



# Lake of the Woods County

## Public Works Department

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Public Works Director  
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### **Phase II Investigation of Pine and Curry Islands SNA Request for Qualifications**

#### **1. INTRODUCTION**

Lake of the Woods County is requesting Statements of Qualifications from qualified consulting firms to provide professional engineering, environmental, and natural resource services for the Pine & Curry Islands Barrier Island Restoration Feasibility Study and Conceptual Design Project. The project is funded through the Minnesota Environment and Natural Resources Trust Fund as recommended by the Legislative-Citizen Commission on Minnesota Resources (LCCMR). There is also supplemental funding from the International Joint Commission (IJC).

#### **2. PROJECT BACKGROUND**

Pine and Curry Islands are a unique freshwater barrier island system located in southern Lake of the Woods. They are experiencing severe erosion due to high water levels, extreme storm events, and disrupted sediment transport. This erosion threatens critical wildlife habitat, water quality, and shoreline stability, impacting both ecological integrity and outdoor recreation opportunities.

A Phase I investigation identified the primary causes of erosion, including longshore sediment transport disruptions, extreme weather events, and historical land modifications. Without intervention, continued erosion will degrade the island's natural resources, reduce habitat for fish and wildlife, and increase sedimentation in the surrounding waters.

This Phase II investigation will build on previous research to develop and inform restoration strategies. Potential solutions include shoreline stabilization, sediment management, and habitat restoration to protect the island's ecological functions, enhance water quality, and ensure long-term coastal resilience.

#### **3. PROJECT OBJECTIVES**

- *Evaluate current conditions and future risks*
- *Assess impacts to water quality, habitat, fisheries, and sediment transport*
- *Refine hydrodynamic and sediment transport models*
- *Develop restoration alternatives*
- *Identify sustainable and constructible solutions*
- *Prepare conceptual designs suitable for future implementation.*

#### **4. SCOPE OF SERVICES**

The selected consultant team shall provide professional services including, but not limited to, the following tasks.

##### **Task 1 – Project Management, Background Research and Coordination**

- *Project kickoff meeting*
- *Review prior work and surveys*
- *Schedule and budget management*
- *Coordination with County staff*
- *Coordination with state, federal, and tribal stakeholders*
- *Progress reporting*

##### **Task 2 – Data Collection and Existing Conditions Assessment**

- *Topographic surveys of the existing islands*
- *Bathymetric surveys of 4 Mile Bay and the lake*
- *Sediment sampling and characterization*
- *Sub-bottom profiling*
- *Additional hydrodynamic data collection as necessary*
- *Biological and ecological resource assessment*
- *Historical data review and synthesis*

##### **Task 3 – Modeling and Technical Analysis**

- *Update and calibrate hydrodynamic models (lake wide circulation and wave modeling)*
- *Update sediment transport models*
- *Evaluate existing and future conditions*
- *Analyze impacts associated with climate change scenarios*
- *Assess phosphorus loading and water quality impacts*
- *Evaluate effects on fisheries and aquatic habitat*

##### **Task 4 – Alternative Conceptual Design, Development and Evaluation**

*Develop and evaluate a minimum of three restoration alternatives, including:*

- *Beach and dune nourishment*
- *Nature-based shoreline stabilization*
- *Vegetated restoration strategies*
- *Hybrid structural alternatives*
- *Adaptive management approaches*
- *Do nothing scenario*

*Evaluation criteria shall include:*

- *Environmental benefits*
- *Water quality improvements*
- *Habitat enhancement*
- *Constructability*
- *Cost*
- *Long-term maintenance*
- *Regulatory permitting considerations*
- *Preliminary layouts*
- *Typical sections*
- *Planning-level cost estimates*

- *Implementation sequencing*
- *Maintenance considerations*

**Task 5 – Stakeholder and Public Engagement**

- *Facilitate stakeholder meetings*
- *Conduct public engagement activities*
- *Coordinate with state and federal agencies*
- *Coordinate with Indigenous communities and tribal governments*
- *Document stakeholder feedback*

**Task 6 – Final Feasibility Report**

Prepare a final report documenting:

- *Existing conditions*
- *Modeling results*
- *Alternative evaluation*
- *Recommended alternative(s)*
- *Conceptual designs*
- *Planning-level costs*
- *Funding and implementation recommendations*

**5. CONSULTANT TEAM QUALIFICATIONS**

The County is seeking a multidisciplinary consultant team with demonstrated expertise in freshwater coastal systems, hydrodynamic modeling, sediment transport, ecological restoration, and shoreline stabilization. The selected consultant shall possess the technical capabilities necessary to complete a comprehensive feasibility study and develop conceptual restoration alternatives for the Pine and Curry Islands barrier island system within Lake of the Woods. The consultant team shall demonstrate qualifications and experience in the following areas:

- Hydrodynamic and wave modeling of large lakes, coastal environments, estuaries, or comparable water bodies.
- Sediment transport modeling, shoreline change analysis, and geomorphic assessments.
- Barrier island, shoreline, or coastal restoration planning and design.
- Freshwater coastal engineering and nature-based shoreline stabilization techniques.
- Topographic, bathymetric, hydrographic, and geophysical surveying, including sub-bottom profiling.
- Sediment sampling, laboratory analysis, and interpretation of geotechnical and geological data.
- Climate resiliency and adaptation planning related to shoreline systems.
- Fisheries biology, aquatic habitat restoration, wetland ecology, and natural resource assessments.
- Preparation of conceptual engineering designs, construction cost estimates, and long-term maintenance recommendations.
- Experience coordinating with federal, state, tribal, and local agencies, including permitting and environmental review.
- Public engagement, stakeholder facilitation, and presentation of technical information to non-technical audiences.

The proposed team shall include, at a minimum, professionals with expertise in coastal engineering, hydraulic and hydrologic modeling, geomorphology, ecology or fisheries biology,

surveying, geotechnical engineering, and environmental permitting. Additional specialty disciplines may be included where appropriate.

Preference will be given to teams demonstrating successful completion of projects involving large freshwater lakes, barrier island systems, coastal restoration, or similar multidisciplinary investigations.

## **6. PROPOSAL REQUIREMENTS**

**Consultants shall submit one electronic PDF proposal by July 15, 2026 at 2 pm to Anthony Pirkel, organized in the following order:**

### **1. Cover Letter (1 page max)**

Provide a cover letter signed by an authorized representative of the firm introducing the project team, identifying the primary point of contact, and expressing the firm's interest in providing services.

### **2. Firm Overview (1 page max)**

Provide a brief description of the firm, including office locations, years in business, areas of expertise, and the availability of staff proposed for this project.

### **3. Project Understanding and Technical Approach (2 pages max)**

Describe the consultant's understanding of the project objectives, major technical challenges, and overall approach to successfully completing the work. Discuss proposed methodologies for data collection, numerical modeling, alternative development, stakeholder engagement, and preparation of final deliverables.

### **4. Project Team (2 pages max)**

Identify all key personnel and subconsultants proposed for the project. Include an organizational chart illustrating reporting relationships and each team member's anticipated responsibilities. Provide a résumé for each key team member, highlighting relevant education, professional registrations, certifications, years of experience, and directly applicable project experience.

### **5. Relevant Project Experience (2 pages max)**

Experience involving freshwater coastal systems, barrier islands, Great Lakes, or large lake restoration is strongly preferred. Provide descriptions of at least three projects completed within the past ten years that are similar in scope and complexity.

For each project include:

- Client name
- Project location
- Project budget
- Year completed
- Scope of services provided
- Role of key personnel proposed for this project
- Hydrodynamic or sediment transport modeling software utilized
- Project outcomes and current implementation status

### **6. Technical Capabilities (3 pages max)**

Describe the firm's capabilities in:

- Hydrodynamic and wave modeling
- Sediment transport analysis
- Shoreline and geomorphic assessments
- Bathymetric and hydrographic surveys

- Geotechnical investigations
- Ecological and fisheries assessments
- Climate resiliency evaluations
- Conceptual engineering design
- Cost estimating
- Environmental permitting

**7. Project Management (1 page max)**

Describe the firm's quality assurance and quality control procedures, project management approach, communication strategy, and methods for maintaining project schedule and budget.

**8. References (1 page max)**

Provide three client references for projects of similar scope completed within the past ten years. Include the client contact name, title, organization, telephone number, and email address.

**9. Proposed Schedule (2 pages max)**

Provide a preliminary project schedule identifying major milestones and anticipated completion dates for each task.

**7. PROPOSAL EVALUATION AND SELECTION CRITERIA**

A Selection Committee will evaluate all proposals received using the criteria listed below. The County reserves the right to interview one or more of the highest-ranked firms if deemed necessary. The County may also request clarifications or additional information during the evaluation process.

The County will select the consultant team determined to be the most qualified to perform the required services.

The County retains the right to negotiate a scope of work with the highest-ranked consultant. If an agreement cannot be reached, negotiations may be terminated, and the County may begin negotiations with the next highest-ranked consultant.

<b>Evaluation Criteria</b>	<b>Maximum Points</b>
Project Understanding and Technical Approach	20
Qualifications and Experience of the Project Team	20
Relevant Project Experience	20
Technical Expertise and Available Resources	15
Project Management, Schedule, and Quality Assurance	10
Stakeholder Coordination and Communication Experience	5
References and Past Performance	5
Local Knowledge and Familiarity with Lake of the Woods Region*	5
<b>Total Possible Points</b>	<b>100</b>

**Project Understanding and Technical Approach (20 Points)**

Evaluation will consider the consultant's understanding of the project objectives, technical challenges, proposed methodologies, innovation, and overall approach to completing the study.

**Qualifications and Experience of the Project Team (20 Points)**

Evaluation will consider the education, professional registrations, certifications, years of experience, and expertise of the proposed project manager and key personnel. Particular emphasis will be placed on the experience of individuals who will actually perform the work.

**Relevant Project Experience (20 Points)**

Evaluation will consider the consultant's successful completion of projects similar in scope and complexity, including hydrodynamic modeling, sediment transport analysis, freshwater coastal engineering, shoreline restoration, ecological assessments, and feasibility studies.

**Technical Expertise and Available Resources (15 Points)**

Evaluation will consider the consultant's technical capabilities, modeling software, equipment, specialized expertise, and ability to perform the required services in-house or through qualified subconsultants.

**Project Management, Schedule, and Quality Assurance (10 Points)**

Evaluation will consider the firm's project management approach, communication procedures, quality assurance/quality control program, staffing availability, and ability to complete the work within the project schedule.

**Stakeholder Coordination and Communication Experience (5 Points)**

Evaluation will consider the consultant's experience working with federal, state, tribal, and local agencies, as well as experience conducting public engagement and facilitating stakeholder meetings.

**References and Past Performance (5 Points)**

Evaluation will consider client references, record of successful project delivery, quality of work, responsiveness, and ability to meet schedules and budgets.

**Local Knowledge and Familiarity with Lake of the Woods Region (5 Points)**

Evaluation will consider the consultant's understanding of Lake of the Woods, freshwater coastal processes, regional environmental conditions, and applicable regulatory requirements. Firms without previous experience in the region may demonstrate equivalent experience on comparable large freshwater lake systems.

**Interviews (Optional)**

The County reserves the right to invite one or more of the highest-ranked firms to participate in interviews. If interviews are conducted, the Selection Committee may revise proposal scores based upon the interview presentation, responses to questions, and clarification of the consultant's qualifications.

## **8. County Rights and Reservation of Rights**

The County reserves the right to reject any or all proposals, waive informalities or irregularities, request additional information, negotiate modifications to proposals, cancel this solicitation, or award the contract in the best interest of the County.

\*Local knowledge is intended to recognize familiarity with the project area and regulatory environment and is not intended to provide an unfair advantage to local firms.

Consultants interested in obtaining Phase I information or discussing the project may contact Anthony Pirkl.

**Anthony Pirkl**



Public Works Director / County Engineer  
Lake of the Woods County