

A Root Wad/Rock Vane Adventure on the North Fork Chena River

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When two “Gotta Live On The River” type families built their respective vacation cabins fifty feet back from the North Fork of the Chena River, they thought they were safe. They worried about the fire of 2002 burning down their cabins but had no idea one family would loose the cabin to water rather than fire and another would nearly loose theirs. During the July 2003 flood both families watched in horror as they lost over 30 feet of their banks to the Chena River.

Before both desperate families armed their river banks with tons of rock, they contacted the Federal government because they heard they could get help from the Natural Resource Conservation Service’s Wildlife Habitat Incentives Program (WHIP) and the Fish and Wildlife Service’s (FWS) Partners for Fish and Wildlife Grant Program (PFW). After several field trips and consultation with Engineer Chris Roach, we came up with a plan to restore their banks and improve fish habitat. Chris Roach’s plans for both families called for using root wads to construct a bankfull bench, protected by log vanes upstream and downstream of the bench. FWS worked closely with Alaska Department of Natural Resources (ADNR) – Lands, ADNR-Office of Habitat Management and Permitting (OHMP), and U.S. Army Corps of Engineers (COE) to secure permits. Because the vane and root wads would be constructed instream, it was especially important to have all the agencies onboard with our plans.

We would need low water to construct both the root wad bankfull bench and the vanes. The OHMP permit specified that work “shall not be conducted during the month of May when Arctic grayling are spawning in this reach of the North Fork Chena River.” Typically, the Chena River drops right after break-up (mid-May) and quickly rises. So we geared up to begin the project in early September 2005.

The River Gods were somewhat against us. We were counting on the normal cool, dry September. Blame it on global warming but we had a beautiful, clear/dry August and a very wet September. By September 23 the primarily root wad project was nearly completed but the second root wad/vane project was waiting on lower water. Equipment was rented, operators were standing by and dormant willow cuttings were eyeing their new home between soil wraps. By the last week of September, temperatures had dropped, it was snowing and the river had finally dropped! Between snow flakes and howling wind, the crew kept a positive outlook and completed construction of the second root wad/vane project by October 11 (Columbus Day).

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