From:	Barbara Byrne - NOAA Federal barbara.byrne@noaa.gov>
Sent:	Tuesday, May 28, 2019 6:17 PM
То:	Joe Heublein - NOAA Federal
Cc:	Ellrott, Brian
Subject:	Fwd: Updated population context for spring-run I&S

Joe, FYI -- meant to cc you originally.

----- Forwarded message ------

From: **Barbara Byrne - NOAA Federal** <<u>barbara.byrne@noaa.gov</u>> Date: Tue, May 28, 2019 at 6:10 PM Subject: Updated population context for spring-run I&S To: Brian Ellrott - NOAA Federal <<u>brian.ellrott@noaa.gov</u>>

FYI, I cleaned up the method Joe and I used initially (included a few more years and didn't round to make the calculation more clear...if falsely precise) to put the spring-fun loss numbers into a population context. The updated paragraph from the Delta effects section is below; please check that this is carried over correctly into the SR I&S (think the only change is that the upper end of the range under the PA increased...but please double check):

NMFS put the combined CV spring-run Chinook salmon loss in a screening-level population context (see caveats in Section 2.5.5.8.3.1) by expressing the estimated annual combined loss as a percentage of the juvenile CV spring-run Chinook salmon entering the Delta. Assuming that the relationship between spring-run escapement and number of juveniles entering the Delta is similar to that for winter-run Chinook salmon (Table 2.5.5 37.5), the observed Brood Year 2010-2018 tributary CV spring-run Chinook salmon escapement range of 1,059 to 19,516 is estimated to produce 35,334 to 3,837,720 juvenile CV spring-run Chinook salmon entering the Delta. The estimated annual combined loss from the COS is 851 juveniles, and estimated annual combined loss from the PA is 1,732. Applying the estimated annual combined loss to the lowest and highest juvenile population estimates provides ranges of <1 ($851 \div 3,837,720$) to 2 ($851 \div 35,334$) percent loss of the juvenile CV spring-run Chinook salmon population in the Delta for the COS, and <1 ($1,732 \div 3,837,720$) to 5 ($1,732 \div 35,334$) percent loss of the juvenile CV spring-run Chinook salmon population in the Delta for the COS, and <1 ($1,732 \div 3,837,720$) to 5 ($1,732 \div 35,334$) percent loss of the juvenile CV spring-run Chinook salmon population in the Delta for the COS, and <1 ($1,732 \div 3,837,720$) to 5 ($1,732 \div 35,334$) percent loss of the juvenile CV spring-run Chinook salmon population in the Delta for the COS, and <1 ($1,732 \div 3,837,720$) to 5 ($1,732 \div 35,334$) percent loss of the juvenile CV spring-run Chinook salmon population in the Delta for the COS, and <1 ($1,732 \div 3,837,720$) to 5 ($1,732 \div 35,334$) percent loss of the juvenile CV spring-run Chinook salmon population in the Delta for the PA.

On Tue, May 28, 2019 at 4:12 PM Brian Ellrott - NOAA Federal <<u>brian.ellrott@noaa.gov</u>> wrote: Hey all. fyi, I'm taking the subject sections on my laptop this evening so I can work on them during my travel to Sacramento. I'll put them back on the server tomorrow morning.

Let me know soon if that will be a problem.

Thanks, Brian

Brian Ellrott

Central Valley Salmonid Recovery Coordinator NOAA Fisheries West Coast Region U.S. Department of Commerce Mobile: 916-955-7628 Office: 916-930-3612 brian.ellrott@noaa.gov

--

Barb Byrne Fish Biologist NOAA Fisheries West Coast Region U.S. Department of Commerce Office: 916-930-5612 barbara.byrne@noaa.gov California Central Valley Office 650 Capitol Mall, Suite 5-100 Sacramento, CA 95814



Find us online www.westcoast.fisheries.noaa.gov



--

Barb Byrne Fish Biologist NOAA Fisheries West Coast Region U.S. Department of Commerce Office: 916-930-5612 barbara.byrne@noaa.gov California Central Valley Office

650 Capitol Mall, Suite 5-100 Sacramento, CA 95814



Find us online www.westcoast.fisheries.noaa.gov