



Trinity River Mainstem Redd Survey Update November 21, 2018

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 size of natural- vs. [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 November 21 (Table 1). Figure 2 compares preliminary 2018 cumulative redd counts in Reaches 1–10 with the previous 16 years (2002–2017). 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.

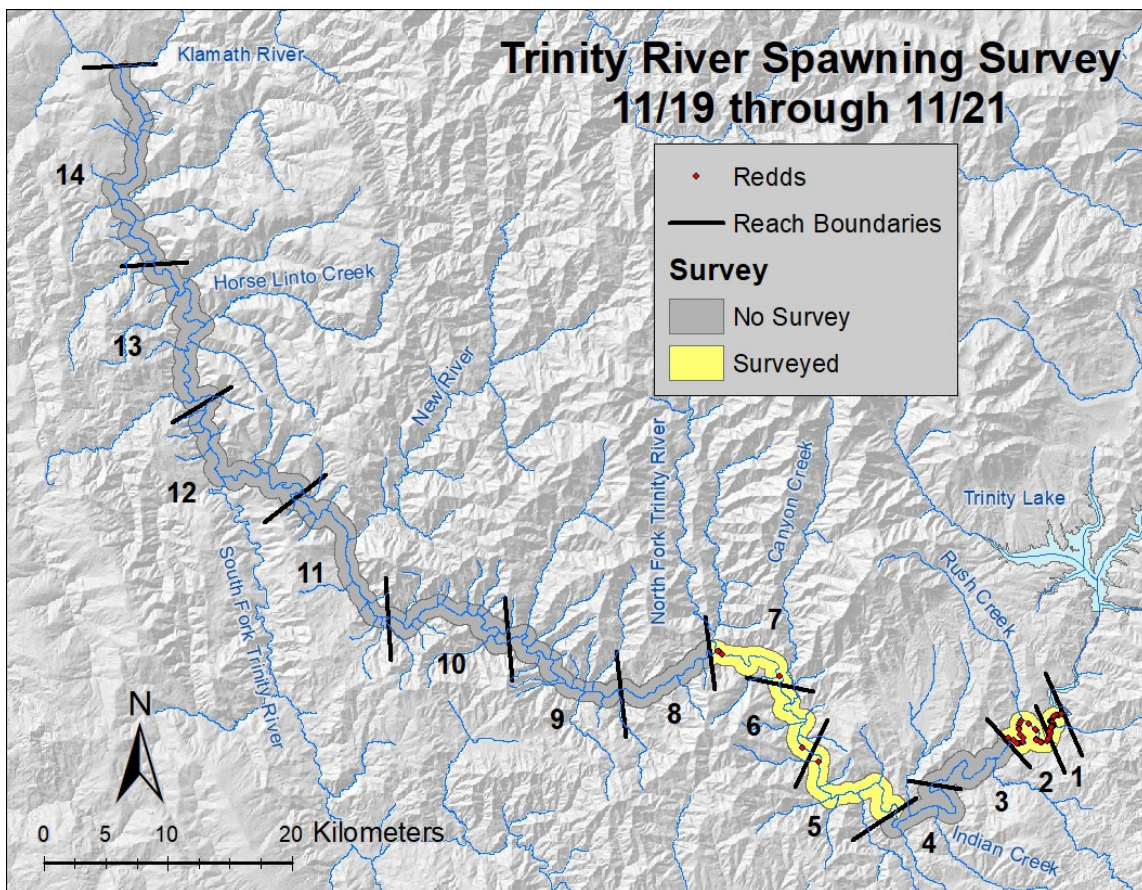


Figure 1. Mainstem Trinity River salmon spawn survey area for this week’s update.



Table 1. Preliminary count of redds by reach from the fall 2018 mainstem Trinity River redd survey. Reach 8 (Pigeon Point Run) and Reach 11 (Burnt Ranch Gorge) are not surveyed due to abundant whitewater.

Week start	Reach														Total	
	01	02	03	04	05	06	07	08	09	10	11	12	13	14		
08/27	0															0
09/03	0	0	0	0	0	0	0									0
09/10	0	0	0	1	1	0	0		0	0						2
09/17	3	9	6	7	4	0	0		0	0						29
09/24	36	64	52	34	NS	0	0		1	0						187
10/01	23	65	58	NS	43	0	2					0	0	0		191
10/08	39	47	30	53	31	3	8		63	22						296
10/15	43	62	15	36	41	19	19					12	16	2		265
10/22	21	42	16	23	49	4	29		99	51						334
10/29	11	19	28	11	18	11	7					33	60	13		211
11/05	44	51	28	9	16	3	7		4	15						177
11/12	55	139	40	18	0	0	0					11	30	8		301
11/19	59	35	NS	NS	1	3	7		NS	NS						105
11/26	-	-	-	-	-	-	-					-	-	-		-
12/03	-	-	-	-	-	-	-		-	-						-
12/10	-	-	-	-	-	-	-					-	-	-		-
12/17	-	-	-	-	-	-	-					-	-	-		-
Total	334	533	273	192	204	43	79			167	88		56	106	23	2,098

‘NS’ = no survey

These data are preliminary and subject to revision.

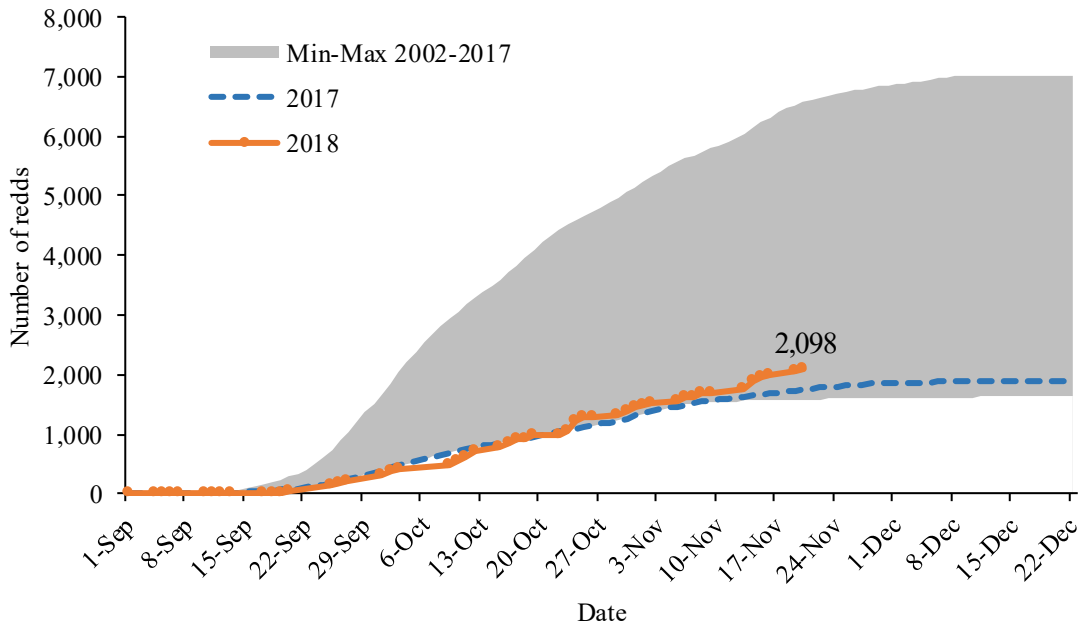


Figure 2. Cumulative redd counts in Reaches 1–10 (Reach 8 excluded) of the mainstem Trinity River in 2018 as of November 21 compared to 2017 and the range of counts from 2002 to 2017.

We track the spawning success (i.e., pre-spawn mortality versus partially and fully spawned) of female salmon in the Trinity River during redd 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 November 21, 406 fresh female Chinook Salmon carcasses have been inspected, 8 (2.0%) of which were pre-spawn mortalities.

For more information regarding mainstem Trinity River redd surveys, please contact Steve Gough (707-825-5197; steve_gough@fws.gov).



Photo by A. Fleitz (USFS)