Korth Park Shoreline Restoration Final Report

Introduction

The Jefferson County Parks Department received two lake protection grants from the Department of Natural Resources (DNR). The goal of the main grant (LPT-234-04) was to restore approximately 1,065 feet of shoreline at Korth County Park to native grasses, flowers, trees, and shrubs. The second grant (LPT-287-06) was to cover the cost of correcting some severe erosion along 700 feet of shoreline.

The projects were implemented over a period of 5 years (2005-2008) by the Jefferson County Parks Department and the Land and Water Conservation Department (LWCD).

Korth County Park is located on the southwest shore of Rock Lake in the Town of Lake Mills. Purchased in 2000, the 89 acre park was once a dairy farm. Approximately 64 acres of cropland were converted to prairie, trees, and wetland. At the time of purchase, the shoreland area contained a mixture of gully erosion, severe bank erosion, invasive species, and part of it was a dumping ground for trash. But these weren't the only reasons why the shoreland restoration was proposed. The park is located in Korth Bay which is a DNR designated sensitive area in Rock Lake due to it's variety of aquatic plants which are spawning and rearing grounds for fish. Therefore, restoring the shoreland area would also benefit the lake.

Shoreland Restoration

The original goal of the Korth Park Shoreland Restoration lake protection grant was to implement a shoreland restoration plan that consisted of about 3 acres of plantings on shore (15,000 sq ft hand planting and 106,000 sq ft of seeding), and 2,000 square feet of aquatic plantings. The final project included approximately 35,800 of hand planting (more than double what was planned) and about 2 acres of seeding. Some aquatic plants were used in the restoration, but the original plan was scaled back after seeing that a variety of aquatic plants were already present along the shoreline.

Jefferson County hired LJ Reas consulting to work with Parks and LWCD staff on project planning, species selection, plant layout, and oversight of the majority of the plantings. The consultant also assisted with removal of invasive species with herbicide treatments.

Approximately 1,065 feet of Rock Lake shoreline at Korth Park was restored to native shoreland and prairie grasses, flowers, trees, and shrubs. The width of the hand-planted portion of the restoration varied along the length of the project anywhere from 30 feet at the minimum to 125 feet at the maximum.

The following is a summary of what was planted in the restoration using plant plugs:

- 12,983 native flowers and grasses
- 780 shrubs representing 8 different species
- 60 trees representing 14 different species

Native species were also planted by seed behind the area that was installed with plant plugs. Some plant species, including iris and sedges, were planted in the water directly adjacent to the land.

Numerous planting events occurred throughout the project. At each planting event, there were many volunteers who assisted in planting and weeding the restoration. The total number of hours contributed by volunteers was 285.75 hours. The volunteers came from a variety of areas and organizations including:

- citizens who lived in the Lake Mills area
- citizens from Jefferson and Dane Counties
- staff and clients of St. Colletta of Wisconsin (an organization dedicated to supporting adults with developmental and other disabilities)
- students of Lake Mills High School
- Friends of Korth Park

Erosion Control

A bad ice-push event in the early 1990's created steep slopes and undercutting of the shoreline banks. The first lake protection grant included plans to re-grade a portion of the shoreline in order to create more stable slopes. Unfortunately, the winter of 2004/2005 resulted in additional ice-push that resulted in severe ice heave and undercutting. A more extensive project then became necessary and the 2^{nd} lake protection grant was applied for and received in 2006.

The original goal of the Korth Park Shoreland Restoration – Addressing Erosion grant was to remove the ice-heave, grade out the undercut areas, and establish slopes that will maintain long-term stability of the shoreline. This goal was accomplished in addition to planting the graded area with native plants.

Jefferson County was aware that a sewer line owned by the City of Lake Mills was located underground fairly close to the lake. Because the sewer line was an older one, the location of the line was unable to be determined by the City of Lake Mills. In 2004, the City of Lake Mills decided to lay a new sewer line through Korth Park and located it far away from the lake. The old line was then flushed clean, shut off from the sewer system, and left in place. This enabled Jefferson County to proceed with the grading project without the threat of inadvertently breaking the line and causing a sewage spill close to Rock Lake.

The erosion control project included grading approximately 700 feet of shoreline amounting to 95,000 square feet of area. Due to the cultural history of the site (Native American artifacts found at various location in the park including in the shoreland area), an archeologist was on site during the grading project. The archeologist was on site to not only document any additional artifacts that were found, but to also insure that Jefferson County was following the relevant protocols if artifacts were found. There were no new artifacts found during the grading project.

Additional Information

Though not part of the grant projects, Jefferson County worked with many partners (an Eagle Scout, Friends of Korth Park, citizens, WE Energies, and American Transmission Company) to install an osprey pole and platform at Korth Park in January 2009. In the past couple of years, osprey have been sited on Rock Lake at Korth Park, and at the Zeloski Marsh located west of the park.

In May of 2009, an osprey was seen both in Zeloski Marsh and fishing in Rock Lake from Korth Park. One of the birders saw an osprey at the end of May and stated that it was late in the season for the bird to still be migrating. So, we are hopeful that ospreys will use the platform as a perch and eventually a nesting site.

Photos

Photos of both projects are available for both projects and are attached in separate files.