

## State of Washington Department of Fish and Wildlife

Region 5 Vancouver Office 2108 Grand Blvd. Vancouver WA 98661-4624

June 20, 2017

Tammy Mackey, District Fisheries Biologist U.S. Army Corps of Engineers Portland District 333 SW First Ave. Portland, OR 97208-2949

Re: Request for Access to the Bonneville Dam AFF in Fall 2017

Dear Ms. Mackey:

The Washington Dept. of Fish and Wildlife (WDFW) is seeking permission to conduct research at Bonneville Dam in the late summer and fall of 2017 as an essential component of a net pen study to establish survival rates for adult salmon caught and released from commercial fishing seines in the lower Columbia River. A copy of the study design is attached.

WDFW requests permission to capture adult Chinook and Coho salmon from the Adult Fish Facility (AFF) at the Washington Shore adult fish ladder at Bonneville Dam for the use as a control group for this study. Access to the AFF is requested from approximately August 28<sup>th</sup> through October 27<sup>th</sup> for training and conducting research. Research activities would be three days a week (dates yet to be determined), for a total of approximately 24 days. Access would be needed at least a week prior to September 4<sup>th</sup> for training purposes. Up to sixty salmon (fall Chinook or Coho) per day, fifteen for each of four net pens, may be required from the AFF, with a goal of averaging 40 fish per day for the entire study period. Initially, we anticipate capturing primarily fall Chinook salmon in the study. Later on in the study period we would transition to a combination of fall Chinook and Coho salmon in the treatment and control groups. These fish will be held in net pens along with approximately equal numbers of treatment fish caught in purse seines. Net pens will be located at sites in the Columbia River near Skamania Landing.

This study is designed to evaluate of the post-release mortality rates associated with salmon caught in purse seines. Fishing for the treatment portion of this study will take place downstream of Bonneville Dam between river miles 132 and 145. The treatment group will be a representative sample of fall Chinook and Coho salmon caught in purse seines. The sample size goal is for the treatment group is 960 fish (fall Chinook and Coho combined) for the study period, with the goal of an equal number of control fish from the AFF. Fish from both groups

will be tagged with Passive Integrated Transponders (PIT) tags. Some biological data that will be collected from each fish includes species, stock, sex, fork length, and adipose disposition, as well as capture and release conditions. After a 48-hour holding period, all fish will be released into the Columbia River from the net pen location.

Control group fish will be collected from the AFF's holding pool as they swim through the false weir and pass through the flume. If selected, the fish will enter a small anesthetic tank through the side ghost flume. Once anesthetized with Aqui-S, the fish will be scanned for PIT tags. Fish that do not already contain a PIT tag will be tagged and used for the study. Fish will be transferred from the anesthetic tank into a transport tank and trucked to Skamania Landing for transfer into net pens. Fish will be transported at approximately 20-25 fish per truckload from the AFF.

The intended seasonal sampling plan is as follows:

Dates: Task:

Aug. 28th-31st Facility training with CRITFC on daily facility safety and operations.

Sept. 4st-Oct. 27th Tagging three days per week (likely Monday, Wednesday, Friday)

**Operation Times:** Daylight hours

Collection Goals: Forty fish per 24 days, a total of 960 fall Chinook and Coho salmon

**Configuration:** 



Please contact me if you have any questions.

Sincerely, 6/10/2017

Tom Wadsworth, WDFW District Fish Biologist