Release date: August 1, 2018

# **Lake Champlain Basin Program Announcement**

# **Request for Proposals**

# Geomorphic Assessments for Québec and Vermont Segments of the Rock River

The Lake Champlain Basin Program and New England Interstate Water Pollution Control Commission are pleased to announce a Request for Proposals (RFP) for geomorphic assessments of the Rock River in reaches draining both portions of Québec and Vermont according to Vermont Stream Geomorphic Assessment Protocols. Phase 1 and 2 assessments will be completed for specified reaches in Québec, and an update for Phase 2 assessments will be completed for specified reaches in Vermont. The successful applicant will propose a project that completes the outputs described in the attached RFP according the required project timeline. Up to \$70,000 is available to support this project.

This work is applicable to the Clean Water Goal of 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 on behalf of the Lake Champlain Basin Program by the Great Lakes Fishery Commission.

This RFP is available on the Lake Champlain Basin Program website (<a href="lcbp.org/grants">lcbp.org/grants</a>). To receive a copy of the RFP via U.S. 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.

Applicants must submit proposals in electronic format ONLY. Please see the RFP and the attached proposal format information for complete details.

#### **DEADLINE NOTICE:**

Electronic versions of proposals must be RECEIVED by grants@lcbp.org no later than:

4:30pm on September 17, 2018

Late, incomplete, or non-electronic proposals will not be considered.

Successful applicants will be notified in December 2018. Although LCBP reserves the right to make no awards, we anticipate granting one award from this RFP.

# **Lake Champlain Basin Program Request for Proposals**

# Geomorphic Assessment for Québec and Vermont Segments of the Rock River

#### 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 US EPA under the Clean Water Act. The LCBP coordinates and funds efforts that benefit the Lake Champlain Basin's water quality, fisheries, wetlands, wildlife, recreation, and cultural resources. The LCBP works in partnership with government agencies from New York, Vermont, and Québec, private organizations, local communities, businesses and citizen groups. These partners lead collaborative, non-partisan actions to address water quality and environmental challenges that cross political boundaries in a multi-national watershed. Management 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 (NEIWPCC) has served as the primary program administrator of LCBP at the request of the Lake Champlain Steering Committee, and administers the program's personnel and finances. NEIWPCC 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. Project background

The Vermont Department of Environmental Conservation River Management Program has been conducting and guiding river assessments over the past decade on various streams within the Missisquoi Bay watershed in Vermont. This is part of a statewide effort to use the science of fluvial geomorphology to increase our understanding of the process of streams' geomorphic evolution. These assessments will lead to better implementation of practices that will minimize potential hazards, support healthy habitat, and protect water quality, including phosphorus load reduction. Similarly, geomorphic assessments have been completed for several river segments in the Québec portion of the Rock River watershed, following somewhat different assessment protocols. An important goal of this project is to conduct an integrated assessment for both the Vermont and Québec portions of the Rock River using consistent assessment protocols. The assessment information will be used to prioritize river corridor sections requiring the greatest attention.

The Lake Champlain Basin Program is soliciting proposals from qualified applicants to complete a Phase 2 Geomorphic Assessment (as described in the Vermont Geomorphic Assessment Phase 2 Handbook referenced in Attachment A) for the Rock River Watershed in Québec and Vermont. The study reaches are located on the respective stream mainstems and tributaries, as shown on the attached maps (Attachment B). A 2007 Phase 2 geomorphic assessment was completed for many reaches of the Vermont portion of the Rock River (as depicted on the VT reach map in Attachment B) and these reaches will only require an assessment update rather than a full assessment. For the Québec reaches, a Phase 2 assessment is required for all

perennial reaches (see the Quebec reach map in Attachment B), making use of prior assessments where applicable. A Phase 1 assessment will also be needed for the Québec reaches.

### II. Project tasks and outputs

# **Summary:**

The successful applicant will conduct Phase 1 and 2 Stream Geomorphic Assessments using the Vermont Stream Geomorphic Assessment Protocols published by the Vermont Department of Environmental Conservation (Attachment A) for up to 35 reaches totaling approximately 32 kilometers of river in Québec. In addition, the successful applicant will update the Phase 2 Assessment completed in 2007 for 19 reaches and approximately 27 kilometers of river in Vermont. The Phase 2 Assessment Update will involve a review and update of steps 1-5 and 7 of Vermont's Phase 2 assessment protocols – the update process is described more fully in Attachment C. The successful applicant will make all necessary landowner contacts and secure landowner permission for accessing river frontage lands along assessed reaches. The successful applicant will be responsible for the final assessment and quality assurance prior to submitting data for quality assurance reviews by LCBP.

# Specific tasks and outputs:

- a) Hold a coordination meeting at the initiation of the project (Spring 2019) to ensure tasks and deliverables are understood and identification of any needs, project limitations, or anticipated challenges that can be identified prior to tasks being implemented.
- b) <u>Prepare a Quality Assurance Project Plan (QAPP)</u> for Phase 1 and 2 assessments following guidance available from the LCBP and VTDEC. The QAPP must be approved before data collection can begin, and shall apply to data collected in both the Vermont and Quebec portions of the study area.
  - i. The QAPP must follow procedures specified in the Vermont Phase 2 Handbook and Data Management System (see Attachment A), and LCBP requirements. The LCBP project officer will assist with QAPP development.
  - ii. Prior to the Phase 2 quality assurance check, a review should be conducted by a qualified assessment scientist prior to submitting data to the LCBP.
  - iii. A QAPP report will be submitted to LCBP along with all assessment draft reports and the draft final report.
- c) Complete the Phase 1 assessment for Québec reaches using the protocols specified in Vermont's Stream Geomorphic Assessment Phase 1 Handbook. Submit the Phase 1 report to LCBP by November 30, 2019. Meet with LCBP in the winter of 2019-2020 to determine, using the results of the Phase 1 report, how many of the 35 reaches in Québec should be included in the Phase 2 assessment.
- d) Complete the Phase 2 field work for Vermont and Québec reaches using protocols specified in the most current version of Vermont's Stream Geomorphic Assessment Phase 2 Handbook, including bridge and culverts assessments, and the 2008 Habitat Protocol. Specific reaches are depicted in Attachment B. To the extent that landowners give permission for access, each reach is to be assessed in its entirety.

Subdivision of reaches into segments or sub-reaches will be completed as described in the Vermont Phase 2 Protocols.

- i. Conduct a complete Phase 2 Assessment (steps 1-7) and bridge and culvert assessment on up to 32 kilometers of stream length for up to 35 reaches of the Rock River in Québec. The number of reaches to be included in the Phase 2 Assessment will be determined in consultation with LCBP following completion and review of the Phase 1 Assesment results.
- ii. Record all sketch, photo, and assessment data on Vermont's Stream Geomorphic Assessment Phase 2 Assessment field forms and (for the Vermont reaches) enter data into the current version of Vermont's webbased Data Management System and maintain reproducible copies of all field documents. Provide LCBP with electronic copies of all field forms.
- iii. Use field sketches and GPS locations to create GIS coverages and document the location of reach and segment breaks, photo points, crosssection locations, and other definite features located during the field assessment.
- iv. Use Stream Geomorphic Assessment Feature Indexing Tool to record spatially tracked features identified in the most current Vermont Stream Geomorphic Assessment Phase 2 Handbook.
- v. Enter cross section reach data into the Vermont State Phase 2 excel spreadsheet and upload to the Vermont Data Management System.
- vi. Field-verify Phase 1 data (including the location of valley walls) and correct (where necessary) on the Phase 1 Reach Summary Report forms and the valley wall shapefile.
- vii. For Vermont reaches, complete a Phase 2 Assessment Update following the steps described in Attachment C.
- viii. Submit a draft report for Phase 2 Assessment (Québec reaches) and Phase 2 Assessment Update (Vermont reaches) to LCBP for review by November 30, 2020.
- e) <u>Produce a map</u> depicting high-priority areas in need of riparian buffers and other BMPs, applying the results of the geomorphic assessment.
- f) Meet with the LCBP to develop preliminary project identification information for at least 15 prioritized projects for protection and restoration efforts within the watershed, including cost estimates, based in part on the location and extent of sediment regime modifications and opportunities for flood flow and sediment load attenuation. The LCBP and project partners in Vermont and Québec will provide a full set of criteria to be used to guide the selection of priority projects. A broad range of project types should be considered, including re-establishing access to floodplains as well as buffer protection and creation. Descriptions of a larger list of candidate

- projects and more detailed information on the 15 high-priority projects should be included in the final report.
- g) Organize a public meeting with LCBP to present the findings of the Stream Geomorphic Assessments and to solicit project interest. The LCBP will advertise the project and the public meeting via a press release.
- h) <u>Submit a draft final report</u> including the results and resulting data for all of the assessments and all GIS and other data collected at the completion of the project. The format and content of the final report will follow LCBP guidelines.

# III. Summary of other project requirements

- 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 initiated. 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: <a href="http://www.lcbp.org/about-us/grants-rfps/grant-toolkit/">http://www.lcbp.org/about-us/grants-rfps/grant-toolkit/</a>. The successful applicant will enter into a contract with NEIWPCC 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 before initiating any data collection or secondary data analyses. More information about LCBP Quality Assurance Plans can be found at: <a href="http://www.lcbp.org/about-us/grants-rfps/grant-toolkit/qapp/">http://www.lcbp.org/about-us/grants-rfps/grant-toolkit/qapp/</a>. The project timeline should be scheduled with an expected QAPP approval date no earlier than 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 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 and may be published as part of the Lake Champlain Basin Program's Technical Report Series, located here: <a href="http://www.lcbp.org/media-center/publications-library/technical-reports/">http://www.lcbp.org/media-center/publications-library/technical-reports/</a>. 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 (subject to change):

Proposals due to LCBP	4:30 PM EST, September 17, 2018
Applicants notified of funding decisions	December, 2018
Detailed project workplan due	January, 2019
Project start date	March, 2019
Phase 1 draft assessment due (Québec reaches)	November, 2019
Phase 2 draft assessment reports due	November, 2020
Project deliverables and draft final report due	April 15, 2021

- 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 and NEIWPCC in a suitable file format. LCBP and NEIWPCC 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 NEIWPCC, and subject to any other approvals required by state or federal law. Reports and other deliverables will credit LCBP, Great Lakes Fishery Commission, and NEIWPCC as funding partners for any work completed under the project contract.
- 7. The successful applicant will be required 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. Individuals and representatives from organizations that participated in the development or review of this RFP and its contents are ineligible to apply.

# 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 the Stream Geomorphic Assessment Protocols (Attachment A) and riparian restoration project design.
- 2. Demonstrated ability to accomplish the tasks described above.
- Potential for the project to improve Vermont and Québec collaboration and management consistency for stream corridor assessment and restoration within the Rock River watershed.
- 4. Clarity, conciseness, and adherence to the proposal guidelines.
- 5. Appropriateness of budget and budget justification, describing how the awarded funds will be used to produce the set of deliverables, outputs, and outcomes described above.

### VI. Available Funds and Match Requirements

A total of \$70,000 may be made available for a project to be supported under this RFP.

Applicants may budget costs that are associated with the project as direct expenses, including personnel costs, travel, project supplies, meeting expenses, and subcontracts. 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 will be considered favorably during budget review.

### VII. Appropriate Use of Funds

LCBP grant funds cannot be used to produce for-profit products or to cover costs associated with regulatory compliance or direct fundraising efforts. LCBP grant funds also cannot be used for land purchases, endowment funds, or lobbying or legislative advocacy of any kind.

#### VIII. Notification of Award

Award notification to applicants is expected by December 2018. 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 NEIWPCC 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.

### IX. Period of Performance

Work is expected to begin in **Spring 2019** and is to be completed no later than **April 15, 2021** (see specific deliverable deadlines in Section II above).

### X. Schedule and Requirements for Proposal Submission

- Please follow the format outlined in the attached Technical Proposal Format Requirements.
- Submit an <u>electronic version</u> of your proposal to <u>grants@lcbp.org</u> no later than 4:30 PM EST, September 17, 2018. Please be sure you receive email notification that your application was received. Electronic submissions must be in MS Word format. Hardcopies will not be accepted.

### XI. Contact Information

Direct all proposals and other inquiries to:
Matthew Vaughan
Lake Champlain Basin Program Technical Coordinator
NEIWPCC Environmental Analyst
54 West Shore Rd., Grand Isle, VT 05458
p: 802-372-0216; f: 802-372-3233
mvaughan@lcbp.org; neiwpcc.org; 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, and letters of participation or support.

**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 the project and what it will accomplish in relation to the RFP.

**TASKS:** Describe in detail the tasks that will be performed, including methods and approaches.

**DELIVERABLES AND OUTPUTS:** Detailed description of the items that will be sent to LCBP as documentation of work completed through the award, and the elements of the projects that are not delivered to LCBP, such as outreach efforts. Quarterly progress reports and a final report (including GIS data) are required deliverables.

**OUTCOMES:** Provide a description of the anticipated impact or change in condition (i.e. behavior or environment) that you are trying to achieve through this award. Outcomes may be short-term or long-term.

**SCHEDULE:** Timeline showing anticipated dates for completion of the major tasks and deliverables and outputs. 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 (e.g., 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).

**EXAMPLE** Budget Spreadsheet

		•			Task 5 (add or remove	Line Item Totals	Proposed	Line Item Totals +
					columns as	for All	Match (if	Propose
Line Item	Task 1	Task 2	Task 3	Task 4	needed)	Tasks	any)	d Match
Personnel	\$500	\$1,200	\$800	\$495	\$1,000	\$3,995	\$3,000	\$6,995
Fringe	\$150	\$360	\$240	\$149	\$300	\$1,199	\$1,000	\$2,199
Travel	\$0	\$100	\$300	\$100	\$0	\$500	\$400	\$900
Supplies	\$0	\$200	\$0	\$2,000	\$500	\$2,700	\$1,000	\$3,700
Professional Services	\$0	\$0	\$0	\$2,500	\$0	\$2,500	\$1,000	\$3,500
Total Direct	\$650	\$1,860	\$1,340	\$5,244	\$1,800	\$10,894	\$6,400	\$17,294
Indirect	\$78	\$223	\$161	\$629	\$216	\$1,307	\$0	\$1,307
TOTAL BUDGET	\$728	\$2,083	\$1,501	\$5,873	\$2,016	\$12,201	\$6,400	\$18,601

# Attachment A State of Vermont River Management Stream Geomorphic Assessment Protocols

The Consultant shall perform services related to Stream Geomorphic Assessment and provide reports in accordance with the protocols listed in the following documents:

May 2007 Vermont Stream Geomorphic Assessment Phase 1 Handbook <a href="http://dec.vermont.gov/sites/dec/files/wsm/rivers/docs/rv\_SGA\_Phase1\_Protocol.pdf">http://dec.vermont.gov/sites/dec/files/wsm/rivers/docs/rv\_SGA\_Phase1\_Protocol.pdf</a>

May 2009 Vermont Stream Geomorphic Assessment Phase 2 Handbook <a href="http://dec.vermont.gov/sites/dec/files/wsm/rivers/docs/rv\_SGA\_Phase2\_Protocol.pdf">http://dec.vermont.gov/sites/dec/files/wsm/rivers/docs/rv\_SGA\_Phase2\_Protocol.pdf</a>

May 2009 Vermont Stream Geomorphic Assessment Phase 3 Handbook <a href="http://dec.vermont.gov/sites/dec/files/wsm/rivers/docs/rv\_SGA\_Phase3\_Protocol.pdf">http://dec.vermont.gov/sites/dec/files/wsm/rivers/docs/rv\_SGA\_Phase3\_Protocol.pdf</a>

June 2008 Vermont Agency of Natural Resources Reach Habitat Assessment <a href="http://dec.vermont.gov/sites/dec/files/wsm/rivers/docs/rv\_RHAProtocolReport.pdf">http://dec.vermont.gov/sites/dec/files/wsm/rivers/docs/rv\_RHAProtocolReport.pdf</a>

Handbook Appendices

http://dec.vermont.gov/watershed/rivers/river-corridor-and-floodplain-protection/geomorphic-assessment

March 2009, Appendix G: Bridge and Culvert Assessment <a href="http://dec.vermont.gov/sites/dec/files/wsm/rivers/docs/rv">http://dec.vermont.gov/sites/dec/files/wsm/rivers/docs/rv</a> SGAB%26CProtocols.pdf

April 2010 Vermont Agency of Natural Resources River Corridor Planning Guide: to Identify and Develop River Corridor Protection and Restoration Projects <a href="http://dec.vermont.gov/sites/dec/files/wsm/rivers/docs/rv\_rivercorridorguide.pdf">http://dec.vermont.gov/sites/dec/files/wsm/rivers/docs/rv\_rivercorridorguide.pdf</a>

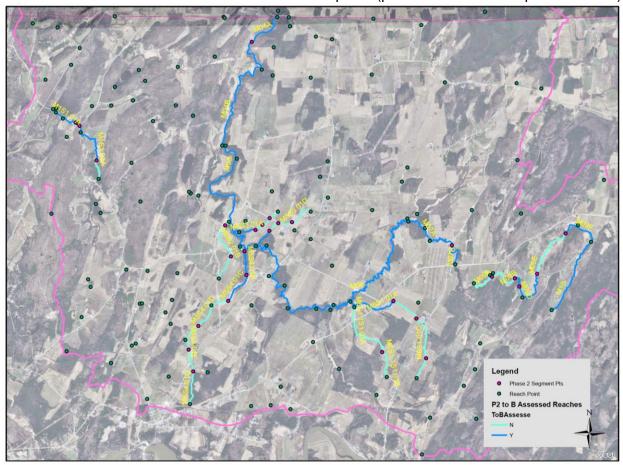
Vermont Agency of Natural Resources Stream Geomorphic Assessment Tool (SGAT): Available for download at RFP website (<a href="http://lcbp.org/grants">http://lcbp.org/grants</a>)

April 2010 Guide to River Corridor Easements
<a href="http://dec.vermont.gov/sites/dec/files/wsm/rivers/docs/rv\_RiverCorridorEasement-guide.pdf">http://dec.vermont.gov/sites/dec/files/wsm/rivers/docs/rv\_RiverCorridorEasement-guide.pdf</a>

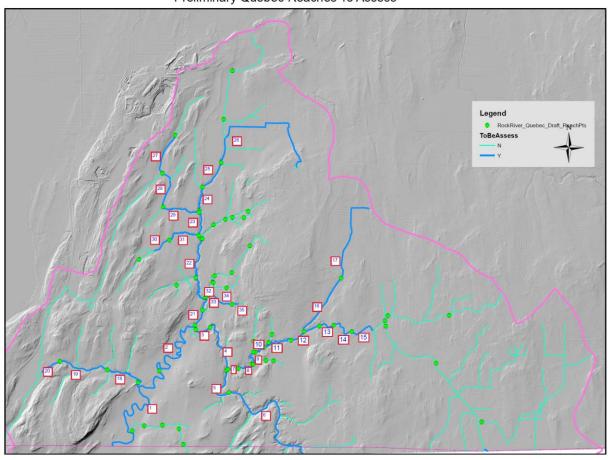
# **Attachment B**

Maps of Rock River reaches to be assessed in Vermont and Québec GIS shapefiles are available for download on the LCBP website (<a href="lcbp.org/grants">lcbp.org/grants</a>)

Vermont reaches to receive Phase 2 assessment update (prior assessment completed in 2007)



Preliminary Quebec Reaches To Assess



#### Attachment C

# Description of Phase 2 Reach Assessment Update Applicable for Vermont Rock River Reaches

The Phase 2 assessment update will include a review and update of data collected previously for steps 1, 2, 3, 4, 5 and 7 and will be done on approximately 27 km of stream length on 19 reaches from the 2007 Rock River study (see attached map). Step 6, the Rapid Habitat Assessment, and the Bridge and Culvert Assessment will not be conducted on these reaches; (basic constriction information in step 4.8 shall be collected).

The intent for this assessment update is to target data updates to parameters that may have changed over the last 11 years and are most linked to phosphorus and/or sediment loading dynamics within the watershed.

Prior to commencing field work on these reaches, information from the 2007 data should be reviewed and considered for use in the field where possible. Where feasible, cross-sections should be completed at the original location and/or in near-by stream sections. This will assist in determining if there have been signfincant adjustments in the stream over time. Some parameters, such as steps 1, 4.1, 4.2, 4.5, 4.6, and 5.5 may be found to have no or little changes in many cases, but it is important to include these to confirm that no changes have occurred since the original data was collected. Where changes to these parameters are found, it will be important to update the data accordingly.

Data collected to update such information as erosion and aggradation spots, lack of buffer, and changes in cross-sections or stream type will help determine if there have been geomorphic condition improvements and/or degradation over time. This work will also be used to help target areas for future project implementation.