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# Pacific Salmon Restoration Program Planning

*Chelan County  
Public Utility District  
(Washington)*

**SUMMARY:** The Chelan County Public Utility District (PUD) rears Pacific salmon and steelhead associated with the Upper Columbia River as part of anadromous fish agreements and habitat conservation plans for its Rocky Reach and Rock Island Hydroelectric Projects. The Chelan County PUD fish rearing commitment encompasses multiple programs to produce over 4.8 million juvenile fish in total. In the next four to six years the Chelan County PUD anticipates making significant investments in its existing fish rearing programs to meet habitat conservation plan commitments for fish production.

**CHALLENGE:** Chelan County PUD commitments for 2003–2013 call for increases in the production levels of Pacific anadromous stocks. The existing infrastructure is not adequate to meet the increased production levels for the new hatchery program.

**SOLUTION:** Analysis of the hatchery program is accomplished in two steps: bio-programming and alternatives analysis. Bio-programming results in a detailed model of fish growth and the rearing requirements of each stock. Alternatives analysis builds on the rearing requirements identified in the bio-programming step and compares requirements to existing infrastructure and capacity for pre-defined alternative fish rearing plans.

**RESULTS:** The result of bio-programming and alternatives analysis is a detailed identification of gaps in water flow and fish rearing volume requirements based on criteria set forth in the PUD's habitat conservation plans. The PUD will address these identified gaps and meet increased fish production requirements through investments in new infrastructure and facilities.

## **SERVICES PROVIDED:**

- Production Modeling
- Infrastructure Planning
- Conceptual Design