

L-SOHC Questionnaire

Program Request Title: 32 Knowlton Creek Fishery Restoration and Enhancement Project

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A. REQUEST FOR FUNDING OVERVIEW:

- 1. Why there is an urgent need to act NOW?** The mouth of Knowlton Creek flows into the St. Louis River estuary behind Tallus Island. Sediment originating from current land use described in the proposal has been transported to the estuary, resulting in the conversion of the shallow sheltered bay behind Tallus Island to upland, meadows and emergent wetlands. A mitigation project associated with a Superfund process within the estuary, which is scheduled to begin in January of 2010, will result in the restoration of shallow sheltered bay habitat at the mouth of Knowlton Creek. The restored habitat will subsequently be designated as a MDNR “Aquatic Management Area”. The restoration will remove approximately 100,000 cubic yards of material at a cost of more than \$5 million. Unstable sediment located just upstream of the estuary will jeopardize the long-term viability of shallow wetland habitat restored at the mouth of Knowlton Creek. Therefore it is imperative that the proposed restoration project within Knowlton Creek watershed be completed.

B. CONSTITUTIONAL CONTEXT FOR PROGRAM ACTIVITIES

- 1. Tell the Council how much of your proposal is acquisition and how much restoration/enhancement?**
Acquisition - A total of **\$61,000 (2%)** of the requested funds will result in the acquisition of permanent easement as a MDNR aquatic management area, which will ensure protection and public use in perpetuity of a 200 foot corridor along 7,000 feet of Knowlton Creek.
Restoration/Enhancement – A total of **\$2,453,000 (83%)** of the requested funds will result in the restoration and enhancement of 4.1 miles of stream and establishment of a wildlife corridor between the St. Louis River estuary and the Magney Snively Natural Area.
- 2. How will the public be able to use the all the projects in this program and enjoy the benefits of this public investment?** Public use of the project area will be ensured through acquisition of permanent easement as a MDNR aquatic management area along 7,000 feet of Knowlton Creek. Knowlton Creek was designated as a cold-water trout stream in 2009 and will be stocked with brook trout beginning in 2010 (stocking of trout is not dependent upon completion of the proposed restoration project). Completion of the project will increase the opportunity for anglers within the City of Duluth to fish for brook trout. Establishment of a wildlife corridor between the estuary and Magney Snively (Spirit Mountain) will also provide the opportunity for a trail system between these two significant habitat features. Spirit Mountain Authority is working in coordination with MDNR to develop plans for a trail system that would connect the existing Western Waterfront Trail with the facilities of Spirit Mountain and the trails surrounding and extending out from it.

C. PRIORITIES

- 1. Specifically, how does your program address the Council's statewide and/or regional priorities?** This program “Restoring Fish and Wildlife Populations in the Lower St. Louis River” is based upon implementation of the Lower St. Louis River Habitat Plan. The Habitat Plan is fully consistent with the Minnesota Conservation and Preservation Plan and clearly addresses all nine of the L-SOHC’s statewide priority considerations. The program, which is located in the Northern Forest Section, is also consistent with the L-SOHC’s desired condition

for the section's forest lands, lakes and wetlands and wildlife habitat. Specifically, the program clearly defines objectives for the 30 year process of delisting the St. Louis River Area of Concern (1), identified strategies produce multiple conservation benefits (2), the program will be effective at leveraging funds against Dedicated Funding sources to accomplish objectives (3), most projects have strongly defined public access components (4), many identified projects will include establishment, restoration or enhancement of AMA's (6), the Habitat Plan and identified projects are and will be based on science-based strategic planning (7), many identified projects are intended to enhance endangered, threatened or special concern species or will account for impacts upon them (8), many identified projects are intended to expand on existing fishing and outdoor recreation opportunities (9).

The proposed project is the next priority in the program for the St. Louis River Area of Concern and will most probably leverage funding through the GLRI. The project has conservation benefits relative to cold-water streams and a unique northern forest complex. Completion of the project will establish an AMA and increase public angling opportunities in an urban area. The project will be completed under the supervision of State and Federal resource managers based on best available scientific methods.

2. **Tell the Council how do you set priorities among the opportunities available to this program? Be SPECIFIC** The Lower St. Louis River Habitat Plan was developed in support of the St. Louis River Area of Concern (AOC) Remedial Action Plan (RAP). The RAP is the implementation plan to de-list the Beneficial Use Impairments (BUI's) and remove the estuary from the State's Impaired Waters (303d) List. The strategies (projects) identified to address the BUI's for the estuary were developed through a collaboration of more than 20 Federal, State, Municipal, private, non-government organizations and individuals and represents a combined vision for restoring fish and wildlife populations, biological health and ecological diversity within the estuary.

Currently, there have been approximately 45 large scale restoration projects identified in the Habitat Plan, with 4 being implemented. Individual projects are rated as high, medium or low priority. Prioritization of projects is based on ecological importance, relationship to defined objectives, geographic location, level of development of project scoping, relationship to other projects within the estuary, commitment of pertinent government agencies, availability of funding and political/public support. The priority of Knowlton Creek Watershed Project is considered "high" based on all identified variables.

3. **Tell the Council how you define "science-based strategic planning"** Agency partners collaborating during the development of the Lower St. Louis River Habitat Plan defined "science-based strategic planning" through the use of The Nature Conservancy's Conservation by Design Methodology (CbD). CbD is a structural approach that utilizes best available scientific information along with local expert knowledge. This approach has been employed very effectively to enumerate threats, identify strategies that will address threats and develop plans that result in the implementation of strategies. The process has been strengthened over time through effective coordination between the resource agencies charged with moving the estuary towards delisting the Lower St. Louis River as a Great Lakes AOC.

D. PROGRAM DETAILS:

1. The Work

- a. **Enumerate the specific kinds of action you plan to take to protect, enhance, and/or restore natural systems.**

Protect: The proposed project protects 7,000 feet of stream corridor and northern forest through the MDNR aquatic management area Program. Knowlton Creek was designated as a cold-water trout stream in 2009 and will be stocked with brook trout beginning in 2010.

Completion of the project will increase the opportunity for anglers within the City of Duluth to fish for brook trout.

Enhance/Restore: The proposed project will restore an estimated 3,200 linear feet of highly degraded stream channel, which will provide improved habitat conditions for the rehabilitated brook trout population. Assessment and potential upgrade of 18 stream crossings will reduce environmental impacts to the stream channel and improve migration corridors for fish and wildlife. Enhancement of vegetation within approximately 30 acres of the riparian corridor will improve habitat conditions in the trout stream and enhance the wildlife corridor. Completion of the proposed project will also enhance/ensure the future viability of the Tallus Island Shallow Sheltered Bay Restoration Project scheduled for 2010.

b. What species will be helped?

Directly, through completion of the proposed project: brook trout, central mudminnow, common shiner, golden shiner, threespine stickleback, creek chub, homo sapiens, white-tail deer, pine marten, otter, mink, black bear, fox, wood turtle, many species of birds.

Indirectly, through completion of the entire Tallus Island Shallow Sheltered Bay Restoration/Knowlton Creek Watershed Restoration: homo sapiens, muskellunge, northern pike, lake sturgeon, walleye, bluegill, black crappie, piping plover, common tern, black throated warbler, red-winged blackbird, blue warbler, bald eagle, migratory birds

c. Do you currently have the capacity to get the work done that you are requesting dollars for in FY 2011? -- Explain Yes

The MDNR currently has the capacity to process the proposed Aquatic Management Area along 7,000 feet of stream channel. The St. Louis River Alliance has begun the process by which they will hire a "Project Manager" to process contracts for proposed culvert replacements and develop plans for completion of proposed stream habitat restoration as well as coordinate activities for FY 2012 and FY 2013.

2. Program Work Location

a. What percent of your work will be prairie?

b. What percent of your work will be wetland?

c. What percent of your work will be forest? 25%

d. What percent of your work will be aquatic systems? 75%

e. Is it part of a larger habitat complex? If yes BRIEFLY describe the complex. YES

The proposed project is part of an important corridor between two significant habitat complexes within Knowlton Creek watershed of the St. Louis River estuary.

Knowlton Creek flows into the St. Louis River estuary was designated by the International-Joint Commission as a Great Lakes Area of Concern (AOC) in 1989. Subsequent to this designation, phase I and II Remedial Action Plans were developed and a Habitat Plan was completed in 2002. Most recently, State and Federal agencies along with local stakeholder input have identified delisting targets for this important habitat complex and are prepared to complete strategies that will move the estuary towards delisting as a Great Lakes AOC. The Knowlton Creek watershed project is the next priority project on the list of strategies described in the Habitat Plan.

The Magney/Snively forest complex is a 2,000 acre mature forest comprised of sugar maple, yellow birch, basswood, red oak, red maple and black ash. Approximately 250 acres of the forest met MDNR criteria for old-growth, which scored 15 out of 15 possible

points for stand size and landscape context. The Magney/Snively forest complex is the most significant undisturbed habitat feature immediately adjacent to the Minnesota side of the St. Louis River estuary. Knowlton Creek, which is one of five watersheds that drain the forest complex, represents the most undisturbed corridor from the forest to the estuary.

3. How We Plan to Use the Funds Requested

- a. **What percent reduction could you accept without rendering your project inoperable?** A percent reduction in total funds to complete the project of greater than 33% would render the project inoperable. A 33% reduction would eliminate the establishment of wildlife corridors between the St. Louis River estuary and the Magney Snively Natural Area. The overall ecological benefits of the project would be significantly reduced if the corridor were not established during implementation of the remaining elements of the project.

Completion of the project will be phased over three years. Therefore, it should be suggested that phased funding as an alternative to full up-front funding could spread the financial commitment of the L-SOHC over three years. However, is the intent of the SLRA to seek annual funding from the Council for additional future projects that move the St. Louis River AOC towards delisting.

- b. **Have you also applied to the Outdoor Heritage Fund Conservation Partners Grant Program operated by DNR?** No
- c. **Where else might you get money for this project?** As described in 3a, a project proposal will be submitted through the GLRI for 50% (\$1.48 million) of the proposed cost of the restoration project. It is anticipated that this strategy will be employed for future funding requests to both State and Federal sources with the intent of increasing funding probabilities and magnifying restoration/enhancement outcomes within the St. Louis River AOC.

Furthermore, a coordinated effort to secure funding for the flow restoration and water quality portion of the project (\$2.5 million) through the Clean Water Legacy portion of Minnesota Dedicated Funding will be pursued. The State Clean Water Legacy funds will be leveraged against appropriate Federal sources associated with the GLRI.

4. Personnel Details

- a. **Describe the personnel duties. Are they office staff or field staff – existing or new positions?**
- **Project Administrator:** 20% of existing Executive Director SLRA position
Responsibilities will include: 1) Administration, review and oversight of all project components 2) Administer the process for advertisement, review, selection and execution of all project contracts 3) Administer all financial and accounting tasks associated with the project 4) Administer public notifications and public relations for all project work 5) Provide support to project staff as needed
 - **Project Manager:** *New Field Staff, Project Management:*
Responsibilities will include: 1) Management and oversight of day to day project operations 2) Work with MDNR and project engineers on project design and construction details 3) Coordinate the proper completion and submittal of environmental review to all responsible governmental units 4) Oversee all construction work and report any necessary project changes to the Project Administrator and the MDNR 5) Coordinate any changes with the project engineers and contractors 6) Fulfill the role of liaison between the SLRA, MDNR and other resource management agencies