

## **Using a partial reuse aquaculture system for rearing Wenatchee steelhead.**

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Washington Department Fish and Wildlife's, Chiwawa Ponds Fish Rearing facility, under contract with Chelan County Public Utility District operated a new Partial Reuse Aquaculture System. The first rearing season for the pilot projects operation was during 2009-2010. The fish were reared in two circular tanks, under a controlled environment, with high densities and limited space. Water was flowed at a rate less than an average normal fish raceway or pond, with supplemental liquid oxygen injected as needed. Fish health needed improvement with Bacterial Coldwater disease causing mortality. This year's program has the added benefit of an Ultra Violet Light System to combat it. Rearing time at Chiwawa Ponds was from November 2009, thru May 2010. Fish growth rates were from 11.6 fish per pound, (38 grams ea.) at arrival, to 5.5 fish per pound, (83 grams ea.), at the time of volitional release. The volitional fish release strategy was for the two outside rearing tanks fish to migrate to the center empty tank, with center tank fish transferred daily by Chiwawa Ponds personnel, and released at a designated site on the Wenatchee River. Forty percent of the fish had Pitt Tag's inserted so that out migration and survival can be monitored. Promising results show that Wenatchee stock steelhead, *Oncorhynchus mykiss*, can be successfully reared with a Partial Reuse system.