UNITED STATES GOVERNMENT **FISH AND WILDLIFE SERVICE**

Memorandum

TO: Brian Person, USBR DATE: September 16, 2014
Dan Castleberry, USFWS

CC: Nick Hetrick, Darrin Thome & Robert Clarke (USFWS), Mike Belchik & Dave Hillemeier (YTF), Mark Adkison (CDFW)

FROM: J. Scott Foott CA-NV FHC, Anderson, CA

SUBJECT: Detection of *Ichthyophthirius multifiliis* in adult Chinook from lower Klamath River (rm 16)

On Friday 9/12/2014, Mike Belchik (Yurok Fisheries) contacted the Fish Health Center and requested confirmation of several imprint samples. This confirmation of Ich was performed late Friday and additional adult sampling occurred over the weekend. Several suspicious gill samples were observed and a FHC diagnostic trip planned for Monday 9/15/2014. Two Yurok fishery crews and 1 Arcata FWO crew participated in gill net sampling in the vicinity of Blue and Ti Creek (near rm16, water temperature 22°C). A total of 26 adult Chinook were collected and examined by myself for both Ich infection and external clinical signs of disease. All fish were collected from the mainstem river, appeared to actively migrating, and were bright sliver. ***Ichthyophthirius multifiliis* trophonts of various sizes were observed grossly and by phase microscopy in 11 of 26 fish (42%) with 6 (23%) of the affected fish having greater than 30 parasites per gill arch (heavily infected).** These infections were not associated with overt gill hyperplasia indicating the infection was approximately a week old. Bacterial and histological samples are pending. Two phone calls were made on site to communicate initial findings (B. Person and N. Hetrick) and this memorandum represents the only other communication by myself on the matter.

Summary: The findings indicate that the adult Chinook population moving through the lower Klamath R. has a high prevalence of Ich infection and high parasite loads indicative of the early stages of an epizootic.