



October 17, 2001

## **Lake Champlain Basin Program Announcement**

### **Request for Proposals**

#### **Development of Policy Options for Reducing Phosphorus Loads to Lake Champlain**

The Lake Champlain Basin Program (LCBP) is pleased to announce a Request for Proposals (RFP) for the development of phosphorus reduction policy options for the Lake Champlain Basin, and for an economic analysis of those policies.

The LCBP seeks a comprehensive list of policy options for reducing phosphorus inputs to Lake Champlain. Improved wastewater treatment and the implementation of agricultural Best Management Practices (BMPs) in the Basin have greatly reduced phosphorus inputs. However, current phosphorus reduction programs are insufficient to completely meet future phosphorus loading goals, especially in some lake segments, and urban development is offsetting some of the gains that have been made. An assessment of the potential policy options for phosphorus load reductions will assist LCBP partners in developing a fair, equitable and cost-effective program that will achieve phosphorus reduction goals.

The RFP is available from Basin Program website <http://www.lcbp.org> or by calling the Basin Program office at 802/372-3213 (800/468-LCBP toll free in New York and Vermont), to receive a copy via US Postal Service.

To facilitate the review process, applicants must submit proposals in both paper and electronic format. Please see the RFP and the attached proposal format information for complete details.

#### **DEADLINE NOTICE:**

**Hardcopy (8 copies) and electronic versions (no facsimiles) of proposals  
must be POSTMARKED by**

**December 12 2001.**

**LATE OR INCOMPLETE PROPOSALS WILL NOT BE CONSIDERED**

**Mailing Address:**  
PO BOX 204, 54 West Shore Road  
Grand Isle, VT 05458

## Lake Champlain Basin Program

### Request for Proposals

#### Development of Policy Options for Reducing Phosphorus Loads to Lake Champlain

##### I. Background

The Lake Champlain Basin Program is a partnership between state, provincial, and federal government agencies, as well as many local groups, working together to protect and enhance the environmental integrity and the social and economic benefits of the Lake Champlain Basin. In 1996, the Basin Program completed *Opportunities for Action: An Evolving Plan for the Future of Lake Champlain*, and this plan was signed by the governors of both New York and Vermont. This management plan addresses a range of issues from water quality to recreation. The highest priorities in the plan are reducing phosphorus pollution, reducing pollution from toxic substances, and developing a management program for nuisance non-native aquatic species.

Because phosphorus is the pollutant believed to pose the greatest threat to water quality, aquatic ecosystems, and the human use and enjoyment of Lake Champlain, *Opportunities for Action* stresses the importance of reducing phosphorus inputs to Lake Champlain. The states of New York and Vermont and the Province of Quebec have committed to 20 year phosphorus reduction goals for individual lake segments, as well as five-year interim goals. Toward these goals, many wastewater treatment facilities in the Basin have been upgraded and agricultural Best Management Practices (BMPs) implemented.

In 2000, the LCBP released a *Preliminary Evaluation of Progress Toward Lake Champlain Phosphorus Reduction Goals*. The report, prepared by a team of scientists and managers working on phosphorus issues in the Lake Champlain Basin, predicted a reduction in phosphorus inputs to Lake Champlain of about 38.8 mt/yr by 2001, far exceeding the five-year interim reduction goal of 15.8 mt/yr. The report also determined that phosphorus loads generated by land use changes in the Basin are offsetting some of the gains achieved through reduction efforts. Population within the Basin is increasing, and more land is being developed. Based on this report, it is clear that not all lake segments can be brought to the loading targets needed to meet the in-lake phosphorus criteria by relying solely on existing reduction programs. There also continues to be public interest in accelerating the phosphorus reduction process, to achieve the loading reduction targets in fewer than 20 years.

Additionally, the US EPA has been working on implementing provisions of the Federal Clean Water Act that require states to develop Total Maximum Daily Loads (TMDLs) for waters that do not comply with water quality standards. Both Vermont and New York have listed Lake Champlain as a water requiring a TMDL for phosphorus.

In order to reduce phosphorus loads in the Basin enough to reach in-lake goals, specific information is needed on the potential policy options for achieving additional phosphorus reductions in all segments of the lake.

## **II. Phosphorus Reduction Options for the Lake Champlain Basin**

*Opportunities for Action* defines a series of 13 lake segments for Lake Champlain. Under current phosphorus reduction programs, some lake segments have far exceeded their five-year phosphorus loading reduction goal, while other lake segments have not even met those goals. In addition, the programs in place will not meet all future goals for phosphorus loading reductions. Land conversion to urban and suburban uses is progressing at a rapid pace in some areas and developed land typically contributes more phosphorus per unit area than undeveloped land.

Missisquoi Bay is of particular concern currently, as it did not meet its five-year interim phosphorus reduction goal. Otter Creek, Main Lake VT, Shelburne Bay, Burlington Bay, Malletts Bay, Northeast Arm, and St. Albans Bay lake segments are also of special concern, as they are undergoing significant changes in land use. However, policy options are needed for all regions of the Basin.

This request is for proposals to develop and recommend appropriate policy options for reducing phosphorus inputs to Lake Champlain and an investigation of the costs associated with these policy options.

The study must address potential policy options for achieving the additional phosphorus reductions necessary to achieve the loading reduction targets, possibly in an accelerated timeframe. All policy options developed must be consistent with the states' TMDL processes. Both point and nonpoint source options must be considered. The LCBP has particular interest at this time in nonpoint source options.

The contractor must work closely with LCBP staff and committees (the Phosphorus Reduction Task Force and the Technical Advisory Committee) while developing the policy options. The proposal should include a description of how input from these committees, as well as key agencies and organizations, will be gathered and incorporated the project team's work.

For the selected proposal, an approved workplan will be required before a contract can be completed and the work begun.

### **Tasks:**

- Building on previous and ongoing work, including the state TMDLs, *Opportunities for Action*, and *Preliminary Evaluation of Progress Toward Lake Champlain Phosphorus Reduction Goals* (documents are available through the LCBP Office), prepare a written review of the phosphorus reduction policies that are in place for other major watersheds in

the USA and Canada (including the Great Lakes region, the Chesapeake Bay, and the Province of Quebec), in order to determine potential policy options for the Lake Champlain Basin. Review both regulatory and non-regulatory policies for both point and nonpoint sources of phosphorus, with an emphasis on options for achieving nonpoint reductions. The institutional challenges and the costs and benefits associated with each policy must be explicitly addressed as part of the review.

- Based on the review, present options for achieving further phosphorus reductions in the Lake Champlain Basin. The options that are presented should be as specific as possible, should include recommendations about how each could be implemented, considering the political jurisdictions and institutional arrangements in the Lake Champlain Basin, and should include a realistic assessment of the costs involved. Options considered may include, but should not be limited to, the following: better backroads, agricultural practices and policies, construction site management, streambank stabilization, urban stormwater management, and improved WWTP technologies.
- Provide an evaluation of which options might be most feasible and cost effective in those watershed segments still not meeting their phosphorus loadings targets or in-lake phosphorus standards in 2001 based on the report *Preliminary Evaluation of Progress Toward Lake Champlain Phosphorus Reduction Goals*. Be as geographically explicit as possible in these recommendations.
- Prepare brief quarterly reports documenting progress on each objective and task in the project (see attached Proposal Format Requirements). A final report describing all data, methods, and results will be required at project completion. When approved, the final report will be edited for content and style in consultation with the contractor and published as part of the Basin Program's Technical Report Series. The author(s) is also encouraged to submit one or more articles resulting from the project for publication in a peer-reviewed, professional journal.
- Interact with the LCBP's Technical Advisory Committee and its Phosphorus Reduction Task Force regularly by attending appropriate meetings and presenting work in progress (two or three such meetings are expected).

### **III. Eligibility**

Eligible organizations include colleges, universities, nonprofit organizations, for-profit companies, and government agencies.

### **IV. Proposal Evaluation and Selection Criteria**

Proposals will be judged according to how well they address the following:

1. Demonstrated understanding of the water quality issues and management programs in the Lake Champlain Basin, especially as they relate to phosphorus.
2. Demonstrated knowledge of policies used for urban and agricultural point and nonpoint source pollution control.
3. Merit and feasibility of the proposed methods to assess the feasibility and costs of phosphorus reduction policies for the Lake Champlain Basin, as described in Section II.
4. The credentials of the investigators.
5. Potential for the project to enhance the decision making process about phosphorus reduction policy for the Lake Champlain Basin.
6. Extent to which the proposed work reflects the Vermont and New York TMDL processes and other phosphorus reduction efforts in the Basin.
7. Provision of a public education element (at minimum, a project summary intended for lay audiences is required).
8. Clarity, conciseness and adherence to the attached proposal guidelines.
9. Demonstrated ability to create documents and products that are accessible to and can be used by regional policy makers.
10. Ability of the contractor to complete the work within less than a year.

### **Budget Requirements**

A total of \$40,000 is available for this project.

### **Period of Performance**

Work must be completed within one year of the execution of a contract. A shorter time frame would be considered a bonus.

### **Schedule and Requirements for Proposal Submission**

- Please follow the format requested in the attached proposal guidelines.

- Eight (8) paper copies of each proposal must be POSTMARKED by **December 12, 2001**.
- In addition, please submit an ELECTRONIC VERSION of your proposal, either on diskette or via e-mail. Electronic versions must also be POSTMARKED (or received via e-mail) by **December 12, 2001**.

Send proposals and direct all questions to:

Technical Coordinator  
Lake Champlain Basin Program  
PO Box 204  
54 West Shore  
Grand Isle, VT 05458

802/372-3213  
lcbp@lcbp.org

## Lake Champlain Basin Program

### Technical Proposal Format Requirements

Proposals should adhere to following format and an 8 page maximum length (font size 12), not including budget information, references cited and investigator resumes. Submit proposals on plain paper fastened with a single staple or binder clip only. Please do not submit materials beyond those requested, as additional materials will be discarded and not considered in the proposal evaluation.

TITLE - concise and descriptive.

POINT OF CONTACT: Name, organization, address, phone and fax numbers, and electronic mail address.

ABSTRACT: Brief description of proposed work and products.

INTRODUCTION: Brief overview of what the project is, how it relates to past projects (in the basin and elsewhere), and what it will accomplish in relation to the RFP.

OBJECTIVES AND TASKS: List the project's objectives and describe in detail the tasks that will be performed relative to each objective, including methods and approaches.

Note: Projects involving environmental data collection must submit a Quality Assurance Project Plan to EPA and the plan must be approved prior to the start of any data collection work.

DELIVERABLES: Detailed description of the planned products from each task of the project. Required deliverables: quarterly progress reports and a final report.

SCHEDULE: Timeline showing anticipated dates for completion of the major tasks and deliverables. Quarterly progress reports are due on the last day of December, March, June, and September. Work is to be completed within a maximum of one year of the execution of a contract.

DETAILED BUDGET JUSTIFICATION: Cost breakdown by major budget categories (i.e. personnel, equipment), linking costs to specific tasks/deliverables wherever possible. Breakdown should show both LCBP costs, costs covered by partner organizations (if applicable), required match amounts, and totals. A non-federal match equal to 25% of total project costs is required, either in funds or in-kind services (e.g. for \$40,000 the match equals \$13,333 which is 25% of \$53,333). (1 page, not included in the 8 page maximum total for the proposal)

TECHNICAL REFERENCES CITED: List all references cited in the proposal (not included in the 8 page maximum total for the proposal).

CURRICULUM VITAE/RESUME OF PRINCIPAL INVESTIGATORS: Include up to 5 references for publications pertinent to proposed project. Please limit to one page per investigator, not included in the 8 page maximum total for the proposal.