From: Cathy Marcinkevage - NOAA Federal <cathy.marcinkevage@noaa.gov>
Sent: Wednesday, May 1, 2019 2:18 PM
To: Evan Sawyer - NOAA Affiliate
Subject: Fwd: IOS Detail Confirmation

IOS questions, answered -- what's in the text is correct!

---------- Forwarded message ---------
From: **Steve Zeug** <stevez@fishsciences.net>
Date: Wed, May 1, 2019 at 1:39 PM
Subject: RE: IOS Detail Confirmation
To: Cathy Marcinkevage - NOAA Federal <cathy.marcinkevage@noaa.gov>
Cc: Ellis, Gregg <Gregg.Ellis@icf.com>, Westbrook, Mark <mwestbrook@usbr.gov>

Hi Cathy-

I can confirm that both of the items you asked about are true for the model runs we did for the BA. If you have any other questions, just let me know.

Steve

From: Cathy Marcinkevage - NOAA Federal <cathy.marcinkevage@noaa.gov>
Sent: Wednesday, May 1, 2019 12:36 PM
To: Steve Zeug <stevez@fishsciences.net>
Cc: Ellis, Gregg <Gregg.Ellis@icf.com>; Westbrook, Mark <mwestbrook@usbr.gov>
Subject: IOS Detail Confirmation

Hi Steve --

I'd like to confirm a few things regarding the IOS modeling. We are fleshing out details in our write-up and have the following from our CWF BiOp text, but I'm not sure that it is accurate for the application of the model for the ROC LTO. Can you review these points and give me the yay or nay? I don't have reason to believe that it is different, but would rather confirm than assume.

1. For the first four years of the 82 year simulation period, the starting population for both scenarios are 5,000 of which 3,087.5 are female.

2. The model assumes all winter-run entering the Delta are smolts and that there is no flow or temperature related mortality for the river migration (RBDD to Freeport) but a mean survival of 23.5% is applied with a standard error of 1.7%.

Thanks!!

Cathy