

FINAL
Bear River Environmental Coordination Committee
Funding Policy for Streambank Stabilization Projects

The Bear River Environmental Coordination Committee (ECC) receives numerous requests for funding a variety of projects related to enhancing Bonneville Cutthroat Trout (BCT) populations. Projects to date have included irrigation diversion fish passage and screening, watershed treatment, habitat improvement and water quality improvement projects. While most proposed projects aim to improve BCT habitat, limited funding and the potential for some streambank stabilization projects to create some potential negative impacts requires additional evaluation of bank stabilization proposals to provide the best cost benefit ratio possible.

Most projects are fairly straightforward; however, streambank stabilization projects can provide site-specific benefits while also potentially negatively affecting up- and downstream conditions. Additionally, although localized habitat benefits and water quality improvements may result from reduced streambank erosion, a short reach of bank that is stabilized among many miles of unstable or quasi-stable bank may not provide readily measureable improvements to overall water quality and/or BCT numbers.

The overarching goal of any ECC-funded stabilization project is to maintain or return waterways to **stable form and function**. This includes relatively stable meander and sediment transport patterns. Therefore, it is necessary for meandering alluvial streams to continue to meander; however, adequate resistance (enhanced by riparian plant root structure) prevents *excessive* erosion and sediment transport. Each streambank stabilization project will be evaluated relative to its contribution to suitable form and function on the reach for which it is proposed. Projects will also be assessed for site-specific merit and potential off-site effects. Depending on the stream type, appropriate methods for stabilization can include streambank buffer establishment, use of riparian fencing, riparian plantings, erosion control fabric combined with soil lifts, and angular rock. Natural streams have varying degrees of inherent stability. Streams confined in narrow, rocky canyons will tend to remain in the same location over time, whereas alluvial streams in relatively low gradient valleys meander and migrate over time. The goal of stabilization projects should be to restore form and function to degraded streams – *not* to prevent any future movement or changes from occurring. The majority of stabilization-related problems evident in alluvial streams are caused by channelization, down-cutting, loss of riparian vegetation, and flow-regime changes. The goal of ECC-funded stream/river projects shall be stabilization and restoration of channel reaches to properly functioning conditions. For example, restoration of an alluvial stream should allow for future channel migration, while a project on a confined channel may not need to allow for such movement. Therefore, streambank stabilization proposals whose purpose is to stop property boundary loss or shift resulting from channel migration will not be considered for ECC funding.

Ensuing proposals will be evaluated based on a variety of factors, however, designs appropriate to the geomorphology of the stream type being treated will be a critical component of each project (See the ECC's approval and ranking criteria, #14).