

# **REQUEST FOR PROPOSALS**

## **Practical Synthesis of Existing Knowledge on Retrofitting Existing Infrastructure using Nature-based Solutions (NBS) for Coastal Flood Risk Management**

for the project

### **Nature-based Solutions to Address Flooding in Coastal Cities**



**Commission for Environmental Cooperation**

**2022**

## I. Overview

The Commission for Environmental Cooperation (CEC) is requesting proposals from prospective consultants to produce a practical synthesis of existing knowledge on retrofitting existing infrastructure using nature-based solutions (NBS) for coastal flood risk management.

The Commission for Environmental Cooperation (CEC) was established in 1994 by the governments of Canada, the United Mexican States (Mexico), and the United States of America (United States) through the North American Agreement on Environmental Cooperation, a side agreement concluded in connection with the North American Free Trade Agreement (NAFTA). As of 2020, the CEC operates in accordance with the Environmental Cooperation Agreement, which entered into force at the same time as the new trade agreement known as CUSMA, T-MEC and USMCA in each of these three countries, respectively. The CEC brings together a wide range of stakeholders, including the public, Indigenous people, youth, nongovernmental organizations, academia, and the business sector, to seek solutions to protect North America's shared environment while supporting sustainable development for the benefit of present and future generations. Find out more at: [www.cec.org](http://www.cec.org).

The CEC's Council, its governing body, approved the project entitled Nature-based Solutions to Address Flooding in Coastal Cities as part of the Operational Plan for 2021, with the purpose of filling knowledge gaps in supporting the broader implementation of NBS in North American coastal cities. For a complete description of the project, including tasks and related budget, please visit the CEC website at: <http://www.cec.org/nature-based-solutions-to-address-flooding-in-coastal-cities/>.

## II. Terms of Reference

### A. Overview and Scope

One of the objectives of the *Nature-based Solutions to Address Flooding in Coastal Cities* project is to address the gaps and barriers preventing broader implementation of nature-based solutions (NBS) for coastal flood risk management in North America. The lack of data and authoritative design guidance for retrofitting existing infrastructure using NBS to achieve flood resilience objectives remains a barrier to reducing infrastructure maintenance and replacement costs and achieving other social and environmental co-benefits. This objective will be met by producing a practical synthesis of existing knowledge on retrofitting existing infrastructure using NBS for coastal flood risk management while enhancing co-benefits.

The output of this work (the practical synthesis) is intended to generate evidence to support decision-making.

### B. Description of Services

The consultant shall coordinate with the CEC's designated contacts to accomplish the following:

1. Compile and summarize available information on retrofitting existing infrastructure for enhanced flood resilience using nature-based solutions (NBS) in coastal cities. The practical synthesis is intended for flood risk managers or decision-makers (at all levels of government or in the private sector) responsible for investing in, operating, maintaining, and upgrading infrastructure. The summary should include, but not be limited to:

- Opportunities for NBS retrofitting within the existing portfolio of infrastructure at all stages, including new construction, repair, modification, or replacement. This section should highlight the overall magnitude of the opportunity, and specific opportunities, considering the existing portfolio of infrastructure reaching end-of-life in North America. It should also consider future conditions.
- The range of options available for NBS retrofitting, from natural to hybrid features, with specific examples. If possible, include cost comparison to traditional (grey) infrastructure solutions.
- Incentives for retrofitting infrastructure with NBS versus more traditional (grey) infrastructure solutions.
- Strategies or criteria to help decision-makers establish which NBS retrofits to infrastructure provide measurable flood resilience benefits and co-benefits (including social, environmental, and economic benefits), versus those that provide little or no such benefit.
- Legal and financial responsibilities for retrofitting.
- The role of the private sector (e.g., key stakeholders financing these solutions, public-private partnerships, landowners).
- Barriers or gaps in knowledge or data that hinder wider implementation of NBS retrofitting of infrastructure for coastal flood resilience, and recommendations to overcome those barriers or address gaps.
- Case studies highlighting examples of retrofitting existing infrastructure should be included. Case studies should be representative of and/or applicable to coastal cities in North America.

The practical synthesis should also seek to address gaps identified during an intersectoral scoping workshop in mid-2022 (workshop report to be provided by the CEC).

2. Produce at least three (3) briefing notes based on results of the practical synthesis, on topics agreed upon with CEC staff and the Project Steering Committee.

### **Deliverables**

1. Draft and final practical synthesis of existing knowledge on retrofitting existing infrastructure
2. Draft and final briefing notes (at least 3) based on the results of the practical synthesis

### **Meeting Arrangements**

The CEC will arrange remote conferencing services as needed.

### **C. Periodic Reporting Requirements**

Throughout the project, the consultant will work in close collaboration with the CEC, the Project Steering Committee, and experts to gather information to support delivery of the work. The consultant may consult directly with government officials and other experts, as needed.

However, the consultant shall report only to, and receive direction only from the CEC designated staff.

The CEC Secretariat will forward draft deliverables to the project’s Steering Committee and other experts, for their review and comment. The CEC Secretariat will arrange teleconferences with the consultant, the CEC designated staff, and other experts on an as-needed basis. The goal of these meetings will be to present the products and assess progress on the project. The consultant is expected to be available for these calls, at mutually agreed times.

The consultant will work in his or her own offices. The consultant will inform the CEC of any potential problems and suggest solutions and actions that could be taken to facilitate the achievement of desired results.

**Provisional timeline of expected deliverables**

Date	Activity and deliverable
15 July 2022	Detailed table of contents of practical synthesis of retrofitting existing infrastructure, including list of case studies to be included
15 November 2022	First draft of practical synthesis of retrofitting existing infrastructure, for review by CEC staff and Project Steering Committee
15 March 2023	Second draft of practical synthesis of retrofitting existing infrastructure, for review by CEC staff and Project Steering Committee
TBD	Final revised practical synthesis incorporating comments received from CEC within 4 weeks of receipt of the comments
17 April 2023	First draft of briefing notes, for review by CEC staff and Project Steering Committee
15 June 2023	Second draft of briefing notes, for review by CEC staff and Project Steering Committee
TBD	Final revised briefing notes incorporating comments received from CEC within 4 weeks of receipt of the comments

**D. Quality of Deliverables**

The consultant is responsible for providing deliverables of **publishable quality** (i.e., copy-edited prior to submission) in English and, when applicable, for the technical editing of the materials. The consultant will submit to the CEC Secretariat all written material (including complete drafts and final reports) in Microsoft Word, following the format of the CEC’s [Report Template](#) and adhering to the precepts of the [Guidelines for CEC Documents and Information Products](#), as supplemented by the CEC’s English [Style Guide](#). Supporting documents for tables, figures and maps will be submitted with the report in their original file format (e.g., Excel or ArcGIS). Note that all amounts shall be presented in metric units. The CEC Secretariat will be responsible, when applicable, for translation, printing, publication and distribution of products from this activity.

Upon delivery by the consultant of a final version of the report or other written materials under the project, the CEC reserves the right to a 15-business day period to review the document(s), notify the consultant of any potential issues or errors, and return the document(s) to the consultant for appropriate corrections, at no extra cost. In all cases, contract payments will be withheld if products submitted to the CEC fail to fulfill the quality and formatting requirements specified above. In the event that the consultant neglects to make the required corrections or if, following corrections, a deliverable remains unsatisfactory, the document shall be edited or

revised by a third party designated by the Secretariat, the cost of which shall be deducted from the consultant's fees at a rate of C\$60 per hour.

### **E. Plagiarism**

Plagiarism is the act of conveying someone else's original expression or creative ideas as one's own and can be a violation of copyright law. Neither intentional nor unintentional plagiarism is acceptable to the CEC. The consultant must follow good scholarly methodology in preparing reports and deliverables under the contract, including systematic referencing in footnotes or in-sentence references, for any secondary sources, quotations, data, etc., that do not originate with the author. Sources for tables and figures reproduced from other literature must be given in a "Source" attribution immediately below the table or figure. Failure to properly reference the source of such borrowed material constitutes plagiarism and will be considered a breach of contract. For further information, see [Guidelines for CEC Documents and Information Products](#). In addition, for every written deliverable submitted, the Consultant must use iThenticate software, or an equivalent software approved by the Commission, to validate the written product in question and must forward the plagiarism review results to the CEC at the time of document submission. Contract payments will be retained if products do not fulfill these requirements.

## **III. Requirements and Proposal Evaluation**

### **A. Mandatory Requirements**

*To be eligible for further consideration, all consultants must fulfill the following basic requirements.*

#### **1. In-country Ability**

The consultant, as well as all their personnel and subconsultants, must reside and be authorized to work legally in Canada, Mexico or the United States of America. If travel is required, the consultant must possess valid documentation to travel within these countries.

#### **2. Key Personnel**

For the purposes of this RFP, the term "consultant" may refer to either a group or company or a single individual.

If a proposal is submitted by a consortium of individuals or institutions, a "lead" consultant should be designated to take responsibility for ensuring overall coordination, the coherence of activity outputs, and the integration of information and ideas.

#### **3. Qualifications Required**

The consultant must possess competence and experience in:

- Nature-based solutions (NBS) for coastal flood risk management
- Infrastructure planning, design, management, operation, and/or retrofitting
- Researching and compiling information
- Performing socio-economic analysis and quantifying co-benefits
- Working effectively and with appropriate consideration to social and cultural differences across Canada, Mexico, and the United States

The consultant must be fluent in both written and spoken English.

#### **4. Proposal Submission**

It is the intention of the CEC Secretariat to include the **Terms of Reference (Section II)** of this document) in the contract negotiated with the successful applicant. Therefore, prospective consultants should refer to these for more detailed information on the project and the services to be provided. Prospective consultants are requested not to reiterate the Terms of Reference in their submissions, but are invited to suggest modifications to enhance the proposal.

Proposals must include the following:

- A brief statement of interest and intent. This statement should be based upon and serve to demonstrate the consultant's experience and subject knowledge. The statement should address desired results; guidelines (parameters within which results are to be accomplished); resources (human, financial, technical, or organizational support available to help accomplish the results); and other aspects deemed applicable by the consultant. The purpose of this statement is to demonstrate not only the consultant's general and specific familiarity with the subject area, but also to highlight writing skills;
- A general work plan for carrying out this project;
- Proposed methodology;
- Suggested modifications to the Terms of Reference, and the reasons for such modifications;
- Resumes of the key personnel involved in the project;
- Detailed cost breakdown, including number of person/days of key and other personnel, direct and indirect costs, travel costs and applicable taxes;
- Description of relevant experience and any other relevant information;
- Two samples of previous work;
- Two letters of recommendation from previous assignments; and
- List of no less than three references.

#### **B. Other Information to be Provided**

Potential consultants are encouraged to submit any additional information that they believe will assist the CEC Secretariat in the evaluation of their proposal. However, the proposal should not exceed six (6) pages, exclusive of applicant resumes, samples of previous work or corporate brochures.

#### **C. Type of Contract to be Used for These Services**

The CEC Secretariat intends to use its milestone-based contract for these services. A sample is available upon request. If the contract is negotiated with a consortium, the CEC will offer the consultants the option to have separate contracts between each consultant and the CEC.

All work within the contract must be completed by 30 July 2023.

#### **D. Selection Procedure**

The consultant deemed best qualified will be selected on the basis of a competitive process, in accordance with sections 2.5-2.7 of the [CEC Consultant Services Procurement Manual](#).

Proposals that the CEC Secretariat determines to be complete will be evaluated according to the procedure described below. Prospective consultants who submit proposals determined by the CEC Secretariat to be incomplete will be so notified in writing.

Each complete proposal that is submitted will be evaluated by the CEC Secretariat according to the following criteria, with a point rating assigned for each:

Evaluation Criteria	Maximum Point Rating
Experience, qualifications and competency of key personnel	40
Understanding of project requirements and adequacy of work plan	25
Suitability of the proposed approach	10
Adequacy of budget	10
Writing ability	15
Total	100

A minimum score of 80 will be required for the prospective consultant's proposal to be eligible for further consideration. Cost efficiency will be taken into account in the evaluation.

Proposals in response to this request will be evaluated by the CEC designated staff and technical reviewers, who will form an Evaluation Committee. Each member of the Evaluation Committee will receive a copy of the proposals and will be asked to rate each proposal using the evaluation criteria and its maximum point ratings given above.

The CEC designated staff will arrange for a conference call/meeting among the members of the Evaluation Committee to discuss the ratings, arrive at final scores, and, subsequently, a ranking of all proposals. The strengths and weaknesses of each proposal, in terms of the evaluation criteria, will be noted and summarized. Once the selection has been made, each prospective consultant will be provided with their score—if requested—along with their comparative ranking. However, neither the evaluations nor the scores of other bidders will be provided.

### **E. Estimated Level of Resources Required**

The budget for this activity is not expected to exceed C\$80,000 including professional fees and expenses. Reimbursable expenses are detailed in the CEC standard contract, available upon request; in addition, the cost of using iThenticate or other approved software to detect plagiarism (US\$50) should also be considered.

For universities and nongovernmental organizations, note that the CEC accepts that overhead be charged for administration and other indirect costs up to 15% of the total value of the contract.

If the proposal were presented by a consultant established in Mexico, the applicable value-added tax will be 0%, in accordance with Article 29, section IV, paragraph a) of Mexico's VAT Act, as these are technical services that were engaged from abroad.

If a currency other than Canadian dollars is used, the consultant should indicate the total cost of the professional services in Canadian dollars as well as the currency of choice, for comparison purposes.

### **F. Basis of Payment Required**

The consultant will be paid by milestone.

Payment shall be made only for *bona fide* consultant fees and legitimate expenses incurred in accordance with the contract for professional services, and only upon receipt and documented acceptance by the Secretariat of statement(s) of account/invoice(s) from the consultant.

Settlement of invoices that are acceptable for payment will normally be made 30 days from the date of receipt by the Commission.

### **G. Conflict of Interest**

“Conflict of interest” means, but is not limited to, a situation where a consultant’s personal interest is sufficiently connected with professional duties under the contract, such that it results in a reasonable apprehension that said personal interest may influence the exercise of professional responsibilities under the contract. For example, a direct conflict of interest exists when the consultant is also a CEC government official, or is related to or closely affiliated with a CEC government official, CEC staff member or third party involved with the performance of the services.

The consultant will inform the CEC Secretariat of any circumstance that existed prior to the execution of this contract, or that could manifest during the performance of this contract, which could constitute a conflict of interest. The consultant will complete and sign, on behalf of all his or her personnel, the attached *Declaration of Acceptance and Impartiality and Independence* (see Annex). The Consultant will also take note of the [CEC Consultant Services Procurement Manual](#).

### **I. Deadlines for Proposal Submission and Decision**

The proposal, including all relevant attachments, must be received by the CEC Secretariat offices by **17:00 ET on 27 April 2022**. Proposals submitted after this deadline will not be considered.

**Proposals must be submitted via e-mail to [lroy@cec.org](mailto:lroy@cec.org)**. Proposal format may be in Microsoft Word or Adobe PDF format. Once the proposal has been submitted electronically, the CEC will confirm receipt within three business days. If receipt is not confirmed by e-mail within this time, **applicants must contact the CEC**. The contact person is:

Lauren Roy  
Project Lead, Ecosystems Unit  
Commission for Environmental Cooperation  
700 de la Gauchetière St. West, Suite 1620  
Montreal, QC, Canada H3B 5M2  
Tel: 514-350-4300; Fax: 514-350-4314

The CEC Secretariat intends to select the consultant and notify the applicants within a reasonable period of time following the proposal submission deadline.



ANNEX (see also Schedule D in CEC standard contract)

## CONSULTANT'S DECLARATION OF ACCEPTANCE AND IMPARTIALITY AND INDEPENDENCE FOR CONTRACT

I, the undersigned,

Last Name: \_\_\_\_\_ First Name: \_\_\_\_\_

### ACCEPTANCE

hereby declare that I accept to serve as consultant in the subject contract.

### IMPARTIALITY AND INDEPENDENCE

*(If you accept to serve as a consultant, please check one of the two following boxes. The choice of which box to check will be determined after you have taken into account, inter alia, whether there exists any past or present relationship, direct or indirect, with any of the Parties to the Environmental Cooperation Agreement (ECA) or their Commission for Environmental Cooperation ("CEC") representatives, Secretariat staff, and/or third parties involved in the performance of this contract, whether financial, professional, familial, or of another kind and whether the nature of any such relationship is such that disclosure is called for pursuant to the criteria set out below. Any doubt should be resolved in favor of disclosure.)*

**I am impartial and independent** with respect to the ECA Parties and their CEC representatives, CEC Secretariat staff, and third parties involved in the performance of this contract, and intend to remain so; to the best of my knowledge, there are no facts or circumstances, past or present that need be disclosed because they are likely to give rise to justifiable doubts as to my impartiality or independence, and that may constitute a conflict of interest.

**OR**

**I am impartial and independent** with respect to the ECA Parties and their CEC representatives, Secretariat staff, and/or third parties involved in the performance of this contract, and intend to remain so; **however**, I wish to call your attention to the following facts or circumstances which I hereafter disclose because they might be of such a nature as to give rise to justifiable doubts as to my impartiality or independence, and that may constitute a conflict of interest. Where facts or circumstances exist that might give rise to the latter such doubts, I may set out measures I intend to take to mitigate or eliminate any doubts regarding my impartiality and independence, and/or a possible conflict of interest. (Use separate sheet and attach.)

Date: \_\_\_\_\_

Signature: \_\_\_\_\_