

## Main Request for Funding Form

### Lessard-Sams Outdoor Heritage Council Fiscal Year 2014 / ML 2013 Proposal

**Program or Project Title:** Duluth 2012 Flood: Stream Habitat Restoration Program

**Funds Requested:** \$6,023,000

**Manager's Name:** Kate Kubiak

**Title:** Conservation Leader - Specialist

**Organization:** South St. Louis SWCD

**Street Address:** 215 North 1st Avenue East, Rm 301

**City:** Duluth, MN 55802

**Telephone:** 218.723.4867

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**Organization Web Site:** <http://www.southstlouisswcd.org/index.html>

**County Locations:** St. Louis , and St. Louis County.

#### Ecological Planning Regions:

- Northern Forest

#### Activity Type:

- Restore
- Enhance

#### Priority Resources Addressed by Activity:

- Forest
- Habitat

### Abstract

An epic storm dumped up to ten inches of precipitation on Northeastern Minnesota on June 19 and 20, 2012. In response, this project creates a stream habitat repair program for eight of Duluth's iconic cold-water or brook trout streams.

### Activity Detail

#### Design and Scope of Work

On June 19th and 20, a slow moving storm dumped a record amount of rainfall on Duluth and parts of Northeastern Minnesota. This rainfall fell with devastating consequences for residents and the streams and rivers flowing down Duluth's semi-mountainous terrain into the St. Louis River and Lake Superior. Bridges were washed away, culverts were blown out, channels were down cut and enlarged and huge areas of

sediment fell directly into pools and riffle of the region's cold-water (trout) streams. Disaster relief from the Federal Emergency Management Agency (FEMA) will help repair infrastructure, including parts of the storm-water system. However, this assistance is unlikely to prioritize restoration of unstable streams and damaged aquatic habitat. Pools and riffle areas were filled with sediment, smothering benthic organisms and depriving brook trout and other fish of spawning substrate, refugia, and a forage base. Exigent threats persist in areas where denuded hillsides, debris, raw gullies and eroding or missing culverts are present.

This proposal seeks to work in concert with FEMA, the City of Duluth, and a host of area partners to stabilize and restore habitat in eight of the hardest hit cold-water streams. This approach is not meant to imply that these are the only seriously damaged streams or rivers. It is simply the first phase of a staged river restoration process for streams damaged by extreme flooding and high peak flows. Experience gleaned from this first stage will be applied to subsequent phases, resulting in efficient use of human and financial capital.

Phase I of the restoration process focuses on the following eight Duluth area streams. The headwaters of these streams start above the escarpment in the communities of Proctor, Hermantown and Duluth Township.

- Keene Creek
- Buckingham Creek
- Kingsbury Creek
- Chester Creek
- Miller Creek
- Amity - Lester Creek
- Tischer Creek
- Mission Creek

#### Part (A)

The project includes a series of discrete, interrelated components. These components include physical and geomorphic inventories and measurements of streams, including assessments of green infrastructure, aquatic habitat, riparian corridor condition and hazard indices (e.g., bank hazard index). Stream geomorphology experts like Dave Rosgen and Stantech Consulting will be employed to work within a team environment to provide a system-wide approach to restoration for these severely damaged streams. Teams of volunteers and crew members from Duluth's own Stream Corps will work with volunteers and agency representatives to systematically walk streams and tributaries documenting conditions and locations. These locations will be linked and made available to partner agencies and the public through Google Earth or its equivalent. Fisheries experts from the DNR and area research institutions will work in parallel with this effort to determine a strategy to assure survivability of brook trout populations and other key aquatic fish and insect species.

#### Part (B)

A second phase of the project will focus on developing designs and restoration plans for priority restoration sites on public lands. These restoration designs will be developed in concert with river experts who have designed site specific and system-wide restoration projects in semi-mountainous areas like Duluth. The scope of this work includes in-stream and channel work, gully restoration and rehabilitation of stream banks and denuded slopes. Bank or bluff restoration will target 24 specific locations, with an average of three locations per stream. The system-wide assessment process discussed in Part (A) will be used to target restoration work. Some streams will have more sites and complicated bank restoration plans; whereas others sites and streams will have fewer sites and smaller scale restoration efforts. The prioritization scheme relies on composite score made up of indicators like habitat value, feasibility, cost, accessibility, natural recovery potential, downstream

impacts, ecological and recreational value community priorities. Smaller scale gully repair and shoreline stabilization not covered by FEMA assistance will also be part of the restoration package. Approximately 40 gullies will be remedied in these eight streams. Again, these gully repairs will be distributed based on needs within each watershed. The number of linear feet of in-stream habitat or shoreline stabilization will consist of approximately 8000 feet, with the priority set by needs within each watershed. A triage process will be used to focus on areas of greatest need. The forest canopy will be restored and replanted in critical sites, with similar number of linear feet (8000 ft.) distributed by greatest need.

### Part (C)

Project design or implementation will follow Part (B) or the design stage. This stage consists of developing bids and specifications for project designs. Individual projects will be awarded consistent with Minnesota Management and Budget (MMB) and Lessard-Sams Heritage Fund requirements. Projects will be administered by individual project managers as part of the same river restoration project team approach. Project managers include state and University of Minnesota employees, City of Duluth and St. Louis County employees (SWCD) and non-profit organizations like the Nature Conservancy, Community Action Duluth, the St. Louis River Alliance and the Minnesota Land Trust. The principal investigator will serve as the liaison to these project managers and to Lessard-Sams staff.

### Part (D) Public Involvement:

The City of Duluth and surrounding areas are still reeling from the events of June 19 and . Therefore, there is little to no resistance at this time to implementation of these projects. An effort will be made to make sure citizens are kept informed and apprised of progress at key steps in the process. This information exchange will take place on websites of partners like Lake Superior Streams, blogs like the “Perfect Duluth Day” and social media like Facebook and Twitter. These information sources will be augmented by traditional outlets like neighborhood newspapers and email announcements.

There may be some noise associated with these projects (equipment). Therefore every effort will be made to be sensitive to noise intrusions, dust and traffic in impacted areas. Neighborhood meetings will be held in conjunction with City staff to discuss project plans with neighbors and impacted property owners. Adjustments to project designs and scheduling will be made based on feedback received.

## **Planning**

### **MN State-wide Conservation Plan Priorities**

- H2 Protect critical shoreland of streams and lakes
- H6 Protect and restore critical in-water habitat of lakes and streams
- H7 Keep water on the landscape
- LU6 Reduce Upland and gully erosion through soil conservation practices

### **Plans Addressed**

- Lower St. Louis River Habitat Plan
- Minnesota DNR Strategic Conservation Agenda
- National Fish Habitat Action Plan
- Lake Superior Basin Plan, Lake Superior Lakewide Management Plan

## LSOHC Statewide Priorities

- Are ongoing, successful, transparent and accountable programs addressing actions and targets of one or more of the ecological sections
- Produce multiple enduring conservation benefits
- Are able to leverage effort and/or other funds to supplement any OHF appropriation
- Allow public access. This comes into play when all other things about the request are approximately equal
- Address conservation opportunities that will be lost if not immediately acted on
- Use a science-based strategic planning and evaluation model to guide protection, restoration and enhancement, similar to the United States Fish and Wildlife Service's Strategic Habitat Conservation model
- Ensures activities for "protecting, restoring and enhancing" are coordinated among agencies, non profits and others while doing this important work
- Target unique Minnesota landscapes that have historical value to fish and wildlife

## Relationship to Other Constitutional Funds

- Environmental and Natural Resource Trust Fund
- Clean Water Fund
- Parks and Trails Fund

The Stream Habitat Restoration Program (SHRP) is a local adaptation of Clean Water Council and Clean Water Fund's (CWF) approach to restoration and protection of Minnesota's watersheds and surface water quality. CWF support underlies the large scale efforts by state natural resource agencies and their partners to assess state-wide watershed conditions, to identify stressors, and to develop and implement strategies to restore water quality and aquatic habitat. The Duluth 2012 Flood: Stream Habitat Restoration Program (SHRP) is simply a localized version of the same approach, with an emphasis on restoring heavily damaged cold-water streams and watersheds draining into the St. Louis River Area of Concern (AOC) and Lake Superior. The SHRP will serve as the framework and core of this new effort. However, the true measure of success for this local collaborative model will be realized when project partners recognize the need, and apply for funds from the Trails and Parks Fund, the CWF, FEMA and other federal and state sources.

## Accelerates or Supplements Current Efforts

The storm of June 19th and 20 completely altered physical conditions in Duluth area streams. As such, this situation amounts to resetting the physical and biological conditions of these cold-water stream systems. Much of the modeling and assessment work completed to date will have to be repeated. New surveys will have to be undertaken to assess cold-water habitat availability, channel dimensions, stream flow characteristics and water quality conditions. Equipment will have to be replaced and ongoing assessment and evaluation restarted. Some studies and restoration work completed under the auspices of the St. Louis River Remedial Action Plan (RAP) and Miller Creek Total Maximum Daily Load may have to be revisited and revised. On a positive note, this storm also provides an unprecedented opportunity for natural resource agencies and partners to implement low impact development techniques and strategies to reduce the likelihood of severe property and ecological damage from another large scale precipitation event. This project does build on a highly successful history of partners working together to restore the St. Louis River AOC and to protect the gem of the Great Lakes, Superior.

## Sustainability and Maintenance

The collaboration and good will engendered by the SHRP will pay dividends into the future. The SHRP will serve as a magnet for scientific research and innovation; which in turn drives entrepreneurship. This critical mass will likely spawn spin- off businesses, research ventures and organizations that generate wealth and provide employment. These dividends will essentially turn an ecological and social disaster into an opportunity for new growth, and scientific and technical development. Maintaining the investment of the SHRP will be part of adaptive management strategy as the project moves into maintenance mode (likely 10 to 15 years from now). The SHRP will simply enhance a collaborative atmosphere that has existed for years in the Duluth area. Collaborators will continue to share resources, data and expertise through programs like the Natural Resource Research Institute's Lake Superior Streams web portal and the Regional Storm-water Protection Team. Evaluation and ongoing oversight will be paid for by a combination of state and federal sources as part of their mandates under the Great Lakes Water Quality Agreement, Clean Water Act, the Coastal Zone Management Act, the Safe Drinking Water Act and a wide variety of state and local statutes.

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

*Is the activity on permanently protected land and/or public waters per MS 103G.005, Subd. 15? - Yes*  
**(County/Municipal)**

## Accomplishment Timeline

Activity	Approximate Date Completed
Organize the Stream Habitat Restoration Program (SHRP), Define Partner Roles	10-31-2013
Publicly Announce the Formation of the SHRP	11-30-2013
Set Up Liasion Function with FEMA	11-30-2013
Design the Stream Reconnaissance Work (damage assessment)	03-31-2014
Carry Out the Stream Reconnaissance Work (damage assessment)	11-30-2014
Evaluate the Reconnaissance Data	02-28-2014
Determine Equipment Needs and Installation Schedule	02-28-2014
Install Equipment and Measurement Devices	04-15-2014
Model, Determine Feasibility of Restoration Approaches and Scenarios	12-30-2014
Publish a Summary of Restoration Alternatives and Scenarios	2-28-2015
Convene Experts and the Public - Decide on a Course of Action	03-31-2015
Schedule the Restoration Work	05-30-2015
Prepare Plans and Specifications	06-30-2015
Publish a River Restoration Request for Proposals	08-31-2015
Select and Award Contracts	12-31-2015
Carry Out Restoration Work	12-31-2018
Inspect and Photo Document Work	06-30-2018
Evaluate Restoration Effectiveness and Develop Stage II Projects and Adaptive Strategies	06-30-2018

## Outcomes

### Programs in the northern forest region

- Improved aquatic habitat indicators
- Increased availability and improved condition of riparian forests and other habitat corridors
- Improved stream stability

## Budget Spreadsheet

Total Amount of Request: \$6,023,000

### Budget and Cash Leverage

Budget Name	LSOHC Request	Anticipated Cash Leverage	Cash Leverage Source	Total
Personnel	\$775,000	\$350,000		\$1,125,000
Contracts	\$4,850,000	\$2,000,000	FEMA, EPA, CORPS	\$6,850,000
Fee Acquisition w/ PILT	\$0	\$0		\$0
Fee Acquisition w/o PILT	\$0	\$0		\$0
Easement Acquisition	\$0	\$0		\$0
Easement Stewardship	\$0	\$0		\$0
Travel (in-state)	\$0	\$0		\$0
Professional Services	\$300,000	\$0		\$300,000
Direct Support Services	\$0	\$0		\$0
DNR Land Acquisition Costs	\$0	\$0		\$0
Capital Equipment	\$43,000	\$0		\$43,000
Other Equipment/Tools	\$32,000	\$0		\$32,000
Supplies/Materials	\$23,000	\$0		\$23,000
DNR IDP	\$0	\$0		\$0
Total	\$6,023,000	\$2,350,000	-	\$8,373,000

### Personnel

Position	FTE	Over # of years	LSOHC Request	Anticipated Cash Leverage	Cash Leverage Source	Total
Project Manager	1.00	5.00	\$450,000	\$350,000	Volunteers, Local Govt Staff	\$800,000
Technican	1.00	5.00	\$325,000	\$0	-	\$325,000
Total	2.00	10.00	\$775,000	\$350,000	-	\$1,125,000

### Capital Equipment

Item Name	LSOHC Request	Anticipated Cash Leverage	Cash Leverage Source	Total
Total Station Survey Equipment	\$43,000	\$0	-	\$43,000
Total	\$43,000	\$0	-	\$43,000

## Output Tables

Table 1. Acres by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	0	0	0	100	100
Protect in Fee with State PILT Liability	0	0	0	0	0
Protect in Fee W/O State PILT Liability	0	0	0	0	0
Protect in Easement	0	0	0	0	0
Enhance	0	0	0	0	0
Total	0	0	0	100	100

Table 2. Total Requested Funding by Resource Type

Type	Wetlands	Prairies	Forest	Habitats	Total
Restore	\$0	\$0	\$0	\$6,023,000	\$6,023,000
Protect in Fee with State PILT Liability	\$0	\$0	\$0	\$0	\$0
Protect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$0	\$0
Protect in Easement	\$0	\$0	\$0	\$0	\$0
Enhance	\$0	\$0	\$0	\$0	\$0
Total	\$0	\$0	\$0	\$6,023,000	\$6,023,000

Table 3. Acres within each Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore	100	0	0	0	0	100
Protect in Fee with State PILT Liability	0	0	0	0	0	0
Protect in Fee W/O State PILT Liability	0	0	0	0	0	0
Protect in Easement	0	0	0	0	0	0
Enhance	0	0	0	0	0	0
Total	100	0	0	0	0	100



Table 4. Total Requested Funding within each Ecological Section

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore	\$6,023,000	\$0	\$0	\$0	\$0	\$6,023,000
Protect in Fee with State PILT Liability	\$0	\$0	\$0	\$0	\$0	\$0
Protect in Fee W/O State PILT Liability	\$0	\$0	\$0	\$0	\$0	\$0
Protect in Easement	\$0	\$0	\$0	\$0	\$0	\$0
Enhance	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$6,023,000	\$0	\$0	\$0	\$0	\$6,023,000

Table 5. Target Lake/Stream/River Miles

3 miles

## Parcel List

### Section 1 - Restore / Enhance Parcel List

St. Louis

Name	TRDS	Acres	Est Cost	Existing Protection?
AUDITORS PLAT NO 4 DULUTH	05014221	3	\$0	Yes
BANNING AND RAYS SUBDIVISION IN DULUTH	05014215	4	\$0	Yes
BANNING AND RAYS SUBDIVISION IN DULUTH	05014215	7	\$0	Yes
DECKER ROAD ADDITION DULUTH	05014219	1	\$0	Yes
DECKER ROAD ADDITION DULUTH	05014219	1	\$0	Yes
DULUTH LANDS IN THE CITY	05014216	140	\$0	Yes
DULUTH LANDS IN THE CITY	05014205	10	\$0	Yes
DULUTH LANDS IN THE CITY	05014205	10	\$0	Yes
DULUTH LANDS IN THE CITY	05014206	42	\$0	Yes
DULUTH LANDS IN THE CITY	05014206	41	\$0	Yes
DULUTH LANDS IN THE CITY	05014206	36	\$0	Yes
DULUTH LANDS IN THE CITY	05014206	19	\$0	Yes
DULUTH LANDS IN THE CITY	05014206	9	\$0	Yes
DULUTH LANDS IN THE CITY	05014207	4	\$0	Yes
DULUTH LANDS IN THE CITY	05014207	40	\$0	Yes
DULUTH LANDS IN THE CITY	05014205	10	\$0	Yes
DULUTH LANDS IN THE CITY	05014205	9	\$0	Yes

DULUTH LANDS IN THE CITY	05014205	9	\$0	Yes
DULUTH LANDS IN THE CITY	05014205	10	\$0	Yes
DULUTH LANDS IN THE CITY	05014205	10	\$0	Yes
DULUTH LANDS IN THE CITY	05014205	40	\$0	Yes
DULUTH LANDS IN THE CITY	05014209	3	\$0	Yes
DULUTH LANDS IN THE CITY	05014215	28	\$0	Yes
DULUTH LANDS IN THE CITY	05014219	11	\$0	Yes
DULUTH LANDS IN THE CITY	05014218	2	\$0	Yes
DULUTH LANDS IN THE CITY	05014215	3	\$0	Yes
DULUTH LANDS IN THE CITY	05014215	15	\$0	Yes
DULUTH LANDS IN THE CITY	05014215	9	\$0	Yes
DULUTH LANDS IN THE CITY	05014204	20	\$0	Yes
DULUTH LANDS IN THE CITY	05015201	11	\$0	Yes
DULUTH LANDS IN THE CITY	05014204	5	\$0	Yes
DULUTH LANDS IN THE CITY	05014204	10	\$0	Yes
DULUTH LANDS IN THE CITY	05014202	11	\$0	Yes
DULUTH LANDS IN THE CITY	05014219	2	\$0	Yes
DULUTH LANDS IN THE CITY	05014204	20	\$0	Yes
DULUTH PROPER SECOND DIVISION	05014206	3	\$0	Yes
DULUTH PROPER SECOND DIVISION	05014206	3	\$0	Yes
DULUTH PROPER SECOND DIVISION	05014206	0	\$0	Yes

DULUTH PROPER SECOND DIVISION	05014206	1	\$0	Yes
DULUTH PROPER SECOND DIVISION	05014232	0	\$0	Yes
DULUTH PROPER SECOND DIVISION	05014232	2	\$0	Yes
DULUTH PROPER SECOND DIVISION	05014232	2	\$0	Yes
DULUTH PROPER SECOND DIVISION	05014232	2	\$0	Yes
DULUTH PROPER SECOND DIVISION	05014206	1	\$0	Yes
DULUTH PROPER SECOND DIVISION	05014232	0	\$0	Yes
DULUTH PROPER SECOND DIVISION 1ST SUBDIVISION	05014232	1	\$0	Yes
ENDION DIVISION OF DULUTH	05014202	3	\$0	Yes
ENDION DIVISION OF DULUTH	05014202	2	\$0	Yes
ENDION DIVISION OF DULUTH	05014202	2	\$0	Yes
ENDION DIVISION OF DULUTH	05014202	1	\$0	Yes
ENDION DIVISION OF DULUTH	05014202	3	\$0	Yes
ENDION DIVISION OF DULUTH	05014204	1	\$0	Yes
ENDION DIVISION OF DULUTH	05014216	0	\$0	Yes
ENDION DIVISION OF DULUTH	05014204	1	\$0	Yes
ENDION DIVISION OF DULUTH	05014205	1	\$0	Yes
ENDION DIVISION OF DULUTH	05014205	1	\$0	Yes
ENGLEWOOD FARMS DULUTH	05014215	4	\$0	Yes
ENGLEWOOD FARMS DULUTH	05014215	3	\$0	Yes
ENGLEWOOD FARMS	05014215	3	\$0	Yes

DULUTH				
ENGLEWOOD FARMS DULUTH	05014215	1	\$0	Yes
GRAYS ADDITION TO DULUTH	05014203	0	\$0	Yes
GRAYS ADDITION TO DULUTH	05014205	0	\$0	Yes
GRAYS ADDITION TO DULUTH	05014204	0	\$0	Yes
GREENBRIAR HILLS DULUTH	05014209	26	\$0	Yes
HARRISONS BROOKDALE DIVISION OF DULUTH	05014232	2	\$0	Yes
HARRISONS BROOKDALE DIVISION OF DULUTH	05014232	1	\$0	Yes
HARRISONS BROOKDALE DIVISION OF DULUTH	05014232	0	\$0	Yes
HARRISONS BROOKDALE DIVISION OF DULUTH	05014232	0	\$0	Yes
HARRISONS BROOKDALE DIVISION OF DULUTH	05014232	1	\$0	Yes
HARRISONS BROOKDALE DIVISION OF DULUTH	05014232	1	\$0	Yes
HARRISONS BROOKDALE DIVISION OF DULUTH	05014232	1	\$0	Yes
HARRISONS	05014232	1	\$0	Yes

BROOKDALE DIVISION OF DULUTH				
HARRISONS BROOKDALE DIVISION OF DULUTH	05014232	0	\$0	Yes
HARRISONS BROOKDALE DIVISION OF DULUTH	05014232	0	\$0	Yes
HARRISONS BROOKDALE DIVISION OF DULUTH	05014232	1	\$0	Yes
HARRISONS BROOKDALE DIVISION OF DULUTH	05014232	0	\$0	Yes
HARRISONS BROOKDALE DIVISION OF DULUTH	05014232	1	\$0	Yes
HARRISONS BROOKDALE DIVISION OF DULUTH	05014232	0	\$0	Yes
HARRISONS BROOKDALE DIVISION OF DULUTH	05014232	0	\$0	Yes
HARRISONS BROOKDALE DIVISION OF DULUTH	05014232	0	\$0	Yes
HARRISONS BROOKDALE DIVISION OF DULUTH	05014232	0	\$0	Yes
HARRISONS BROOKDALE DIVISION OF DULUTH	05014232	2	\$0	Yes
HARRISONS BROOKDALE DIVISION OF DULUTH	05014232	2	\$0	Yes
HARRISONS BROOKDALE	05014232	2	\$0	Yes

DIVISION OF DULUTH				
LINCOLN PARK GARDENS DULUTH	05014232	1	\$0	Yes
LINCOLN PARK GARDENS DULUTH	05014232	1	\$0	Yes
LINCOLN PARK PLACE DULUTH	05014232	0	\$0	Yes
LINCOLN PARK PLACE DULUTH	05014232	0	\$0	Yes
LINCOLN PARK TERRACE DULUTH	05014232	0	\$0	Yes
LINCOLN PARK TERRACE DULUTH	05014232	0	\$0	Yes
LINCOLN PARK TERRACE DULUTH	05014232	0	\$0	Yes
MILLER CREEK DIVISION	05015201	51	\$0	Yes
MILLER CREEK DIVISION	05015201	9	\$0	Yes
MILLER CREEK FIRST ADDITION	05014219	16	\$0	Yes
MYERS AND WHIPPLES ADDITION TO DULUTH	05014215	0	\$0	Yes
MYERS AND WHIPPLES ADDITION TO DULUTH	05014215	0	\$0	Yes
MYERS AND WHIPPLES ADDITION TO DULUTH	05014215	0	\$0	Yes
PORTLAND DIV OF TOWN OF DULUTH	05014215	1	\$0	Yes
PORTLAND DIV OF TOWN OF DULUTH	05014215	0	\$0	Yes
PORTLAND DIV OF TOWN OF DULUTH	05014215	1	\$0	Yes
PORTLAND DIV OF TOWN OF DULUTH	05014215	0	\$0	Yes
PORTLAND DIV OF TOWN OF DULUTH	05014215	1	\$0	Yes
PORTLAND DIV OF	05014202	0	\$0	Yes

TOWN OF DULUTH				
SPALDINGS ADDITION TO DULUTH	05014232	1	\$0	Yes
SPALDINGS ADDITION TO DULUTH	05014232	0	\$0	Yes
SPALDINGS ADDITION TO DULUTH	05014232	0	\$0	Yes
SPALDINGS ADDITION TO DULUTH	05014232	0	\$0	Yes
SPALDINGS ADDITION TO DULUTH	05014232	0	\$0	Yes
SPALDINGS ADDITION TO DULUTH	05014232	0	\$0	Yes
SPALDINGS ADDITION TO DULUTH	05014232	0	\$0	Yes
SPALDINGS ADDITION TO DULUTH	05014206	1	\$0	Yes
SPALDINGS ADDITION TO DULUTH	05014206	1	\$0	Yes
SPALDINGS ADDITION TO DULUTH	05014232	1	\$0	Yes
SPALDINGS ADDITION TO DULUTH	05014232	1	\$0	Yes
SPALDINGS ADDITION TO DULUTH	05014232	1	\$0	Yes
SPALDINGS ADDITION TO DULUTH	05014232	1	\$0	Yes
SPALDINGS ADDITION TO DULUTH	05014232	1	\$0	Yes
SPALDINGS ADDITION TO DULUTH	05014232	0	\$0	Yes
SPALDINGS	05014232	1	\$0	Yes



ADDITION TO DULUTH				
SPALDINGS ADDITION TO DULUTH	05014232	0	\$0	Yes
SPALDINGS ADDITION TO DULUTH	05014232	0	\$0	Yes
SPALDINGS ADDITION TO DULUTH	05014232	0	\$0	Yes
SPALDINGS ADDITION TO DULUTH	05014232	0	\$0	Yes
VALLEY VIEW ADD TO DULUTH	05014204	10	\$0	Yes

St. Louis County

Name	TRDS	Acres	Est Cost	Existing Protection?
DULUTH LANDS IN THE CITY	04815206	39	\$0	Yes
DULUTH LANDS IN THE CITY	04815206	39	\$0	Yes
DULUTH LANDS IN THE CITY	04815206	39	\$0	Yes
DULUTH LANDS IN THE CITY	04815206	39	\$0	Yes
DULUTH LANDS IN THE CITY	04815206	39	\$0	Yes
DULUTH LANDS IN THE CITY	04815206	40	\$0	Yes
DULUTH LANDS IN THE CITY	04815206	39	\$0	Yes
DULUTH LANDS IN THE CITY	04815206	38	\$0	Yes
DULUTH LANDS IN THE CITY	04815206	40	\$0	Yes
DULUTH LANDS IN THE CITY	04815206	7	\$0	Yes
DULUTH LANDS IN THE CITY	04815206	9	\$0	Yes
DULUTH LANDS IN THE CITY	04815206	40	\$0	Yes

DULUTH LANDS IN THE CITY	04815206	40	\$0	Yes
FOND DU LAC EIGHTH STREET DULUTH	04815206	1	\$0	Yes
FOND DU LAC EIGHTH STREET DULUTH	04815206	1	\$0	Yes
FOND DU LAC EIGHTH STREET DULUTH	04815206	1	\$0	Yes
FOND DU LAC NINTH STREET DULUTH	04815206	0	\$0	Yes
FOND DU LAC NINTH STREET DULUTH	04815206	1	\$0	Yes
FOND DU LAC NINTH STREET DULUTH	04815206	0	\$0	Yes
FOND DU LAC NINTH STREET DULUTH	04815206	1	\$0	Yes
FOND DU LAC NINTH STREET DULUTH	04815206	1	\$0	Yes
FOND DU LAC SEVENTH STREET DULUTH	04815206	0	\$0	Yes
FOND DU LAC SEVENTH STREET DULUTH	04815206	0	\$0	Yes
FOND DU LAC SEVENTH STREET DULUTH	04815206	0	\$0	Yes
FOND DU LAC SEVENTH STREET DULUTH	04815206	0	\$0	Yes
FOND DU LAC SEVENTH STREET DULUTH	04815206	0	\$0	Yes
FOND DU LAC SEVENTH STREET DULUTH	04815206	0	\$0	Yes
FOND DU LAC SEVENTH STREET DULUTH	04815206	1	\$0	Yes
FOND DU LAC	04815206	0	\$0	Yes

SEVENTH STREET DULUTH				
FOND DU LAC SIXTH STREET DULUTH	04815206	0	\$0	Yes
FOND DU LAC SIXTH STREET DULUTH	04815206	0	\$0	Yes

## Section 2 - Protect Parcel List

No parcels with an activity type protect.

## Section 2a - Protect Parcel with Bldgs

No parcels with an activity type protect and has buildings.

## Section 3 - Other Parcel Activity

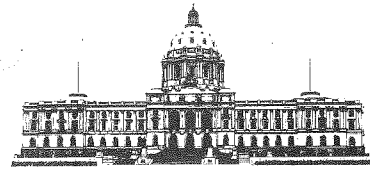
No parcels with an other activity type.

**Roger J. Reinert**

State Senator  
Duluth

149 State Office Building  
100 Rev. Dr. Martin Luther King, Jr. Blvd.  
St. Paul, MN 55155-1206

Office: (651) 296-4188  
sen.roger.reinert@senate.mn



## Senate

State of Minnesota

July 5, 2012

Lessard-Sams Outdoor Heritage Council  
100 Rev. Dr. Martin Luther King Jr. Blvd.  
State Office Building, Room 95  
St. Paul, MN 55155

To the Councilmembers:

I am writing to express my support for the Duluth 2012 Flood: Stream Habitat and Restoration Program (SHRP) proposal, which was submitted last week by the South St. Louis Soil and Water Conservation District. This project would have a direct and necessary impact on restoring our cold-water streams in and around Duluth.

The storm of June 19th and 20 completely altered physical conditions in Duluth area streams. Much must be done to stabilize and restore habitat in our community's hardest hit streams. The Duluth 2012 Flood: SHRP would work in conjunction with larger scale efforts by state natural resource agencies to assess state-wide watershed conditions, to identify stressors, and to develop and implement strategies to restore water quality and aquatic habitat. Additionally, the program would offer the opportunity to implement strategies to reduce future large scale flood damage.

I strongly encourage your consideration of the Duluth 2012 Flood: SHRP proposal. This program will fill a critical need in Duluth's overall recovery efforts. Please feel free to contact me with any questions as they arise.

Sincerely,

A handwritten signature in dark ink that reads "Roger J. Reinert".

Roger J. Reinert  
State Senator  
District 7 – Duluth



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SENATE DISTRICT 7

**Committees:** Transportation • Local Government and Elections • Commerce and Consumer Protection





City of Duluth  
Don Ness, Mayor

411 West First Street • Room 403 • Duluth, Minnesota • 55802-1199  
218-730-5230 • Fax: 218-730-5904 • Email: [dness@duluthmn.gov](mailto:dness@duluthmn.gov) • [www.duluthmn.gov](http://www.duluthmn.gov)

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July 2, 2012

Lessard-Sams Outdoor Heritage Council  
100 Rev. Dr. Martin Luther King Jr. Blvd  
State Office Building, Room 95  
St. Paul, MN 55155

Re: Support for Duluth 2012 Flood: Stream Habitat Restoration Project

On behalf of the City of Duluth, I am writing to express strong support of the proposal by the Minnesota Pollution Control Agency (MPCA) for funding under the Lessard Sams Outdoor Heritage Fund. The MPCA's application "*Duluth 2012 Flood: Stream Habitat Restoration Project*" request funds which will significantly assist in restoring and conserving the invaluable Lake Superior Basin water resources.

As the pictures clearly demonstrate, several areas in the City of Duluth and surrounding areas were devastated by the unprecedented flooding of June 19 and 20<sup>th</sup> – which included significant damage to several streams that were already impaired. In addition to storm water runoff and erosion, water quality will continue to be an issue in trout streams and nearby shore waters of Lake Superior.

I am confident in this proposal as it involves an impressive coalition of trusted partners including: the City of Duluth, University of Minnesota-Duluth, St. Louis County, Nature Conservancy, Community Action Duluth, the St. Louis River Alliance and the Minnesota Land Trust. Together with these area partners and the Lessard-Sams Outdoor Heritage Council, the City of Duluth is committed to stabilizing and restoring habitat in our hardest hit cold-water streams, as well as restoring impacted waters throughout the community. This critical funding will help provide our community with an opportunity to do just that. It would allow for immediate restoration projects as well as an opportunity to evaluate other restorations and conservation options.

For all the reasons above, I encourage your strong support of this application. Please feel free to contact me if you have any questions or if there are additional ways I can be of assistance. Thank you for your consideration.

Sincerely,

Don Ness  
Mayor

## Northern Bedrock Conservation Corps

### Board of Directors

Tim Beaster  
*Duluth Stream Corps*

Doug Bowen-Bailey  
*Digiterp Communications*

Ricky DeFoe  
*Duluth American Indian  
Commission*

Bob Grytdahl  
*Duluth Human Rights  
Office*

Cindy Martins  
*Lean Six Sigma  
Workplace & Leadership  
Trainer*

Trisha O'Keefe  
*Director, UMD  
International Student  
Services Office*

Jesse Schomberg  
*Minnesota Sea Grant  
College Program*

### Staff

Rolf Hagberg  
*Executive Director*

Brooke Tapp  
*Operations Director*

June 29, 2012

Brian Fredrickson  
Lake Superior Basin Coordinator  
Minnesota Pollution Control Agency  
525 Lake Avenue South, Suite 400  
Duluth, Minnesota 55810  
218-302-6604

Dear Mr. Fredrickson,

On behalf of the board and staff of Northern Bedrock Conservation Corps (NBCC), I'm writing to support your application to Lessard Sams Outdoor Heritage Fund. The floods of last week have devastated the rivers that run through Duluth and into Lake Superior.

I support the plan to access, develop work plans and proceed to restore and develop new strategies that will mitigate future catastrophes like this past week.

Using a conservation corps model is a effective and cost efficient way to do much of the hands work that will be needed.

I look forward to helping with this project in the future. Thanks for taking the lead on this.

Sincerely,



Rolf R. Hagberg  
Executive Director  
Northern Bedrock Conservation Corps





engaging our community to end poverty.

June 28, 2012

Lessard-Sams Outdoor Heritage Council  
100 Rev. Dr. Martin Luther King Jr. Blvd.  
State Office Building, Room 95  
St. Paul, MN 55155

Dear Lessard-Sams Outdoor Heritage Council,

As Program Manager of Community Action Duluth's Stream Corps, I am writing in support of the application by the Minnesota Pollution Control Agency (MPCA) for funding under the Lessard Sams - Outdoor Heritage Fund. The MPCA's proposal "Duluth 2012 Flood: Stream Habitat Restoration Program" would fit well with efforts already underway by the Stream Corps.

The goal of the Stream Corps is to provide jobs to restore habitat along Duluth's coldwater streams. This program has employed and trained over a dozen disadvantaged Duluth residents, restoring almost 75 streamside acres and planting over 10,000 native trees for 125 Duluth landowners. Since Community Action Duluth's Stream Corps program launched in October 2010, we have shown that a Conservation Corps model is a cost-effective way to generate jobs and job skills while restoring the environment.

The catastrophic 500-year flood in Duluth devastated the city's streams and their cold-water habitat. This event caused major damage to streams that are already impaired. Of the 14 designated trout streams within the City limits, half are listed on the State's 303(d) register. Without significant efforts taken immediately to restore the damage from this storm, it is likely that these impairments will worsen.

Duluth is still reeling from the devastation caused by the flooding, but I believe that this proposal represents a unique chance for the Council to restore Duluth's streams, put people to work, and improve the economy in one of Minnesota's great cities. This is the kind of project that the people of Minnesota envisioned when they passed the Legacy amendment in 2008. Please give your consideration to this proposal and let's heal Minnesota's environment and the people that depend on it.

Sincerely,

Tim Beaster  
Duluth Stream Corps Program Manager  
[tim@communityactionduluth.org](mailto:tim@communityactionduluth.org)  
(218) 726-1665

# UNIVERSITY OF MINNESOTA

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Duluth Campus

Office of the Director

Center for Water and the Environment  
Natural Resources Research Institute

5013 Miller Trunk Highway  
Duluth, Minnesota 55811-1442  
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[www.nrri.umn.edu/cwe](http://www.nrri.umn.edu/cwe)

28 June 2012

R.C.Boeheim  
District Manager, [R.Boheim@southstlouisswcd.org](mailto:R.Boheim@southstlouisswcd.org)  
South St. Louis Soil & Water Conservation District  
215 North 1st Avenue East Room 301  
Duluth, MN 55802

Re: Support for *Duluth 2012 Flood: Stream Habitat Restoration Program* L-SOHCproposal

Dear Mr. Boeheim,

I would like to express my strong support for the project proposal *Duluth 2012 Flood: Stream Habitat Restoration Program* being submitted by the South St. Louis Soil & Water Conservation District for funding consideration by the Lessard-Sams Outdoor Heritage Council for FY 2014.

The flash flooding that occurred in response to the intense rainstorms of June 19-20, 2012 in the region was unprecedented in the past 100 years and caused enormous ecological, in addition to economic damage to area watersheds and their aquatic ecosystems. In addition to the direct impacts of the stormwater runoff and erosion associated with the flash floods, there will be continuing degradation of water quality and habitat in the trout streams, the St. Louis River Estuary and Area of Concern (AOC), the near-shore waters of Lake Superior, and perhaps its off-shore waters as well.

I can commit to actively collaborate with the partnership that this grant would establish in the areas of technical assessment related to water quality and biological communities, and also by helping to disseminate information and products generated by the proposed program via both the *DuluthStreams/LakeSuperiorStreams.org* project and the *Weber Stream Restoration Initiative* for which I am the lead scientist. Your team has been a key partner in both of these programs since their inception in 2003 and 2005 respectively, and has the technical expertise, experience, and established partnerships with the >25 regional agencies and organizations that now work cooperatively on stormwater runoff and erosion control issues in the Western Lake Superior Basin.

I realize that budget details may not be crystallized for several weeks, but I can commit to approximately 10% of my annual effort during the course of the project. I believe that this program addresses a critical need for the region and the State of Minnesota in regard to restoring and conserving the ecological, aesthetic, cultural, recreational, and economic value of Lake Superior Basin water resources.

Sincerely,



Richard Axler, PhD

Senior Research Associate - Limnology/Water Quality  
(218)720-4316 /4279 (voice); [raxler@nrri.umn.edu](mailto:raxler@nrri.umn.edu)  
[www.lakesuperiorstreams.org](http://www.lakesuperiorstreams.org) [www.waterontheweb.org](http://www.waterontheweb.org)  
[www.nrri.umn.edu/cwe](http://www.nrri.umn.edu/cwe) [www.lakeaccess.org](http://www.lakeaccess.org)



# UNIVERSITY OF MINNESOTA

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28 June 2012

R.C.Boeheim

District Manager, [R.Boheim@southstlouisswcd.org](mailto:R.Boheim@southstlouisswcd.org)

South St. Louis Soil & Water Conservation District

215 North 1st Avenue East Room 301

Duluth, MN 55802

Re: Support for *Duluth 2012 Flood: Stream Habitat Restoration Program* L-SOHC proposal

Dear Mr. Boeheim,

The Center for Water & the Environment at the Natural Resources Research Institute is very pleased to support this grant proposal and to agree to actively participate in the program if funded. We have a long standing commitment to applying sound science to help understand and solve difficult environmental issues, in particular in Superior Basin watersheds. NRRI scientists can provide technical expertise in regard to ecological assessment, monitoring, evaluation, GIS, statistical analysis, project review, outreach education, and proposal development to further leverage available funding. A major program of the kind envisioned in this proposal is a critical and strategic need for the region's water resources and their biological communities to recover as rapidly as possible, and in the most cost-effective manner. It would provide funding for immediate restoration projects in addition to creating a mechanism for efficiently evaluating restoration options and promoting partnerships among regional organizations, agencies, NGOs, and citizen volunteers to restore degraded habitat and water quality and protect Lake Superior and the St. Louis River Estuary from further deterioration.

Please keep me informed as these efforts proceed and feel free to contact either me or any of the other NRRI scientists you've worked with as the need arises for help in responding to the impacts of last week's dramatic flash flooding.

Sincerely,



Lucinda B. Johnson  
Director