

LA GRANGE HYDROELECTRIC PROJECT
REINTRODUCTION ASSESSMENT FRAMEWORK
MAY 18, 2017 PLENARY GROUP MEETING

ATTACHMENT B

NMFS STUDY UPDATE

Deason, Jesse

From: William Foster - NOAA Federal <william.foster@noaa.gov>
Sent: Monday, May 15, 2017 8:00 AM
To: Staples, Rose; Deason, Jesse; Le, Bao; Johnson, Laura
Cc: Edmondson, Steve; Jean Castillo - NOAA Federal
Subject: Re: Materials for La Grange May 18 2017 Plenary Group Meeting

Dear Rose and Others:

Below is an update on NMFS' upper Tuolumne River studies.

Status of NMFS' Upper Tuolumne River Studies, May 2017.

In response to requests made during the first and subsequent Fish Passage Workshops to better explain the fish passage decision making process and cooperate in conducting and paying for studies, NMFS competed annually for internal funds to assist in fish passage study efforts. To date we hosted a 2-day public workshop titled: "*Fish Passage Over High Head Dams Workshop*" (presentations posted on-line by the District's consultant); and publicly released the "*Reintroducing Fish Upstream of Rim Dams; Providing Passage to Advance Salmon Recovery in California's Central Valley - Frequently Asked Questions*" document (posted on NMFS website). In addition NMFS funded the following studies:

Habitat Assessment and Carrying Capacity Study:

NMFS expects a "non-Public" draft report to be completed in May or June for internal NMFS review.

Fish Passage Engineering Study:

NMFS had a site visit with the Districts and NMFS's consultant, ANCHOR QEA, LLC, on March 14th. Since then the consultant has been gathering, reviewing, and analyzing project data to develop fish passage feasibility concepts that will provide safe, timely, and efficient passage and contribute to the recovery of ESA-listed salmonids in the Central Valley. NMFS anticipates a "non-Public" draft of the conceptual designs from the consultant by the end of June for internal NMFS review.

O. mykiss Genetics Study:

A "non-Public" draft report is expected at the end of June for internal NMFS review.

Thanks, see you at meeting

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ATTACHMENT C

UPDATED WTI TABLE AND UPPER RIVER STUDIES PRESENTATION

*SEE SEPARATE FILE FOR UPDATED UPPER RIVER STUDIES
PRESENTATION DUE TO FILE SIZE*

La Grange Reintroduction Assessment Framework - Upper Tuolumne River Temperature and Timing

	UOWTI (MWAT)	UTWTI (MWAT)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Spring-run Chinook Salmon^{1,2}														
Adult Upstream Migration	64	68												
Adult Holding	61	65												
Adult Spawning	56	58												
Embryo Incubation and Emergence	56	58												
Fry Rearing	65	68												
Juvenile Rearing and Downstream Movement	65	68												
Smolt Outmigration	63	68												
Steelhead^{1,2}														
Adult Upstream Migration	64	68												
Holding	61	65												
Adult Spawning	54	57												
Embryo Incubation and Emergence	54	57												
Fry Rearing	68	72												
Juvenile Rearing and Downstream Movement	68	72												
Smolt Outmigration	55	57												

UOWTI = Upper Optimum Water Temperature Index

UTWTI = Upper Tolerable Water Temperature Index

MWAT = Maximum Weekly Average Temperature

¹ Dark shaded areas represent known peak periods for the specified lifestage whereas light shaded areas represent presence.

² The absence of dark shaded areas for any lifestage indicates that the Technical Committee did not identify any particular peak period based on the available data.