

Final Programmatic Report Narrative

Instructions: Save this document on your computer and complete the narrative in the format provided. The final narrative should not exceed ten (10) pages; do not delete the text provided below. Once complete, upload this document into the on-line final programmatic report task as instructed.

1. Summary of Accomplishments

In four to five sentences, provide a brief summary of the project's key accomplishments and outcomes that were observed or measured.

Construction began in summer of 2018 but due to high lake levels required hydraulic dredging to remove sediment. The re-meander of the streambed to the original channel was completed along with the construction of the diversion berm. Materials were held in "dewatering" bags at the staging site until dry. These materials were moved to a City of Manitowoc held disposal site in November 2018. Final landscaping and additional habitat structures will be installed in Spring 2019.

2. Project Activities & Outcomes

Activities

• Describe and quantify (using the approved metrics referenced in your grant agreement) the primary activities conducted during this grant.

Interim Report provided all documents associated with collecting benchmark water quality data, habitat assessments, avian monitoring, fish sampling, invasive species monitoring plan, conceptual design plan, construction & conservation easements, and a final engineering plan.

All monitoring activities were part of our original plan. There were four sites for monitored for water quality sampling, two transects for avian monitoring, two fish sample sites. Overall 2.5 stream miles and 232 acres are being monitored.

These reports were shared in the interim report.

- Habitat Assessment
- Water Quality Analysis
- Avian Monitoring
- Fish Sampling

Additionally, a comprehensive Invasive Species Management Plan was created and a three-year Phragmites control project was implemented.

Leading to the permit phase, a conceptual design plan was created, construction and conservation easements were provided for adjacent landowners, and a final engineering design was developed.

Once the project was permitted, a call for construction bids was delivered to a targeted set of appropriate firms that was framed by an approved project manual.

• Briefly explain discrepancies between the activities conducted during the grant and the activities agreed upon in your grant agreement.

In January 2017, the City Attorney determined that moving the dredge material to Indian Creek Park was too significant of a liability for the City. LNRP received official word from the City in April 2017 and the situation created the need for a re-design including moving to a new disposal site. Changes in the design were also needed due to high lake levels that required hydraulic dredging. Additional fundraising was required with funds leveraged from the WDNR, West Foundation, and the Crown Foundation in collaboration with Ducks Unlimited.

Outcomes

• Describe and quantify progress towards achieving the project outcomes described in your grant agreement. (Quantify using the approved metrics referenced in your grant agreement or by using more relevant metrics not included in the application.)

List of achievements

- 15 unique habitat types were found in the Little Manitowoc Conservancy;
- 2.5 miles of instream restoration and 232 acres of habitat enhancements that focused on invasive species management of upstream areas
- 0.5 miles of stream opened with fish passage improvements and restored hydrology
- miles of beach habitat quality improvements with annual beach clean ups
- 38 acres of wetlands restored to an enhanced hydrology and habitat quality

Construction Phase Outcomes

- Improved wildlife habitat with more open water for waterfowl staging
- Improved fish habitat with increased deeper water habitat
- Created aquatic food plot with calm water and vegetation behind diversion berm
- Increased flow at the diversion berm to diversify estuary habitat
- Removed and disposed of contaminated sediment
- Provided a public viewing area next to recreational trail
- Removed invasive species (Phragmites and Japanese knotweed and box elder)
- Improved safety by creating gradual slope of approx. 200 feet of frontage improving ingress/egress for wildlife
- Future benefits (Spring 2019): addition of nesting structures and woody debris to enhance habitat
 - Briefly explain discrepancies between what actually happened compared to what was anticipated to happen.

All original goals of the grant application were completed although at a higher cost than originally anticipated.

 Provide any further information (such as unexpected outcomes) important for understanding project activities and outcome results.

No unexpected outcomes emerged. LNRP will continue to monitor in the post-construction phase and will disseminate those findings to the appropriate and interested stakeholders.

3. Lessons Learned

Describe the key lessons learned from this project, such as the least and most effective conservation practices or notable aspects of the project's methods, monitoring, or results. How could other conservation organizations adapt their projects to build upon some of these key lessons about what worked best and what did not?

At the end of 2016, we entered the permitting phase with the Wisconsin Department of Natural Resources and Army Corps of Engineers. A fully engineered design was completed for the primary coastal wetland restoration and a habitat enhancement of the 38 acre wetland creating a beneficial use of the dredged material at a nearby park. However, in January 2017, the City Attorney determined that moving the dredge material to Indian Creek Park was too significant of a liability for the City. LNRP received official word from the City in April 2017 and the situation created the need for a redesign including moving to a new disposal site. Additional fundraising was required with funds leveraged from the WDNR, West Foundation, and the Crown Foundation in collaboration with Ducks Unlimited.

The lesson here is that changes in City staff, changes in permit conditions, and changes in site condition are inevitable.

4. Dissemination

Briefly identify any dissemination of lessons learned or other project results to external audiences, such as the public or other conservation organizations.

LNRP hosted a wide range of engagements in the early design phase to obtain stakeholder input. At these meetings, other project leaders and practitioners were invited to share their perspectives on previous projects as lessons learned.

A conceptual plan was put in place for the coastal wetland restoration that was based on input from these stakeholders including representatives from the DNR, UW Fish and Wildlife, Lakeshore Water Institute, Ducks Unlimited, the Wisconsin Waterfowl Association, the Lakeshore Invasive Species Management Area, Friends of the Manitowoc River Watershed, and the City of Manitowoc.

A project prospectus and a power point were created as a result of these discussions. The presentation was used to share the project with funders, Woodland Dunes Board of Directors, Zoological Society, and Manitowoc County Parks and Recreation Committee.

The Friends of the Manitowoc River Watershed will be hosting a workshop on March 23, 2018 that will focus on coastal wetlands where the Little Manitowoc Wetland Restoration Project will be showcased along with a site visit.

5. Project Documents

Include in your final programmatic report, via the Uploads section of this task, the following:

- 2-10 representative photos from the project. Photos need to have a minimum resolution of 300 dpi and must be accompanied with a legend or caption describing the file name and content of the photos;
- report publications, GIS data, brochures, videos, outreach tools, press releases, media coverage;
- any project deliverables per the terms of your grant agreement.

Project Deliverables

Photos (7):

- Berm Construction
- Dewater Bags Full
- Dewater Bags
- Dewatering Staging Site
- Hydraulic Dredge
- Stream Remeander Construction
- Stream Remeander Dredging

Outreach Materials:

- Project Prospectus
- Project Presentation
- News Release
- Facebook Posts (2)
- Project Summary

Project Deliverables:

- Project Manual
- Permits

POSTING OF FINAL REPORT: This report and attached project documents may be shared by the Foundation and any Funding Source for the Project via their respective websites. In the event that the Recipient intends to claim that its final report or project documents contains material that does not have to be posted on such websites because it is protected from disclosure by statutory or regulatory provisions, the Recipient shall clearly mark all such potentially protected materials as "PROTECTED" and provide an explanation and complete citation to the statutory or regulatory source for such protection.