



Trinity River Mainstem Redd Survey Update December 2, 2022

The [Arcata Fish and Wildlife Office](#) along with the [California Department of Fish and Wildlife](#), [Yurok Tribal Fisheries Program](#), [Hoopa Valley Tribal Fisheries Department](#), and [Shasta-Trinity National Forest](#) survey the mainstem Trinity River to recover salmonid carcasses and count and map Chinook Salmon (*Oncorhynchus tshawytscha*) redds. The distribution of Chinook Salmon spawning is expected to change in response to rehabilitation efforts of the [Trinity River Restoration Program](#) and to the relative run sizes of natural- and [Trinity River Hatchery](#)-origin fish. Spawning surveys are attempted weekly between [Lewiston Dam](#) and the North Fork Trinity River (Reaches 1–7) and every other week on the survey reaches downstream of the North Fork Trinity River (Figure 1, Table 1).

This update provides preliminary data on this season’s redd observations as of December 2 (Table 1). Figure 2 compares preliminary 2022 cumulative redd counts in Reaches 1–10 with the previous 20 years (2002–2021). Redds constructed by Chinook and Coho salmon are not differentiated until the end of the season when they are apportioned by species (Chinook or Coho salmon) and origin (hatchery or natural) using carcass data.

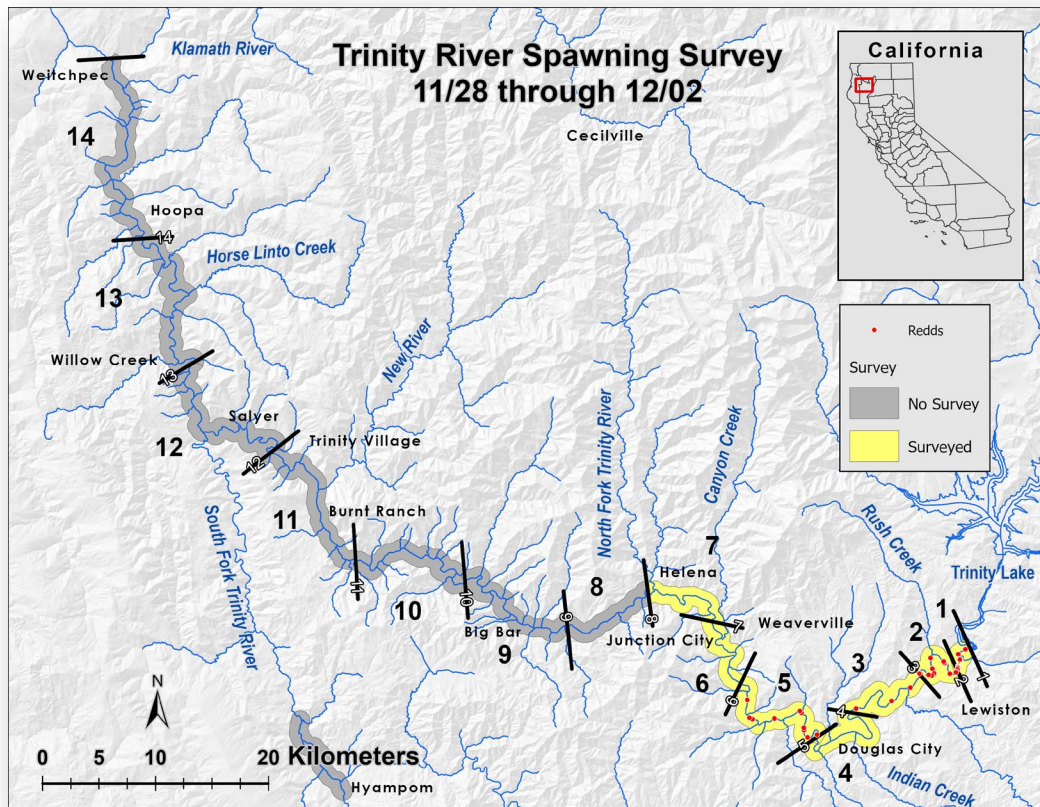


Figure 1. Mainstem Trinity River salmon spawn survey area and redds for this week’s update.





Table 1. Preliminary count of redds by reach from the fall 2022 mainstem Trinity River redd survey as of December 2. Reach 8 (Pigeon Point Run) and Reach 11 (Burnt Ranch Gorge) are not surveyed due to abundant whitewater.

Week start	Reach														Total	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14		
Sep 5	0	0	0	0	0	0	0									0
Sep 12	10	4	10	4	1	0	0		0	NS						29
Sep 19	7	17	63	60	31	1	0					0	0	0		179
Sep 26	109	221	151	112	144	31	43		18	3						832
Oct 3	64	114	41	31	115	114	70					0	0	NS		549
Oct 10	31	62	32	48	82	87	83		140	48						613
Oct 17	4	38	63	27	87	93	57					15	24	1		409
Oct 24	11	38	32	30	55	11	14		130	49						370
Oct 31	59	65	36	25	NS	9	20					59	136	NS		409
Nov 7	68	75	NS	NS	NS	NS	NS		33	35						211
Nov 14	53	29	27	11	37	2	1					50	62	85		357
Nov 21	32	46	NS	NS	NS	1	0		14	NS						93
Nov 28	17	13	6	0	10	0	0					NS	NS	NS		46
Dec 5	-	-	-	-	-	-	-		-	-						-
Dec 12	-	-	-	-	-	-	-					-	-	-		-
Total	465	722	461	348	562	349	288		335	135		124	222	86		4,097

'NS' = no survey

These data are preliminary and subject to revision.

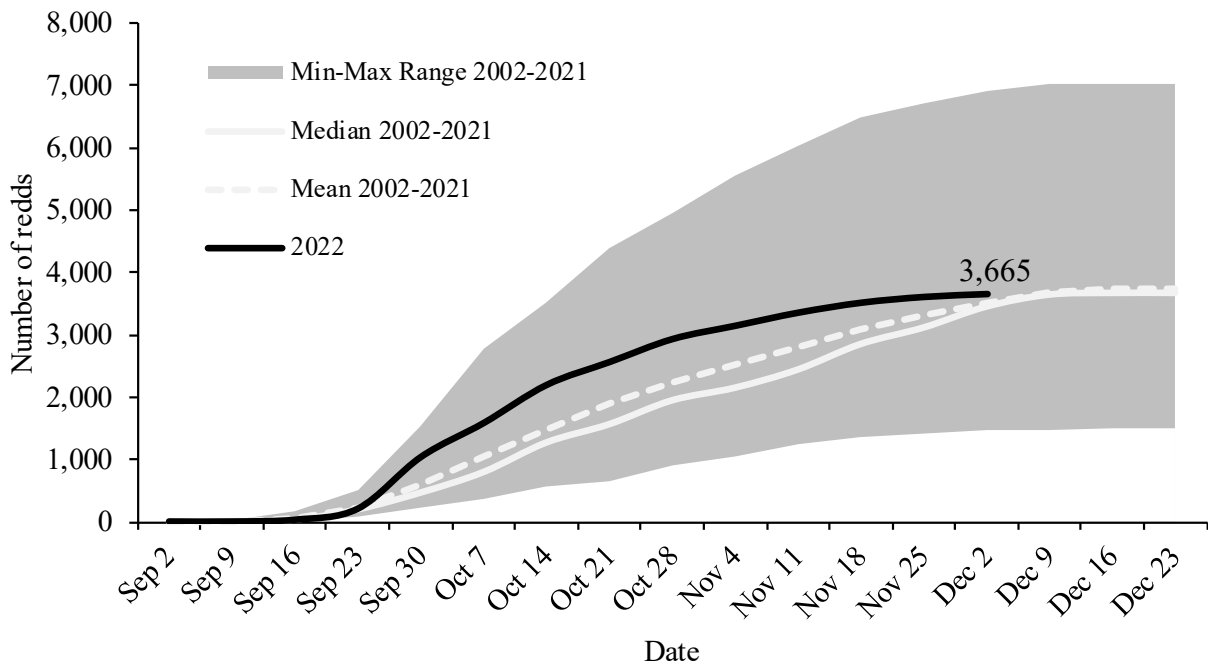


Figure 2. Cumulative redd counts in Reaches 1–10 of the mainstem Trinity River in 2022 as of December 2 compared to the range of counts from 2002 to 2021.

The spawning success (i.e., pre-spawn mortality versus partially and fully spawned) of female salmon in the Trinity River are tracked during the spawn surveys. Only ‘fresh’ carcasses, those that exhibit minimal decay, are used for assessing pre-spawn mortality because carcasses with extensive decay may not retain unspawned eggs. As of December 2, 787 fresh female Chinook Salmon carcasses have been inspected, 15 (1.9%) of which were pre-spawn mortalities.

For more information regarding mainstem Trinity River redd surveys, please contact Steve Gough (steve_gough@fws.gov).



Photo of the Week: Between rain showers on the Trinity River.