

Willow Creek Downstream Migrant Trap Site  
2008 In-Season Trapping Update –June 10, 2008

Synopsis: The 2008 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 (YTFFP) on the mainstem Trinity River near Willow Creek, California. The season began March 13, 2008 with the installation of one trap. A second trap was installed March 15, 2008, and a third trap was installed March 27, 2008. See attached catch summary for details of this narrative.

This summary includes data from March 13<sup>th</sup>, 2008 through June 5<sup>th</sup>, 2008 and is presented as raw catch. No expansions have been calculated at this time. Data entry is not complete for Julian Weeks 21 and 23, May 21<sup>st</sup> to May 27<sup>th</sup>, and June 4<sup>th</sup> to June 10<sup>th</sup>. Heavy debris load from floating algae have occasionally resulted in null sets, causing less than 21 trap days (3 traps x 7 days) in some weeks. This accumulation of algae in the rotary screw traps is a relatively new phenomenon for the Trinity River, and has necessitated increased trap checks at night as well as during the day.

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), with a few age 1+ natural Chinook salmon. Weekly mean Fulton's K values of YOY Chinook salmon began the season lower than 1.0 with an increase in condition to greater than 1.0 in Julian Week 16 which has continued through Julian Week 23. Efficiency calibrations at high flow benches were conducted May 8<sup>th</sup> (~10,500 cfs measured at Hoopa Gauge; initial efficiency estimate of 0.93 %), May 16<sup>th</sup> (~10,000 cfs; initial efficiency estimate of 0.79 %), May 29<sup>th</sup> (~5,800 cfs; initial efficiency estimate of 3.8%), and June 5<sup>th</sup> (~2,500 cfs; initial efficiency estimate of 3.7%). Natural Chinook salmon catches show bi-modal peaks in raw catch, both of which are coincident with a dropping of flow, this is consistent with past year's catches

Raw daily catches of steelhead (*Oncorhynchus mykiss*) smolts (age 1+) have been increasing as the season progresses. Steelhead smolts captured JW 11-23 had weekly mean Fulton's K values slightly higher than 1.0, with a steady drop over time (indicating that the smolting process is underway). Steelhead YOY have begun to increase in the catches, but still at low levels. Normal peaks in YOY steelhead catch occur in mid-June to early July.

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 at the beginning of the season and have steadily dropped over time, again indicating that the smolting process is underway. A peak in coho smolt catch occurred coincident with the high dam releases in early May, this is consistent with past year's catches.

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: 3/13/2008

DayMax: 6/5/2008

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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> )					
		Min	Max	Min	Max	Min	Max		YOY					YOY	1+	2+	Ad-Clip	Total	YOY	1+	M-Clip	Total	
									No Clip	Ad-Clip	Total	1+	1+/AD										Total
11/2008	Mar 12-Mar 18			11.9	12.86	7.15	9.06	10	19	0	19	0	0	19	0	5	1	0	6	1	4	0	5
12/2008	Mar 19-Mar 25			11.52	12.18	7.7	9.71	14	27	0	27	2	0	29	0	16	0	3	19	0	3	19	22
13/2008	Mar 26-Apr 01			11.52	12.27	7.05	9.13	18	130	0	130	1	0	131	0	42	11	227	280	20	19	13	52
14/2008	Apr 02-Apr 08			11.6	12.9	8.19	9.65	21	523	0	523	2	0	525	0	162	10	166	338	6	9	4	19
15/2008	Apr 09-Apr 15			11.62	13.1	9.1	11.6	15	595	0	595	0	0	595	0	184	12	112	308	5	5	3	13
16/2008	Apr 16-Apr 22			11.05	13.2	7.65	11.5	21	1,066	0	1,066	0	0	1,066	0	240	21	321	582	6	7	0	13
17/2008	Apr 23-Apr 29			11.06	12.16	8.06	11.7	15	548	0	548	0	0	548	0	32	25	398	455	5	4	1	10
18/2008	Apr 30-May 06			11.02	16.2	10.9	13	11	232	0	232	0	0	232	3	17	13	133	166	2	1	15	18
19/2008	May 07-May 13			10.89	10.91	10.6	10.9	14	169	0	169	0	0	169	5	16	16	125	162	11	1	90	102
20/2008	May 14-May 20			10.86	15.77	11.9	13.6	20	551	0	551	1	0	552	5	26	33	295	359	10	18	118	146
21/2008	May 21-May 27			10.34	10.6	11.4	12.7	12	1,264	0	1,264	0	0	1,264	7	17	4	42	71	18	7	37	62
22/2008	May 28-Jun 03			9.08	10.54	11.6	13.2	21	4,423	0	4,423	0	0	4,423	30	88	0	50	168	27	44	50	121
23/2008	Jun 04-Jun 10			9.74	9.91	13.5	13.7	5	1,231	0	1,231	0	0	1,231	13	45	0	18	76	9	7	20	36
<b>Totals</b>								197	10,778	0	10,778	6	0	10,784	63	890	146	1,890	2,990	120	129	370	619

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: 6/11/2008