

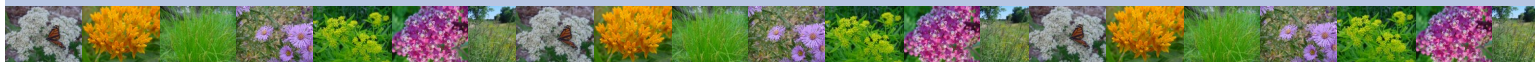


PROJECT PROFILE

ANOKA NATURE PRESERVE RIVERBANK STABILIZATION ANOKA, MN



Riverbank
Stabilization



Project Summary

Cedar tree revetments are a cost-effective bioengineering practice that can be used to stabilize actively eroding riverbanks. ACD in partnership with the Conservation Corps of Minnesota & Iowa (CCMI), and the City of Anoka, installed a cedar tree revetment in the Anoka Nature Preserve in the summer of 2023. Erosion at the site was moderate but was in the beginning stages of creating a more serious issue in the future. Excessive erosion along riverbanks threatens property values, contributes sediment and nutrients to the receiving water body, and eliminates wildlife habitat. Installation of the 570-foot revetment and bare root plantings will slow or stop the erosion and reduce the likelihood of a much larger and more expensive potential project in the future. Cedar brush was also installed to provide additional soft armoring. Funding for this project was provided from the Conservation Partners Legacy, and a CCMI crew labor grant funded from the Clean Water, Land, and Legacy Amendment. The City of Anoka also contributed funding. ACD provided project management and construction oversight throughout the process.



Completed summer of 2023.

Project Specs

Date Installed.....Summer, 2023
Project Length.....570'

Pollution Reduction

TSS.....5.985 tons/yr
Phosphorus.....5.087 lbs/yr

Project Expenses

Installation (labor).....\$16,532.00
Materials.....\$3,096.71
Total.....\$19,628.71

Project Funding

CPL Grants.....\$6,885.17
CCMI Crew Labor Grant....\$8,960.00
ACD Labor.....\$6,672.00
Tree/Plant Donations.....\$1,820.67
Total Project Cost.....\$19,628.71

Installation Process



Pre-project conditions consisted of an actively eroding riverbank. Bare-soil and exposed tree roots were present throughout the riverbank. Cedar trees were harvested elsewhere in the county and staged at the site for installation.



Cedar trees were shingled and tied together using steel cable and clips. Trees were 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 limbed on one side and anchored parallel to the shoreline. Bare root plantings will be added to the site in Spring, 2024 to provide additional long lasting bank protection and habitat.