## 2022 - 2023 – Coho Salmon Spawning Ground Surveys Scott River Watershed Council



Between January 4 and January 27, 2023, the Scott River Watershed Council conducted spawning ground surveys on French Creek, Miners Creek, Sugar Creek and the mainstem Scott River (Table 1). Each accessible stream reach was surveyed three to four times during this period. The goal of this effort was to observe live salmonids and redds, as well as to collect biological samples from carcasses.

1.4 kilometers (0.9 miles) of French Creek were surveyed three times during the spawning season. On January 12, two redds were observed, one of which had a live Coho Salmon (*Oncorhynchus kisutch*) adult. On January 18, two Coho carcasses were observed. One more redd was observed on January 26. In addition to observations made during formal surveys, two incidental observations of live Coho adults were made: One on January 2 and one on January 13.

0.35 km (0.2 miles) of Miners Creek were surveyed three times during the spawning season. No live fish, redds or carcasses were observed during these efforts.

1.2 km (0.75 miles) of Sugar Creek were surveyed three times during the spawning season. On January 10, one redd was observed. On January 19, one live Coho adult, one redd and one Coho carcass were observed.

0.3 km (0.2 miles) of the mainstem Scott River upstream and downstream of the confluence with Sugar Creek were surveyed four times during the spawning season. On January 4, two live Coho were observed.

Stream	French Creek	Miners Creek	Sugar Creek	Scott River
Distance Covered (km)	1.4	0.35	1.2	0.3
Live Coho Observed	3	0	1	2
Redds Observed	3	0	2	0
Coho Carcasses Observed	2	0	1	0

Table 1. All stream reaches surveyed with distance covered, live fish, redds and carcasses observed.

The California Department of Fish and Wildlife operates a weir and video counting station on the mainstem Scott River at river kilometer (rkm) 29.2. According to CDFW's Klamath River Project In-season Update from January 13, 2023, preliminary observations from this station counted 236 adult Coho Salmon, although the weir was removed on December 26, 2022 due to a sharp increase in flows. At the time of removal, it appeared that the number of Coho coming through the station was on the rise (Figure 1).



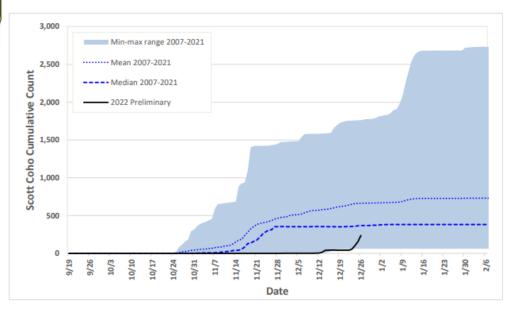


Figure 1. 2022 preliminary Coho Salmon observations from CDFW Scott River counting station, compared to historical mean, median and min-max range.

The number of observations made by SRWC staff were fewer than expected given historical survey data and the number of fish seen at the CDFW counting facility. Precipitation events in late December and mid-January caused large spikes in streamflow that may provide an explanation for this. From December 27 to January 17, flows at the USGS Fort Jones Gage on the mainstem Scott River did not dip below 500 cubic feet per second (cfs) and were greater than 1,000 cfs for much of that time (Figure 2). This period of sustained flows would have allowed Coho spawners to access a wide range of habitat throughout the watershed. This contrasts to recent years in which lower winter flows limited the accessible stream area for returning adults. A wider distribution of spawners throughout the Scott River and its tributaries would explain the perceived lack of density in the reaches that SRWC was able to survey. In addition, these spikes of flow were accompanied by increased turbidity and sediment movement that may have obscured live fish, redds and carcasses.

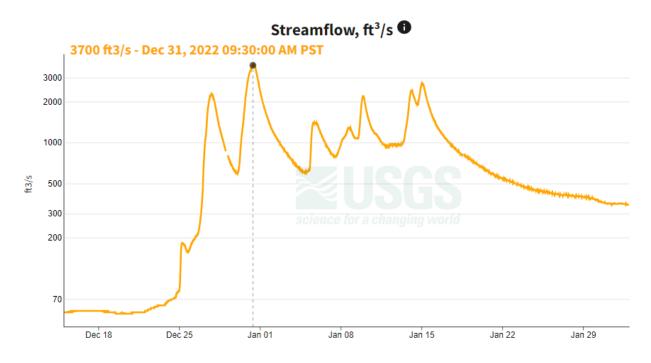
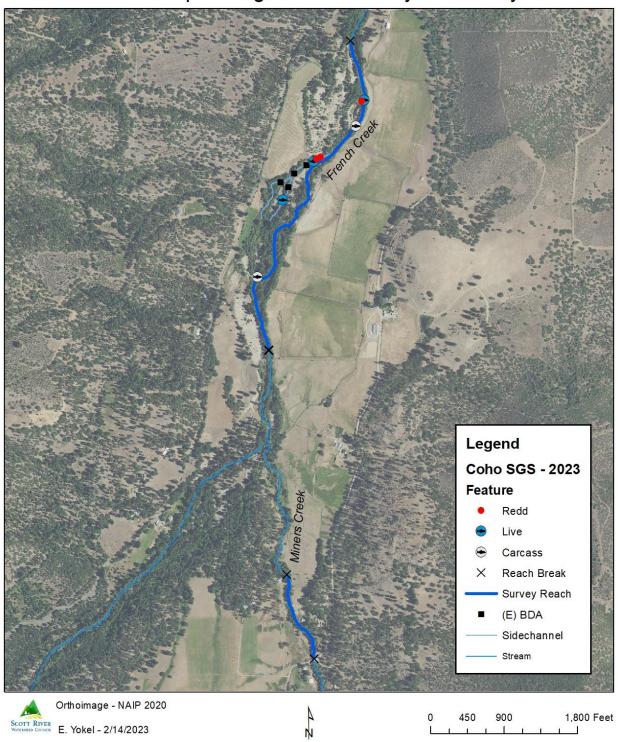


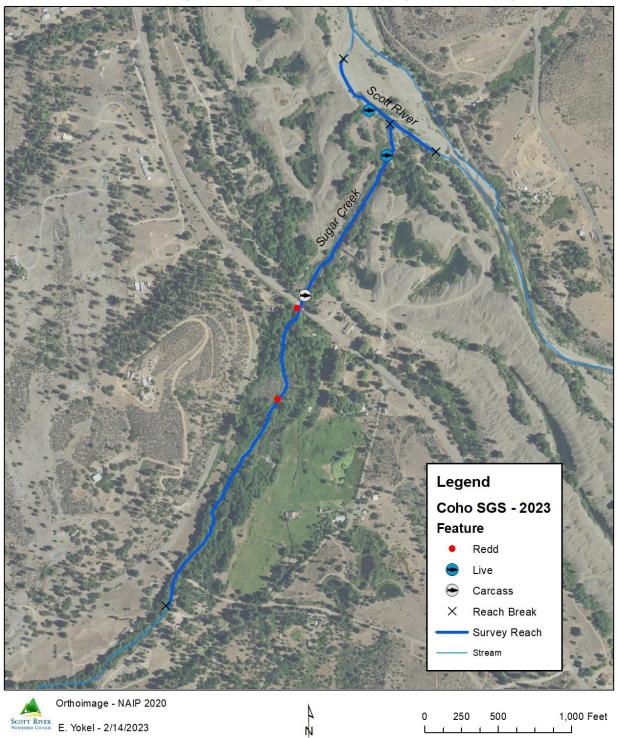
Figure 2. Streamflow (cfs) at the USGS Scott River Station (11519500) - December – January 2023.

## Mid French Creek & Miners Creek Coho Salmon Spawning Ground Surveys - January 2023



Map 1 – Survey reaches and observations – Mid French Creek and Miners Creek

## Sugar Creek - Scott River at Sugar Confluence Coho Salmon Spawning Ground Surveys - January 2023



Map 2 – Survey reaches and observations – Sugar Creek and Scott River at Sugar Creek Confluence