

Title:

Yakima River Kelt Re-conditioning Project - Radio Tracking

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Summary of Presentation:

Radio telemetry is used to evaluate the success of the reconditioning project. The Kelts were tracked using a variety of methods including mobile tracking, fixed sites and aerial surveys. The fixed sites were located at Prosser Dam (RM 47.1), Slagg Ranch (RM 66), Sunnyside Dam (RM103.8), Roza Dam (RM 127.9), Naches River (Cowiche Dam RM 3.6), Toppenish Creek (RM 44.2) and Simcoe Creek (RM 8.1). There were a total of 9 flights done from March through May. These flights proved to be essential in locating fish and investigating the disappearance of Kelts. Flights were done in all the basins and prioritized by fish movement. Mobile tracking was done by road and by raft. Mobile tracking allowed for actual pinpoint location and the eventual observation of Kelts building redds and spawning

During the 2001-2002 seasons, a total of 197 (35%) Kelts survived reconditioning. Of the 197 surviving Kelts, 108 re-matured and were released. The remaining 88 Kelts were held longer, but the vast majority never matured. Sixty-one of the 108 were radio tagged and released. Each tag was inserted using the gastric insert technique. The first release of 55 radio tagged Kelts occurred on November 15, 2001. The second release of 5 radio tagged Kelts was on January 18, 2002. One additional Kelt was radio tagged and released on January 29, 2002. All fish were released at Mabton (RM 59.8).

Of the 61 radio tagged Kelts, 28 (46%) were detected in 9 tributaries of the Yakima River. Satus Creek had the highest count of Kelts, 17 (28%), followed by the Naches River, 6 (10%) and Toppenish Creek with 5 (8%). The Kelt tracked the furthest, was located at RM 2.1 in Rattlesnake Creek, a tributary of the Naches River. This particular fish remained in the same stretch of river for 3 weeks before the signal was lost. In addition to Rattlesnake Creek, a radio tagged Kelt was tracked into the Tieton River. This fish was observed jumping out of the water numerous times and eventually regurgitated the tag. One radio tagged Kelt was detected passing Roza Dam (RM 127.9). This Kelt was identified passing through the Roza Dam collection facility on April 11, 2002.