

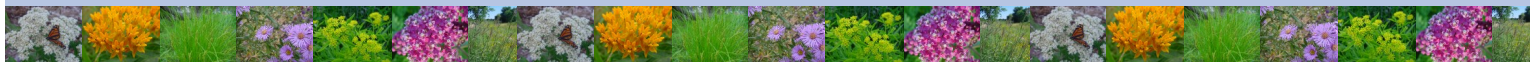


PROJECT PROFILE

BROWN RIVERBANK STABILIZATION OAK GROVE, MN



Riverbank
Stabilization



Project Summary

Cedar tree revetments are a cost-effective bioengineering practice that can be used to stabilize actively eroding riverbanks. Anoka Conservation District (ACD) staff with the help of the Conservation Corp of Minnesota (CCM) installed a cedar tree revetment on a residential property that borders the Rum River in Oak Grove during the summer of 2017. Erosion at the property, which was dominated by bank undercutting, was in the beginning stages of creating a more serious issue. Bare soil and tree roots were becoming clearly visible as a result of the erosion. Excessive erosion along riverbanks threatens property and associated structures, contributes sediment and nutrients to the receiving water body, and eliminates wildlife habitat. Installation of the 385 foot revetment and live willow and dogwood stakes will slow or stop the erosion and reduce the likelihood of a much larger and more expensive corrective project in the future. Funding for this project was provided from the Conservation Partners Legacy grant, a CCM crew labor grant funded as a part of the Clean Water, Land, and Legacy Amendment, and a landowner contribution.



Completed project in the summer of 2017.

Project Specs

Date InstalledAugust 2017
Project Length.....385 feet

Project Expenses

Installation (labor).....\$6,731.43
Materials.....\$996.16
Planning/Admin.....\$1,929.41
Total.....\$9,657.00

Project Funding

Conservation Partners
Legacy Grant\$6,234.17
CCM Crew Labor Grant.....\$2,799.42
Landowner Contribution.....\$623.41
Total Project Cost.....\$9,657.00

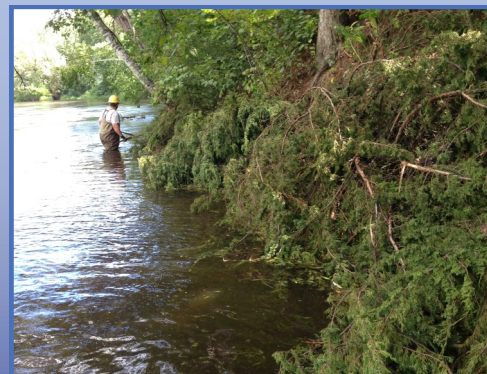
Installation Process



Pre-stabilization conditions consisted of an actively eroding riverbank and sparse understory vegetation. Bare soil and exposed tree roots were becoming clearly visible.



Cedar trees were tied together using cable and cable clips. The trees were then secured to the riverbank using a duckbill anchor with the trunks facing upstream to divert the flow of water away from the bank.



The cedar trees were anchored parallel to the shoreline and willow stakes were added between the trees. Willow stakes will grow and spread into a shrub grove to provide long lasting bank protection and habitat.