

Final Report
Vaughn Creek Reach 1 Fish Passage Improvement Project
April 2006 – December 2007

Project Narrative

The Tillamook Bay Watershed Council used Pacific Salmon Commission funds to address several limiting factors on Lower Vaughn Creek including a fish passage barrier and degraded riparian habitat and water quality. The replacement of the side-by-side culvert with a bridge enhanced fish passage in the lower reach. Fencing the creek (0.9 miles) and providing off-stream watering excluded cattle from the creek, reduced bacteria inputs and stream bank erosion, resulting in improvement of instream habitat and water quality. Native trees and shrubs will eventually shade the stream, increase bank stability, filter nutrient runoff from adjacent pastures, and provide habitat for wildlife and invertebrates.

Collectively, the culvert replacement and upstream riparian enhancements will greatly contribute to improving the water quality and habitat throughout the lower reach. The project benefits chum, coho, chinook, steelhead, and cutthroat throughout the Vaughn Creek watershed. The project aimed to:

- Enhance freshwater habitat;
- Improve hydrologic and sediment routing processes;
- Improve water quality in lower reach of private agricultural land;
- Optimize commercially, recreationally and culturally important salmonid species; and
- Educate the community on watershed processes and restoration benefits.

The Vaughn Creek Reach 1 Fish Passage Improvement Project was originally part of a larger project designed to address restoration issues at a watershed scale. Project partners planned to replace a tidegate and two culverts, install a livestock crossing, and fence and plant four agricultural properties in the lower reach. However due to multiple issues, including permitting and engineering challenges, extra unforeseen permitting expenses, liability questions due to engineering issues, and the inability to extend a secured grant for an additional year, the partners decided to reduce the project scale and replace the side-by-side culverts with a bridge, install the livestock crossing and off-stream watering systems, and fence and plant three properties. The funding for these activities was secured in early 2006.

Project implementation did not occur until the in-stream work period in 2007 as the Army Corps of Engineering permit did not arrive until late September 2006, which required the PSC grant be extended an additional year. In 2007, bids were solicited from contractors for the culvert replacement and livestock crossing. The costs to complete both activities were much higher than estimated, almost double the original estimates, and PSC grant funds were used to replace the side-by-side culverts to improve fish passage and stream flow issues. The off-stream watering system was also completed on the Prince project. Fencing and planting will be complete by April 2008.

Budget Information

The grant originally awarded \$58,481.00USD for the project. The attached final budget shows the original estimated costs for the completed project activities, the 2007 revised budget, and the final, actual costs. Due to the changes in the project scope, the grant provided \$37,195.53USD for project costs. Details are included in the attached budget sheet.