

Lessard-Sams Outdoor Heritage Council

MEMO: Agenda Item #9

DATE: December 12, 2017

SUBJECT: Lands in the Public Domain
ML 17, Ch. 91, Art. , Sec. 2, Subd 5(j) Conservation Partners Legacy Grant Program Phase IX:
Statewide and Metro Habitat

PRESENTER: Jessica Lee, MN DNR and Jim Shoberg, City of Duluth

Suggested Motion:

Motion to approve the acquisition of land in the public domain as the purchase creates additional direct benefits sought by the Outdoor Heritage Fund (OHF), the purchase will protect an unnamed coldwater tributary of Tischer Creek, designated by the DNR as Tributary 6.5. Otherwise make no motion or a negative motion may be made referring to no additional direct benefits.

Past council practice has been to approve purchases of tax-forfeit land and county-owned land because additional protection is realized using OHF funds.

Background: The Conservation Partners Legacy Grant Program (CPL) is seeking approval to allow a grant recipient, City of Duluth, to purchase the parcel currently in the public domain by being owned by the school district. CPL Staff and the City of Duluth are here today presenting a request for the council's agreement that their purchase of and owning the lands will provide additional habitat benefits.

This land is currently platted and open for purchase to the public and could be lost to development if the OHF does not purchase this property.

LSOHC approval is necessary because the land is in the public domain as described in M.S. 97A.056, Subd. 9. Lands in public domain. The statute allows the OHF to be used to buy publically owned land only if certain criteria are met.

Subd. 9. Lands in public domain.

Money appropriated from the outdoor heritage fund shall not be used to purchase any land in fee title or a permanent conservation easement if the land in question is fully or partially owned by the state of Minnesota or a political subdivision of the state, unless: (1) the purchase creates additional direct benefit to protect, restore, or enhance the state's wetlands, prairies, forests, or habitat for fish, game, and wildlife; and (2) the purchase is approved by an affirmative vote of at least nine members of the council.

Upon approval, CPL will give approval to this project to be funded in the 2017 grant cycle. If the council does not approve, CPL will not acquire the parcels and will seek to distribute the monies to other applicants.

This was a proposal before the Council considered for the 2016 legislative session, HA 05 - Restoring Duluth's Cold Water Streams.

Attachments: Original CPL Application

Conservation Partners Legacy Grant Application

Printed 2017-12-07

Project Contact

Project name	2017 Tributary 6.5 Protection and Restoration	Project manager	Jim Shoberg
Organization name	City of Duluth	Title	Senior Project Manager
Organization type	Government	Phone	218-730-4316
Mailing address 1	411 West 1st Street	Email	jshoberg@duluthmn.gov
Mailing address 2			
City	Duluth		
State	MN		
Zip code	55802		

Project Overview

Sites / Location

County name	St. Louis
Project site name	Tischer Tributary 6.5
Total project sites	1
Total project acres	16

Land Ownership

Primary land ownership	Local Government
Additional land ownerships	

Habitat

Primary habitat type	Fish, Game or Wildlife Habitat
Additional habitat types	

Activities

Primary activity	Acquisition
Additional activities	

Project Funding Summary

Grant type	Metro
Grant request level	over \$25,000
Total grant amount requested	\$300,250
Total match amount pledged	\$64,499
Additional funding amount	
Total project cost	\$364,749

Project Summary

Have you ever received a CPL grant before? Yes

Project Location Summary

Primary county	St. Louis - Duluth	Primary land ownership	Local Government
Project site name	Tischer Tributary 6.5		

Habitat and Activity Summary

Primary habitat	Fish, Game or Wildlife	Total project sites	1
type	Habitat	Total project	16
Primary activity	Acquisition	acres	

Advance payment

Will you be requesting advance payment? No

Summary

TISCHER CREEK TRIBUTARY 6.5 Scope Tributary 6.5 Phase I: Acquisition. The City will acquire 16 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. Water flow to adjacent wetlands will be restored by replacing a clogged culvert. Tributary 6.5 Phase III (future funding): An existing utility right-of-way 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. Connectivity and fish passage will be restored by 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.

Problem statement

Problem Approximately 1/4 of Tributary 6.5 length is on ISD-709 property, including its source. 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 additional impervious surface produced by residential development. Tischer is above the watershed's 10% impact threshold for impervious surface. Habitat within the tributary has been impacted by both beaver impoundments on the channel (observed in historical aerial photos), as well as channelization of the upper reach and culverting/fill over the source that blocks flow to adjacent wetland. Importance Tischer Creek is one of three restoration priority areas for Brook Trout and other coldwater species by National Fish & Wildlife Foundation (NFWF). NFWF is a pass through organization for the Great Lakes Restoration Initiative. 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 that warms Tischer Creek and significantly improves the water quality downstream. Tributary 6.5 is consistently colder than the main stem of Tischer. Further, acquisition will ensure that an adequate visual and sound barrier remains between Hartley and residential developments to preserve the "wilderness" experience felt by users. Hartley is a designated regional asset because it provides this experience in an undeveloped natural area within 2.5 hours of Mpls/St. Paul. How it was identified DNR Fisheries indicated that this is a critical coldwater base flow source to Tischer and habitat downstream. The Hartley Nature Center Master Planning process identified the ISD 709 parcels as a priority. Habitat affected The acquired parcels include a mix of wetlands, Tributary 6.5, and upland forests. The parcels are on the northern border of Hartley 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. Downstream flow is significantly warmed by the impoundment and impact downstream coldwater species including trout and benthic organisms.

Project objectives

Objective 1: Acquire 16 acres that surround Tischer Tributary 6.5. and annex to Hartley Park.

Objective 2: Eliminate invasive species on the entire 16 acres and restore flow to adjacent wetlands. Habitats benefited: The acquired parcels include a mix of wetlands, Tributary 6.5, and upland forests. The parcels are on the northern border of Hartley 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 eliminate invasive, exotic species, improve upland habitat, and protect water quality downstream by ensuring the coldwater flow. The land is adjacent and will be added to the Hartley nature preserve and the protection permanent. Outcomes listed by species removed may be found in the attached Conservation Plan

Methods

Phase I: Acquisition and annexation was approved via the Hartley Master Plan and Duluth City Council approval of same in 2014. Duluth is in negotiation with ISD 709 to acquire the parcels. Duluth's Properties and Facilities Management will retain a DNR approved appraiser to value the land before purchase. Upon closing, the City Council will approve annexation to Hartley Park.

Phase II: Immediately after annexation, Community Action Duluth's Stream Corps will begin removal of invasives and will monitor and retreat as necessary for two years. Control methods listed by species controlled may be found in the attached Conservation Plan. Community Action Duluth partners with the City of Duluth to identify and eliminate invasive species on city-owned land. To date, invasives have been removed on 24 miles of riparian zones of the St. Louis River and in 146 acres in Hartley Park and estuary uplands. Stream Corps is under contract to remove a further 110 acres of invasives in Hartley. Stream Corps works with the Midwest Invasive Species Information Network (Network) to improve reporting and response. City of Duluth staff will replace the blocked culvert. Phase III: Successful restoration steps include: site assessment, project planning, site preparation, species selection, 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).

Experience / Abilities

The City relies on the MN Land Trust to guide on-the-ground restoration implementation. MLT conservation easements permanently protect more than 150 miles of shoreline and riparian areas in Minnesota and restore habitat for lake sturgeon, sheltered bays, and wild rice in the St. Louis River Corridor. The City and MN Land Trust will coordinate restoration activities with natural resource management agencies and organizations including DNR Stream Habitats and Fisheries, MNPCA, and the EPA. The City will align this project with the St. Louis River AOC Remedial Action Plan. These partners provide advice and expertise that guides all development and restoration actions. The City will complete this year an open CPL Metro project to remove invasives and restore native habitat in the St. Louis Corridor. The City retained Boreal Natives and Community Action Duluth Stream Corps to clear invasives and replant natives. The grant has restored 130 acres to date and will restore an additional 57 acres before the end of the project: 105 more acres than originally committed. Please see Methods for Stream Corps experience.

Project Timeline

Time Frame	Goal
July 2018	Acquisition complete
August 2018	Begin restoration, replace culvert
May 2019	Monitoring and retreat
May 2020	Monitoring and retreat
Estimated project completion date	2021-06-30

Budget Information

Organization's Fiscal Contact Information

Name	Wayne Parsons	Street address 1	411 West 1st Street
Title	Chief Financial Officer	Street address 2	
Email	wparsons@duluthmn.gov	City	Duluth
Phone	218-730-5450	State	MN
		Zip	55802
		Code	

Budget Details

Personnel

<u>Name</u>	<u>Title / work to be completed</u>	<u>Amount</u>	<u>Grant/Match</u>	<u>In-kind/Cash</u>
Henry Martinson	Acquisition & Title transfer	\$8,500	Match	In-kind
Wayne Parsons	Grant Administration	\$9,833	Match	In-kind
Jim Shoberg	Project Management	\$4,948	Match	In-kind
Will Roche	Overall oversight	\$6,218	Match	In-kind

Contracts

<u>Contractor Name</u>	<u>Contracted Work</u>	<u>Amount</u>	<u>Grant/Match</u>	<u>In-kind/Cash</u>
Community Action Duluth	Invasive Species Removal	\$29,000	Match	Cash

Fee Acquisition with PILT

<u>Parcel Name</u>	<u>Parcel Purchase Price</u>	<u>Amount</u>	<u>Grant/Match</u>	<u>In-kind/Cash</u>
010-2116-00650	249000	\$249,000	Grant	
010-2116-00350	13500	\$13,500	Grant	
010-2116-00290	1300	\$1,300	Grant	
010-2116-00300	1550	\$1,550	Grant	
010-2116-00310	1700	\$1,700	Grant	
010-2116-00320	1700	\$1,700	Grant	
010-2116-00330	1850	\$1,850	Grant	
010-2116-00340	2350	\$2,350	Grant	
010-2116-00190	1150	\$1,150	Grant	
010-2116-00200	1150	\$1,150	Grant	
010-2116-00210	1200	\$1,200	Grant	
010-2116-00280	1600	\$1,600	Grant	

010-2116-00270	1450	\$1,450	Grant
010-2116-00260	1400	\$1,400	Grant
010-2116-00250	1350	\$1,350	Grant
010-2116-00220	3100	\$3,100	Grant
010-2116-00230	2000	\$2,000	Grant
010-2116-00240	2900	\$2,900	Grant

Professional Services

<u>Professional Name</u>	<u>Description of Services</u>	<u>Amount</u>	<u>Grant/Match</u>	<u>In-kind/Cash</u>
Appraiser TBD	Appraisal	\$6,000	Match	Cash

Additional Budget Items

<u>Item</u>	<u>Description</u>	<u>Amount</u>	<u>Grant/Match</u>	<u>In-kind/Cash</u>
Culvert	Replace blocked culvert	\$10,000	Grant	

Additional Funding

Additional funding amount

Budget Overview

Item Type	Grant	Match	Total
Personnel		\$29,499	\$29,499
Contracts		\$29,000	\$29,000
Fee Acquisition with PILT	\$290,250		\$290,250
Fee Acquisition without PILT			
Easement Acquisition			
Travel (in-state)			
Professional Services		\$6,000	\$6,000
DNR Land Acquisition Cost			
Equipment/Tools/Supplies			
Additional Budget Items	\$10,000		\$10,000
Total:	\$300,250	\$64,499	\$364,749

Project Funding Summary

Grant type	Metro
Grant request level	over \$25,000
Total grant amount requested	\$300,250
Total match amount pledged	\$64,499
Additional funding amount	
Total project cost	\$364,749

Project Information

1. Describe the degree of collaboration and local support for this project.

Duluth partners with many organizations and interest groups to meet its goals, ensure community buy-in, and leverage expertise and funds. Minnesota Land Trust (MLT) assists Duluth evaluate, plan, and implement protection and restoration projects (See Restoration Plan). MLT is a statewide non-profit working to protect and restore Minnesota's natural areas. This is a priority project for DNR fisheries and design of this project was overseen by DNR Fisheries, Two Harbors. The Arrowhead Fly Fishers and Izaak Walton League are especially supportive of this project for urban angling opportunities for youth. Acquisition of the DPS parcels was a priority in the Hartley Master Plan. Community Action Duluth's Stream Corps will implement the invasive species removal and monitor and retreat as necessary.

2. Describe any urgency associated with this project.

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. DNR Fisheries indicated that loss of this critical coldwater base flow source would negatively impact Tischer and habitat downstream. Acquisition ensures that an adequate visual and sound barrier remains between Hartley and residential developments to preserve the "wilderness" experience felt by users. Hartley is a designated regional asset because it provides this experience in an undeveloped natural area within 2.5 hours of Mpls/St. Paul.

3. Discuss if there is full funding secured for this project, the sources of that funding and if CPL Grant funds will supplement or supplant existing funding.

Funding to remove invasive species is secured: provided by Community Action Duluth Stream Corps and funded by EPA GLRI funds. However, the priority is to acquire the parcels and protect them from development and there are no funds available. Duluth requests \$300,250 to acquire the property and restore water flow to adjacent wetlands.

4. Describe public access at project site for hunting and fishing, identifying all open seasons.

Hartley Nature Preserve is a 640 acre natural site of biodiversity that includes a coldwater stream within a major urban area. The source that improves water quality downstream from the impoundment is a unique and eminently valuable resource to increase public access and exposure to trout fishing, bow hunting, and other outdoor recreation. Tischer Creek and other urban cold water streams in Duluth are critical to engage young people in fly fishing and resource conservation. The area is used for hiking, biking, skiing, bird watching, fishing, kayaking/canoeing, geocaching, and the like. Habitat restoration is expected to improve water and land based wildlife recreation by removing the invasive exotic species and preserving this cold water source.

5. Discuss use of native vegetation (if applicable).

Phase II removal of invasives will promote growth by existing natives. All planting in Phase III will follow DNR Restoration and Enhancement guidelines as well as Pollinator Best Management Practices. Locally sourced material will be used as much as possible to preserve potential local ecotypes that include low and high flood plains and terraced mesic upland forest. Verification of plant species and variety will be required when nursery obtained plants are used. Only native species included in MN DNR Field Guide to the Native Plant Communities of Minnesota will be used. Restoration uses a combination of seed, seedlings and cuttings for propagation.

6. **Discuss your budget and why it is cost effective.**

The budget for the land was determined by the asking price of ISD 709-Duluth Public Schools. The City will enter negotiations with the District after it has its own appraisal performed. Stream Corps utilizes a CC model to build marketable job skills for individuals with barriers to employment, while simultaneously enhancing habitat and biodiversity. The model leverages federal resources to provide employment as well as restore habitat and biodiversity.

7. **Provide information on how your organization encourages a local conservation culture. This includes your organization's history of promoting conservation in the local area, visibility of work to the public and any activities and outreach your organization has completed in the local area.**

Duluth residents insisted that a 'preservation' category that restricts use on lands of high natural resource or scenic value be incorporated into the Comprehensive Land Use Plan. Duluth boasts 128 parks covering over 11,000 acres of land: considerably more greenspace than comparable cities. Cycling, skiing, hiking, climbing and snowmobile clubs are on-going partners. Last year, 2,445 volunteers and 48 organizations donated over 11,000 hours to support conservation and recreation projects in the City! Extensive environmental education programs occur via collaborations with schools and non-profits and the west Duluth elementary school is environmentally themed. Stream Corps works with the Midwest Invasive Species Information Network (Network) to improve reporting and response and provides an early detection and rapid response resource for invasive species to assist in the detection and identification of invasive species and support successful management.

Site Information

Land Manager

Name	Erik Birkeland	Phone	218-730-4435
Organization	City of Duluth	Email	ebirkeland@duluthmn.gov
Title	Director -Properties & Facilites		
Review and approval form	Duluth_LM_Approval_Form.pdf		

Site Information

Site name	Tributary 6.5	Project acres	16
Habitat	Fish, Game or Wildlife Habitat	Open to public hunting?	Yes - some
Activity	Acquisition	Open to public fishing?	Yes - all
Land ownership	Local Government		



Attachments

Additional Documentation

Attach additional documentation as applicable using the appropriate categories below. If you exceed the size limit while uploading, contact CPL staff to discuss your options.

Letters of Support

<u>File</u>	<u>Description</u>
City_of_Duluth_Support_Letters.pdf	Letters of Support

Partner Commitment Letters

Photos

<u>File</u>	<u>Description</u>
Tributary_6.5._Graphics.pdf	Photos & Graphics

Restoration Plans

<u>File</u>	<u>Description</u>
Tributary_6.5_Restoration_Plan.pdf	Restoration Plan

Engineering/Survey/Design Plans

Supplemental Documents

<u>File</u>	<u>Description</u>
2017_Hydrologist_Form.pdf	Hydrologist Form
2017_Duluth_Parcel_List.xlsx	

Final Application Submission

This completes your CPL Grant Application. Please take the time to revisit the previous sections and make sure you have entered everything completely and correctly. Once you hit the submit button below, you will not be able to return to this application to make changes.

**I certify that I have read the Conservation Partners Legacy Grants Program Request for
✓ Proposal, Program Manual and other program documents, and have discussed this project with the appropriate public land manager, or private landowner and easement holder.**

**I certify I am authorized to apply for and manage these grant and match funds, and the
✓ project work by the organization or agency listed below. I certify this organization to have the financial capability to compete this project and that it will comply with all applicable laws and regulations.**

**I certify that all of the information contained in the application is correct as of the time of the
✓ submission. If anything should change, I will contact CPL Grant Staff immediately to make corrections.**

**I certify that if funded I will give consideration to and make timely written contact to
✓ Minnesota Conservation Corps or its successor for consideration of possible use of their services to contract for restoration and enhancement services. I will provide CPL staff a copy of that written contact within 10 days after the execution of my grant, should I be awarded.**

**I certify that I am aware at least one Land Manager Review and Approval form is required for every application and at least one Public Waters Contact form is required for all public
✓ waters work. I am aware I must submit all completed forms by uploading them into this application. I have attached the required type and number of forms as necessary for this project.**

✓ I am aware that by typing my name in the box below, I am applying my signature to this online document.

Signature: **Jim Fibly Williams**
Title: **Director of Public Administration**

Organization / Agency: **City of Duluth**
Date: **2017-09-12**



Minnesota Department of Natural Resources
Regional Fisheries Office
1201 East Highway #2
Grand Rapids, MN 55744

Sept 11, 2017

Conservation Partners Legacy Grant Program
Minnesota DNR
500 Lafayette Road
Box #20
St. Paul, MN 55155

Dear Conservation Partners Legacy Grant Program,

We are writing to support a proposal from the City of Duluth to acquire property for the Hartley Nature Preserve and Tischer Creek tributary restoration. Tischer Creek Tributary 6.5 (Tributary 6.5) is located on the north side of Hartley Park and approximately ¼ of the stream length is within the parcel to be acquired, including the tributary source.

The tributary has significant coldwater flow, with a defined bed and banks, and is fed by small groundwater seeps as well as surface water runoff. Tributary 6.5 was consistently colder than the main stem of Tischer Creek, a designated trout stream, indicating this is an important coldwater base flow source to Tischer Creek.

Habitat within the tributary has been impacted by both beaver impoundments as well as channelization of the upper reach and culverting/fill over the source of flow. Acquisition of this tributary would allow for future restoration of the tributary, and prevent additional impacts to water quality and channel stability in both this tributary and the mainstem of Tischer Creek. Tischer Creek is already above the 10% impact threshold for impervious surface within the watershed, increasing the importance for limiting creation of additional impervious surfaces within this watershed.

We feel this project has a high probability of success and will improve habitat within the tributary and connected waters. The City of Duluth has worked closely with DNR Fisheries to develop the restoration budget and proposal. We will also be involved in future restoration design and construction.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jeff Tillma".

Jeff Tillma
Stream Habitat Specialist

A handwritten signature in blue ink, appearing to read "Deserae Hendrickson".

Deserae Hendrickson
Duluth Area Fisheries Manager



Jessica Lee
Conservation Partners Legacy Grant Program
Minnesota Department of Natural Resources
St. Paul, MN 55155

September 12, 2017

Re: City of Duluth application, Tischer Tributary 6.5 Acquisition and Restoration

Dear Ms Lee:

Since 1964, the International Federation of Fly Fishers has been an organized voice for fly fishers. The International Federation of Fly Fishers and its Councils are the only organized advocate for fly fishers on a national and regional level. The Upper Midwest Council include the states of Minnesota, Wisconsin, and Northern Illinois. The Upper Midwest Council joins the other FFF councils around the country to support and enhance the local charter and affiliate clubs.

The Council represents all aspects of fly fishing from the art of casting instruction and fly tying, to the protection of our fisheries. We provide conservation education about threats and issues that impact our natural resources, provide programs to engage youth in fly fishing, and encourage a Fly Fishing Code of Ethics that promotes responsible use of resources and courtesy to others.

Urban trout streams are uniquely sensitive to potential impacts from development because of the need for cover to keep the waters cool and clean. Tributary 6.5 is critical to the health of Tischer Creek downstream: it's cold, clear waters mitigate the warming and degradation caused by the impoundment in Hartley Park. The Federation supports policies and actions that encourage protection of these unique habitats and fish and therefore ask to support the acquisition and protection of the tributary.

Sincerely,

Todd Heggstad
President
Upper Midwest Council



3001 Woodland Avenue
Duluth, MN 55803
218-724-6735
info@hartleynature.org

Jessica Lee
Conservation Partners Legacy Grant Program
Minnesota Department of Natural Resources
St. Paul, MN 55155

Sept 1, 2017

Dear Ms. Lee:

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 and is specifically mentioned in the Hartley Park Master Plan. Acquisition of the parcels will ensure the protection and restoration of Tischer Tributary 6.5 as well as protect resource quality in the larger park area. Removing buckthorn and tansey improves the long-term health of the ecosystem as well as provides significant opportunities for public understanding of the problems caused by invasives. Attention and education about sometimes unique resource needs, in particular, the unique needs of cold water streams in urban environments, provides opportunities for public understanding that can be disseminated far beyond the impact of one project.

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

Sincerely,

Tom O'Rourke
Executive Director



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

Jessica Lee
Conservation Partners Legacy Grant Program
Minnesota Department of Natural Resources
St. Paul, MN 55155

September 8, 2017

Dear Ms Lee:

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

Lake Superior National Estuarine Research Reserve

14 Marina Dr., P. O. Box 2000
University of Wisconsin-Superior
Superior, WI 54880



Ms. Jessica Lee
Conservation Partners Legacy Grant Program
Minnesota Department of Natural Resources
St. Paul, MN 55155

RE: Support for City of Duluth application to Conservation Partners Legacy Grant Program

September 11, 2017

Dear Ms. Lee,

On behalf of the Lake Superior National Estuarine Research Reserve, I am writing to express support for the City of Duluth's application to the Conservation Partners Legacy Grant Program. The City's proposed work to restore and improve urban wild lands and cold water streams are of direct interest to the Reserve, and contain the strong partnerships and strategic leveraging of resources necessary for success.

The Lake Superior Reserve was designated in 2010 by the National Oceanic and Atmospheric Administration as one of a system of 28 networked [Research Reserves](#) nationwide committed to long term research, education, outreach and stewardship to improve the understanding of coastal systems and the practice of coastal management. The Reserve's programmatic work includes research on invasive aquatic and terrestrial species, monitoring and restoration within the estuary and watershed, environmental education and outreach and specialized training for coastal decision makers. The Reserve is also committed to growing and strengthening a wide range of community partnerships to promote and facilitate the best practice in science and restoration and as such, we have partnered with the City of Duluth and many other entities in the surrounding coastal region.

The City of Duluth's efforts to restore natural resources in the St. Louis River and western Lake Superior are laudable and meet many of the objectives of the Reserve. Science-based restoration and maintenance that create healthy, productive ecosystems increases the resilience of those ecosystems to threats. Improved access allows "living classrooms" to advance environmental literacy and involves young people, teachers, and citizens in coastal/local issues of concern. Restoration provides opportunities to test and modify best practices and provides sampling and monitoring measures to resource professionals engaged in long term resource management. Considerable progress has been made in the estuary and lake, but much remains to be done. The City's proposal promises to provide significant benefits for the residents of Duluth, the Twin Ports and visitors to western Lake Superior's coastal communities.

With all of the above, and on behalf of the Reserve, I am pleased to submit this letter of support and urge you to give it strong consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "Erika Washburn".

Erika Washburn, Ph.D.
Reserve Manager
Lake Superior NERR
715.392.3141
Erika.Washburn@uwex.edu



Jessica Lee
Conservation Partners Legacy Grant Program
Minnesota Department of Natural Resources
St. Paul, MN 55155

Sept 7, 2017

Dear Ms Lee:

The Minnesota Land Trust believes the City of Duluth's efforts to control exotic plant species and restore and enhance riparian and upland environments on City owned land will have widespread and significant effect on wildlife and aquatic habitats. In addition, these restoration projects will have significant positive outcomes for the Duluth's economic and business development goals and outdoor access and water quality initiatives.

Duluth is a significant landowner on Lank Superior and the St. Louis River Estuary. The Estuary is particularly important because it supports the primary nesting and spawning areas for fish and wildlife populations. 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 of the St. Louis River through DNR's St. Louis River Restoration Initiative. Improvements to Buckingham Creek contributes to this regional effort.

The Land Trust is pleased to be a partner in this project. We have been actively implementing protection and restoration projects 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 continues to 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 riparian habitat on 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

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UNIVERSITY OF MINNESOTA

Duluth Campus

Natural Resources Research Institute

Office of the Director

*5013 Miller Trunk Highway
Duluth, Minnesota 55811-1442*

*218-788-2694
Fax: 218-788-2619*

September 11, 2017

Jessica Lee
Conservation Partners Legacy Grant Program
Minnesota Department of Natural Resources
St. Paul, MN 55155

Re: Conservation Partners Legacy - Metro: Acquisition of Tischer Tributary 6.5

Dear Ms Lee:

The mission of the Natural Resources Research Institute is to deliver research solutions to balance our economy, resources and environment for resilient communities. The Institute collaborates with its partners (including industry, government, universities, tribes, agencies and communities) to foster 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.

Resource restoration and protection contribute significantly to our region's tourism economy, but that's not all. A vibrant, healthy, diversified recreation environment creates a great place to live and work and encourages diversified private sector investment. Duluth was recently voted best outdoor city for that reason. Further, the City of Duluth's support of, and commitment to, building its commitment to acquire and/or restore threatened land such as that surrounding the tributary 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 manage area resources to improve ecosystem health and the economic vitality of our region. Tischer Creek runs directly into Lake Superior, a part of the St. Louis River Area of Concern. Improvement of our upland streams will have a positive impact on the river ecosystem. We are pleased to strongly endorse this work and to collaborate with the City on restoration efforts.

Sincerely,

A handwritten signature in black ink, appearing to read 'R. T. Weberg', with a stylized flourish extending from the end.

Rolf T. Weberg
Director

Jessica Lee
Conservation Partners Legacy Grant Program
Minnesota Department of Natural Resources
St. Paul, MN 55155

September 5, 2017

Dear Ms Lee:

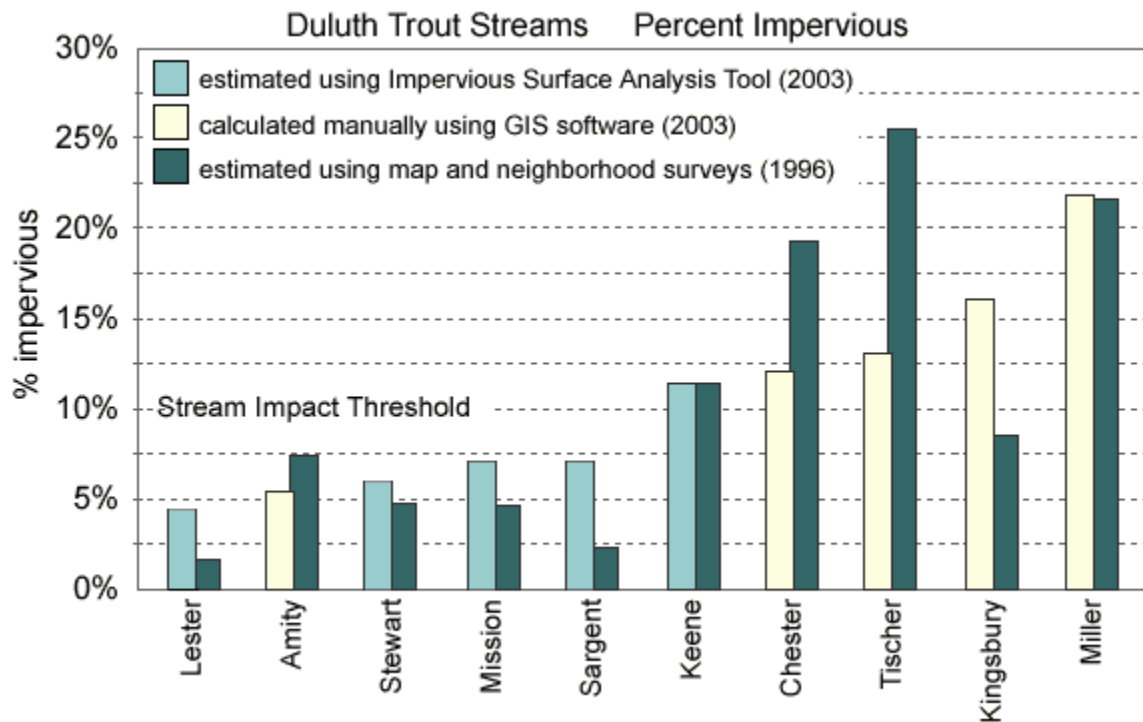
Minnesota Sea Grant is the only Sea Grant program focused entirely on Lake Superior. Sea Grant seeks to maintain and enhance its coastal environment and economy through high-quality research, education, and outreach. The complex nature of the multi-disciplinary natural resource problems facing us requires 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. These 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.

The City of Duluth is stepping up to the plate to collaborate with the MN DNR to restore and protect these important resources. 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.

A handwritten signature in black ink, appearing to read 'J. Schomberg', with a stylized, flowing script.

Jesse Schomberg
Extension Program Leader and Coastal Community Extension Educator
University of Minnesota Sea Grant Program
31 W College St
Duluth, MN



Graphic Source: Duluth Streams website <http://www.lakesuperiorstreams.org/streams/tischerwshed.html>



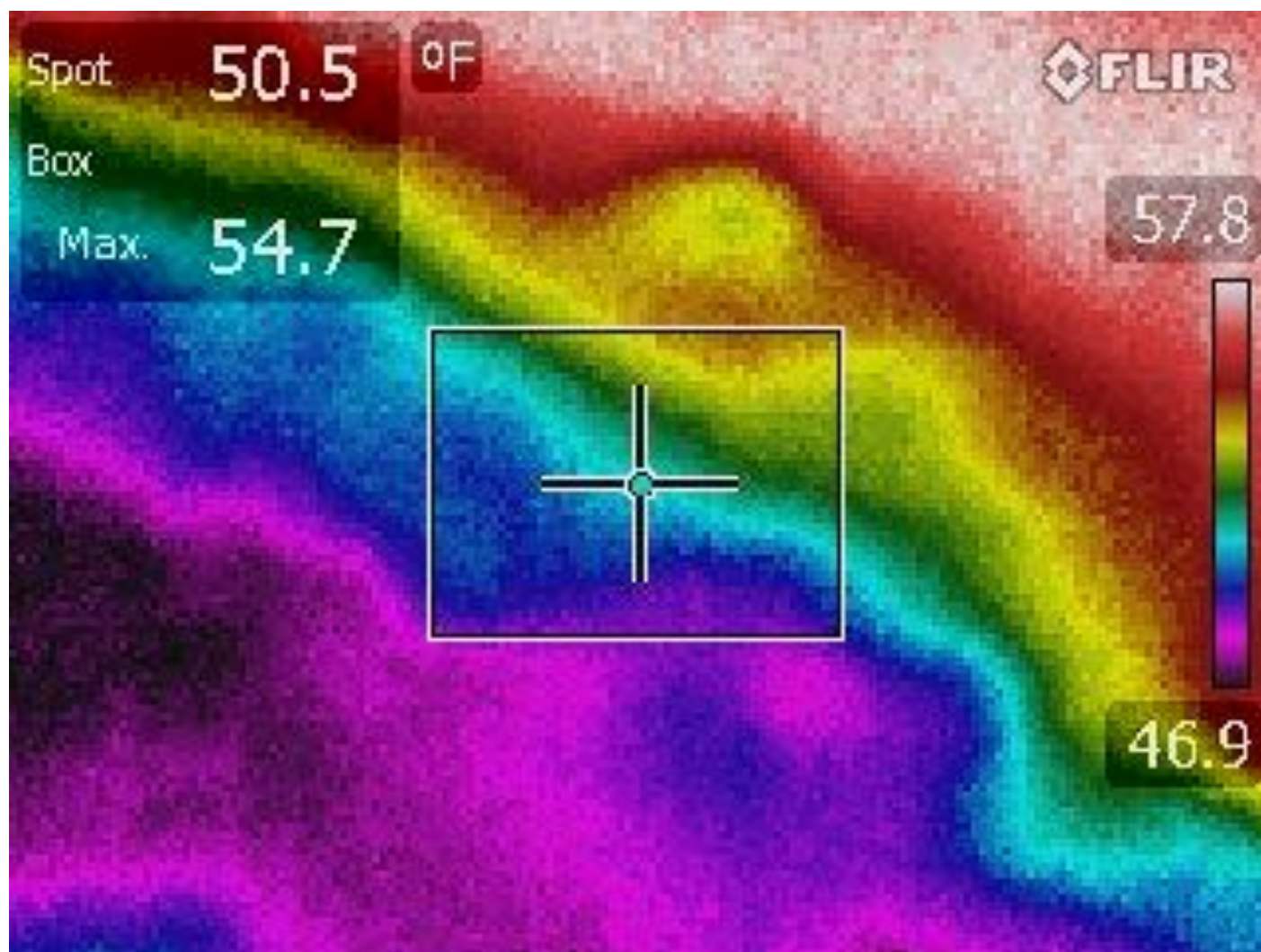
Tischer Tributary 6.5: Reach impacted by beaver impoundment.



Tischer Tributary 6.5: Channelized reach near source on school property



Tischer Tributary 6.5: Reach in Hartley Park near confluence with Tischler Creek



Thermal image of confluence of Tributary 6.5 with Tischer Creek in Hartley Park. Purple areas are cold tributary flow (bottom left) mixing with the warmer red areas of stream flow (top right of photo) coming down Tischer Creek. Areas where two are mixing are shown in blue/yellow.

Restoration Plan

Buckthorn (glossy & common)/honeysuckle

Honeysuckle will be controlled wherever it is found on targeted sites. Control methods are the same as buckthorn.

Glossy buckthorn (*Frangula alnus*) grows quickly and can be reproductive by age 3. Common buckthorn (*Rhamnus cathartica*) reaches maturity by age 5. The seeds of buckthorn, both glossy and common, can remain viable in the soil for up to 6 years. Therefore, from the last seed dropping season, it will take a minimum of 6 years of monitoring and treating areas to remove the population. Treatment every three years is most financially effective. “Although seed eradication is not a practical short-term goal, chemical girdling can substantially and strategically reduce seed and effectively limit spread.”

Stream Corps will utilize chainsaws for buckthorn stem removal. Volunteer will use loppers to remove smaller diameter re-sprouts and new stems. Best practice indicates disposal of buckthorn on-site to prevent further spread the plant to new habitats. Many buckthorn will have already dropped their berries, therefore removing the entire bush won't eliminate seed from the seed bank. Retaining the waste on-site will provide nutrients for the forest over the next 5 years.

Control acres will be broken into smaller zones to maximize impact and lessen the chances for missed stems. Each side of a zone consists of a physical and obvious barrier such as a stream or a trail. The method will follow the Aldo Leopold Foundation model utilized over 15 years. Cutting will start on the edges of the zones and work into the interior, cutting off any avenues for the buckthorn or honeysuckle to escape each zone. This is especially useful in areas that are surrounded by standing buckthorn. The sawyer will fell the trees outward, creating a walkway for sprayers following behind and maximizing visibility of the stumps. The width of the cuts for each line will be kept to about 4-6 feet to help the sprayers locate stumps. Cuts are generally made 3-6 inches above the ground to increase treatment effectiveness; however, snow depth could greatly restrict us from being able to cut that low on the stem so stumps may be upwards of 18 inches in some areas. Along trails, the first 10 feet will be basal sprayed only wherever possible (basal diameter less than 2 inches) to preserve aesthetics. No spray will be used within 10 feet of open water.

Crewmembers with backpack sprayers will follow the sawyer and treat the stumps with the herbicide mixture. Garlon 3A and Hi-light Dye Liquid are the chemicals used for treatment. This is done by dripping the chemical over the entire cut surface of the stump to prevent possible re-sprouting. Having two sprayers follow one sawyer is an effective way to avoid missing stumps. It also allows the sawyer to move at a faster pace.

Wild Parsnip

Mechanical Control: Cutting the entire root just below ground level with a sharp shovel or spade is the most effective to prevent resprouting. In some soil types in wet conditions, the plants can be pulled out of the ground by hand. All seeds are removed from the site and disposed of in a landfill or by burning.

If the population is too large to hand-cut or pull, a power brush-cutter is used just after peak flowering and before the seeds set. Any plants that are cut above the ground and resprout are cut again a few weeks later to prevent flowering. Cutting done after seed set reduces the likelihood that the plants will be able to resprout and flower. Plants cut at this time are gathered and removed from the site to prevent mature seed from developing and falling to the ground. Where appropriate, all seeds will be hand-collected after they have set. If control of flowering or seeding plants is carried out over several years, the population will decrease as the seed bank is depleted.

Chemical Control: Chemical controls are effective, but will be used sparingly on quality habitats. The

best method is to burn the site, then follow with spot applications of herbicide. Herbicides such as 2,4-D, Escort® or glyphosate can be spot applied to the basal rosette of the parsnip. Adult plants are spot treated during the time of plant bolting until flowering (mid-May to mid-June) or in the fall targeting plants in the rosette stage. Effective spot treatment mixtures are 1-3% active ingredient glyphosate mix or a 1 ounce Escort® plus surfactant mix.

Japanese Knotweed

Stem injection applications deliver herbicide directly into the hollow cane in the first few internodes above the ground level of the plant. The injection process is more cost effective compared to making several trips to sites to re-spray foliar applications. Delivering Round-up or Rodeo directly into the plant, above the root crown dramatically increases the translocation ability of the herbicide throughout the plants root structure. Crews utilize the J. K. Injection Tool for the individual stem injections. The needle is inserted perpendicular to the stem, and midway between lower nodes. The applicator squeezes the trigger and the pre-set amount of herbicide is delivered into the stem cavity.

The injection process in riparian areas has been the most effective control method against plant re-growth, and poses limited threats to neighboring vegetation. With this method there is no need to cut canes, or handle viable plant material for disposal. If 40 of 50 canes in an area are injected, expect that the 10 canes NOT injected/treated to survive and spread. Each cane develops its own rhizome system. Injections can be made anytime during the growing season, with early June being the preferred timing as most canes have developed. Plants will be dead within 72hrs, and can be cut and transported with no risk of spreading by fragmentation.

Garlic Mustard

The R2ED (Rapid Response and Early Detection) Team or Duluth Invaders Service Initiative consists of 21 volunteers who have been trained in invasive species eradication methods for 5 terrestrial plants in the Duluth City Limits - Common Tansy, Garlic Mustard, Buckthorns (Common and Glossy), Japanese Knotweed, and Exotic Honeysuckles (Morrow's, Bell's and Tartarian). CA Duluth will work with R2ED to organize garlic pulls early in the season before flowering. Plants will be bagged and either land filled or burned. All footwear and equipment will be cleaned to ensure seeds are not transported.

Quantification Methods

Buckthorn/honeysuckle: Two different methods will ensure consistency with previous data in their respective sites.

Method 1: Prior to removal, points will be randomly generated and input to a GPS. An employee will walk to the point and use a compass to direct them North. They will walk 20 yards north (a 100 yard tape will be laid out) with hands outstretched and count how many individuals are within their wingspan during the walk. This method records all individuals before and after, however it is time intensive and does not differentiate between adults and juveniles.

Method 2: In one section, the entire area was walked using a tablet with a map application showing the boundaries. Within this area, all adult buckthorn were GPS'd using a 10 point average method and displayed on a map. Following the removal of buckthorn in this stand, the same can be done the following year to measure the successful removal of adult trees. This method only records the population of adults before and after treatment, which may skip any young ones not treated. Area includes city owned parts of the WWFT.

Japanese Knotweed: Each stand will be counted as treatment commences and recorded. About 72 hours later the knotweed will be cut and transported and any surviving individuals will be treated

again. The following year, as treatment begins, the stands will be counted to see a reduction in size and density.

Garlic Mustard: Sites will be mapped via GPS to show the parameter, and mapped again the following two years to track reduction or growth.

Wild Parsnip: Of the few stands known to occur, each individual will be recorded and removed. A reduction in stand size is expected after two years of removal.

1. Maintenance

Year I: Within 6-8 weeks of treatment, a team will check all sites for reassessment. All sites will need some type of treatment following. Some will need another knockdown, others just a follow-up spray treatment.

Year II Check all sites for reassessment Some will need another knockdown, others just a follow-up spray treatment. Add plantings or seeds appropriate to site.

On-going: City of Duluth, CA Duluth, or Hartley Nature Center will assess how new communities are doing and plan for control and replanting. (Dependent upon funding.)

Results – Outputs and Outcomes

Buckthorn and Eurasian Honeysuckle

- Outcome: 90% elimination of all plants over 4 feet in height.
- Measures: Observation, documenting location with GPS and photos, Using GIS and GNSS to log areas and to ensure work crew stays on the intended property.
- Responsible: Initial Map – City of Duluth (completed), Tracking – Duluth Stream Corps
- Accuracy of that estimate, including applicable limitations. Accurate: staff will use GPS tracking to record areas treated.

Japanese Knotweed

- Outcomes: 90% reduction by stem count
- Measures: Observation of stem counts, documenting location with GPS and photos;
- Responsible: Duluth Stream Corps
- Accuracy of estimate, including applicable limitations Accurate. Use of GPS and photos.

Garlic Mustard

- Outcomes: 50% reduction in area
- Measures: Observation, documenting location and parameter of infestation with GPS and photos;
- Responsible: Duluth Stream Corps
- Accuracy of estimate, including applicable limitations
Fair: each plant produces thousands of seeds making reseeding likely.

Wild parsnip

- Outcomes: 80% reduction by stem count
- Measures: Observation by stem counts, documenting location with GPS and photos;
- Responsible: Duluth Stream Corps
- Accuracy of estimate, including applicable limitations
Fair: does not grow in stands and stems are not visible for 3 years after seeding.

CPL Public Waters Project Form

CONTACT INFORMATION:

DNR Hydrologist name: Patricia Fowler

Phone: (218) 302-3246

Email: Patricia.Fowler@state.mn.us

PROJECT INFORMATION:

Project Name: Tischer Tributary 6.5 Acquisition/Restoration

Organization: City of Duluth

Contact Person: Jim Shoberg

Email: jshoberg@duluthmn.gov

THIS PROJECT INVOLVES PUBLIC WATER(S): ☒ YES continue with form ☐ NO skip to signature

PUBLIC WATERS IN PROPOSED PROJECT:

DOW #:	Name:	County:	T/ R/ S	or	UTM
	Tischer Tributary 6.5	St. Louis	05014202	E	N
				E	N
				E	N
				E	N
				E	N

☐ There are waters involved in this project that are outside my work area and I have provided the applicant with contact information for the appropriate Area Hydrologist.

Please check the appropriate boxes:

PERMITS

☒ I have discussed any public water permits, applications and requirements the applicant may be responsible for while completing this project within public water(s).

With the project as presented, a Public Waters permit:

☐ is likely to be required, need further information.

☒ will be required.

☐ will not be required.

☒ A permit review has not been conducted and the results of a possible review are neither implied nor stated.

COMMENTS please provide any comments about projects, impacts, etc., to be considered when funding decisions are made.

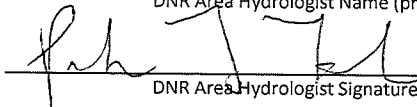
DNR staff have identified the upper reach of this tributary as an important cold water source for Tischer Creek, providing benefits to water quality downstream from the Hartley Pond impoundment. Acquisition is primary before the land is developed for residences. Post acquisition, connectivity and fish passage will be restored by 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.

☒ By checking this box and signing my name below I certify that I discussed the proposed project with the applicant.

Patricia Fowler

Date: 09/07/2017


DNR Area Hydrologist Name (print)



DNR Area Hydrologist Signature

APPLICANT: Upload this PDF file to the Review and Approval tab within the application system.

Tischer Tributary 6.5

Legend

 Creek Alignment

 Proposed Aquisition

