

TO: Paul Wagner, NOAA representative

RE: Request to use separation by code

DATE: February 16, 2012

Dear Paul,

The Corps AFEP transport studies with which I am involved will require the use of separation by code (SbyC) at each of the collector dams (Lower Granite, Little Goose, Lower Monumental, and McNary Dams) and the use of the SbyC collection systems at Lower Granite and Bonneville Dams in 2012. The various transport studies and their needs are detailed below. Please present this request at the next FPAC meeting. If you have any questions concerning these projects, contact Doug Marsh at (206) 860-3235 or via email Doug.Marsh@noaa.gov.

Details:

We will be conducting transportation studies requiring separation-by-code at projects downstream from our release points. The projects and our needs are listed below. These SbyC activities are part of AFEP-funded research evaluations, and full proposals can be found on the COE website.

As in past years, wild yearling Chinook salmon tagged for the BPA funded reach survival study will be collected at Bonneville Dam for the gathering of length and condition data. This information will aid in understanding of how river conditions impacted migrants. We anticipate that less than 500 fish will be collected.

As in past years, yearling (60,000) and subyearling (578,000) hatchery fall Chinook salmon will be tagged for an evaluation of transport and bypass under 2012 river conditions. A percentage of each study group will be assigned to a Bypass group while the rest will be assigned to a Transport group. Also, as in past years, we will need SbyC for holdover fall Chinook salmon tagged in 2011 and assigned to the Transport group so they are transported during spring 2012 when general transport is in effect. Finally, holdover fall Chinook salmon will again be collected at Lower Granite (just the 2011 Bypass group) and Bonneville (both the 2011 Bypass and Transport groups) Dams to collect information on overwinter growth. We anticipate that less than 50 and 500 fish will be collected at Lower Granite and Bonneville Dams, respectively.

As we have since 2005, we will recapture returning adult fall Chinook salmon at the Lower Granite Dam trap for the collection of scales. The PIT tag codes of the returning adults will come from a collection of approximately 3.4 million PIT tag codes (fish tagged from 2007-2011). Because the current SbyC system can't handle that many codes, only the targeted codes that are detected in adult ladders below Lower Granite Dam will be inserted into the SbyC code database. The collected scales will provide information on age-of-ocean entry, total age, and origin.

For the yearling Chinook salmon study, we will provide PTOC with the tag codes twice a week, after the fish have been tagged. For the subyearling Chinook salmon studies, we anticipate that the majority of the tag codes can be provided to PTOC prior to the release of the fish; however, tag codes for the surrogate tagging will be sent to PTOC twice weekly during the six weeks of tagging. If unforeseen problems arise, we will work with PTOC to send the tag codes as soon as possible.

Yearling Chinook salmon temporal SAR study

We want to divert all targeted wild yearling Chinook salmon at Bonneville Dam. Tagging of the wild fish will begin on 10 April 2012. Because our Bonneville crew may also be assisting another researcher away from the dam, we will work with PTOC to set a schedule once staff availability is known. We plan to begin sampling around 15 April 2012, with sampling continuing through 30 June 2012.

Action: At Bonneville Dam

- Divert all wild yearling Chinook salmon with no 24-hr limit to the separation-by-code tank.

Fall Chinook salmon passage strategies and life history studies

From 2011 marking:

We want to divert fish that were part of the 2011 Transport group to transport in 2012. All fish with tag codes in the list provided to PTOC are to be transported if the facility is in transport mode; therefore, we want this set of tag codes set to Monitor Mode.

Action: At Lower Granite, Little Goose, Lower Monumental, and McNary Dams:

- 100% to Monitor Mode

We want to divert fish from our 2011 marking to the separation-by-code tank at both Lower Granite and Bonneville Dams. At both dams, all yearling smolts (released in 2011) will be collected.

Action: At Lower Granite Dam

- Divert all targeted fish with no 24-hr limit to the separation-by-code tank. Each week the sampling will begin at 0700 Sunday and end at 0700 Friday. Please begin sampling on 27 March 2012. Sampling will continue through mid-May.

Action: At Bonneville Dam

- Divert all targeted fish with no 24-hr limit to the separation-by-code tank. Because our Bonneville crew will also be assisting another researcher away from the dam, we will work with PTOC to set a schedule once staff availability is known. We plan to begin sampling around 13 March 2012 (pending all permits being in place). Sampling will continue through 31 May.

For 2012 marking:

We plan to PIT-tag hatchery yearling and hatchery and wild subyearling fall Chinook salmon in 2012 and will need separation-by-code at Lower Granite Dam and below. Our needs could begin as early as 1 April and continue through the entire season. We need to set 100% of the provided hatchery yearling fall Chinook salmon tag codes to Monitor Mode and 100% of the provided hatchery and wild subyearling Chinook salmon to transport at Lower Granite, Little Goose, Lower Monumental, and McNary Dams.

Action: At Lower Granite, Little Goose, Lower Monumental, and McNary Dams:

- 100% to Monitor Mode (yearlings) or 100% to transport (subyearlings)

Sampling for adult scales:

In addition to collection for transportation, we will also want to collect returning fall Chinook salmon adults at the Lower Granite Dam adult trap for scale sampling. We want to collect up to 100% of our tagged fish as they pass through the trap, beginning when the trap is re-opened for fall Chinook salmon collection (mid-August to early September). We may reduce our sampling for some groups of adults to below 100%. We will work with PSMFC staff prior to the beginning of the adult fall Chinook run to set the necessary parameters.

Action: Adults at Lower Granite Dam adult trap:

- Collect up to 100% of tag codes provided.