

Release Date: September 13, 2016

Lake Champlain Basin Program Announcement

Request for Proposals

High Resolution Land Use/Land Cover Mapping for the Lake Champlain Basin

The Lake Champlain Basin Program (LCBP), in conjunction with the New England Interstate Water Pollution Control Commission (NEIWPCC) is pleased to announce a Request for Proposals (RFP) for services to develop a detailed land use/land cover map for the U.S. portion of the Lake Champlain Basin. Up to **\$150,000** is available for this project.

Project Goal: This project will provide an accurate and up-to-date mapping of urban lands, forests and agricultural lands within the Lake Champlain Basin to enhance water quality initiatives as outlined in the LCBP's long-term management plan *Opportunities for Action: An Evolving Plan for the Future of the Lake Champlain Basin*.

This project is supported by funds awarded to the New England Interstate Water Pollution Control Commission by the U.S. EPA in support of the Lake Champlain Basin Program. LCBP anticipates granting one award from this RFP.

This Request for Proposals is available from the Lake Champlain Basin Program website. Look for the link on our homepage at www.lcbp.org. To receive a copy of the RFP via US Postal Service, contact the Lake Champlain Basin Program office at (802) 372-3213 or toll free at (800) 468-LCBP in New York and Vermont.

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

DEADLINE NOTICE:

Electronic versions only of proposals will be accepted and must be RECEIVED by the Lake Champlain Basin Program office by 4:30pm on:

November 1, 2016

LATE OR INCOMPLETE PROPOSALS WILL NOT BE CONSIDERED.

The successful applicant will be notified by early January 2017. LCBP anticipates granting one award from this RFP.

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0. Overview

Congress designated Lake Champlain as a resource of national significance with the Lake Champlain Special Designation Act of 1990. The Special Designation Act also established the Lake Champlain Basin Program (LCBP) and authorized it to receive direct support from U.S. EPA under the Clean Water Act. The LCBP works in partnership with government agencies from New York, Vermont, and Québec, private organizations, local communities, and individuals to coordinate and fund efforts that benefit the Lake Champlain Basin's water quality, fisheries, wetlands, wildlife, recreation, and cultural resources. These efforts are guided by the comprehensive management plan *Opportunities for Action: An Evolving Plan for the Future of the Lake Champlain Basin*.

Since 1992, the New England Interstate Water Pollution Control Commission (NEIWPC) has served as the primary program administrator of LCBP at the request of the LCBP's Steering Committee, and administers the program's personnel and finances. NEIWPC is a congressionally authorized not-for-profit interstate organization whose membership includes all six New England states and New York State and whose mission is to help its member states to realize their individual and collective clean water program goals.

I. Background

Accurate land use/land cover (LULC) maps are a critical tool for resource managers, planners and the general public. The most current basin-wide LULC data was developed in 2007 using the National Land Cover Database, NLCD 2001, as a base. As land use changes over time, updated information is critical for accurate mapping. Recent water quality efforts in the region have found it necessary to modify the existing LULC datasets with more detailed information to include land use intensity information. Updating basin-wide LULC using the latest available datasets with detailed intensity classifications will enable high resolution modeling across sub-watersheds.

The scope of this Request for Proposals is to develop a new LULC dataset that covers the U.S. portion of the Lake Champlain Basin. New GIS LULC data layers will be created for public use based on imagery from 2012-2014 or best available sources. The LULC classification will utilize a classification scheme that may be aggregated to the NLCD (2001, 2006, 2011) 16-class system with at least an 85% accuracy. An overall 10-meter or better resolution is desired with a detailed basin-wide classification to enable current and future water quality modeling without re-classifying each watershed separately.

The successful proposal will provide a detailed discussion of the proposed classification and methods of accuracy assessments for a basin-wide dataset. Inclusion of land use intensity, specifically with respect to developed and agricultural lands, is desired in the classification scheme. Use of the most recent impervious surface mapping, basin-wide LIDAR data and NLCD data is highly encouraged.

II. Project Tasks and Outputs

The Lake Champlain Basin Program (LCBP) seeks proposals for technical services to develop an updated land use/land cover dataset in the U.S. portion of the Lake Champlain Basin. Proposals should describe

how the applicant plans to address the following project components, detailed in the bullets below. The proposal also should provide a brief description of potential outcomes of this project, including uses of these data once the outputs are complete:

Output 1: A 10-meter or better resolution updated land use/land cover dataset using the most recent available base layer information. A basin-wide classification scheme should be aggregated to the current NLCD 16-class system with at least an 85% accuracy.

Output 2: Data generated by this project will be delivered in a format that can be integrated into the Lake Champlain Basin Atlas, a web interface that is publicly available and highly interactive, allowing citizens to view the updated land use dataset.

III. Summary of Other Requirements for the Selected Proposal

The selected applicant will be required to complete the following additional tasks:

1. Following initial notification of the award, a workplan must be approved by the LCBP before a contract agreement can be executed and the work begun. The workplan will detail the logistical elements of the project, including deliverables and project timeline. Information about the LCBP grant process, workplan development guidelines, and reporting requirements can be found on the LCBP website at: <http://www.lcbp.org/about-us/grants-rfps/grant-toolkit/>. The successful applicant will enter into a contract with NEIWPC in order to complete the work and will be compensated upon completion of workplan deliverables.
2. Once the grant agreement has been executed, the contractor must develop a Quality Assurance Project Plan (QAPP) to be approved by the LCBP and the US EPA before the beginning of any data collection or secondary data analyses. More information about LCBP Quality Assurance Plans can be found at: <http://www.lcbp.org/about-us/grants-rfps/grant-toolkit/qapp/>. The project timeline should be scheduled with an expected QAPP approval date no sooner than April 1, 2017 (or 6 weeks following contract execution). No primary or secondary data may be collected or analyzed with LCBP funding prior to QAPP approval.
3. The successful applicant will prepare brief quarterly reports documenting progress on each objective and task in the project (see attached Proposal Format Requirements). A final report fully documenting the project's results will be required at project completion.
4. When approved, the final report will be edited for content and style in consultation with the successful respondent and may be published as part of the Lake Champlain Basin Program's Technical Report Series, located here: <http://www.lcbp.org/media-center/publications-library/technical-reports/>. Some content of this report may also be used for future LCBP public outreach materials.

5. The successful applicant will complete the project according to the following schedule*:

Proposals Due to LCBP	4:30 PM EST, November 1, 2016
Applicants Notified of Funding Decisions	Early January 2017
Detailed Project Workplan Due	Early February, 2017
Project Start Date	March 1, 2017
Project Deliverables and Final Report Due	March 31, 2018

*Schedule is subject to change.

6. All materials and work products, regardless of physical form or characteristics, produced as a result of this project shall be made available to LCBP, NEIWPC, and EPA in a suitable file format. LCBP, NEIWPC, and EPA shall have an unrestricted right to use any materials, software, maps, studies, reports, and other products or data generated using assistance funds or specified to be delivered. The contractor shall not obtain, attempt to obtain, or file for a patent, copyright, trademark or any other interest in any such materials, or work products without the expressed, written consent of LCBP and NEIWPC, and subject to any other approvals required by state or federal law. Reports and other deliverables will credit LCBP, NEIWPC, and EPA as funding partners for any work completed under the project contract.
7. GIS data produced under this project must adhere to the requirements of EPA's National Geospatial Data Policy (see http://www.epa.gov/geospatial/docs/National_Geospatial_Data_Policy.pdf). Specifically, the selected contractor must provide documentation for all produced data, including source information for each digital data layer and specific information about the data layer itself, (i.e., method used, geographic extent of data layer, file format, date of creation, staff contact, description and definition of data fields and their contents, related files, if any, and description of data quality and quality assurance methods used). The EPA Metadata Editor (EME) was developed to simplify and standardize metadata development and is a recommended tool for streamlining production of required metadata. The EME and related training materials can be downloaded from <https://edg.epa.gov/EME/>. Specific technical guidance on geospatial deliverables and acceptable formats can be found at <http://www.epa.gov/region02/gis/r2gisdeliverables.html>. GIS data produced under this project will be submitted to NEIWPC as a final deliverable.
8. NEIWPC requires its contractors to maintain workers compensation and liability insurance. More details will be provided to the successful applicant at the time of contracting.

IV. Eligibility

Eligible organizations include colleges, universities, nonprofit organizations, for-profit companies, and non-federal government agencies. The selected contractor will be responsible for the completion of all project tasks, though subcontracted work may be permitted by the LCBP Project Officer upon written request. Individuals and representatives from organizations that participated in the development or review of this RFP and its contents are ineligible to apply.

NEW Procurement Requirement:

The following procurement procedure is applicable to proposals submitted in response to this RFP if the primary applicant is not a for-profit organization. The purpose is to ensure fair and open competition for purchases supported by LCBP/federal funding. If the applicant plans to use LCBP funding to obtain supplies, equipment or contractual services to complete its proposed workplan, then it must follow federal procurement regulations:

- procurement of supplies and services that do not exceed \$3500 may be made without soliciting competitive quotes if the price is considered reasonable.
- procurement of supplies, equipment and services that are greater than \$3500 and do not cost more than \$150,000 require that the recipient obtain multiple price quotes through a documented competitive process. Good faith efforts to obtain services from disadvantaged business enterprises should also be made, including contacting the small business administration and minority business development agency to inform them about the opportunity for businesses to submit price quotes as part of the competitive process. At least three price quotes for the contract work must be secured. The selected item or service does not need to be the lowest cost if it does not meet your requirements or you can otherwise demonstrate that the higher price offers the “best value.” Justification must be provided for the outcome of the bid process. This process may take place prior to the submission of a proposal for LCBP funds. For further information see the [Grants Toolkit](#) page.

V. Proposal Evaluation and Selection Criteria

Proposals received in response to this RFP will undergo an external peer review, and will be judged according to the following criteria:

1. Demonstrated technical knowledge of existing land use/land cover datasets and available base layer information in the Lake Champlain region.
2. Technical merit and applicability of the proposed product toward the priority objectives identified in this RFP.
3. Demonstrated ability to accomplish the deliverables outlined in Section II.
4. Potential for the project to enhance the knowledge of land use change on water quality and resource management within the Lake Champlain Basin.
5. Clarity, conciseness and adherence to the proposal guidelines.
6. Demonstrated ability to create documents and user-friendly products that are accessible to and can be used by local partners working to address resource management issues in the Lake Champlain Basin.
7. Appropriateness of budget and budget justification, describing how the funds awarded will be used to produce the set of deliverables described in Section II.

VI. Available Funds and Match Requirements

A total of \$150,000 may be made available for this project. Proposals with budgets that exceed this amount will not be considered. Applicants may budget costs that are associated with the project as direct expenses, including personnel costs, travel, project supplies, meeting expenses, and subcontracts (subcontracts only with prior permission from LCBP). Some allocation of project funds for indirect costs also is acceptable. However, **for projects in response to this RFP, the indirect budget must not exceed 21%**

of the direct project budget. No in-kind or cash match is required, though match may be considered favorably during budget review. LCBP anticipates granting one award from this RFP.

VII. Notification of Award

Award notification to applicants is expected in early January 2017. The award recipient may be asked to submit a revised workplan, timeline, and task –based budget at this time. Project work cannot begin until a contract is signed by both parties. LCBP and NEIWPC will not pay for expenses incurred prior to the contract start date. Payment for costs incurred will be on a reimbursement basis per the contract payment schedule and contingent upon completion of quarterly progress reports and project deliverables.

VIII. Period of Performance

Work is expected to begin **March 1, 2017** and is to be completed no later than **March 31, 2018**.

IX. Schedule and Requirements for Proposal Submission

1. Please follow the format outlined in the attached Technical Proposal Format Requirements.
2. Hardcopies of the proposal will NOT be accepted on or before the submission deadline. Editable electronic copies ONLY will be accepted and must be received via email in Microsoft Word or Word-compatible format by 4:30pm on **November 1, 2016** to rmitchell@lcbp.org.

X. Contact Information

Direct all proposals and other inquiries to:

Ryan Mitchell

NEIWPC Information Officer;
Lake Champlain Basin Program Communications Coordinator
54 West Shore Rd., Grand Isle, VT 05458
p: 802-372-3213 x 211; f: 802-372-3233
rmitchell@lcbp.org www.neiwpc.org www.lcbp.org

Technical Proposal Format Requirements

Proposals should adhere to the following format and should not exceed a 10-page maximum length (font size 12), NOT including budget information, references cited and investigator resumes.

TITLE: Concise and descriptive.

POINT OF CONTACT: Name, position, organization, address, telephone, fax and email of the person who will be the point of contact.

AUTHORIZED REPRESENTATIVE: Name, position, organization address, telephone, fax and email of the person who is authorized to sign the contract.

ABSTRACT: Brief description of proposed work.

INTRODUCTION: Overview of what the project is 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.

DELIVERABLES: Detailed description of the planned products from each task of the project. Quarterly progress reports and a final report (including the GIS data) are required deliverables.

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 the specified performance period in the RFP.

DETAILED BUDGET JUSTIFICATION: Cost breakdown by major tasks and budget categories (i.e. personnel, equipment), linking costs to specific tasks/deliverables wherever possible. Breakdown should show costs to be covered by the LCBP award and other sources (if applicable), as well as any match amounts and totals. (1 page, not included in the 10-page maximum total for the proposal).

TECHNICAL REFERENCES CITED: List all references used for the proposal (not included in the 10-page maximum total for the proposal).

CURRICULUM VITAE/RESUME OF PRINCIPAL INVESTIGATORS: Include up to 3-5 references for prior work pertinent to the proposed project. Please limit to one page per investigator; not included in the 10-page maximum total for the proposal.