



PROJECT PROFILE

HINES RIVERBANK STABILIZATION CAMBRIDGE, MN



Isanti SWCD

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 Isanti during the fall of 2018. 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 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 260 foot revetment, live willow and dogwood stakes, and seeding of native grass and sedges 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 Outdoor Heritage grant; a CCM crew labor grant funded by the Clean Water, Land, and Legacy Amendment; and a landowner contribution.



Completed project in the fall of 2018.

Project Specs

Date InstalledOctober 2018
Project Length.....260 feet

Project Expenses

Installation (labor).....\$4,117.68
Materials.....\$1,028.74
Planning/Admin.....\$1,833.50
Total.....\$6,979.92

Project Funding

Outdoor Heritage Fund\$3,760.38
CCM Crew Labor Grant.....\$2,585.00
Landowner Contribution.....\$634.54
Total Project Cost.....\$6,979.92

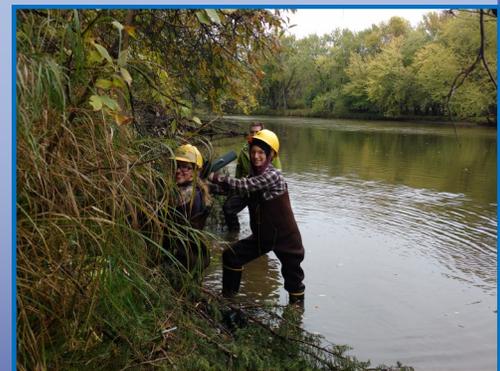
Installation Process



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