

Willow Creek Downstream Migrant Trap Site  
2007 In-Season Trapping Update –August 20, 2007

Synopsis: The 2007 Downstream Migrant trapping season at the Willow Creek Trap Site (river kilometer 34) is being conducted jointly by the USFWS Arcata Fish and Wildlife Office (AFWO) and the Yurok Tribal Fisheries Program (YTFP) on the mainstem Trinity River near Willow Creek, California. The season began March 5, 2007 with the installation of one trap. A second trap was installed March 15, 2007, and a third trap was installed April 4th, 2007.

This summary includes data from March 6<sup>th</sup>, 2007 through August 8<sup>th</sup>, 2007 and is presented as raw catch. No expansions have been calculated at this time. Data entry is not complete for Julian Weeks 30 and 32. Heavy debris load from the increased dam releases created problems for the rotary screw traps during Julian Weeks (JW) 18–22, and resulted in less than 21 trap days per week (7 days per week x 3 traps= 21 trap days per week). See attached catch summary for details of this narrative.

Raw daily catches of Chinook salmon (*Oncorhynchus tshawytscha*) have been captured each day sampling has occurred and most have been young-of-the-year (YOY). Weekly mean Fulton's K values of YOY Chinook salmon are slightly higher than 1.0 with a possible increase in condition from JW 15-22 compared to JW 10-14. Chinook salmon catches of natural fish peaked JW 19 and tapered off until the arrival of hatchery Chinook salmon in JW 23. Catches declined dramatically in the second week of July and continue to be at low levels.

Raw daily catches of steelhead (*Oncorhynchus mykiss*) smolts (age 1+) peaked coincident with the increased flow in JW 17 and have tapered off with a few smaller peaks in catch. No age 2 steelhead occur on the catch summary because steelhead scales have not been aged this year; once aging is complete some age1 steelhead will be moved to the age 2 column. Steelhead smolts captured JW 10-19 had weekly mean Fulton's K values slightly higher than 1.0; values dropped below 1.0 in JW 20-23. Steelhead YOY catches peaked in JW 24 and have tapered off slowly since then.

Raw daily catches of coho salmon (*Oncorhynchus kisutch*) are low compared to the past 5 years, especially for natural smolts. Weekly mean Fulton's K value of natural coho salmon smolts were higher than 1.0 in JW 11-18, but have decreased below 1.0 in JW 19-23, but have since returned to near 1.0. Coho salmon smolt catches, both natural and hatchery, in JW 17 increased coincident with the increased water releases from Lewiston Dam, and peaked in JW 21.

If you have any questions regarding this summary, don't hesitate to contact Bill Pinnix at (707) 822-7201.

# USFWS RST Juvenile Salmonid Catch Summary for TRWC1 and TRWC2 and TRWCY

DayMin: 3/6/2007

DayMax: 8/8/2007

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Preliminary, all data subject to revision.

JW /Year Week Range		*Flows (cfs)		**Dissolved Oxygen (mg/L)		**Water Temp (C)		Trap Days Sampled	CHINOOK ( <i>O. tshawytscha</i> )					STEELHEAD ( <i>O. mykiss</i> )					COHO ( <i>O. kisutch</i> )					
									YOY				1+	1+/AD	Total	YOY	1+	2+	Ad-Clip	Total	YOY	1+	M-Clip	Total
									No Clip	Ad-Clip	Total	1+												
10/2007	Mar 05-Mar 11			12.31	12.33	8.0	8.4	4	27	0	27	0	0	27	0	3	0	0	3	0	0	0	0	
11/2007	Mar 12-Mar 18			11.85	12.81	8.7	10	10	128	0	128	1	0	129	0	11	0	0	11	23	2	1	26	
12/2007	Mar 19-Mar 25			10.89	12.27	8.8	11	14	236	0	236	3	0	239	0	62	0	7	69	18	1	120	139	
13/2007	Mar 26-Apr 01			10.7	12.06	8.3	11	14	191	0	191	0	0	191	6	93	0	67	166	9	1	8	18	
14/2007	Apr 02-Apr 08			10.75	13.08	9.9	14	17	201	1	202	0	0	202	3	312	0	274	589	12	3	0	15	
15/2007	Apr 09-Apr 15			10.42	11.75	11	13	20	1,397	0	1,397	2	0	1,399	3	584	0	210	797	19	4	3	26	
16/2007	Apr 16-Apr 22			10.72	11.58	9.9	12	21	3,651	0	3,651	1	0	3,652	0	711	0	329	1,040	20	4	7	31	
17/2007	Apr 23-Apr 29			10.48	17.43	11	14	21	3,002	0	3,002	0	0	3,002	0	1,405	0	425	1,830	40	35	189	264	
18/2007	Apr 30-May 06			12.84	18.91	10	12	8	670	0	670	0	0	670	2	63	0	56	121	28	19	291	338	
19/2007	May 07-May 13			15.31	19.04	13	14	19	5,103	0	5,103	0	0	5,103	10	180	0	107	297	15	22	162	199	
20/2007	May 14-May 20					13	13	19	4,663	0	4,663	0	0	4,663	9	171	0	79	259	8	11	140	159	
21/2007	May 21-May 27			10.28	14.33	13	14	14	3,506	0	3,506	1	0	3,507	11	398	0	127	536	22	53	607	682	
22/2007	May 28-Jun 03			5.48	10.59	16	18	18	2,945	0	2,945	0	0	2,945	8	126	0	29	163	31	18	193	242	
23/2007	Jun 04-Jun 10			8.64	9.65	15	18	20	5,039	31	5,070	0	0	5,070	79	137	0	35	251	28	17	165	210	
24/2007	Jun 11-Jun 17			8.96	9.46	16	19	21	7,589	701	8,290	0	0	8,290	166	56	0	13	235	20	12	93	125	
25/2007	Jun 18-Jun 24			8.41	9.09	17	19	21	5,603	707	6,310	0	0	6,310	144	14	0	3	161	12	2	10	24	
26/2007	Jun 25-Jul 01			8.14	8.83	17	19	21	3,595	346	3,941	0	0	3,941	106	4	0	1	111	3	0	0	3	
27/2007	Jul 02-Jul 08			8.2	8.7	19	23	21	2,580	128	2,708	0	0	2,708	121	8	0	0	129	4	0	1	5	
28/2007	Jul 09-Jul 15			8.05	8.89	21	24	21	678	40	718	0	0	718	61	19	0	0	80	0	0	0	0	
29/2007	Jul 16-Jul 22			8.5	9.05	20	22	21	113	9	122	0	0	122	29	3	0	0	32	0	0	0	0	
30/2007	Jul 23-Jul 29			8.02	8.92	23	23	17	80	10	90	0	0	90	7	5	0	0	12	0	0	0	0	
31/2007	Jul 30-Aug 05			8.39	8.97	22	24	21	45	0	45	0	0	45	9	27	0	0	36	0	0	0	0	
32/2007	Aug 06-Aug 12			9.17	9.18	21	22	7	22	2	24	0	0	24	7	4	0	0	11	0	0	0	0	
Totals								390	51,064	1,975	53,039	8	0	53,047	781	4,396	0	1,762	6,939	312	204	1,990	2,506	

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

\*Flows reported by USGS, may be subject to revision \*\*Water temperature recorded with Min-Max thermometer. Dissolved oxygen recorded in river at time of daily trap check

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

Summarized on: 8/20/2007