

FISH PASSAGE CENTER

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MEMORANDUM

TO: FPAC

FROM: FPC Staff

DATE: May 29, 2007

RE: Little Goose Fish Counts

At your request the FPC staff has reviewed the adult and jack counts in the Lower Snake river in an attempt to discover any anomalous trends in counts or project operations over the spring of 2007. Of particular interest was adult passage at Little Goose Dam, as adult counts over the season have totaled 21,456 adults at LMN through May 28, 2007 and 14,391 adults at LGS through May 28, 2007. FPAC was reviewing a concern that fish were being held up below Little Goose Dam and were not able to pass the project.

FPC summarized PIT-tag adult chinook detected at IHR and compared to detection at LGR (adult PIT-tag data are only available for these two projects). The proportion detected at LGR declined through time (Figure 1). Although jack proportion increased through time, jack detection proportion (0.74) was not much higher than 2-3 ocean return detection proportion (0.69). No PIT-tags from Tucannon River were found, however, no tagged yearling chinook were released in the Tucannon River in 2004 and 2005. Only in 2006 were any PIT-tags released; just over 2,000 tags were released at Curl Lake Acclimation Pond, and another 163 wild fish were marked in the winter of 2005-2006.

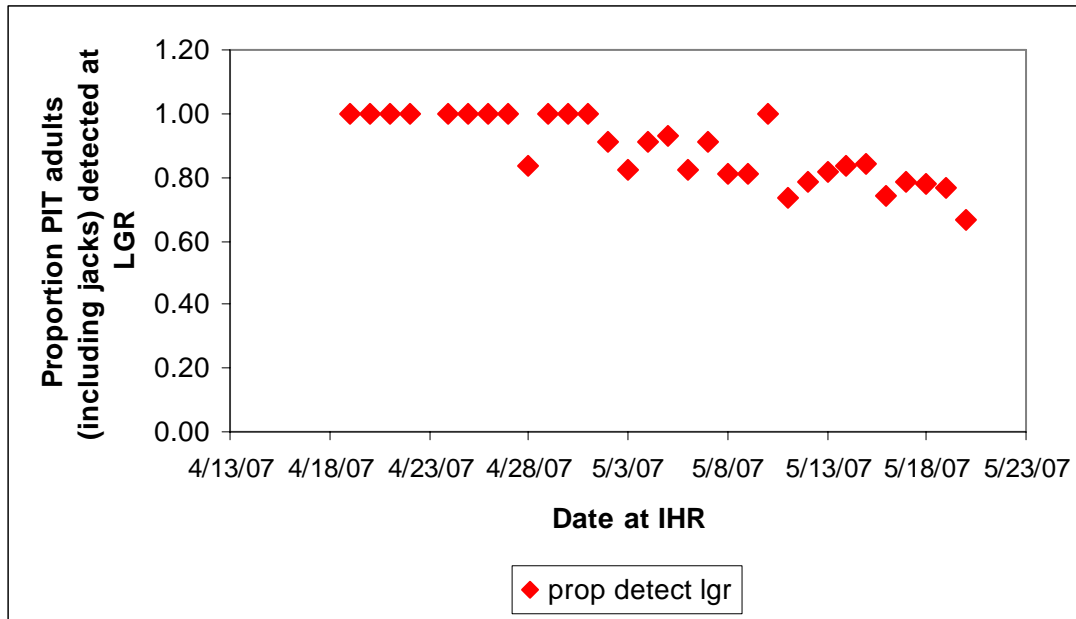


Figure 1. Proportion of adult Chinook detected at IHR dam that were subsequently detected at Lower Granite Dam, by date of passage at IHR.

Average Travel Time for those fish that were detected at Lower Granite did not indicate a delay occurring. Travel times were no more dispersed with the Median remaining at approximately 4 days through the month of May.

Although adult counts are fewer at Little Goose Dam in comparison to Lower Monumental Dam, there have been no indications that adult fish have had problems passing Little Goose Dam. Adult counts have been consistently lower at Little Goose over the season in comparison to Lower Monumental Dam as is the case in most years (Steve Richards, WDFW-Personal Communication). Operationally nothing has changed in 2007 that would have prevented adult passage at Little Goose Dam with the exception of Unit #1 being down over the last two days due to a fish screen problem (Dave Hurson, Walla Walla COE, email). In past years when passage at Little Goose has been a problem, fish catching along the LGS wall before the entrance was not good. This was a result of a large eddy formed under high spill and low powerhouse flows. This year, fishing has been excellent along the LGS wall (Anne Dowdy, ODFW Personal Communication), so it is unlikely that the eddy is preventing fish from locating the entrances (although the last fishway inspection did mention the formation of a moderate eddy on the south shore). Also, the adult fishways were in criteria on the last two fishway inspections performed by ODFW personnel on May 17, 2007 and May 29th, 2007 (with the exception of the subsurface collection channel velocity meter reading slightly below criteria velocity, however visual surface velocities were within criteria).

Although there is no clear indication of what could be causing a passage problem at Little Goose Dam, adult passage at Little Goose is a high priority and the FPC staff will continue to keep track of fish passing through the Snake River system.