

Trinity River Restoration Program Juvenile Outmigrant Monitoring Program, In-Season Update May 24, 2011

The following summary is an in-season update on juvenile salmonid monitoring in the mainstem Trinity River, California as of May 24, 2011. The first text summary and table covers the upriver trapping site, Pear Tree Gulch, operated by the Hoopa Valley Tribal Fisheries department. The second text summary and table covers monitoring operations at the lower river trapping site, Willow Creek, operated by the Yurok Tribal Fisheries Program. These monitoring operations are operated in collaboration with the US Fish and Wildlife Service, Arcata Fish and Wildlife Office, and together form a single monitoring program.

Catch Notes for Pear Tree Gulch Trap Site (near North Fork of Trinity River): Naturally produced age-0 Chinook were present at the onset of sampling and have been captured during every week sampled. Relative to past years, peak age-0 Chinook catch occurred earlier than we typically see, with large numbers caught from late January through mid-March. Naturally produced age-1 Chinook were present at the onset of sampling and have been captured during sampling each week, with peak catches occurring in late March. Age-1 hatchery Chinook have been rare in the catch, which is typical of most years.

Naturally produced age-1 Coho were present in the catch at the onset of sampling and have been present in the weekly catch in all but a few sampling weeks, with peak catches occurring in January and early February. Naturally produced age-0 Coho appeared in the weekly catch during JW 8 (19 Feb-25 Feb), and have been captured in higher numbers than we see most years, with peak catches occurring JW 13 and JW 14 (19March-1April) . Hatchery Coho appeared in the catch a few days after they were released from TRH, and weekly catch peaked the following week JW 12 (19 March – 25 March).

Naturally produced Steelhead smolts (age-1 and age-2+pooled; to be parsed by FL frequency at the end of the season) were present in the catch at the onset of sampling and have been captured every week of the season, with peak catches occurring in early to mid-March. Naturally produced age-0 steelhead appeared in the catch in early march, with peak catches occurring in late March and early April, which is typical of most years. Hatchery steelhead were rare in the catch until the week following their release from TRH, with peak catches occurring JW 12 (19 March-25 March).

HVTFD RST Juvenile Salmonid Catch Summary for TRN-5 and TRN-8

DayMin: 1/13/2011

DayMax: 4/29/2011

Hoop Valley Tribal Fisheries Department, , 300 South Loop Rd., Hoopa, CA, 95546, (530) 625-4267

Preliminary, all data subject to revision.

JW /Year	Week Range	*Flows (cfs)		Dissolved Oxygen (mg/L)		*Water Temp (F)		Days Sampled	CHINOOK (<i>O. tshawytscha</i>)						STEELHEAD (<i>O. mykiss</i>)				COHO (<i>O. kisutch</i>)				
		Min	Max	Min	Max	Min	Max		YOY			No Clip	Ad-Clip	Total	1+	1+/AD	Total	YOY	1+	2+	Ad-Clip	Total	YOY
2/2011	Jan 08-Jan 14	986	1360			42.3	44.9	4	158	1	159	1	0	160	0	13	1	0	14	0	7	0	7
3/2011	Jan 15-Jan 21	1270	1810			42.2	45.8	8	184	0	184	6	0	190	0	31	0	0	31	0	3	0	3
4/2011	Jan 22-Jan 29	936	1220			41.9	45.4	14	3,368	0	3,368	9	2	3,379	0	48	1	0	49	0	5	0	5
5/2011	Jan 30-Feb 04	775	910			40.3	45.9	14	6,909	0	6,909	10	1	6,920	0	21	0	1	22	0	8	0	8
6/2011	Feb 05-Feb 11	706	766			39.6	47.4	14	12,765	0	12,765	14	2	12,781	0	32	0	0	32	0	10	0	10
7/2011	Feb 12-Feb 18	687	1470			40.5	46	14	6,674	1	6,675	23	0	6,698	0	75	0	0	75	0	6	0	6
8/2011	Feb 19-Feb 25	828	1010			40.6	45.6	10	6,636	1	6,637	4	0	6,641	0	24	0	0	24	0	3	0	3
9/2011	Feb 26-Mar 04	754	1020			40	47.9	14	16,305	2	16,307	15	0	16,324	1	65	0	0	66	1	3	0	4
10/2011	Mar 05-Mar 11	1030	1610			44.8	50.2	14	9,618	0	9,618	19	1	9,638	0	309	0	2	311	6	7	0	13
11/2011	Mar 12-Mar 18	1260	4130			44.1	46.8	14	3,940	0	3,940	13	0	3,953	3	141	0	3	147	46	0	1	47
12/2011	Mar 19-Mar 25	2590	3580			42.8	69.2	14	1,695	7	1,702	60	0	1,777	2	100	0	236	237	50	5	13	72
13/2011	Mar 26-Apr 01	2220	3200			7.2	51.1	14	2,162	0	2,162	18	0	2,180	38	86	0	109	233	161	0	4	165
14/2011	Apr 02-Apr 08	1810	3000			10.2	48.6	14	2,672	0	2,672	6	0	2,678	9	91	0	112	212	164	1	1	191
15/2011	Apr 09-Apr 15	1370	1650			43.7	51.7	14	2,730	0	2,730	9	0	2,739	66	68	0	106	240	31	0	1	32
16/2011	Apr 16-Apr 22	1540	2240			45.8	51.6	14	3,226	0	3,226	19	0	3,245	18	74	0	102	194	20	0	4	24
17/2011	Apr 23-Apr 29	1780	1780			49.3	50	12	3,174	0	3,174	10	0	3,184	1	43	0	87	131	23	0	9	32
Totals								202	82,216	12	82,228	236	6	82,487	138	1,221	2	758	2,018	502	58	33	622

Actual catch reported (not expanded for non-sample days).

*Flows and water temperatures from USGS gage 11526400, may be subject to revision

YOY=Young of Year (less than 1 yr); Y+=greater than 1 yr; Ad-Clip=Adipose Fin Clipped; M-Clip= Maxillary Clip

Summarized on: 5/17/2011

Lower Trinity Outmigrant Monitoring at Willow Creek Trap Site
2011 Catch Summary Update –May 20th

The 2011 trapping season at the Willow Creek Trap Site (river kilometer 34) is conducted jointly by the Yurok Tribal Fisheries Program (YTFF) and the USFWS Arcata Fish and Wildlife Office (AFWO) on the mainstem Trinity River near Willow Creek, California. The season began March 5th, 2011 with the installation of all three traps. See attached catch summary for details.

This update includes data from March 5th to May 20th, 2011 and is *raw catch*, with no expansions yet calculated; for table of catches please contact Nate Harris. High flows and heavy debris resulted in null sets, causing less than 21 trap days (3 traps x 7 days) in some weeks leading to variable effort over the season. Consequently, raw catch numbers should be interpreted with caution.

Chinook salmon (*Oncorhynchus tshawytscha*) were captured each day sampling occurred and most were wild young-of-the-year (YOY) thus far. Weekly mean Fulton's K values of Chinook salmon have not yet been calculated. Total numbers and average fork length of Chinook salmon have steadily increased over the season. Efficiency calibrations were conducted with freeze-branded hatchery Chinook salmon when flow levels allowed. Recapture rates ranged from 0.41% to 2.32%.

Steelhead (*Oncorhynchus mykiss*) YOY and smolts (age 1+) were present in the catch since the beginning of trapping, and hatchery steelhead first appeared in JW 12. Hatchery steelhead catch numbers increased in JW14 and have been steady since. Wild steelhead smolts numbers were steady as well, with slightly fewer captured weekly than hatchery smolts. YOY steelhead catch rates are thus far quite low.

Coho salmon (*Oncorhynchus kisutch*) numbers increased gradually, with YOY and smolts reaching their highest numbers in JW14-17 and JW 18-20, respectively. Hatchery coho (R-max) first appeared in the catch during JW 13, and increased to their highest levels so far in JW 18-20.

If you have any questions regarding this summary, please contact Nate Harris at (530) 625-4130 x1609.

for TRWC-Y, TRWC-1, and TRWC-2 (preliminary, all data subject to revision)

<u>Chinook (<i>O. tshawytscha</i>)</u>					<u>Steelhead (<i>O. mykiss</i>)</u>				<u>Coho (<i>O.</i></u>	
YOY					YOY	1+	Ad-clip	Total	YOY	1+
<u>Ad-clip</u>	<u>Total</u>	<u>1+</u>	<u>1+/AD</u>	<u>Total</u>						
0	88	0	0	88	10	17	0	27	1	1
0	44	0	0	44	3	3	0	6	5	0
0	29	0	0	29	0	4	1	5	2	0
0	93	2	0	95	0	28	24	52	5	2
0	169	0	0	169	0	54	150	204	11	2
0	375	5	0	380	1	198	191	390	20	4
0	418	1	0	419	0	142	217	359	13	3
0	361	0	0	361	0	177	263	440	12	8
0	84	0	0	84	0	149	212	361	1	11
0	204	0	0	204	0	73	111	184	14	13
0	709	0	0	709	0	174	179	353	1	21
0		0	0		0	29	37		0	2

<u>kisutch)</u>		<u>Mark-recapture</u>		
<u>Max-clip</u>	<u>Total</u>	<u># release</u>	<u># recap</u>	<u>% recap</u>
0	2	970	14	1.44
0	5	1420	33	2.32
0	2	NA	NA	NA
14	21	NA	NA	NA
21	34	2695	11	0.41
28	52	NA	NA	NA
15	31	1859	13	0.70
46	66	965	11	1.14
245	257	2541	17	0.67
80	107	2460	24	0.98
258	280	2400	19	0.79
31		1395	24	1.72