

# LUTZ PARK - Shoreline Restoration

**Year Constructed:** 2018

**Location:** Appleton, WI

**Project Size:** 400 units

**Project Type:** Shoreline Restoration

**Client:** City of Appleton

**Reinforcement:** None Required

**Vegetation:** Seed Application

**Installation:** Highway Landscapers

## + Project Snapshot

Nestled along the hills of the Fox River in Appleton, WI, Lutz Park has a long riverfront history. Prior to the many locks and dams it was home to Appleton's only steamboat landing and contained a rapids known as the Grand Chute.

As part of infrastructure upgrades to Lutz Park and the Appleton Yacht Club, the City of Appleton chose to incorporate the Envirolok system to stabilize the shoreline and create a vegetative buffer between South Lutz Drive and the Fox River. Because of the limited wake in the marina, stabilization was archived by placing small stone up to the ordinary high-water elevation and stacking the Envirolok system at a 1.5V:1H slope for the remaining 2' above the stone. The Envirolok system provides an encapsulated soil layer providing permanent protection from erosion during high flood events. The system also allowed for the engineers to design a steeper slope above the shoreline, preserving a widened vegetative buffer was behind the Envirolok reinforced slope. A mix of native grasses, sedges and wildflowers planted in the buffer provide natural filtration and infiltration of runoff, preserve water quality and provide valuable pollinator habitat along the river's edge.

This example of a blended shoreline using hard armoring and the bio-engineered solution of Envirolok is a cost-effective way to secure an active shoreline area, while still including a natural aesthetic. While there are many similar projects where the Envirolok system is placed below the water level without using hard armoring solutions at the toe, the area of this section of river has extremely mucky soils, which would have required the system to be embedded deep below the riverbed. Instead the design chose to reuse much of the on-site stone as a cost-effective means of securing the toe.

