

## A Changing System

The health of our streams is a direct reflection of the health of the land. Streams connect the mountains to the valleys, the headwaters to the lakes, and people to the land. They move across the landscape, erode banks and carry sediment many miles downstream. One minute streams are calm and gentle, the next they can be a powerful force of nature.



As the stream channel continues to evolve with varying flow and velocity it will cut deeper and wider striving for a state of equilibrium. This natural channel process can persist over decades, resulting in problem areas along the system. These erosional areas can lead to channel cutting, streambank instability, loss of vegetation, de-watered meadows, and loss of habitat for aquatic species. Managing this dynamic system can be a huge challenge for landowners.

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# STREAM RESTORATION AND ENHANCEMENT



*Solutions for a better  
stream system*

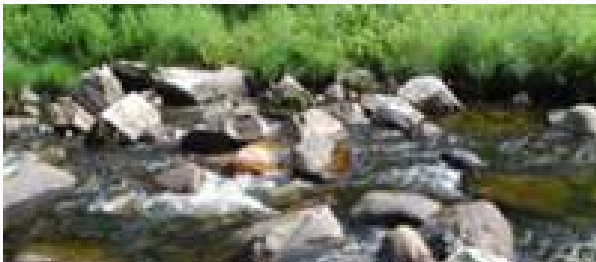
## Restoration and Enhancements Techniques

The following design approaches can be used to protect and stabilize the soils in a streambank, protect the banks and floodplain, accelerate recovery and restore stream stability. The keys to a successful bank stabilization project are:

- Allow the stream to maintain its dynamic equilibrium by not confining the channel.
- Design streambank structures to temporarily protect the banks while they stabilize.

Ultimately, healthy streambanks are good for aquatic habitat, stream temperature, and valuable to agricultural production.

### Grade Control: using riffles and rock weirs



### Planting Vegetation: adding plants for stream bank stability



### In-Stream Bank Protection: adding root wad revetment or engineered log jams



### Reconnection of Stream Channel: creating a functional floodplain



### Pond and Plug: reconnects the stream channel to its functioning flood plain and restores the degraded meadow's water table to its historic level



Before After



Aerial

## Working with LCUWC

The Lake County Umbrella Watershed Council is committed to helping landowners improve watershed function and stream channel health. We'll find the right treatment that suites your needs while enhancing watershed condition.