

SUPPLEMENTAL REQUEST FOR PREPROPOSALS

DEVELOPING A WATER RESOURCES DECISION SUPPORT SYSTEM PHASE I- INVENTORY OF INFORMATION

SUMMARY

The Great Lakes Protection Fund seeks preproposals for projects to assemble an inventory of information on the sources of Great Lakes' water, the uses of that water, and the ecological consequences of those uses. Such an inventory should inform the design and development of an information system to support sound, resource-based water management decisions. Proposed projects should make maximum use of existing government and private programs. The Fund may support a number of coordinated projects. Following the completion of the inventory, the Fund may issue subsequent requests for preproposals for system design.

The deadline for submitting preproposals in response to this supplemental request is 5:00 p.m., February 15, 2000.

BACKGROUND

Over the past 30 years, the citizens, governments, and industries of the Great Lakes Basin have addressed chemical contamination and improved water quality in the Great Lakes. Together, these groups have demonstrated that economic and environmental health can go hand-in-hand. Now, new threats to the basin's ecological security are beginning to emerge. These include the effects of possible bulk water exports, potential new diversions of water out of the basin, and the need to anticipate and manage new water uses within the basin. The ecosystem impacts of these types of uses have not been systematically addressed.

The legal and policy context has changed since the Governors entered into their last formal agreement on the management of Great Lakes water resources- the Great Lakes Charter. For example, the States and Provinces have adopted various regulations governing the use of Great Lakes waters. In 1986, the US federal government included language in the Water Resources Development Act that prohibits diversions from the US portion of the Great Lakes unless all Governors approve the request. The US and Canada have also entered into two significant international trade treaties—the North American Free Trade Agreement and the General Agreement on Tariffs and Trade (supplemented by agreements concerning the World Trade Organization)—that affect decisions about the use and transfer of water. Future water use decisions may be made and reviewed in entirely new ways.

Additionally, new scientific information shows that the ecological health of aquatic, wetland, and riparian systems is driven by the hydrologic regime that characterizes any given system or site. The hydrologic regime includes not only the absolute quantity of water present over a given time period, but the frequency with which quantity, level and/or flow recurs, the rate at which conditions change, the duration of various flow conditions and the range of flows in a given system. The biologically relevant time scales for key hydrological events can be as short as an

hour and as long as several years. Further, new studies also show that the Great Lakes ecosystem supports a richness of unique biological diversity. A major threat to these exhaustible natural resources is the alteration of hydrologic regimes in the Basin's ground waters, streams and lakes.

In light of the changed legal, policy and scientific environments, the Region's Governors have announced that they will seek a new regional agreement among the states and provinces to more closely plan, manage and make decisions regarding the protection of Great Lakes basin waters. The agreement will include a new standard to ensure that water use decisions will protect the integrity of the Great Lakes ecosystem.

PROJECT CRITERIA

The Fund seeks to support the collaborative design of an information system to support sound water resource management decisions in the Great Lakes basin. Likely customers of such a system would include water project proponents; decision-makers in local, state, provincial, regional and federal government agencies; and those interested in undertaking ecological restoration projects in the basin. The principal purpose of a system would be to support water management decisions that conserve the basin's exhaustible natural resources and protect the integrity of the Great Lakes ecosystem.

As the first step in that process, the Fund now seeks preproposals to inventory and characterize known sources of information about the basin's water resources, the use of those resources, and how the various types of uses interact with the basin's ecological health. The Fund may support a large, single, collaborative effort to produce such an inventory. Alternatively, the Fund may chose to support a variety of projects to assemble what is known.

The project should:

Inventory and characterize the available information sources on Great Lakes basin surface and groundwater resources including the extent of the resource, how it changes over time, and how groundwater, tributaries, coastal waters and open lake waters interact.

Inventory and characterize the information sources on the existing uses of basin water resources, including but not limited to, diversions, in-stream uses, withdrawals and consumptive uses.

Inventory and characterize available information sources on the ecological impacts associated with present and expected water uses, drawing on scientific literature, expert opinion, models, in-basin studies and studies elsewhere.

Inventory and characterize available information sources on the nature of the basin's exhaustible, water dependent, natural resources: their abundance, distribution, natural history, and threats to their health.

Identify how each state and province manages its water resources and the level of program activity for each jurisdiction in the last several years.

Include relevant attributes of each information source such as its geographic scope, known uncertainties, age, type of information (case study, data base, model, etc.), and so forth.

Supported efforts must:

Be the next practical step in the development of a basin-wide water resource management program that conserves exhaustible, water dependent natural resources.

Be a collaborative effort resulting in new, publicly available information on the basin's resources.

Make maximum use of existing and planned efforts; and

Leverage Fund support as much as possible.

The Fund wishes to support a collaborative team that includes the potential owners of an ultimate information system, that system's potential customers, decision science professionals and other relevant technical disciplines such as ecologists and hydrologists. Applicants should be advised that the Fund is neither the ultimate client nor a potential owner of such a system. The information collected must remain in the public domain and actively shared with all affected interests.

ELIGIBILITY

The Great Lakes Protection Fund can support a wide variety of applicants. Non-profit organizations (including environmental organizations, trade associations, and universities), governmental agencies, individuals, and for-profit businesses are eligible for Fund support. Successful applicants must maintain open access to certain project data, records, and information.

All applicants must show that the proposed work has clear public benefit and that any related financial benefits will accrue to the public good. *Government agencies must show that Fund support is not being used to replace or duplicate public funds. Private, for-profit, concerns must show that all project benefits inure to the public good.*

CONTENT OF PREPROPOSALS

Preproposals are overviews of a project team's approach to the inventory, outline the anticipated product, summarize the general plan of work and time frame, and describe the team's qualifications. Preproposals are the first step in securing support from the Fund. A more detailed and complete proposal will be invited after a preproposal is selected.

Preproposals should be no more than three pages of text. No attachments are permitted. Staple a completed Preproposal Cover Sheet to each copy of the preproposal. Please submit six copies of the entire package. Do not send cover letters, covers or binders. No fax or e-mail applications will be accepted.

All preproposals must be delivered to the Fund's offices no later than 5:00 p.m., February 15, 2000.

Please address the following issues, in the order below, in your preproposal:

Project Outcome

Identify the expected product of the work. Summarize the anticipated scope of information to be collected, the manner in which information sources are to be characterized and the manner(s) in which results will be disseminated (such as printed material, software products and/or internet products).

Proposed Work

Outline the work to be carried out. Identify major task categories. Include a timeline for the project that lays out when the work will be complete and identifies major interim products. Discuss how the team will identify and capture relevant information developed outside of the region. Discuss how qualitative information will be identified, captured and shared.

Key Personnel

Identify the members of the project team (those supported by the request, by other funding sources and volunteers), indicating roles and responsibilities. The project team must include meaningful representation of all interests affected by water resource management. Briefly describe qualifications of the team's leaders.

Financial Plan

Present the estimated costs of the proposed work in summary categories: personnel, equipment and supplies, travel, consultants, overhead, etc. The Fund will not support overhead costs in excess of 15% of the direct project costs (excluding travel and sub-contracts).

Identify the type and amount of support requested of the Fund. Identify how other moneys will be raised to support the proposed work.

Submit six copies to:

Preproposal Application—Water Resources Decision Support System
Great Lakes Protection Fund
35 E. Wacker Drive, Suite 1880
Chicago, IL 60601

CALENDAR

December 1999

Request for Preproposals

February 15, 2000

Preproposal Submissions

March 2000

Full Proposals Invited

April/May 2000

Full Proposal Review and Revision

June 2000

Announcement of Awards

THE GREAT LAKES PROTECTION FUND

The Great Lakes Protection Fund is a private, nonprofit corporation formed in 1989 by the Governors of the Great Lakes States. It is a permanent environmental endowment that supports actions that improve the health of the Great Lakes ecosystem.

The Fund seeks projects that lead to tangible improvements in the health of the Great Lakes ecosystem, address the interdependence of ecological and economic health, and are innovative, creative, and venturesome. The Fund accepts preproposals at any time and in response to periodic, supplemental requests for preproposals on specific topics such as this.

This Request for Preproposals builds upon the Water Resources work previously supported by the Fund. In September 1999 the Fund awarded grants to thirteen projects in response to the Fund's Flow Regime Restoration request for proposals. Collectively, these projects evaluate how restoring the physical dynamics and structure of the basin's water systems may lead to a healthier ecosystem. The portfolio tests solutions to the major issues associated with flow regime restoration—dam removal, channel restoration, urban and rural storm drainage, and wetland restoration. Headwater wetlands, headwater streams, main-stem tributaries, agricultural lands, suburban developments, urban centers and coastal areas are all included as project sites. Each individual project plays a part in the bigger picture, and collectively, the portfolio makes the work of each individual project more meaningful.

In addition to supporting regional efforts to restore the health of the Great Lakes, the Fund has returned over \$21 million to its member states for their Great Lakes priorities. Please contact the Fund for information on individual state programs.