



**PROJECT 11-2: Caribou River Bank Stabilization**

**Background:** Thaddeus Surber reported in 1922 that "Evidence of excessive high water are wanting along this stream, the forest and swamps covering its water-shed, holding in check the excessive rains so that evidence of erosion are also wanting." Also "The forest growth is very dense, the second-growth in particular and almost covers the stream in many places; alder tickets are frequently encountered." Since the time of Surber, bank erosion has become a problem and looks to be accelerating in the past decade. Land use practices and increasing human pressure along the North Shore have degraded the Caribou River watershed.

**Problem Statement:** Minimize sedimentation into Caribou River so that the lower reach might be used for successful rearing of rainbow (steelhead) and brook (coaster) trout.

**Goals:**

1. Redirect flow away from the toe of the southern river bank to prevent additional slumping.
2. Create a bench at bankful height to alleviate bank stressing during flood events.
3. Stabilize bank above the bench, including modification of upland drainage patterns.

**Priority:** High

**Task Duration:** 1 - 3 years

**Potential Mechanism:** GLRI, MLSCP, CPL

**Potential Partnering Organization(s):** DNR, SWCD, SHTA, TU

**Estimated Cost:** \$75,000 to \$125,000

**Comments:** Need to work with DNR Parks and the SHTA to allow access for heavy machinery as well as a material staging area. Work may extend into the Caribou Falls WMA as well. DOW permits will be needed to work below OHW for vane installation. With these permits come work exclusion rules for working in the stream (September 15 thru June 30).

**Special Considerations:** If work is considered for the upper slump and gully erosion, heavy machine access will be an issue.

**Accomplishments:** Site visit to consider options with DNR Parks, private engineer (Jay Michaels of EOR) and DNR Fisheries completed on 10/29/2008.

**Measure(s) of Success:** No additional bank slumping at this location.

**Primary Contact:** Alan Anderson, DNR Fisheries, (218)353-7591

*Vision Statement: Maintain, protect, and restore healthy cold water ecosystems with relatively stable flows and a diversity of habitat for fish and wildlife to enhance our quality of life.*

*For project information: [www.lrcd.org/links/lsc\\_projects.htm](http://www.lrcd.org/links/lsc_projects.htm)*