

# Cedar Tree Revetments

## What is a Cedar Tree Revetment?

Cedar tree revetments are a bioengineering practice that uses Eastern red cedar trees to serve as soft, natural armor, providing protection along eroding riverbanks. This protection decreases erosion and allows silt and sand to be deposited overtime. The deposited material forms a bed in which the seeds of riverbank plants such as sedges can grow.

By the time the trees have decayed, the bank should be stabilized by the root systems of new plant growth and accumulated sediment. Revetments are ideal for riverbanks experiencing mild to moderate erosion. For riverbanks more than 5 ft. tall or areas with high water velocity, a revetment practice may be inadequate to properly address the issue.



## Why install a Cedar Tree Revetment?

Cedar tree revetments are a low cost, environmentally friendly option to protect eroding streambanks. Revetments will slow or stop erosion during the project's lifespan and reduce the likelihood of a much larger and more expensive corrective project in the future. Riverbank erosion contributes sediment and other pollutants into waterways, reduces riparian habitat, and results in property loss. Stabilizing your eroding riverbank will provide water quality benefits to the Rum River as well as protect your property.



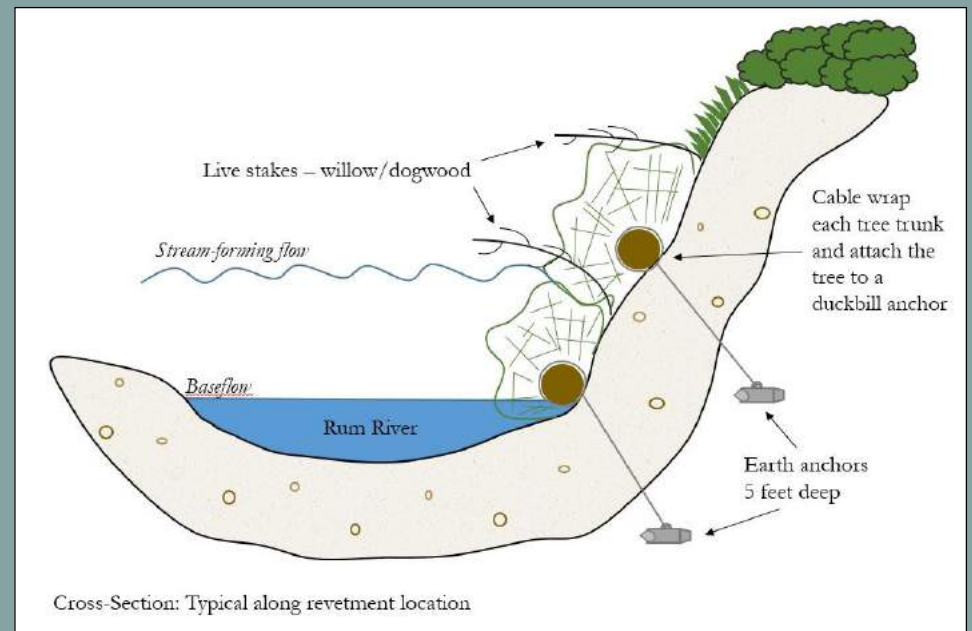
## How will my revetment be installed?

Cedar trees will be harvested locally and installed by a Conservation Corps crew led by Anoka Conservation District (ACD) staff. Trees will be cable-anchored tightly against the toe of the bank, with the base of the tree facing upstream. The trees will be overlapped and cabled together to create a shingled chain of trees. Multiple rows of trees can be installed, depending on the height of the bank. Bare-root plants will be added along the bank to provide additional stabilization and wildlife habitat.



## What will happen to my revetment over time?

When installed the trees are green. However, since the trees are dead, the needles will begin to turn brown and eventually fall off. Even without needles the cedar tree's dense branches can effectively protect the bank for years as the branches are naturally rot-resistant. Planting bare-root species along the riverbank will assist in stabilizing the area and will become established before the trees fully decay in approximately 10-years.



## How much will my revetment cost?

Grant funding for the installation of cedar tree revetments along the Rum River was provided to Anoka County by the MNDNR through the Conservation Partners Legacy program. The available grants cover the majority of the cost of the project but do require homeowners to contribute 10% of the total project cost. Project costs vary based on the size and severity of the eroding bank. In the past, landowner contributions has ranged from \$500 to \$1,500. Residents interested in having their riverbank evaluated for a cedar tree revetment should contact ACD to receive a free site assessment.



For more information or  
with questions contact:

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