-Sams Outdoor Heritage Council
95 State Office Building
St. Paul, MN 55155

May 21, 2015

Dear Madam/Sir:

Improvement and stewardship of Hartley Park, as well as the entire Duluth parks and trails system, depends upon vital partnerships between the City of Duluth and a variety of community-based organizations. Hartley Nature Center is the City's primary partner in the planning, improvement, use and stewardship of Hartley Park. The City of Duluth works in partnership with Hartley Nature Center on all significant decisions about the Park and strives to achieve genuine consensus with Center leadership.

The acquisition and restoration of the ISD 709 property has long been a priority for the park and the Nature Center, as outlined in the Hartley Park Master Plan. Acquisition of the parcels will ensure a quality user experience for Hartley Nature Center's program participants and the general public utilizing the park's many recreational opportunities. Attention to the resources needs by removing buckthorn and tansy improves the long-term health of the ecosystem, and provides significant opportunities for public education regarding the problems caused by invasives.

Your approval of this application will advance many goals for many stakeholders; the Nature Center, the City of Duluth, ski, bike, & conservation partners, and area schools. Thank you for the opportunity and your consideration.

Sincerely,

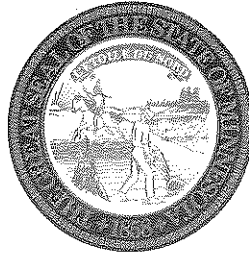
A handwritten signature in black ink, appearing to read "Tom O'Rourke", is written over a light blue horizontal line.

Tom O'Rourke
Executive Director

3001 Woodland Avenue Duluth, MN 55803
office: 218-724-6735 fax: 218-724-4891
www.hartleynature.org

Erik Simonson
State Representative

District 07B



Minnesota House of Representatives

May 26, 2015

Lessard-Sams Outdoor Heritage Council
95 State Office Building
St. Paul, MN 55155

Re: City of Duluth application, *Restoring Duluth's Cold Water Streams*.

Dear Council Members:

I'm writing to respectfully request your support for the City of Duluth's request for Lessard-Sams Outdoor Heritage Council funding for the project titled *Restoring Duluth's Cold Water Streams*.

Duluth is home to 16 designated trout streams. Urban trout streams are especially sensitive to potential impacts from rising water temperature, runoff, poor riparian cover/canopy, impervious surfaces, road crossings, and construction runoff. Tischer and Buckingham creeks and Twin Lakes are particularly important because of their urban locations. They are easily accessible to urban youth and families and provide opportunities for education and outreach that promote fishing and environmental stewardship. Twin Lakes is a unique opportunity: a trout lake in the heart of a city where families can fish for Rainbow Trout.

Acquisition and restoration of the property adjoining Hartley Nature Preserve and Tischer Creek as well as restoration of Buckingham Creek has impacts on the health of the entire Lake Superior watershed as well. Duluth, state, and regional partners have spent millions of dollars to improve water quality and habitat in Lake Superior and the St. Louis River Estuary. Addressing significant watershed degradation issues is an important contribution to these goals as well.

Thank you for your consideration of this request. Please feel free to contact me with any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Erik Simonson'.

Erik Simonson
State Representative



Lessard-Sams Outdoor Heritage Council
95 State Office Building
St. Paul, MN 55155

May 21, 2015

To whom it may concern:


This letter is in support of the Outdoor Heritage Fund request by the City of Duluth Minnesota to continue its work to restore, enhance and protect its natural resource base.

The City and many user groups and volunteers have put forth a great effort promoting the natural resources within the City of Duluth. The economic benefits that this effort provides are a plus for our businesses specifically, but the overall economy as well. Visit Duluth is actively working toward the goal of making our city a regional hub for outdoor activities, in part because of the significant economic impact of silent sports.

Restoration, enhancement, and protection are key to ensuring that the resources are preserved and utilized in such a way as to provide outdoor enjoyment into the future. Preservation of the parcels that adjoin Hartley Park safeguards the health of the park itself and ensures the quality of the user experience.

Enger golf course is an important economic resource for Duluth but is critically in need of irrigation upgrades to reduce water consumption and prevent storm water runoff. A restored Buckingham Creek will increase the diversity of users to Enger Park as well as improve the golfer experience with its beauty.

Visit Duluth is fully in support of the City's request for these important resource upgrades.


Anna Tanski, President/CEO
Visit Duluth

Minnesota Sea Grant College Program

*144 Chester Park
31 W. College Street
Duluth, MN 55812*

*Phone: 218-726-8106
Fax: 218-726-6556*

Tuesday, June 2, 2015

Lessard-Sams Outdoor Heritage Council
95 State Office Building
St. Paul, MN 55155

To whom it may concern:


Minnesota Sea Grant is the only Sea Grant program focused entirely on Lake Superior. Sea Grant seeks to maintain and enhance its coastal environment and economy through high-quality research, education, and outreach. The complex nature of the multi-disciplinary natural resource problems facing us requires innovative solutions. We encourage and facilitate the implementation of research-based best practice solutions and encourage collaboration between federal, state, and tribal agencies, local government, the public, and industry. The synergy generated by collaborating increases the impact of projects.

Duluth is home to 16 designated trout streams: Tischer Creek in Hartley Park and Buckingham Creek in Enger Park are two that are in critical need of restoration and protection. Our monitoring has found impacts to Tischer Creek that can be directly linked to upstream development, and our research has identified both as having high amounts of impervious surface, which has been linked to ecosystem degradation in studies across the country. Trout streams are especially sensitive to potential impacts from urbanization and rural development: rising water temperature, increasing water and sediment runoff, openings in riparian cover/canopy, impervious surfaces, road crossings, and construction runoff. Impacts from watershed disturbance caused by increased residential development adjoining Hartley would likely exacerbate the threat to Tischer Creek.

Two of Sea Grant's main focus areas include healthy coastal ecosystems and resilient communities and economies. The City of Duluth is stepping up to the plate to collaborate with the MN DNR to restore and protect these important resources, which will improve both the health and resilience of these coastal stream ecosystems. Protecting existing resources is always a cheaper option than having to restore severely degraded ones. I appreciate that the City and MN DNR are being proactive in protecting these streams before the problems become so severe that the trout have been eliminated, and Minnesota Sea Grant will gladly provide any assistance we can to assure the success of this project. The City of Duluth and MN DNR have long proved committed and critical partners to Lake Superior watershed issues. Please give this proposal your strongest commitment.

If you have any questions about this letter, please feel free to contact me.

Sincerely,



Jesse Schomberg, Interim Co-Director and Extension Program Leader
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UNIVERSITY OF MINNESOTA

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Natural Resources Research Institute**5013 Miller Trunk Highway
Duluth, Minnesota 55811-1442**Office: 218.720.4294**Fax: 218.720.4328**www.nrri.umn.edu/cwe*

Lessard-Sams Outdoor Heritage Council
95 State Office Building
St. Paul, MN 55155

June 1, 2015


To whom it may concern:

The Natural Resources Research Institute (NRRI) is pleased to support the proposal "Restoring Duluth's Cold Water Streams" being submitted by the City of Duluth to the Lessard-Sams Outdoor Heritage Council. Restoration and protection of natural resources contribute significantly to our region's tourism economy, but that's not all. A vibrant, healthy, and diverse recreation environment creates a great place to live and work, and this environment also encourages diversified private sector investment. Duluth was recently voted best outdoor city for that reason. The City of Duluth is supportive of and committed to acquiring and restoring threatened land, as well as addressing long-standing problems such as delisting the St. Louis River Area of Concern, and restoration of trout streams like Tischer Creek and Buckingham Creek. The restoration of the two streams in this proposal is an important step towards improving aquatic habitats and water quality. Buckingham Creek is a tributary of the St. Louis River, and it runs through Enger golf course and Twin Ponds in Enger Park. Tischer Creek runs through Hartley Park and flows into Lake Superior. The city's support and commitment to these projects provides high quality jobs in applied research and technology development, environmental assessment and restoration, prototyping and analytics, and geographical information systems technology.

NRRI collaborates with local, state, and bi-national partners to plan for sustainable management of Minnesota's natural resources, as well as to improve ecosystem health and the economic vitality of our region. We have several projects underway that are aimed at restoration of the wetland and aquatic habitats in the St. Louis River estuary and the Lake Superior watershed. We are pleased to strongly endorse this work and to collaborate with the City of Duluth on the continued restoration of these streams.

At the University of Minnesota Duluth, the Natural Resources Research Institute's mission is to foster the economic development of Minnesota's natural resources in an environmentally sound manner to promote private sector employment. NRRI collaborates with its partners (including industry, government, universities, tribes, agencies and communities) on fostering a sustainable, more diversified economy as well as a healthy environment. Our work is focused on research that allows stakeholders to make informed economic and environmental decisions necessary for technology development and transfer, business development, and experiential learning in the context of informed environmental stewardship.

Sincerely,



Dr. Rolf Weberg
Director