**Scope of Work**

**Wisconsin DNR Office of the Great Waters**

***Project Title:*** Little Manitowoc Coastal Wetland Restoration Project

***Project Applicant:*** Jim Kettler, Executive Director

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***Project Location:***

The Little Manitowoc River Coastal Wetland (LMRCW) is located on the north side of Manitowoc, Wisconsin adjacent to Lake Michigan.

***Problem Statement:***

Between June 5 and 13, 2008, 6-8 inches of rain fell in Manitowoc (USGS Scientific Investigations Report 2008-5235), causing a record flood, after which the shallow open water wetland drained and became a mud flat. Since then the LMRCW has filled in with Phragmites (common reed grass), reed canary grass, and Japanese knotweed. At times, the river is now only a few inches deep, which restricts migration of fish to spawning areas in the upstream reaches of the river.

***Proposed Work:***

This project will remeander the stream to the original course and create approximately 50% open-water and 50% native emergent vegetation with flat sedge shorelines to provide critical habitat such as spawning grounds for fish, migratory stopovers, staging and breeding grounds for shoreline birds and waterfowl, invertebrates and native plants species. This project is part of a larger initiative to create 230+ acre Little Manitowoc River Conservancy that will stretch 1.5 miles inland, connecting three city parks (Little Manitowoc River Walkway, Lincoln Park, and Indian Creek Park). The Conservancy will run along 2.5 miles of river including 2500ft of Lake Michigan Shoreline bordering the mouth of the river. The area will be made more accessible to the public, provide better shorebird and fish habitat, and will restore natural floodplain wetland conditions to help reduce phosphorus loads.

***Collaboration with Partners:***

Our plan is to integrate the restoration efforts into the conceptual plans for a 240-acre Little Manitowoc River Conservancy encompassing the 38+ acre coastal wetland project in partnership with the City of Manitowoc, UW-Manitowoc, Ducks Unlimited, Friends of the Manitowoc River Watershed, Woodland Dunes Nature Center, and other community groups and organizations.

LNRP will plan the role of fiscal agent and lead agency. Stantec Consulting Services has been engaged to provide designs and construction oversight. Holschbach Construction has been engaged to provide construction services.

***Timetable:***

Additional soil sample analysis will be completed in December 2017 through January 2018 to further investigate the levels of lead and PAH contaminants with special emphasis on the scrape designed for improved waterfowl habitat.

Evaluation and design of a City-selected disposal site that is adjacent to similar excavated materials will be completed in December 2017.

We anticipant final engineering designs will be submitted to the DNR for all appropriate permits sometime in February to March.

Construction will occur between June 15 and August 15.

Final reporting will be completed by September 15.

***Deliverables***:

The final outcomes of the project are to:

Re-establish the hydrologic connection between the wetland and the Little Manitowoc River, benefiting over 1500 feet of stream channel and 38 acres of coastal wetland.

Improve 38 acres of shorebird habitat: migratory stopovers, staging and breeding grounds for birds. In all, on average, 215 different species of birds are observed here annually. We want to make this a birding and wildlife destination.

Restore wetlands and spawning areas for perch and northern pike.

Restore fish passage to over one mile of stream channel that currently have large mapped wetlands adjacent to the channel.

Reduce invasive species on 30+ acres, in particular Phragmites australis (common reed grass), Typha spp. (cattails), Phalaris arundinacea (reed canary grass), and Polygonum cuspidatum (Japanese knotweed). These are all WDNR (NR 40) restricted species.

Provide recreational and educational opportunities such as wildlife observations, integration with the Lincoln Park Zoo programs, in addition to existing regional trail systems like the Ice Age Trail and Mariners Trail along Lake Michigan.

Final construction documentation report (as built report) for dredging and ecological restoration (including restoration monitoring, maintenance, invasive species control along with pre & post restoration photos). Provide an electronic PDF of the final report to the Department.

***Project Budget:***

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Year 1 [January 1, 2018 – September 30, 2018]** | **Additional Funding (Other Sources)** | **Total Project** |
| Personnel/Salaries |  |  |  |
| Fringe Benefits |  |  |  |
| Travel |  |  |  |
| Equipment |  |  |  |
| Supplies |  |  |  |
| Contractual: | $35,000 | $115,000 | $150,000 |
|  |  |  |  |
| Other Costs |  |  |  |
| Total Direct Charges |  |  |  |
| Indirect Charges (14.92%) |  |  |  |
| **Total Cost** | $35,000 | $115,000 | $150,000 |
|  |  |  |  |

***Budget Detail:***

Funds will be used for the disposal of dredge materials to the newly selected disposal site. LNRP will seek additional in-kind and financial assistance from the City of Manitowoc, the West Foundation, Fund for Lake Michigan, and the Wisconsin Coastal Management Program.

***References:***

Dan Koski, City of Manitowoc

Jon Gumtow, Stantec Consulting Services