

Asotin Creek Intensively Monitored Watershed Study – September 2011

Throughout the Columbia Basin millions of dollars are spent every year on stream restoration projects in an effort to increase wild salmon and steelhead populations. The State of Washington in cooperation with the Snake River Salmon Recovery Board has chosen Asotin Creek as a location to study whether wild steelhead numbers will increase after a large amount of stream restoration. These types of studies are called Intensively Monitored Watersheds (IMW) and Asotin Creek was chosen as a location for an IMW because it has a history of local landowner support for conservation and restoration practices and there is a large amount of historic information on the steelhead population.

The goal of the Asotin Creek IMW is to restore trees and shrubs along the stream banks and add wood to the stream to create more cover and pools for juvenile steelhead. With more fish cover and pools we expect more young fish to survive the winter and eventually migrate to the ocean. Private landowners, the Koch's and Thornton's, have been very generous in letting contractors access their land to conduct fish and habitat surveys on Charley Creek and we also work on Fish and Wildlife and Forest Service land on the North Fork and South Forks of Asotin Creek.

We began working in Asotin Creek in 2008 and have been capturing young steelhead and measuring habitat every summer and fall in Charley Creek, North Fork Asotin Creek, and South Fork Asotin Creek. We tag young steelhead with PIT tags (PICTURE) that can be detected by antennas that we have placed in the stream. When the fish swim over the antenna a code unique to that fish is recorded much like a bar code scanner at the grocery store. With this technology we can track fish that leave Asotin Creek and return as adults, measure their growth when we recapture them, and learn how they move about in the watershed. We also count all the pools and fish cover in the stream before and after stream restoration. This information will help us determine if the restoration was successful.

Next year (2012) we are going to start stream restoration in Asotin Creek. We will create dozens of large woody debris structures using logs and wooden posts driven into the stream bottom (PICTURE). We tested this method this summer and it appears to be an inexpensive and practical method for creating more pools and fish cover in Asotin Creek. We will restore 2.5 miles in each of Charley, North Fork, and South Forks Creeks from 2012-2014. We will then continue to monitor the streams for at least six more years to see if the restoration worked at increasing the number of wild steelhead. This project is essentially a large experiment that will teach us a lot about how stream restoration affects steelhead populations and lessons learned from the Asotin Creek IMW will be used throughout Washington to help other stream restoration efforts.

For more information, please contact:

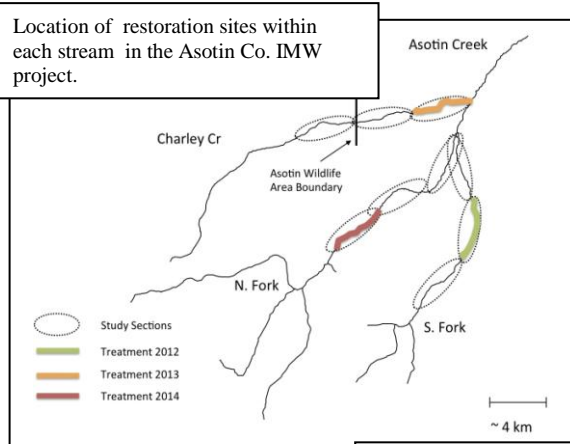
Stephen Bennett
Asotin Creek Intensively Monitored
Watershed Coordinator
Tel. 435.757.5668

Bennett.ecological@gmail.com
www.Ecologicalresearch.org

or Steve Martin, Director
Snake River Salmon Recovery Board
Tel. 509.382.4115

Steve@snakeriverboard.org
<http://www.snakeriverboard.org/>

A 0.5" long
passive integrated
transponder (PIT)
tag – contains a
unique 13 digit
code – implanted
into steelhead that
are 3" or larger.



Driving wooden posts into the stream bottom with a hydraulic driver. These structures will catch wood floating downstream and create cover for the fish and deep pools to help them survive harsh winter conditions.



A young steelhead from Asotin Crk that is about to have a PIT tag implanted in its abdomen.



Logs will be added to some of the post structures to speed up the creation of fish cover and pools. Several hundred of these structures will be built by hand.