From: "Fritsch, Mark" <mfritsch@nwcouncil.org> To: Council Members <AllMembers@NWCouncil.org> Subject: RE: ISRP Follow-up Review of Accord Proposal, Willamette Falls Lamprey Escapement Estimate (2008-308-00)

September 10, 2012

As you will note below, the ISRP's review (per the Council recommendation on August 12, 2009 based on the previous ISRP review from March 2011) of the follow-up material provide by the Warm Springs Tribe (CTWSRO) continues to met science review criteria with qualifications. The qualification as originally defined by the ISRP and confirmed by the Council remain, but the Warm Springs Tribe provided, as requested, the annual progress report to the ISRP and received the following review (i.e., ISRP document 2012-11).

This type of qualification is to be expected as the Warm Springs Tribe continues to implement this project (i.e., Objective 2, Develop a protocol for long-term monitoring and index of abundance of adult Pacific lamprey at Willamette Falls).

As noted by the ISRP the qualification partially remains as it relates to the use of video counts and the Warm Springs Tribe will discontinue this method to enumerate lamprey if progress is not made in the use of this tool for monitoring and indexing lamprey abundance. The purpose of the video counts was two-fold: 1) to provide an index of abundance when escapement estimates are discontinued and 2) provide a means to use a more sophisticated estimator than the Lincoln-Peterson (i.e., daily number of lamprey "inspected" to correspond with daily "marked" from PIT tag detections would allow use of estimators other than L-P, in which all tagged, marked and inspected fish are lumped by season). Data collected via cameras in the ladder is also useful to characterize daily movement patterns through the ladder. It is likely that 2012 will be the last year that cameras are operated in the fish ladder as it appears that water clarity is poor early in the sampling season to use of an alternate estimator for abundance and labor is too intensive as a means of providing an index of abundance. However, video cameras capturing images of lamprey passing over the lamprey ramps are operating as desired and video review is far quicker. Therefore, video resources (i.e., equipment and labor) will be diverted to quantifying lamprey moving through the horseshoe area (lamprey ramps and the old fishway in 2013). In addition, the CTWSRO has enquired about alternative methods of counting lamprey, such as the DIDSON (Dual- Frequency Identification Sonar), though it has been determined that this technology offered a reasonable means to estimate passage numbers because of low resolution of image and with the 28° beam, there would not be enough room at the site to position the sonar to be sufficiently far away to capture sufficient vertical depth.

The Warm Springs Tribe has continued to make progress and meet the expectation in the implementation of this project as proposed and recommended. This success to date of the project can be attributed to the high level of coordination and collaboration (e.g., NMFS, CRITFC, ODFW, USFWS, USGS, PGE, OSU, University of Idaho, Cramer Fish Sciences, Confederated

Tribes Grand Ronde) that needs to occur at the extensive and complex study site (i.e., Willamette Falls).

In addition, the Warm Springs Tribe agrees with the ISRP and expects to submit the "full-scale" project design when uncertainties and assumptions underlying the project are at a point where they can justify that level of implementation.

If you have any questions please let me know. Mark