Lessard-Sams Outdoor Heritage Council

Laws of Minnesota 2012 Accomplishment Plan

Date: **October 24, 2011** ***draft***

Program Title: **Minnesota Trout Unlimited Coldwater Fish Habitat Enhancement Program**

Manager's Name: John Lenczewski
Title: Executive Director
Organization: Minnesota Trout Unlimited
Telephone: 612-670-1629
E-Mail: jlenczewski@comcast.net
Fax: n/a

Funds Recommended: $2,120,000

Legislative Citation: ML 2012, Ch. X, Art. X, Sec. X, Subd. 5 (e): (*to be completed when signed by Governor)*

Abstract:

Minnesota Trout Unlimited will enhance in-stream and riparian fish and wildlife habitat in coldwater streams, rivers and lakes located in existing Aquatic Management Areas and other public lands.

Program Narrative

Design and Scope of Work

The FY 2013 projects will use methods similar to those used on projects completed by MNTU chapters in the past several years. The specific fish habitat enhancement methods used on each stream will vary depending upon the distinct natural resource characteristics of each watershed and ecological region, the limiting factors identified for each stream, the variations in the type and magnitude of poor land uses practices within each watershed, consultation with the Minnesota Department of Natural Resources ("MNDNR"), and MNTU members' first-hand knowledge of the watersheds and habitat enhancement techniques.

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

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

Agricultural area example: Many streams in the agricultural areas of southern and central Minnesota have been negatively impacted by many decades of poor land management practices. How and why the various habitat enhancement actions are typically taken in these regions is best illustrated by the following example:

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

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

Finally, vegetation is reestablished in the re-graded riparian corridor to further stabilize banks and act as buffer strips to improve water quality. Depending upon the specific site conditions, landowner cooperation, and agricultural use, native prairie grasses may be planted along the stream corridors, although often mixed with fast sprouting annual grains to anchor soils the first year.

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

Individual Project Descriptions:

1. Cook County Brook Trout stream (Cook).

Habitat for native brook trout will be enhanced in a 1,500 foot reach of a Cook County stream on existing public land or on an existing AMA easement. No acquisition will be involved. Minnesota Trout Unlimited will work with the MNDNR to identifying a top priority stream segment for enhancement work.

The project will use significant volunteer labor provided by MNTU members, as well as members of other local angling and conservation groups. Using hand labor we will likely revitalize and replace failing wood or wood & rock habitat structures originally installed as long as 60 years ago. New structures may be added and placed so as to provide the deep water cover that the brook trout need. Rock located on and near the site may be added to structures to ensure that they direct both high and low stream flows appropriately

Project planning and initial survey work will begin following a July 2012 appropriation, with fieldwork in summer 2013 or 2014. Planning and permitting steps include working with MNDNR to identify the most appropriate, highest priority stream reach, walking prospective sites and scoping work, working with land managers or owners, and securing additional partners. The MNDNR Fisheries office in Grand Marais, MN is our primary project partner. Additional partners may include local conservation and sporting groups, local residents, the US Forest Service, the USFWS, and others.

2. Kimball, Mink & Boys Lakes (Cook).

The lake habitat and trout fishery in these three lakes has been compromised by the unintended, undesirable invasion of non-game fish. This project consists of two separate components targeted at restoring/enhancing the habitat and protecting it from future degradation. All three interconnected lakes will be reclaimed to restore the previously productive lake habitat conditions for brook, brown and rainbow trout. After consultation with the MNDNR, MNTU will contract with a qualified contractor specializing in lake reclamation projects such as this. Work will take place in late September and early October at the direction of the MNDNR. The reclamation should be completed by freeze up. The timing of delivery of the grant agreement and pace of permitting will dictate which year (2012, 2013 or 2014) the work can be undertaken in.

A physical barrier against future invasions via Kimball Creek will also be installed at the outfall of Kimball Lake. It will involve the use of several large logs, lots of large rock, and physical labor. The work will be take place under the direction of MNDNR personnel.

3. Garvin Brook (Winona).

The project will begin on the edge of Farmers Park and extend downstream approximately 2,700 feet through State or County land. It is intended to increase the health and resilience of the Garvin Brook fishery and watershed by improving the in-stream habitat and surrounding forest habitat. This enhancement project will narrow the stream channel, remove accumulated sediment as needed, re-slope and stabilize stream banks, and install overhead cover (including depth cover) for naturally reproducing trout. Damaged trees, invasive trees and other invasive plants will be removed along the riparian corridor and native vegetation re-established. Several of the methods described in the "Agricultural area example" above will be used. Volunteers from the Win-Cres Chapter of Trout Unlimited will work closely with MNDNR Forestry personnel, the local Conservation Corps Minnesota crew, and others to remove invasive plant species.

Pre-project survey work, project design and permitting will begin in 2012, following a July 2012 appropriation and grant agreement. Fieldwork may commence the following summer fieldwork season (2013) or in 2014 depending upon the pace of survey, design and permitting work. Project partners include Win-Cres Chapter TU, other TU chapters and members, MNDNR Fisheries – Lanesboro Area Office, MNDNR Forestry, Winona State University - Water Resources Center, St Mary's University – Biology Dept., and local residents.

4. Rush - Pine Watershed (Winona).

One to two miles of in-stream and riparian fish and wildlife habitat enhancement work will be completed in this trout stream complex, depending upon the number of private landowners along Pine Creek and Rush Creek who successfully sign up for federal cost sharing dollars. MNTU hopes to secure up to $200,000 in farm bill dollars through the NRCS for materials costs and heavy equipment work.

The project site will likely be on the last mile or more of Pine Creek on a severely degraded segment of stream containing highly eroding stream banks. Habitat will be enhanced using several of the methods previously described in the "Agricultural area example" above. Work will include sloping and stabilizing stream banks, installing overhead cover for trout, installing erosion control measures, and mulching and seeding of exposed stream banks, including with native plant species if appropriate and feasible. If habitat enhancements are completed on the lower reaches of Pine Creek to its confluence with Rush Creek with earlier projects and funding, we may shift work to a section of Rush Creek.

Both the Win-Cres and Hiawatha Chapters of Trout Unlimited will assist with these projects, and MNDNR is a key partner.

5. Hay Creek (Goodhue).

Hay Creek remains a top priority of the Twin Cities Chapter of TU given its close proximity, extensive public access and increasingly productive, fishable water. Building upon ongoing efforts to restore and enhance this watershed, the proposed project site(s) will be near or adjacent to Trout Unlimited habitat enhancement projects completed, or soon to be completed, here.

The habitat work proposed will be very similar to recent projects by the Twin Cities Chapter of TU in the upper Hay Creek watershed. Many of the methods described in the "Agricultural area example" above will be used. Work along approximately 5,000 feet of stream will include sloping and stabilizing stream banks, installing overhead cover for trout, and creating depth cover for naturally reproducing wild brown trout. Pre-project survey work, project design and permitting will begin in 2012, following a July 2012 appropriation. Fieldwork will commence in 2013. Trout Unlimited members will again donate substantial amounts of time and energy.

6. South Creek - Vermillion River (Dakota).

This project involves establishing protective vegetative buffers in streams corridors both to protect trout and aquatic habitat and to create wildlife habitat in perpetually protected corridors. The Vermillion River Watershed Joint Powers Organization and the City of Lakeville will be financial and technical partners on this project component. These partners together will contribute approximately one-half the costs. These partners have already identified more than 20 separate riparian parcels located along South Creek at its tributaries. Vegetative buffers will be established in riparian corridors to provide long term protection of the trout fishery throughout the length of South Creek.

Most of the riparian areas identified are currently in a form that serves as poor wildlife habitat. They range from turf grass, to intact buffers with slightly degraded habitat (i.e. restorations were begun but not completed so that invasive species have started taking hold), to buffers with severely degraded habitat (e.g., overgrown with noxious or invasive species such as reed canary grass and buckthorn). We will hire one or more qualified prairie/grassland restoration specialists to properly establish vegetation is these protected riparian areas which will serve as wildlife habitat corridors as well as protecting coldwater fisheries habitat. MNTU and its partners hope to enhance or restore approximately 144 acres of wildlife habitat by leveraging non OHF funds. It may take three growing seasons (2013 to 2015) to fully establish the vegetation.

7. North Shore steelhead river(s) (Lake; St. Louis).

These two projects will enhance or restore habitat in important nursery and spawning areas of one or more major North Shore steelhead rivers.

7A. In-stream cover habitat for juvenile steelhead

The lack of large logs (large woody debris or "LWD") which provide cover, especially critical overwintering cover, for juvenile steelhead and other migratory trout and salmon is a significant problem on most North Shore streams. This project will increase the amount of cover by restoring large logs to the stream channel in a key nursery stretch accessible to wild spawning steelhead. Depending upon the specific site conditions, large boulders may additionally, or alternatively, be used. In-stream habitat will be significantly enhanced along approximately 2,000 feet of river. Disturbed areas will be planted with trees and native riparian plant species.

The goal of the project is to directly increase the amount of deep pool habitat and overhead cover using large woody debris and rock veining. Large logs with intact root wads will be placed in the stream as will large boulders. This will create direct cover for fish and wildlife, encourage

channel complexity through scour and deposition, provide refugia for fish during flood events, and can reduce the erosive power of storm flows.

The precise project site will be carefully selected with MNDNR fisheries biologists and managers, but will be located in one of the important steelhead rivers in western St. Louis County or eastern Lake County. Site selection, initial survey work, site planning, design and permitting will begin following a July 2012 appropriation. Installation of woody cover, rock veining, and other fish habitat enhancement work will begin in 2013 or 2014. Tree planting and project wrap-up will take place the spring following in-stream work. This will be a collaborative effort between Minnesota Trout Unlimited and the MNDNR. Trout Unlimited members will volunteer substantial time and labor, along with volunteers from the Lake Superior Steelhead Association and other conservation groups.

7B. Riparian tree planting

A second project will restore long lived tree species to approximately one mile of riparian corridor along one or more North Shore steelhead rivers. By planting a mix of larger potted and bare root trees the project should quickly begin providing shade and help reduce summer water temperatures.

This project will increase shade cover by planting a mixture of long lived tree species, both coniferous and deciduous, within the riparian corridor. Matting will be used to keep weed growth down, and trees caged to inhibit deer browsing losses.

Site selection, initial survey work, site planning, design and permitting will begin in 2012, following a July 2012 appropriation. Tree planting will take place in May and/or June in 2013 or 2014. This will be a collaborative effort between Minnesota Trout Unlimited and the MNDNR. Trout Unlimited members will volunteer substantial time and labor, along with volunteers from the LSSA and other conservation groups. We hope to engage local residents in the project and encourage interest and involvement in broader watershed protection efforts.

Hiawatha Chapter Projects:

8. East Indian Creek (Wabasha),

9. Mill Creek (Olmsted),

10. Camp Creek (Fillmore),

Habitat for naturally reproducing trout populations will be enhanced on each of three southeast Minnesota streams using the methods previously described in the “Agricultural area example” above. A total of approximately 2.5 miles of in-stream habitat and stream banks will be enhanced beginning in the 2013 field work season. By leveraging additional funds we hope to complete additional mileage with no additional OHF dollars. Pre-project survey, design and project permitting work will begin in 2012, following a July 2012 appropriation. All projects will consist of sloping and stabilizing stream banks, installing overhead cover for trout, installing

erosion prevention measures, and re-vegetating exposed stream banks, including with native prairie species, where appropriate and feasible.

All three projects are designed to reduce stream bank erosion and associated sedimentation downstream, reconnect the streams to their floodplains, increase cover (including wintering cover for large trout), increase trout abundance, increase natural reproduction of trout and other aquatic organisms, increase habitat and biodiversity for both invertebrates and other non-game species, increase energy inputs via beneficial sunlight, and increase quality trout angling opportunities.

Planning

A. Relationship to the *Minnesota Conservation and Preservation Plan* and Other Published Resource Management Plans

1. Minnesota Statewide Conservation and Preservation Plan – Land & Aquatic Preservation Plan.

   Habitat 2: Protect critical shorelands of streams & lakes…pp. 67-74
   - Target shallow wildlife lakes, natural environment lakes, shallow bays of deep lakes, cold-water/designated trout streams…
   - Habitat 3: Improve connectivity and access to outdoor recreation. pp. 74-77
   - Also provide benefits to wildlife, SGCN, etc.

   Habitat 6: Protect and restore critical in-water habitat of lakes and streams. pp. 81-84
   - Expand efforts to restore critical habitats for aquatic communities in near-shore areas of lakes, in-stream areas of rivers and streams, and deep-water lakes with exceptional water quality
   - Reverse negative effects of stream channelization on in-stream habitats

   Habitat 7: Keep water on the landscape – pp.84-87
   - Habitat benefits include improved water quality, maintaining habitat for wildlife and game species, and enhancing biological diversity
   - Increase riparian buffers along shorelines of rivers, lakes, and sinkholes
   - Maintain and restore headwater wetlands, riparian areas, and floodplains
   - Enhance and expand the use of perennial vegetation.

2. Minnesota's Nonpoint Source Management Program Plan 2008

   Goal 1: Promote a Healthy Hydrological Regime for Minnesota's Streams and Rivers. – pp. 4.3 – 176
   - Promote stream restoration projects that restore connectivity between rivers and their flood plains.
   - Develop an interagency program to assess/control stream bank erosion…

3. Tomorrow's Habitat for the Wild & Rare – an action plan for Minnesota Wildlife.

   Goal I: Stabilize and increase Species in Greatest Conservation Need; 8. Stream habitats, actions include: – pp. 80

- Maintain good water quality, hydrology, geomorphology, and connectivity in priority stream reaches.
- Maintain and enhance riparian areas along priority stream reaches.

4. Strategic Plan for Coldwater Resources Management in Southeast Minnesota 2004-2015

    - Theme 1: Provide for the protection, improvement, and restoration of coldwater aquatic habitat and fish communities so that this unique resource is available for future generations. pp. 9.
    - Theme 2: Provide diverse angling opportunities so that a broad range of experiences are available to anglers. pp. 12.

5. Minnesota's 2008-2012 State Comprehensive Outdoor Recreational Plan

    - Strategy 1: Acquire, protect and restore Minnesota's natural resource base on which outdoor recreation depends. pp12.
    - Strategy 2: Develop and maintain a sustainable and resilient outdoor recreation infrastructure. pp. 17.

6. DNR, Division of Fish and Wildlife Long Range Plan for Fisheries Management Covering Fiscal Years 2004-2010

    - Core Function 2. Conserve, Improve, and Rehabilitate Fish Populations and Aquatic Habitat. pp8.
        - Shoreline habitat restoration program – rehabilitate riparian and aquatic vegetation to improve fish habitat, wildlife habitat and water quality;
        - Metro trout stream initiative – conserve and rehabilitate threatened trout stream resources in the Twin Cities metropolitan area;
    - Core Function 4. Provide Opportunities for Partnerships, Public Information, and Aquatic Education. pp8.
        - Increased public involvement with fisheries projects.

7. Trout Unlimited Driftless Area Restoration Effort – Strategic plan

    Goals: Through DARE, TU is partnering with local, state and federal agencies, nongovernmental organizations and private landowners to strategically link upland conservation and stream corridor restoration to achieve the following goals: - pp. 15.
    - Protect and restore habitat for fish and other species of interest to increase angling and other recreational opportunities. – pp. 15.

B. The projects are the result of science based strategic planning and evaluation similar to the USFWS Strategic Habitat Conservation model.

The U.S. Fish and Wildlife Services' Strategic Habitat Conservation Model uses the following methodology and steps: identify priority species; select a subset of priority species; formulate population objectives; assess the current state of priority species; identify limiting factors; and compile and apply models of population-habitat relationships. USFWS encourages a watershed based approach, especially during consideration of the key threats of development pressures and climate change.

As described in the request for funding, MNTU uses a similar approach. Projects included in this proposal were selected in consultation with MNDNR Fisheries personnel, who use a science based approach to determine high priority streams and project sites. This includes the use of the MNDNR's annual stream monitoring and assessments, which assess limiting factors (including habitat ones) and others factors bearing on macro invertebrate and fish populations. Ongoing monitoring of the projects and post-project fish populations will assess our success, and can be used to help MNTU and the MNDNR improve future habitat conservation and enhancement strategies.

C. Lessard-Sams Outdoor Heritage Council Section Priorities addressed.

Each project in this program addresses one of the following priority actions:

Priority Actions for the Northern Forest Section
1. Protect shoreline and restore or enhance critical habitat on wild rice lakes, shallow lakes, cold water lakes, streams and rivers, and spawning areas.

Priority Actions for the Southeast Forest Section
2. Protect, enhance and restore habitat for fish, game and non-game wildlife in rivers, cold water streams and associated upland habitat.

Priority Actions for the Metropolitan Urbanizing Area Section
2. Protect habitat corridors, with emphasis on the Minnesota, Mississippi and St. Croix rivers (bluff to floodplain.)
3. Enhance and restore coldwater fisheries systems.

Relationship to Other Constitutional Funds

We do not anticipate the use of other constitutionally dedicated state funding on these projects. We have not applied for project funding from the other constitutionally dedicated funds. However, we continue to look for partnerships and opportunities to add components such as native prairie restoration, non-game habitat enhancement, improvements to forested lands and improved watershed practices. In the event a partner proposes to apply other constitutional funds to a project we will promptly notify the L-SOHC to coordinate reporting.

Relationship to Current Organizational Budget

Funds appropriated for this program will supplement the cash and in-kind resources typically raised by MNTU and its chapters to support similar projects. This additional habitat enhancement work represents a significant increase in the amount of local projects over several years ago, but our local members have increased their volunteer labor and the projects are within the range of habitat projects managed by Trout Unlimited as an organization.

Sustainability and Maintenance

MNTU's coldwater aquatic habitat restoration and enhancement projects are designed for long-term ecological and hydraulic stability. Once the in-stream projects are completed and riparian vegetation reestablished, we do not anticipate that there will be any significant maintenance required in order to sustain the habitat outcomes for at least several decades. We anticipate

that long-term monitoring of the integrity of the improvements will be done in conjunction with routine inspections and biological monitoring conducted by local MNDNR staff, MNTU members, or landowners as appropriate. This monitoring will not require separate OHF or other constitutional funding. In the unlikely event that there are other maintenance costs, potential sources of funding and volunteer labor include MNTU, MNDNR AMA maintenance funding, and other grant funds and organizations. Vegetation should be well established before the end of the funding period, and require minimal human intervention thereafter. Trout Unlimited volunteers will provide long-term monitoring and periodic labor as needed.

Outcomes

- Increased angling opportunities along approximately 7 miles of public water which will draw increased use and enjoyment by anglers.
- Increased natural reproduction of trout.
- Increases in the overall trout population in project reaches.
- Reduction in stream bank erosion in project reaches and reduced sedimentation downstream.
- Reduced negative resource impacts from flooding.

Accomplishment Timeline

Activity	Milestone	Date
On all projects survey, project design, and permitting work will begin in 2012 following receipt of the grant agreement.		Fall 2012
Unless where noted in the narrative, fieldwork will begin on projects in summer 2013	Begin habitat enhancements	2013 fieldwork season
Complete riparian and in-stream habitat enhancements, unless as noted in the narrative.	Complete riparian and in-stream habit enhancements	October 2015
Continue management of vegetation in riparian corridors of streams in Metropolitan Urbanizing Area and Southeast Forest Sections	Complete measures necessary to firmly establish desirable vegetation in riparian corridors	October 2017

Attachments *(on spreadsheet workbook – 3 separate tabs):*

A. Budget

*The budget estimates for each category are very rough estimates only. The relative amount of excavation equipment work (contracts) versus rock costs (supplies/materials) varies by project site conditions and is very hard to estimate before final design. The projects will be completed

within the overall budget estimates, despite the various budget categories being higher or lower than estimated at this time. Some in-state travel expenses (mileage) currently anticipated to be paid under the contract category to consultants could be reimbursed to employees if the tasks requiring this travel are performed by employees versus consultants.

**"Anticipated cash leverage" figures in the budget spreadsheet are estimates only of funding which MNTU will pursue. These figures do not include volunteer labor.

B. Proposed Outcome Tables
C. Parcel List

Attachment C. Parcel List

Name of Proposal: Minnesota Trout Unlimited Coldwater Fish Habitat Enhancement Program
Legislative Citation:
Date: 14-Nov-11

Parcel Name	County	Township (25-258)	Range (01-51)	Direction most parcels are 2 with the exception of some areas of Cook County which is 1	Section (01 thru 36)	TRDS	# of acres	Budgetary Estimate (includes administrative, restoration or other related costs and do not include matching money contributed or earned by the transaction)	Description	Activity PF=Protect Fee PE=Protect Easement PO=Protect Other R=Restore E=Enhance	If Easement, what is the easement cost as a % of the fee acquisition?	Any existing protection? (yes/no)	Open to hunting and fishing? (yes/no)
Cook County stream	Cook								**	E		yes	yes, fishing*
Trout Lakes	Cook	62	2	2	5	622205				E		yes	yes, fishing*
		62	2	2	7	622207				E		yes	yes, fishing*
		62	2	2	8	622208				E		yes	yes, fishing*
		62	2	2	17	622217				E		yes	yes, fishing*
Garvin Brook	Winona	106	8	2	5	1068205				E		yes	yes, fishing*
		106	8	2	8	1068208				E		yes	yes, fishing*
Pine Creek	Winona	105	8	2	32	1058232			****	E		yes	yes, fishing*
	Winona	105	8	2	33	1058232				E			yes, fishing*
Hay Creek	Goodhue	112	15	2	23	11215223			****	E		yes	yes, fishing*
					24	11215224							
South Creek-Vermillion	Dakota	114	20	2	33	11420233			***	E		yes	yes, fishing*
North Shore stream - A	Lake or St Louis								**	E		yes	yes, fishing*
North Shore stream - B	Lake or St Louis								**	E		yes	yes, fishing*
East Indian Creek	Wabasha	109	10	2	28	10910228				E		yes	yes, fishing*
Camp Creek	Fillmore	102	10	2	5	1021025				E		yes	yes,fishing*
Mill Creek	Olmsted	105	12	2	25	10512225				E		yes	yes, fishing*

* it is unknown which properties may also permit hunting

** location not finalized; a high priority stream will be determined in consultation with the MNDNR

*** locations not finalized, but one likely to be in this section; as many as 20 separate parcels may be enhanced

**** FY 2013 project location may change if FY 2012 project is completed here