

## Interim Update Report: Klamath River salmon redd sampling results

Between January 24 and 26, 2023, staff from the Arcata Fish and Wildlife Office (AFWO), Yurok Tribal Fisheries Department (YTF), and Karuk Department of Natural Resources (KNR) surveyed the Klamath River for redds along each bank of three river reaches spanning from Iron Gate Dam to the confluence with the Scott River.

This survey was in response to a technical assistance request from the Bureau of Reclamation - Klamath Basin Area Office for redd surveys before and after proposed decreases to BiOp minimum flows.

## Summary of surveys and results

Visibility was poor in all reaches especially just below the dam and in the lower two thirds of Reach 3, making it difficult to positively identify all redds present. Also of note, redds are only visible for approximately two weeks from when they are constructed, so the redd counts identified during these surveys represent a very small portion of all redds constructed this season. Given the poor visibility and nature of redd detectability, these numbers should not be considered an estimate of redd abundance.

**Reach 1:** Iron Gate Dam to the confluence with the Shasta River. AFWO and YTF crews surveyed Reach 1 and observed a relatively small number (4) of redds.

**Reach 2:** Shasta River to the confluence with Beaver Creek. AFWO and KNR crews surveyed Reach 2 and observed 51 redds of which approximately 31 are considered at risk of dewatering if flows were to drop.

**Reach 3**: Beaver Creek to the confluence with the Scott River. AFWO surveyed this reach and no redds were observed. However, visibility was too poor to reliably identify redds. Therefore, the lack of observed redds should not be interpreted as no redds occurring in Reach 3.

Below is a table of the individual data points collected during this survey period. Each point can represent multiple redds (# of redds observed). Estimates of redd depth were used to assess risk of dewatering, with redds less than 0.5 m considered at risk.

Survey	Reach	# redds	Fish on	Depth	<0.5 m	Lat	Lon
date		observed	redd	(m)			
1/24/2023	1	1	N	0.5	N	41.89834	-122.517
1/25/2023	1	1	N	0.5	N	41.90311	-122.468
1/25/2023	1	2	N	0.5	N	41.9129	-122.462
1/25/2023	2	2	N	1	N	41.8255	-122.659
1/25/2023	2	3	n	0.7	N	41.82718	-122.661
1/25/2023	2	11	N	0.3	Υ	41.82861	-122.662
1/25/2023	2	6	N	0.3	Υ	41.82916	-122.662
1/25/2023	2	5	N	0.3	Υ	41.82976	-122.662
1/25/2023	2	6	N	0.5	N	41.83112	-122.661
1/25/2023	2	6	N	0.33	Υ	41.83131	-122.661
1/25/2023	2	1	N	0.33	Υ	41.83147	-122.661
1/25/2023	2	2	N	0.33	Υ	41.83182	-122.661
1/25/2023	2	1	N	0.7	N	41.84236	-122.682
1/25/2023	2	1	N	1.5	N	41.86625	-122.742
1/25/2023	2	5	N	0.7	N	41.84277	-122.683
1/25/2023	2	2	N	1	N	41.84776	-122.685

Below is a screen shot of the data displayed on an aerial photo of the survey area. A more formal and complete report will be provided after the winter redd surveys are completed.

