

Willow Creek Downstream Migrant Trap Site  
2010 In-Season Trapping Update –July 29, 2010

Synopsis: The 2010 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 8<sup>th</sup>, 2010 with the installation of two traps. A third trap was installed March 9<sup>th</sup>, 2010. See attached catch summary for details of this narrative.

This summary includes data from March 9<sup>th</sup>, 2010 through July 20<sup>th</sup>, 2010 and is presented as **raw catch**. No expansions have been calculated at this time. Heavy debris load and high flows have occasionally resulted in null sets, causing less than 21 trap days (3 traps x 7 days) in some weeks resulting in variable effort over the season; therefore raw catch numbers should be interpreted with caution.

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 were greater than 1.0 for all weeks sampled except JW 10 and 11. Efficiency calibrations were conducted with freeze-branded hatchery Chinook salmon during Julian Weeks 10-28.

Raw daily catches of steelhead (*Oncorhynchus mykiss*) smolts (age 1+) have been relatively steady since the beginning of trapping with hatchery steelhead showing up in JW 12; catch of steelhead smolts dropped off beginning mid-June. Weekly mean Fulton's K values of Steelhead smolts were greater than 1.0 for all weeks sampled except JW 14 and JW 18-20 and JW 22. The drop in condition factor in the later weeks is consistent with smoltification processes. Steelhead YOY numbers have increased in the recent weeks and appear to have peaked, but catch is still consistent.

Raw daily catches of coho salmon (*Oncorhynchus kisutch*) are lower than last year at this time but not significantly lower than other years prior. Weekly mean Fulton's K value of natural coho salmon smolts has varied greatly from week to week due to low catches. Hatchery Coho smolts occurred in the catch beginning Julian Week 15.

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: 3/9/2010  
DayMax: 7/20/2010

U.S. Fish and Wildlife Service, Arcata Field Office, 1655 Heindon Rd., Arcata, CA, 95521, (707) 822-7201 Preliminary, all data subject to revision.

JW /Year Week Range		*Flows (cfs) Min Max		**Dissolved Oxygen (mg/L) Min Max		**Water Temp (C) Min Max		Trap Days Sampled	CHINOOK ( <i>O. tshawytscha</i> )					STEELHEAD ( <i>O. mykiss</i> )					COHO ( <i>O. kisutch</i> )				
									YOY														
									No Clip	Ad-Clip	Total	1+	1+/AD	Total	YOY	1+	2+	Ad-Clip	Total	YOY	1+	M-Clip	Total
10/2010	Mar 05-Mar 11			15.8	15.8	6.94	8	8	140	0	140	11	0	151	0	18	0	0	18	0	2	0	2
11/2010	Mar 12-Mar 18			13.84	17.56	6.66	8.96	17	173	0	173	7	0	180	7	16	0	0	23	0	3	0	3
12/2010	Mar 19-Mar 25			13.45	17.41	8.71	9.72	21	281	0	281	5	0	286	2	55	0	9	66	0	1	0	1
13/2010	Mar 26-Apr 01			13.25	14.5	6.94	9.27	17	308	0	308	0	0	308	3	35	0	63	101	0	1	0	1
14/2010	Apr 02-Apr 08			14.8	20.35	6.5	9.28	17	285	0	285	3	0	288	4	32	0	602	638	3	3	0	6
15/2010	Apr 09-Apr 15			13.22	30.05	8.44	8.96	10	601	0	601	0	0	601	0	17	0	36	53	3	1	16	20
16/2010	Apr 16-Apr 22			13.35	14.95	8.99	10.9	17	954	0	954	0	0	954	0	14	0	9	23	1	0	3	4
17/2010	Apr 23-Apr 29			12.71	13.74	10.3	11	15	499	0	499	0	0	499	1	24	0	27	52	2	3	4	9
18/2010	Apr 30-May 06			12.74	14.47	8.85	10.8	11	83	0	83	1	0	84	0	26	0	34	60	3	4	11	18
19/2010	May 07-May 13			12.53	14.12	9.25	11	14	258	0	258	1	0	259	1	12	0	26	39	0	2	13	15
20/2010	May 14-May 20			12.13	12.8	10.8	12.1	21	742	0	742	0	0	742	5	25	0	58	88	2	4	78	84
21/2010	May 21-May 27			11.91	13.36	9	11.0	21	436	0	436	0	0	436	1	15	0	21	37	2	2	29	33
22/2010	May 28-Jun 03			11.36	13.38	10.7	13.3	20	376	0	376	0	0	376	3	31	0	50	84	5	10	85	100
23/2010	Jun 04-Jun 10			10.88	11.75	11.6	13.8	10	620	48	668	0	0	668	1	22	0	13	36	0	3	18	21
24/2010	Jun 11-Jun 17			8.99	13.37	13	14.9	21	4,270	348	4,618	0	0	4,618	6	8	0	9	23	3	4	11	18
25/2010	Jun 18-Jun 24			12.31	16.48	13.5	15.7	21	7,233	620	7,853	0	0	7,853	16	15	0	7	38	6	5	1	12
26/2010	Jun 25-Jul 01			11.88	15.43	14.9	16.8	21	6,475	599	7,074	0	0	7,074	52	13	0	1	66	5	6	4	15
27/2010	Jul 02-Jul 08			9.73	12.85	14.9	18.5	19	16,547	1,228	17,775	0	0	17,775	129	2	0	1	132	6	3	1	10
28/2010	Jul 09-Jul 15			8.81	12.62	17.4	21.5	21	636	446	1,083	0	0	1,083	88	2	0	0	90	1	1	0	2
29/2010	Jul 16-Jul 22			8.24	9.3	19.1	22.1	15	450	371	821	1	0	822	90	0	0	0	90	2	0	0	2
Totals								337	41,367	3,660	45,028	29	0	45,057	409	382	0	966	1,757	44	58	274	376

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: 7/29/2010