

# Request for Quote Aquatic Restoration Initiative Phase II Aquatic and Riparian Invasive Species Management and Native Habitat Restoration

# **Background:**

Riparian and Aquatic Invasive Species (IS) are non-native organisms whose introduction causes or is likely to cause harm to the environment, economy and/or human health. IS can negatively impact native ecosystems by disrupting typical processes by limiting food sources, competing with or displacing native species from their habitats. IS can carry pathogens that are potentially harmful to humans or can cause die-offs in fish and water-dwelling and shoreline bird populations. One major alteration to the Great Lakes ecosystems was the introduction of zebra (1990's) and quagga mussels (2000's). These prolific filter feeders directly compete with desirable plankton that are considered to be the foundation of the food chain, collapsing the non-native and native prey base. Invasive plant species in near shore riparian areas such as Japanese knotweed may further degrade freshwater habitats. A Phase I study indicated that select tributaries along Lake Ontario's eastern shoreline were significantly altering the riparian habitat and the Aquatic and Riparian Invasive Species Inventory and Habitat Assessment results suggested that management and restoration would be beneficial to preserve the natural integrity and native diversity of this system.

It is the desire of the St. Lawrence Eastern Lake Ontario Partnership for Regional Invasive Species Management (SLELO PRISM) to continue the Aquatic Restoration Initiative, developed in 2020. The first project of this initiative included a thorough literature review and initial baseline assessment of select tributaries in the Eastern Lake Ontario region. The purpose of this RFQ is to conduct the management and restoration work as recommended in the Final Report from 2020, which can be found at <a href="https://www.sleloinvasives.org/aquaticrestoration">www.sleloinvasives.org/aquaticrestoration</a>. Year 2 may be followed by monitoring in Year 3. To scale-up this initiative, this work will focus on building partnerships with organizations within NYS and the Great Lakes Region and information will be disseminated to any interested parties through outreach and educational resources.

This Request for Quote (RFQ) is for 2021, Aquatic Restoration Initiative Phase II Aquatic and Riparian Invasive Species Management and Native Habitat Restoration, only. The management and restoration will focus on select areas that were found to be impacted by aquatic invasive species such as water chestnut and near shore plant species, like Japanese knotweed, phragmites, and purple loosestrife that may affect associated habitat. The results of the 2020 assessment identified the most deserving areas in need of eradication/suppression, restoration, and management, and served as the foundation for this initiative.

# Tasks to be completed by subcontractor:

- Once selected, the subcontractor shall work with SLELO PRISM staff to finalize a management and restoration workplan including the conceptual design and schedule, to be submitted within 30 days of contract award.
- The subcontractor shall provide a valid license for the use of herbicides or pesticides.
- The subcontractor shall focus management and restoration activities on the following Eastern Lake Ontario tributaries and riparian corridors in the tailwaters of South Sandy Creek, Sandy Creek, and Deer Creek.
  - o Management activities shall be conducted as recommended in the Phase I Final Report and as summarized in the table below, or by using other known best management strategies, which enable natural ecological processes to be reestablished and to continue, while minimizing the use of herbicides and chemical treatment when possible. All management activities must be pre-approved by TNC.
  - Restoration activities shall be conducted using native species, known to currently (or previously) exist in the identified locations, and as outlined in the initial workplan and agreed upon by SLELO PRISM staff. Native plants and seeds will be purchased by the subcontractor through this budget.
- With the assistance of TNC, obtain necessary state and/or federal permits and landowner approval(s) to conduct the work.
- Provide a virtual or in-person presentation on the results of the work completed under this contract.
- This work shall be supplemented with the use of innovative technology like underwater cameras, unmanned aerial vehicles, digital surveys and GIS tools. These tools may be available for use by the SLELO PRISM as requested by the subcontractor.
- The subcontractor shall submit two reports: mid-contract progress report and final report
  - o Final report shall include:

- Initial workplan as outlined in second bullet above,
- Management and restoration summary and results for each site, including raw data,
- Additional invasive species found and identified at each site shall be recorded in final report, but all new Tier 1-3 Species, are to be reported immediately,
- Report all management activities under Treatment Records in iMapInvasives,
- Suggested or recommended continuation of management and restoration work to improve habitat impacted by invasive species or as the result of suppression and control work,
- Recommendations should consider impacts from changing climatic conditions, provide baseline
  data for measuring changes or results of restoration work, lessons learned and potential
  transferability for other organizations to replicate work, and,
- Digital photos of work throughout the project.

TABLE: Aquatic Restoration Initiative Phase II – Summary of Management and Restoration Recommendations as outlined in Phase I Final Report

| South Sandy Creek  Management and Restoration on 2.3 acres                                   | Suppress                      | It is recommended that Purple loosestrife, observed intermixed with the emergent marsh habitat along the tributary margins, could be managed from liberating a biological control, <i>Galerucella</i> spp.   |
|--|-------------------------------|--|
|  | Suppress                      | It is recommended that Japanese knotweed be controlled. Japanese knotweed is abundant along the riparian zone in the upper reach of South Sandy Creek. Extent of Japanese knotweed along the northern and southern riparian zones are roughly estimated at 1.2 acres and 0.8 acre, respectively.   |
|  | Restore                       | The disturbed knotweed management areas would be restored by scarifying the existing topsoil, sowing a native riparian species (e.g., goldenrod, common boneset, common jewelweed, and joe-pye weed), and planting with native shrubs and/or trees (e.g., black willow).   |
|  | Suppress                      | An isolated patch of common reed grass (estimated 12,000 sf or 0.3 acres) was surveyed along the intermediate riparian zone in the middle reach of South Sandy Creek as well as near the parking area (as feasible).   |
|  | Restore                       | It is recommended that the phragmites site be restored with native riparian and/or emergent species  |
|  | Outreach                      | Interpretive panel erected during work phase describing importance of project.   |
| Sandy Creek  Management and Restoration on .03 acres   | Suppress                      | It is recommended that Purple loosestrife, observed intermixed with the emergent marsh habitat along the tributary margins, could be managed from liberating a biological control, <i>Galerucella</i> spp.   |
|  | Suppress                      | It is recommended that the isolated patch of Japanese knotweed (estimated 1,500 sf or 0.03 acres), which exists near the private boat launch on Seaman's Island be controlled.   |
|  | Restore                       | It is recommended that this site be restored with native riparian and/or emergent species  |
| Deer Creek  Management   | Suppress                      | It is recommended that Purple loosestrife, observed intermixed with the emergent marsh habitat along the tributary margins, could be managed from liberating a biological control, <i>Galerucella</i> spp.   |
| Resilient and Connected Landscapes  Management and Restoration, allocate up to 10% of budget | Restoration<br>and Resiliency | It is recommended that restoration and/or resiliency measures be taken, by controlling or suppressing invasive species combined with re-establishing native communities, both upstream and downstream of the previous recommendations to protect these ecosystems that provide essential services and benefits to society. This work may be conducted as identified during 2021. |

# Tasks to be completed by The Nature Conservancy:

- The Conservancy shall coordinate with the subcontractor regarding approval of task deliverables.
- The Conservancy shall assist the subcontractor to secure access to the property for the activities specified within the final Scope of Work and shall include but is not limited to state permitting.
- The Conservancy shall review the workplan, schedule, species restoration lists and reports as necessary.
- The Conservancy shall assist with management and restoration processes as needed during site activities as feasible by providing a boat and operator or a canoe and underwater video equipment if needed and if requested.
- The Conservancy shall disseminate the final project report and recommendations to partners as necessary.

## **Deliverables:**

The delivery and administration of a comprehensive project including the management of invasive species, restoration of native species in select identified regions in Eastern Lake Ontario enabling natural ecological processes to reestablish themselves and to continue and a comprehensive report on work completed.

### Term:

This engagement should begin approximately April 01, 2021 and shall be completed no later than December 01, 2021.

### **Submit:**

Interested parties are requested to submit quotes (PDF or hardcopy), which present detailed information on the proposed project and subcontractor's qualifications and understanding of the work to be performed, including a budget not to exceed \$30,000.

Quotes shall include the following:

- Detailed quote for services, including preferred billable format ie: task based, hourly, daily, monthly etc.
- Information on similar projects (if any) subcontractor has worked on that will demonstrate the subcontractor's ability to perform the tasks outlined in this RFQ
- Names, qualifications, and experience of specific members of the project team (when feasible)

The Nature Conservancy, as host organization for the SLELO PRISM, will use this information to properly evaluate the 1) subcontractor's capabilities to conduct the tasks as outlined in this RFQ and 2) whether the proposed quote meets the Aquatic Restoration Initiative's goals and objectives.

Interested parties should submit a quote no later than March 9, 2021 to Brittney Rogers, Brittney.Rogers@tnc.org

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