

April 17<sup>th</sup>, 2014

Tammy Mackey  
FPOM Co-ordinator  
US Army Corps Portland District

Dear Mrs. Mackey,

This is the response of the Lamprey Accords Technical Work Group Response to April 2014 FPOM request for criteria to help protect out migrating juvenile lamprey when dewatering units.

Background from the 14JDA04 MFR,

“On 8 April JDA Maintenance reported dead and live juvenile lamprey in the wicket gate areas. JDA Fisheries salvaged all lamprey. 35 lamprey were alive. Nine mortos were collected and frozen for CRITFC’s genetic study. Many were left due to the difficult access/reach. Best estimate is about 100 total mortos. According to JD Maintenance, this is the first time they have found high numbers of juvenile lamprey in the scroll case and around the wicket gates.”

Request from the FPOM minutes,

“1.1.4. [Apr 14] 14JDA04. Lorz asked how the juvenile lamprey kill could be avoided in the future. FPOM discussed the option of trying to coordinate maintenance with peak lamprey passage times. ACTION: NWP will work with the lamprey group (Zorich) representative to try to develop some criteria to help protect the out-migration of juvenile lamprey when dewatering units.”

The juvenile lamprey mortality and FPOM request were discussed during the Lamprey Accords Technical Work Group meeting on 4/16/14 held at the CRITFC office in Portland. Below is our response:

It is important to protect out migrating lamprey, however the erratic timing of these passage events complicates the planning of dewatering activities or any project operation. Prediction of lamprey macrophthalmia (silvers) outmigration is difficult because they tend to arrive in one to three day pulses that rapidly spike and then decline. Given the statement from project maintenance that this was a rare event it seems prudent to continue monitoring and reporting to track whether this becomes a more frequent problem.

If a problem is identified, daily reports from the juvenile bypass system could be checked to determine if a lamprey outmigration pulse is occurring during the planned dewatering, and if so, the dewatering could possibly be delayed. Often these pulses are associated with spikes in the hydrograph of nearby tributaries in the winter, and during the spring snow melt. These hydrographs could also be used as an indicator that a macrophthalmia pulse might be on its way.