Waters Creek

Salmon

Restoration

Project

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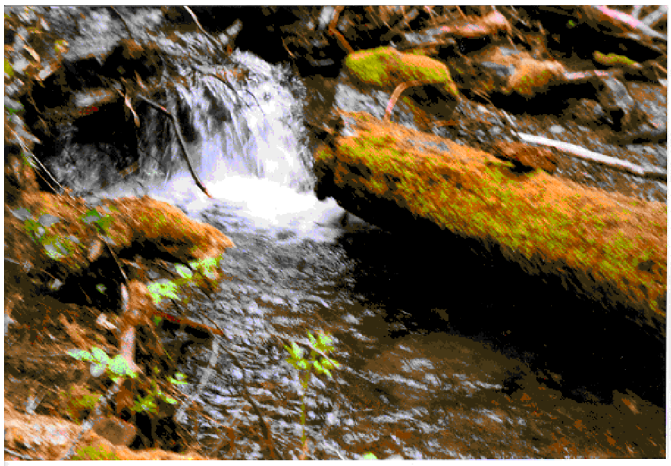

Forest Service Note: This summary of a student's paper is a result of cooperation between Grants Pass High School and the Siskiyou National Forest. People need to know what is going on with their public lands. Take time to find out for yourself!

Introduction

For my senior high school project, I decided to restore salmon habitat in Waters Creek. Waters Creek is located in southwest Oregon, in the Siskiyou National Forest near the small town of Wonder. This project consisted of inserting large woody material as habitat in the creek for Coho Salmon, Chinook Salmon, and Steelhead Trout. Large woody material improves habitat by creating pools, slowing the current, gathering debris and depositing gravel for spawning. I deposited the large wood in the stream by hand labor assisted by mechanical pulley.

Ideal Stream Conditions

The stream picture depicts the ideal habitat for salmon and steelhead. Note the woody material, deposited gravel, and large, deep pools provide ideal living conditions for spawning and growing small steelhead and salmon.

This photo illustrates how the large wood collects gravel used for spawning by adult salmon. Also notice the wood provides shade and supports insect population that the young salmon feed upon.

Note how the large wood collects gravel for spawning under these ideal conditions

Historical Impacts of Logging

The next photo illustrate stream habitat when wood and logs have been removed by humans. Note the lack of wood, pools, and gravel. These conditions are poor habitat for salmon.

Note the lack of large wood, with resulting fast water and lack of resting places for adult salmon.

This lack of large wood results in no spawning gravel and no deep pools. Consequently salmon need to expend more energy to get upstream and have less habitat to successfully spawn in. Young salmon fry have fewer places to live with little protection from predators. Without any large wood comes poor habitat for salmon.

Improving Stream Habitat: My Project

The next series of photos shows one of four sites where fish habitat was improved. I patterned the stream improvements on existing sites where previous work had been accomplished.

The Forest Service had previously thinned nearby stands. I moved large logs from these adjacent thinned stands to the stream where I thoughtfully improved the habitat on four sites..

Site 2

Before

After

Monitoring continues to be an important part of this project. I counted the number, length, and diameter of logs for each site. Next year the Forest Service will monitor movement of the logs as well as gravel deposits, additional debris, and juvenile fish populations.

I wish to acknowledge Mr. Randy Frick, Fisheries Biologist of the Siskiyou National Forest, for his assistance with this project.