

California Department of Fish and Game Update on Constant Fractional Marking/Tagging Program for Central Valley and Klamath River Fall-run Chinook Salmon

Over 32 million fall-run Chinook salmon are produced each year at five hatcheries in California's Central Valley. This production contributes to major sport and commercial fisheries in ocean and inland areas. Until 2007, only experimental releases of fall-run Chinook were externally marked and coded-wire tagged.

In 2006, the CALFED Ecosystem Restoration Program provided funding to begin implementation of the Central Valley Constant Fractional Marking (CFM) program. The initial contract provided funding to Pacific States Marine Fisheries Commission (PSMFC) for the purchase of four automated tagging systems and the first two years of operating costs for marking/tagging production releases of fall-run Chinook salmon at the five major Central Valley hatcheries (in 2007 and 2008). The program includes fall-run Chinook produced at Coleman National Fish Hatchery, Feather River Hatchery, Feather River Hatchery Annex, Nimbus Hatchery, and Mokelumne River Hatchery.

Four state-of-the-art automated tagging trailers were purchased for the program in late 2006 and early 2007 from Northwest Marine Technology. The program successfully processed 100% of the 2007 production releases of fall-run Chinook salmon from the Central Valley hatcheries (Brood Year 2006). A total of 8,154,552 fall-run Chinook was coded-wire tagged and adipose fin-clipped, and 24,472,824 were counted for a total of 32,627,376 processed at the five Central Valley hatcheries.

The program also successfully processed 100% of the 2008 production releases of fall-run Chinook salmon from the Central Valley hatcheries (Brood Year 2007). A total of 7,931,543 fall-run Chinook was coded-wire tagged and adipose fin-clipped, and 23,654,760 were counted for a total of 31,586,303 processed at the five Central Valley hatcheries.

The program is continuing this spring. Marking/tagging was initiated in early February and will end in May. Beginning this year, program operating costs are being funded by the hatchery mitigation agencies, U.S. Bureau of Reclamation, East Bay Municipal Utility District, and Department of Water Resources.

Iron Gate Hatchery, on the Klamath River, received an automated tagging trailer (Northwest Marine Technologies Mfg.) last month. This brings the total to five automated tagging trailers in the State of California. The trailer and tags for 2008 Brood Year fall-run Chinook was funded by 2006 Klamath Salmon Disaster Relief funds. Klamath River Project staff, assisted by PSMFC staff will be marking (adipose clip & CWT) 25% of the fall-run Chinook produced at the hatchery (6,000,000 fish). The tagging is dependent on the size of the fish and is expected to begin on April 20, 2009. There is a five-week window to tag approximately 1.5 million fish. The tight tagging window is due to the overlap of fish reaching an appropriate size to tag and when the best water quality is available in the Klamath at the release point ("just-right" water temperatures).

This tagging effort is a significant increase in tagging rates at Iron Gate Hatchery compared to previous efforts. Funding for a second trailer with tags and labor for the next 10 years is included in the Agreement in Principal with PacifiCorp.