



# Lewis River Fish Hatchery Complex License Implementation Upgrades

## *Lewis River Hydroelectric Projects, Washington*



existing large asphalt-lined pond was converted to a series of smaller rectangular concrete ponds equipped with mechanical crowding capability.

The new sorting facility involves a system that lifts fish to a sorting table and flume system and distributes fish to several locations for transport or holding. The new design includes a new spawning area and truck “water to water” loading fish system. The facility was constructed in spring/summer of 2009 and was in operation for fall 2009 hatchery adult returns.

R2 was selected by PacifiCorp to provide engineering design for modifications to the Lewis River Hatchery facilities. The modifications are to support the hatchery production program and a new program to reintroduce naturally reproducing populations of fish into the Upper Lewis River watershed. Several species are managed in the complex, including spring Chinook, fall Chinook, summer steelhead, winter steelhead, and coho.



Additional design tasks for the Lewis River Hatchery include rearing pond conversions from large asphalt-lined ponds to rectangular concrete ponds. The new ponds are designed with supply and drain systems that will tie into the modifications at the adult

Modifications at the Lewis River Hatchery included a redesign of the adult pond and sorting facility, and three juvenile rearing ponds. An



ponds, providing for first pass and reuse water supply. Rearing pond design allows for construction phasing that will not impact the ongoing continuous operation of the hatchery. The design of two rearing ponds is complete, and construction is slated to be finished and ponds operational in August 2010. The final design for the third pond is currently underway.

### **Project Elements:**

- Conceptual and Final Design
- Adult Handling and Sorting Facilities
- Juvenile Rearing Ponds
- Hydraulic Evaluation of Water Supply and Drain Systems
- Civil, Hydraulic, and Structural Engineering
- Agency Consultation