

Life Cycle Monitoring Weekly Update 4/24/15

Mid Coast (Chris Lorion, Assistant Project Leader)

Coho smolt numbers increased at the mid-coast smolt traps this past week, but we are still seeing fewer fish than we would expect this time of year at several of our sites. The trap with the highest counts is Cascade Creek, where we have had several recent days with over 100 smolts. Trap efficiency is around 90% at Cascade Creek, so trap catch there is pretty close to an out-migrant count. The Lobster Creek sites are also consistently catching 20-30 smolts per day, along with lots of cutthroat trout. In fact, cutthroat trout numbers have been strong at all the traps this week, with a good showing of fish in the 160-249 mm group. At the Mill Creek sites, we are still waiting for the smolts to show up, especially at Yaquina-Mill Creek where catches are still in the single digits. At Siletz-Mill, we have struggled with low trap efficiency, and the total number of coho smolt out-migrants remains very low for the year. On a more positive note, the PIT tag antenna array has now functioned smoothly for the last 5 weeks (a new record), and is picking up almost all of the PIT-tagged smolts that are avoiding the smolt trap. At Tenmile Creek, we installed a ramp in front of the trap last week and greatly improved trap efficiency, especially for those wily steelhead smolts. We are now catching 20-40 steelhead smolts per day there, along with 20-30 coho smolts. We also continue to see eulachon at the trap, and it looks like this will be the second best year for eulachon we've had in 24 years of trapping at this site.

Mid-South Coast (Pat Burns, Assistant Project Leader)

West Fork Smith:

Numbers of adult steelhead at the trap site have slowed dramatically. We will begin shutting down the adult trapping sometime next week. The 281 tagged adults (152 females and 129 males) this year is our third highest for the project since its beginnings in 1999. Spawning surveys are ongoing but activity has been slow with the majority of activity occurring on the mainstem reaches. For the season we have made a total of 225 observations where the presence/absence of floy tags could be determined. Tagged adults account for 54% of the observations made. Our preliminary spawner population for the sub-basin is 549 adult steelhead. We did see a dramatic increase in the capture of coho smolts this week. Sunday was a big day with 643 coho smolts captured. The rest of the week has averaged 300 coho smolts a day. Flow is dropping fast on the river, the trap is pulled up as far as it will go and the legs have been dropped. It will be interesting to see how long we can go before motorizing this trap also.

Winchester Creek:

The catch of coho smolts at the trap site appears to be increasing. Last week we caught a total 41 coho smolts, our highest weekly catch to date, but only recaptured three. Coho fry numbers have dwindled to a couple per day and should continue that way for the rest of the season.

N Scappoose Creek (Ron Constable, Assistant Project Leader):

Can you guess what I have to report for adult fish? If you are thinking that those slackers in Scappoose did not catch any steelhead in the adult trap for like, the 10th week in a row, you would be correct. All signs indicate we will have only 12 adult steelhead this season, the lowest count in some time. The smolt trap, on the other hand, is starting to pick up and, we are slaying 'em, as they used to say back in the day. This week we caught 39 coho smolts with 20 recaps, 13 steelhead smolts with 5 recaps, and 40 larger cutthroat (119mm or larger) with and outstanding 33 recaps. That is some old school trapping,

son. Hopefully we can keep fishing this well as we enter peak migration times, which are just around the corner.

Chum Reintroduction (Brian Alfonse, Crew Leader):

Warm, dry weather along the Lower Columbia this week caused a drop in stream flow throughout all of our systems. Chum fry catch continued to decline at Big Creek and Stewart creek trap sites, and the peak of the migration appears to be over. Daily average chum fry catch is now at 2 fry/ day at Stewart Creek and 6 fry/ day at Big Creek. Coho smolt catch increased each day this week at the Clatskanie River trap and was >100 smolts/ day on Tuesday and Wednesday. We are also starting to catch more Steelhead and Cutthroat trout smolts at Clatskanie; daily average catch is now 17 steelhead/ day and 9 Cutthroat trout/ day. More small coho fry (<32mm FL) were observed at Stewart Creek this week, with average daily catch rates of 53 fry/ day. The picture provided shows three of these small coho fry next to two chum fry (middle). We also caught our first group of trout fry at Stewart Creek; this is three weeks earlier than when we observed them last year.



North Coast (Derek Wiley, Assistant Project Leader)

EF Trask:

After several slow weeks at the adult trap, warm weather last weekend and early this week brought a nice push of adult steelhead into the EF Trask. Since last Friday we captured 25 wild winter steelhead and 1 hatchery winter steelhead at the trap. A few new redds were counted in our calibration surveys upstream of the dam this week, and with new fish passed earlier this week we should see a few more redds in our next round of surveys. Warm weather earlier this week also ramped up the catch of “big” fish at the screw trap, with daily catch of coho smolts (10-23 fish/day), steelhead smolts (15-39 fish/day), and combined cutthroat trout (11-20 fish/day) all occurring in recent days. We also caught another adult steelhead in the screw trap this week, a previously tagged male trapped at the adult trap

earlier this year. This is our fifth adult steelhead caught in the screw trap this season. See below for more detailed information on juvenile catch at the EF Trask screw trap.

NF Nehalem:

Warm weather late last week and into the weekend ramped up both adult and juvenile fish movement in the basin. Since last Friday we captured 29 wild winter steelhead, 1 hatchery winter steelhead, and 1 sea-run cutthroat at Waterhouse Falls and 5 wild winter steelhead at Fall Cr Falls. With new fish continuing to push into the basin, we are still counting a significant amount of redds and seeing a few live steelhead on spawning surveys. This has made for some long days recently as this year we are doing a complete census of mainstem spawning areas and there are lots of redds (both old and new) to evaluate in those areas. To date, we have counted nearly 500 steelhead redds in our calibration surveys upstream of Waterhouse Falls and observed many others in our mark-recapture only surveys. It will be interesting to see what the next round of mainstem spawning surveys yields today and over the weekend.

Both screw traps are yielding very few fry but lots of big guys, with coho smolt daily catch reaching as high as 377 at the lower trap and 223 at the upper trap this week. Steelhead smolt outmigration is likely around peak, with catch this week ranging from 28-44 fish/day at the lower screw trap before water temps dropped with the recent cold front. Cutthroat trout numbers were also strong before the cold front, with combined catch of all size classes ranging from 13-56 fish/day. See below for more detailed information on juvenile catch at both traps.

On Saturday, we bid farewell to Wes Burton and Seth Webster as they start summer positions at the end of the month. Both guys did a great job for us and we are sad to see them go (and no, not just because we are at the peak of our spring season with crazy fish and redd numbers!). We wish both Wes and Seth the best (say that five times fast.....) and anticipate hearing back from them late this summer when we look to fill our nine-month seasonal positions for next season.

Estimates & Interpolated Catch (in Parentheses) through 4/19/15 at the EF Trask Screw trap

	Species	Size Class	Caught	Marked	Recap	Estimate	95% CI	Efficiency		Fork Length (mm)	
								Weighted	Overall	Peak	Season
EF Trask	Coho	Fry	7,212	1,828	105	133,895	23,855	5.80%	5.74%	39.44	39.77
	Coho	Smolt	207	189	75	552	123	40.26%	39.68%	96.36	99.96
	Chinook	Fry	3,148	1,567	72	71,251	16,595	4.84%	4.59%	42.96	43.46
	Chinook	Fingerling	0	0	0	0					
	Chinook	All	3,148	1,567	72	71,219	16,750	4.84%	4.59%		
	Steelhead	60-89mm	5	5	1	(6)			20.00%		85.00
	Steelhead	90-119mm	14	14	1	(15)			7.14%		101.15
	Steelhead	Smolt	240	223	14	4,226	2,854	6.55%	6.28%	187.20	172.15
	Cutthroat	60-89mm	4	4	1	(4)			25.00%		85.50
	Cutthroat	90-119mm	26	22	1	(28)			4.55%		107.19
	Cutthroat	120-159mm	64	57	3	(69)			5.26%		134.65
	Cutthroat	160-249mm	25	25	2	(26)			8.00%		188.48

Estimates & Interpolated Catch (in Parentheses) through 4/19/15 at the Lower (Total Basin) and Upper (Upper Basin) Screw Traps

	Species	Size Class	Caught	Marked	Recap	Estimate	95% CI	Efficiency		Fork Length (mm)	
								Weighted	Overall	Peak	Season
Total Basin	Coho	Fry	18,692	1,307	62	471,057	196,312	4.76%	4.74%	38.56	38.87
	Coho	Smolt	2,610	895	333	6,745	637	39.84%	37.21%	113.52	99.27
	Chinook	Fry	19,414	1,345	66	412,688	282,234	5.61%	4.91%	41.72	42.58
	Chinook	Fingerling	17	15	3	(17)			20.00%		62.06
	Chinook	All	19,431	1,360	69	342,173	96,648	6.73%	5.07%		
	Steelhead	60-89mm	13	13	2	(15)			15.38%		80.62
	Steelhead	90-119mm	42	41	7	(43)			17.07%		104.08
	Steelhead	Smolt	496	418	49	4,129	1,149	12.38%	11.72%	181.32	176.68
	Cutthroat	60-89mm	15	14	4	(17)			28.57%		79.64
	Cutthroat	90-119mm	26	26	6	(29)			23.08%		101.96
	Cutthroat	120-159mm	150	150	14	1,502	835	10.65%	9.33%	146.67	142.66
	Cutthroat	160-249mm	137	136	11	1,848	1,125	8.15%	8.09%	185.40	187.24

	Species	Size Class	Caught	Marked	Recap	Estimate	95% CI	Efficiency		Fork Length (mm)	
								Weighted	Overall	Peak	Season
Upper Basin	Coho	Fry	20,222	1,264	63	434,874	121,598	5.38%	4.98%	36.60	37.27
	Coho	Smolt	1,880	835	285	5,466	584	35.23%	34.13%	101.80	93.95
	Chinook	Fry	3,732	1,054	94	44,215	10,112	9.65%	8.92%	39.84	43.13
	Chinook	Fingerling	2	1	0	(2)			0.00%		61.00
	Chinook	All	3,734	1,055	94	44,174	10,314	9.68%	8.91%		
	Steelhead	60-89mm	8	8	0	(8)			0.00%		82.89
	Steelhead	90-119mm	20	20	2	(21)			10.00%		102.30
	Steelhead	Smolt	203	200	17	2,299	1,105	9.22%	8.50%	161.84	165.00
	Cutthroat	60-89mm	5	3	0	(6)			0.00%		86.00
	Cutthroat	90-119mm	7	7	3	(8)			42.86%		111.71
	Cutthroat	120-159mm	68	67	5	(70)			7.46%		141.58
	Cutthroat	160-249mm	32	32	3	(33)			9.38%		181.78