

# **Request for Preproposals and Qualifications: Consulting Services for Phase II of the Project Envisioning a Chicago Area Waterway System for the 21<sup>st</sup> Century**

September 23, 2010

## **Overview**

The Great Lakes Commission (GLC) and the Great Lakes and St. Lawrence Cities Initiative (Cities Initiative) invite preproposals and statements of qualifications to provide consulting services to serve as Lead Consultant (LC) to identify, evaluate and prioritize options for the separation of the Great Lakes and Mississippi River watersheds to prevent the transfer of aquatic invasive species and improve transportation, water quality and flood management in the Chicago Area Waterway System (CAWS). The CAWS consists of 78 miles of rivers, canals and modified streams located within Cook and surrounding counties. For purposes of this study the CAWS is defined as the following connecting waterways beginning at the Wilmette Pumping Station on the north side through to the Lockport Lock and Dam on the southwest side and including the Grand and Little Calumet Rivers on the southeast side; the Chicago River, Chicago Sanitary and Ship Canal, Illinois & Michigan Canal, Calumet Sag Channel and the Calumet Rivers. A map is included at the end of this document illustrating the system.

Following review of responses to this request, no less than three prequalified consultants and their teams will then be asked to submit full proposals to complete the technical aspects of the work. The overall project, titled *Envisioning a Chicago Area Waterway System for the 21<sup>st</sup> Century*, is projected to be completed by January 2012. The requested consulting services to be provided under this project will be preformed, from January 2011 until approximately January 2012.

The selected LC will be required to perform all services necessary to complete a comprehensive report, and technical sub-reports, which identify and evaluate no less than three options for separation of the two major watersheds while improving transportation, water quality, and flood management. The purpose of these options is to identify and quantify the potential impacts (including financial impacts) of different approaches to separation including potential locations. The Lead Consultant will be required to assemble and lead a team that provides expertise in a number of diverse disciplines required for the evaluation. These may include hydrology and hydraulics; environmental engineering; lock, dam and canal engineering; ecology and fisheries biology; transportation planning and engineering; materials handling; sanitary engineering; regional planning; commercial logistics; and economics. Teaming/subcontracting is welcome.

## **Funding Sources**

Funding for this project has been received from four sources to date: the Joyce Foundation, the Mott Foundation, the Frey Foundation, and the Great Lakes Protection Fund. Other funders are being sought for additional aspects of this project. Information about the amount of available funding will be provided to all consultants invited to respond to the full request for proposals (RFP).

## **Funding Available**

Total project funding has yet to be finalized. The amount of available funding will be provided to all consultants asked to submit a full cost proposal. It is expected that funding will be approximately \$1,000,000.00.

## **Submittal Requirements**

Five paper copies and one electronic copy (in .pdf format) of the Preproposals/Statements of Qualifications must be submitted to the Great Lakes Commission by **Friday, October 22, 2010 at 5:00 pm Eastern**. Proposals should be addressed to Mr. Matt Doss, Great Lakes Commission, 2805 South Industrial Highway, Suite 100, Ann Arbor, MI 48104.

## **Pre-Submittal Conference Call**

A one-hour conference call will be held on **Tuesday, October 5 at 2:00 PM CDT/3:00 PM EDT** to answer questions about the proposed work. Instructions regarding this call will be posted on the GLC web site.

## **Information, Questions and Contact**

The GLC has posted a large amount of background information on their website at <http://www.glc.org/ans/cwsphasell>.

Questions regarding this work effort are encouraged until the final Request for Proposals is issued. However, we ask that a single point of contact be established and identified for each firm showing interest. Questions and comments concerning the project and the role of the lead consultant can be submitted online at <http://wiki.glin.net/pages/viewpage.action?pageId=19202235>. Questions may also be addressed to either Mr. Matt Doss (734-971-9135 or [mdoss@glc.org](mailto:mdoss@glc.org)) or Mr. James Ridgway (313-963-6600 or [jridgway@ectinc.com](mailto:jridgway@ectinc.com)). Answers to all questions will be posted on the site listed above.

## Background

More than 180 non-native aquatic species have become established in the Great Lakes, causing economic losses estimated at \$5.7 billion annually. For more than a decade federal, state and local agencies have taken action to prevent Asian carp from reaching Lake Michigan. Asian carp are only the latest invasive species poised to invade the Great Lakes. Because they are highly mobile, reproduce quickly and consume massive quantities of food, Asian carp could have devastating impacts on the Great Lakes and threaten the region's sport fishing industry, valued at \$7 billion annually<sup>1</sup>. Similarly, AIS from the Great Lakes—such as zebra mussels and round gobies—have damaged the Mississippi River ecosystem.

A regional consensus is emerging that a long-term solution is needed, and that this most likely will entail separating the Great Lakes and Mississippi River watersheds where they have been artificially connected in the Chicago Area Waterway System (among other areas). Separation will impact a complex system of rivers, canals and navigation structures used for commercial and recreational boating, wastewater management, flood control and emergency response. Achieving separation likely would require modifying existing water infrastructure or building physical barriers to interrupt the flow of water between the Great Lakes and Mississippi River systems. Separation, however, is not a simple solution and its extended impacts are not clearly understood.

Separation would impact commercial transportation, water quality, storm water management, flood control, tourism, recreational benefits, and other associated issues. Because of this complexity, a major question for this study involves whether separation could be accomplished in manner that addresses the problems associated with these impacts and provides a through a comprehensive, forward looking vision that builds on the Chicago region's economic and environmental strengths.

## Lead Consultant Role

The GLC and the Cities Initiative are leading a program that will develop and evaluate options for separating the Mississippi River and Great Lakes watersheds in the CAWS and improving transportation, water quality, and flood management. **The Lead Consultant will provide the technical expertise and lead a team of experts to support this effort.** The project will develop and evaluate potential options for separation, including their costs, benefits and impacts. These options should prevent the transfer of aquatic species while also maintaining, if not improving, other aspects of the system including transportation of goods and people, water quality and flood control. This effort will advance two strategic objectives:

- Evaluate the economic, technical, and ecological feasibility of separation by illustrating options to achieve it, along with associated costs, impacts and potential benefits of a re-engineered hydrologic system for greater Chicago; and
- Support and complement the work of the Army Corps of Engineers under their Great Lakes and Mississippi River Inter-Basin Study by defining, assessing and vetting options for separation.

The GLC and the Cities Initiative welcome input on the proposed scope of work from the Lead Consultant. Currently, the initiative is expected to fully characterize baseline conditions for current uses, quantifying the existing system's costs and benefits to stakeholders in Northeast Illinois and Northwest Indiana and the Great Lakes in general. A key outcome will be cost estimates for implementing the various options along with the costs (or risks) of not implementing them, including the cost of ongoing control and management activities. Another key outcome should be a detailed analysis of the benefits to Chicago and the region of a redesigned waterway system.

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<sup>1</sup> *Economic Impact of Great Lakes Fishing by State in 2006*. American Sportfishing Association. Available online at: [http://www.asafishing.org/statistics/saleco\\_trends/index.html](http://www.asafishing.org/statistics/saleco_trends/index.html).

Final products from the initiative will include:

- **Technical reports** on key aspects of the CAWS and impacts associated with the options for separation evaluated under the project. The technical reports will focus, at a minimum, on issues such as hydrology (including wastewater and stormwater), transportation, economics and environmental benefits and impacts.
- A **detailed integration report** consolidating information from the technical reports and delineating options for separation and evaluating their costs, benefits and impacts.
- A **concise summary report** conveying the project results to policymakers and the general public.

### **Project Teams**

The LC will be expected to assemble a team of specialists capable of addressing the complex hydrologic, hydraulic, environmental, commercial, social and economic challenges in an expedient manner consistent with the project schedule, yet fully interacting with and aware of the full range of stakeholder groups and their views including – shippers, water managers, government agencies, citizen groups, recreational and commercial boaters and others. GLC and the Cities Initiative welcome the formation of teams from multiple firms/individuals to ensure a diverse and talented mix of skills and experience. We anticipate that LCs may form teams to most appropriately address certain technical requirements. However, use of sole-source sub-consultants is discouraged, and GLC and the Cities Initiative reserve the right to contract with sub-consultants from the teams of lead consultants not selected for the project.

GLC and the Cities Initiative recognize that many firms have existing and past contracts with agencies and organizations with responsibilities associated with the Chicago Area Waterways System (CAWS) including, but not limited to, the U.S. Army Corps of Engineers, the Metropolitan Water Reclamation District of Greater Chicago, the shipping industry and other prominent stakeholders. Further, it is recognized that certain organizations are or have been involved in litigation or have provided support for litigation with agencies or organizations associated with CAWS. This will not disqualify the firm; however, full disclosure of the relevant associations with agencies and organizations or litigation will be requested by all firms asked to submit a full proposal.

### **Selection Process**

Firms submitting responses to this RFQ will be evaluated based upon the criteria that follow. From those submittals, no fewer than three firms will be selected to develop proposals that will consist of detailed work plans, schedules and budgets for the proposed effort. Firms may be asked to make formal presentations of their proposals to a selection committee. Final consultant selection will be made based on these proposals / presentations.

### **Schedule**

The following is an approximate schedule for the selection of the Lead Consultant.

- Sept. 23, 2010 Release Request for Preproposals and Qualifications (to be distributed to list of potentially qualified entities)
- Oct. 22, 2010 Submittals due
- Oct. 25-Nov. 5 Internal review of candidates
- By Nov. 12, 2010 Notify no less than 3 finalists / invite full proposals
- Dec. 3, 2010 Final proposals due
- Week of Dec. 6 Interview finalists (if necessary)
- Dec. 14, 2010 Make selection and notify applicant
- Dec. 15 – Jan. 5, 2011 Negotiate Contract
- Jan 5, 2011 Lead Consultant Start Work

It is expected that the selected team will identify options for separation between about January and October 2011, and together with GLC and Cities Initiative, will narrow options, evaluate options and prepare final reports between October and December 2011.

### **Submittal Requirements**

Preproposals and Statements of Qualifications must be no longer than 20 pages. They must include concise examples illustrating experience managing multi-disciplinary teams for large, complex and controversial study efforts. Statements must include the following information:

1. One page summary of preproposal, including name of applicant and primary point of contact; names and affiliations of project manager and key discipline leaders and brief overview of their qualifications;

and brief synopsis of proposal approach and any key recommendations for achieving the project goals.

2. Name of applicant.
3. Name and contact information for primary point of contact.
4. Office location from which work will be directed.
5. Names of each proposed sub-consultant and their area of expertise.
6. Name, resume and time commitment [hours per month] of the project manager.
7. Names, resumes and time commitments [hours per month] of the key discipline leaders.
8. Summary of qualifications of applicant and team, stressing the following: major stormwater studies, hydrologic studies, river and canal hydraulics, lock and dam design, wastewater engineering, environmental planning, fisheries biology, ecology, transportation system analysis. riverine and Great Lakes shipping operations, regional planning, cost analysis, economic analysis and public involvement and outreach.
9. Knowledge of and experience working on the issues cited above in the Chicago area.
10. Statement of understanding of the project and the project's strategic objectives.
11. Proposed outline for a plan of work to achieve the outcomes. This section should include any specific recommendations, areas of concern or analyses that the proposer feels would benefit the program.
12. Disclosure of any past or current relationships of the prime or sub-consultants with any of the following organizations on matters related to the Illinois River, Chicago Area Waterway System, or invasive species: U.S. Army Corps of Engineers, Metropolitan Water Reclamation District of Greater Chicago, U.S. Environmental Protection Agency, and Illinois DNR & EPA. (Involvement will NOT preclude selection, but is requested to ensure full disclosure.)
13. Appendices totaling no more than 25 pages are allowed. Appendices may contain one or more executive summaries of relevant reports.

## **Evaluation Factors**

### ***Approach***

- Project understanding – provide a brief description of your understanding of the proposed effort and how your firm/team will interact with stakeholders.
- Capability to meet tight schedule – the accelerated timeframe under which this effort is to be completed is key to its success; describe how your team is structured to meet the schedule.
- Experience / availability of project manager – the project must be under the direction of a highly qualified project manager who can commit substantial 'hands-on' effort to the project (provide the name, qualifications, office location and time commitment of your project manager).
- Experience / availability of key staff and Sub-consultants – key senior staff and sub-consultants need to be available to direct technical sub-efforts; identify the key project teams that will conduct discrete elements of the study effort and identify the team leaders for each, including their qualifications, office location and time commitment.
- Proposed approach – a detailed scope of services will be requested of firms/teams asked to submit full proposals; at this time we ask for your general approach to the effort, how you see the work divided by discipline and what significant issues or perceived problems you will have to overcome. This can include new or revised approaches that you recommend for achieving the project's goals.

### ***Skills/Capabilities***

- Managing interdisciplinary projects – experience in successfully managing large multi-disciplinary projects that balance multiple goals and interests.
- Regional Planning—experience in completing projects evaluating the regional impacts of projects that cut across multiple disciplines technically, economically and socially.
- Hydraulics and Hydrology – experience in complex river and canal hydraulics and urban hydrology.
- Water Quality Planning / Evaluation – experience in evaluating impacts of wastewater, stormwater and sewer overflow discharges on receiving waters; understanding U.S. EPA and Illinois EPA policies and requirements.
- Interaction analysis / Stakeholder involvement – experience working with multiple stakeholders and the public, and recognizing and responding to varying interests and concerns.
- Ecological analysis – experience in evaluating riverine ecosystems impacts, including fisheries, benthic communities, and riverfront terrestrial impacts.
- Multi-Modal Transportation Planning – experience planning and design of transportation facilities with emphasis on river transportation and transfer from ships/barges to truck and rail carriers.
- Transportation/Commerce – experience in evaluating the economic and commercial impact of changes to transportation patterns.

- Economic Impact Analysis – experience in integrating divergent individual economic impacts into a cohesive description of their combined impacts, including performing integrated economic analyses of environmental and transportation planning.
- Assistance with Public Involvement Processes – experience in soliciting and assessing public perceptions of proposed major infrastructure projects and engaging stakeholders in a collaborative discussion process.
- Statistical and Probabilistic Analysis – Performing Statistical and Probabilistic Analysis related to determining the probability of impacts resulting from ecological separation.
- Knowledge of Chicago Waterway Issues – ability to respect the historical aspects of the altered hydraulics of the Chicago waterway system with the needs to protect the ecosystem into the future

Image Source: Michigan Sea Grant. 2010. Asian Carps, fact sheet 10-714.

