U.S. Fish & Wildlife Service

Arcata Fish & Wildlife Office – Fish and Aquatic Conservation Program

Klamath River Carcass and Redd Surveys Update – November 1, 2024

Synopsis: Annual fall-run Chinook Salmon carcass and redd surveys on the mainstem Klamath River are conducted jointly by the USFWS Arcata Fish and Wildlife Office (AFWO), Karuk Tribe of California, and Yurok Tribal Fisheries Program (YTFP). Surveys in 2024 began the week of October 7 (calendar week 42) and will conclude after spawning activity has ended, which is typically around late November or early December. Three areas in the mainstem Klamath River are scheduled for weekly surveys using appropriate methods for those areas:

1) California–Oregon state line to Iron Gate (31.5 km): Carcass and redd surveys are conducted by Karuk Tribe and AFWO,
2) Iron Gate to the Shasta River confluence (21.2 km): Carcass surveys are conducted by YTFP and AFWO, and
3) Shasta River confluence to Wingate Bar (125.7 km): Redd surveys are conducted by Karuk Tribe and AFWO.

California–Oregon State Line to Iron Gate

Surveys began October 22 and 2024 is the first year for salmon spawn surveys in this area following dam removal. This area is divided into four reaches: state line to Copco Village (9.1 km), Copco (the former Copco Reservoir; 7.3 km), Ward's Canyon (4.7 km), and Iron Gate Canyon (10.4 km). Ward's Canyon has abundant whitewater, including Class IV rapids, and is not surveyed. Redd counts, live fish on redds, and fresh carcasses are reported in Table 1.

Table 1. Weekly counts of Chinook Salmon redds, live fish on redds, and carcasses in the mainstem Klamath River in 2024 as of November 1.

	Reach								
	State Line - Copco Village			Copco			Iron Gate Canyon		
Survey dates	Redds	Live	Carcasses	Redds	Live	Carcasses	Redds	Live	Carcasses
Oct 22 - Oct 23	7	16	0	24	20	0	No survey		
Oct 29 - Oct 31	22	28	1	33	46	5	7	0	2
Total	29	44	1	57	66	5	7	0	2

Iron Gate to the Shasta River Confluence

Surveys have been conducted weekly in 2024 since October 8. However, due to high turbidity associated with the dam removal project, visibility (Secchi depth range: 3–11 in) has been too low for effective surveys and no carcasses have yet to be observed. When 2024 data becomes available, a figure of cumulative count to date of 'fresh' fall Chinook Salmon carcasses compared with 2001–2023 data

will be included in these updates. The number of fresh carcasses can be used as an indicator of annual run size, though counts will not be expanded into an estimate of escapement until after the season has concluded. At the end of the survey season, carcass mark-recapture data is used to estimate escapement in this sector using a hierarchical latent variables model.

Shasta River Confluence to Wingate Bar

Redd surveys in this section have been postponed so far this season due to high turbidity. Sediment from the dam removal project as well as the continued input of sediment from tributaries in the 2022 McKinney Fire area is currently limiting visibility to less than a few inches. When 2024 data becomes available, a figure of the cumulative counts to date of fall Chinook Salmon redds compared with 1993–2023 data will be included in these updates. After the season has concluded, redd counts will be doubled (i.e., one redd represents one adult female and one adult male spawner) to estimate escapement below the Shasta River confluence.

The data presented here are preliminary in nature and subject to revision.

If you have any questions regarding these surveys, please contact Steve Gough (steve_gough@fws.gov).