



Klamath River Outmigrant Monitoring Summary, 2011

Synopsis: The 2011 downstream migrant monitoring season on the mainstem Klamath River is conducted jointly by the USFWS Arcata Fish and Wildlife Office (AFWO), Karuk Tribe of California (KTOC), and USGS Fort Collins Science Center. Monitoring began March 2011 at three sites on the mainstem Klamath River between Iron Gate Dam (rkm 309.65) and the Scott River confluence (rkm 232.95). The upstream-most site (rkm 307.75) is on the right bank downstream of the Bogus Creek confluence on Blue Heron RV Park property. The second site (rkm 293.55) is on the left bank downstream of the Carson Creek confluence and upstream of the I-5 bridge river crossing. The downstream-most site (rkm 237.55) is on the left bank just upstream of the Kinsman Creek confluence. Trapping at the Bogus site is conducted using a single frame net. Two inline, upstream (UPS) and downstream (DNS), eight-foot diameter rotary screw traps (RST) and one frame net are situated at the I-5 site. Frame net sampling at the I-5 was postponed after March 16 due to high flows and may resume at lower flows. One five-foot diameter RST is situated at the Kinsman site. Traps are typically run four nights per week (Monday through Thursday) and checked once daily while in operation. We also conduct weekly depletion seining at the Klamathon/Copco-Ager Bridge crossing (rkm 300.70). Seine catches are not reported in this summary but fish health observations at this site are included.

The first table below summarizes average salmonid catch per day by week. Expansions to population estimates have not been applied to these raw catches at this time. Low catch numbers so far this season may be attributed to the low number of spawners this past fall combined with dilution from relatively high flows. The initial release of YOY Chinook Salmon from Iron Gate Hatchery this year was June 23. This year's hatchery YOY Chinook Salmon were marked (adipose fin clipped and coded wire tagged) at a rate 18%.

The second table below summarizes clinical signs of disease. We merely note external symptoms of infection, which may not always be revealed by infected fish. QPCR assays and histology analyses conducted by the USFWS California-Nevada Fish Health Center (CA-NV FHC) will provide more accurate infection rates. Percentages of live YOY Chinook salmon with distended bellies, gill fungus, and pale gills are summarized. Distended bellies may be a clinical sign of infection by the myxosporean parasites, *Ceratomyxa shasta* and *Parvicapsula minibicornis*. Gills of juvenile salmonids ≥ 45 mm FL are evaluated for color (red, pale/pink, white, or tan) and condition (normal, eroded, or fungal). Pale gills may be due to anemia associated with *Parvicapsula minibicornis* infection. Gill fungus is likely *Saprolegnia* growing upon a columnaris (*Flavobacterium columnare*) infection. The CA-NV FHC annually investigates infection rates of *C. shasta*, *P. minibicornis*, and other pathogens in juvenile salmonids in the Klamath River below Iron Gate Dam. Our field crew samples YOY Chinook salmon for this study on the mainstem Klamath River between Iron Gate Dam and the Scott River confluence. Fish health sampling will conclude once the YOY Chinook salmon have migrated downstream and samples are no longer obtainable. Clinical signs of disease have been minimal so far this season.

The third table below summarizes Chinook and Coho Salmon size (fork length) data in 2011 and makes comparisons with previous years.

The charts that follow display normalized proportions of maximum catch per day for Chinook and Coho Salmon at each trap site. These charts provide an indication of this year's outmigration timing with comparisons against previous years. Ten-year average calculations were made only when the data from at least five years were available.

The final chart displays daily mean discharge March through July below Iron Gate Dam (USGS Gaging Station 11516530) from 2000 to 2011.

If you have any questions regarding this summary, please contact Steve Gough at (707) 825-5197.



USFWS 2011 Mainstem Klamath River Outmigrant Trap Juvenile Salmonid Catch-per-Day Summary

U.S. Fish & Wildlife Service, Arcata Fish & Wildlife Office, 1655 Heindon Road, Arcata, CA 95521, (707)822-7201

Preliminary Data - Subject to Revision

Trap	Calendar Week	Sample Dates	IGD Q (cfs)		Water Temp. (F)*		Trapping Days	Chinook (<i>O. tshawytscha</i>)			Coho (<i>O. kisutch</i>)		Steelhead (<i>O. mykiss</i>)			
			Min	Max	Min	Max		YOY			Age 1+		Age 1+			
								No Clip	AD Clip	Age 1+	YOY	No Clip	LM Clip	YOY	No Clip	AD Clip
Kinsman RST	9	2/25-2/25	-	-	-	-	1	7.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
	10	3/1-3/4	1460	2380	43.5	44.9	3	5.67	0.00	0.33	0.00	0.33	0.00	0.00	1.67	0.00
	11	3/8-3/11	2490	2810	43.9	45.1	4	3.00	0.00	0.00	0.00	0.00	0.00	0.00	2.25	0.00
	12	3/15-3/16	3180	3620	44.1	44.4	1	5.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
	14	3/29-3/30	4210	4910	45.2	45.9	2	6.50	0.00	0.00	2.50	0.00	0.00	0.00	1.00	0.00
	15	4/5-4/8	4250	4980	46.1	48.9	4	5.25	0.00	0.25	4.50	0.00	0.00	0.00	0.75	0.00
	16	4/12-4/15	2990	3650	46.6	48.5	3	28.67	0.00	0.00	1.00	0.00	0.00	0.00	1.67	0.00
	17	4/19-4/22	3730	3890	48.2	49.9	4	27.25	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.00
	18	4/26-4/29	4260	4460	45.9	50.2	4	4.75	0.00	0.00	2.00	0.00	0.00	0.00	1.50	0.00
	19	5/3-5/6	3820	4110	49.1	54.4	3	21.00	0.00	0.00	3.33	0.00	0.00	0.00	1.00	0.00
	20	5/10-5/13	3160	3490	52.9	55.3	3	29.00	0.00	0.00	2.33	0.00	0.00	0.00	2.33	0.00
	21	5/17-5/20	3190	3240	52.8	58.2	4	7.75	0.00	0.00	0.25	0.00	0.00	0.25	2.00	0.00
	22	5/24-5/27	3170	3400	54.1	56.1	4	7.25	0.00	0.00	4.00	0.00	0.00	1.00	0.75	0.00
	23	6/1-6/3	3170	3340	53.8	55.0	3	2.00	0.00	0.00	2.00	0.00	0.00	0.00	3.67	0.00
	24	6/7-6/10	2720	2900	58.8	60.0	4	8.00	0.00	0.00	1.50	0.00	0.00	0.00	4.00	0.00
	25	6/14-6/17	2340	2480	60.8	63.1	4	7.75	0.00	0.00	2.25	0.00	0.00	0.00	0.75	0.00
	26	6/21-6/24	1960	2160	63.4	66.5	3	9.33	0.00	0.00	3.67	0.00	0.00	1.00	5.33	0.00
	27	6/29-6/29	1800	1800	64.3	64.3	1	246.00	57.00	0.00	4.00	0.00	0.00	0.00	2.00	0.00
	28	7/6-7/7	1200	1310	70.1	71.3	2	84.00	11.50	0.00	29.00	0.00	0.00	1.00	2.00	0.00
	29	7/13-7/14	1050	1070	66.8	67.2	2	13.00	0.50	0.00	6.00	0.00	0.00	0.50	1.50	0.00
	30	7/20-7/21	1070	1090	66.7	67.9	2	12.00	0.50	0.00	15.50	0.00	0.00	0.00	3.00	0.00
	31	7/27	1080	1080	69.0	69.0	1	3.00	0.00	0.00	3.00	0.00	0.00	0.00	4.00	0.00
I-5 Frame	11	3/9-3/11	2490	2810	43.0	44.1	3	11.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	12	3/15-3/16	3180	3620	43.3	44.1	2	2.50	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00
I-5 DNS RST	10	3/2-3/3	2280	2380	42.5	44.1	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	11	3/8-3/11	2490	2810	43.0	44.1	4	7.00	0.00	0.50	0.00	0.00	0.00	0.00	0.25	0.00
	12	3/15-3/18	2990	3620	42.8	44.1	3	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	14	3/29-3/30	4210	4910	44.9	45.0	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	15	4/5-4/7	4460	4980	46.8	47.0	3	0.67	0.00	0.00	0.67	0.33	0.00	0.00	0.00	0.00
	16	4/12-4/14	3190	3650	47.2	48.0	3	2.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
	17	4/19-4/22	3730	3890	48.7	49.2	4	2.00	0.00	0.00	1.25	0.00	0.00	0.00	0.00	0.00
	18	4/26-4/29	4260	4460	49.8	52.6	4	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.00
	19	5/3-5/6	3820	4110	51.0	54.6	4	1.75	0.00	0.00	1.25	0.00	0.00	0.00	0.25	0.25
	20	5/10-5/13	3160	3490	53.4	57.0	4	3.75	0.00	0.00	1.50	0.00	0.00	0.00	0.00	0.00
	21	5/17-5/20	3190	3240	55.4	58.1	4	6.50	0.00	0.00	2.00	0.00	0.00	0.25	0.00	0.00
	22	5/24-5/27	3170	3400	55.2	56.7	4	7.50	0.00	0.00	1.25	0.00	0.00	0.25	0.25	0.25
	23	6/1-6/3	3170	3340	56.0	56.7	3	8.33	0.00	0.00	1.00	0.00	0.00	0.00	0.67	0.00
	24	6/7-6/10	2720	2900	58.9	60.9	4	9.75	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00
	25	6/14-6/17	2340	2480	61.8	64.3	4	6.50	0.00	0.00	1.00	0.00	0.00	0.00	0.50	0.00
	26	6/21-6/24	1960	2160	65.5	69.8	4	103.75	23.00	0.00	2.75	0.00	0.00	0.00	0.25	0.00
	27	6/29-6/30	1760	1800	65.5	68.5	2	124.00	22.50	0.00	0.50	0.00	0.00	0.00	1.50	0.00
	28	7/6-7/7	1200	1310	68.4	68.9	2	161.00	26.50	0.00	3.50	0.00	0.00	0.50	1.00	0.00
	29	7/13	1070	1070	73.7	73.7	1	14.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
	30	7/20	1090	1090	73.1	73.1	1	17.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
I-5 UPS RST	10	3/2-3/3	2280	2380	42.5	44.1	1	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
	11	3/8-3/11	2490	2810	43.0	44.1	3	2.33	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.00
	12	3/15-3/16	3180	3620	43.3	44.1	1	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
	14	3/29-3/30	4210	4910	44.9	45.0	2	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	15	4/5-4/7	4460	4980	46.8	47.0	3	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00
	16	4/12-4/14	3190	3650	47.2	48.0	3	3.67	0.00	0.00	2.33	0.00	0.00	0.00	0.00	0.00
	17	4/19-4/22	3730	3890	48.7	49.2	4	3.75	0.00	0.00	1.25	0.00	0.00	0.00	0.25	0.00
	18	4/26-4/29	4260	4460	49.8	52.6	4	0.75	0.00	0.00	0.25	0.00	0.00	0.25	0.25	0.00
	19	5/3-5/6	3820	4110	51.0	54.6	4	4.75	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
	20	5/10-5/13	3160	3490	53.4	57.0	4	2.50	0.00	0.00	1.50	0.00	0.00	0.50	1.00	0.00
	21	5/17-5/20	3190	3240	55.4	58.1	4	7.50	0.00	0.00	2.50	0.00	0.00	0.00	0.50	0.00
	22	5/24-5/27	3170	3400	55.2	56.7	4	10.75	0.00	0.00	4.50	0.00	0.00	0.50	0.25	0.00
	23	6/1-6/3	3170	3340	56.0	56.7	3	7.00	0.00	0.00	1.67	0.00	0.00	0.00	0.67	0.00
	24	6/7-6/10	2720	2900	58.9	60.9	4	7.00	0.00	0.00	2.00	0.00	0.00	0.00	0.25	0.00
	25	6/14-6/17	2340	2480	61.8	64.3	4	9.25	0.00	0.00	1.75	0.00	0.00	0.00	0.00	0.00
	26	6/21-6/24	1960	2160	65.5	69.8	4	78.00	13.25	0.00	4.00	0.00	0.00	0.25	0.25	0.00
	27	6/29-6/30	1760	1800	65.5	68.5	2	142.00	25.50	0.00	1.50	0.00	0.00	0.00	0.00	0.00
	28	7/6-7/7	1200	1310	68.4	68.9	2	116.00	13.50	0.00	4.50	0.00	0.00	1.00	1.00	0.00
	29	7/13	1070	1070	73.7	73.7	1	17.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	30	7/20	1090	1090	73.1	73.1	1	9.00	2.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00



USFWS 2011 Mainstem Klamath River Outmigrant Trap Juvenile Salmonid Catch-per-Day Summary (continued)

U.S. Fish & Wildlife Service, Arcata Fish & Wildlife Office, 1655 Heindon Road, Arcata, CA 95521, (707)822-7201

[Preliminary Data - Subject to Revision](#)

Trap	Calendar Week	Sample Dates	IGD Q (cfs)*		Water Temp. (F)**		Trapping Days	Chinook (<i>O. tshawytscha</i>)			Coho (<i>O. kisutch</i>)			Steelhead (<i>O. mykiss</i>)		
			Min	Max	Min	Max		YOY			Age 1 +			Age 1 +		
								No Clip	AD Clip	Age 1+	YOY	No Clip	LM Clip	YOY	No Clip	AD Clip
Bogus Frame	10	3/2-3/4	2280	2380	42.8	42.8	3	31.33	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.00
	11	3/8-3/11	2490	2810	43.1	43.4	4	57.75	0.00	0.50	1.25	0.00	0.00	0.00	2.50	0.00
	12	3/15-3/18	2990	3620	43.3	44.1	4	134.50	0.00	0.00	5.75	0.00	0.00	0.00	0.50	0.00
	14	3/29-3/31	4210	5250	44.9	45.7	3	177.67	0.00	0.00	0.67	0.00	0.00	0.00	0.33	0.00
	15	4/5-4/7	4460	4980	47.5	48.5	3	215.33	0.00	0.00	4.33	0.00	0.00	0.00	0.33	0.00
	16	4/12-4/14	3190	3650	48.2	49.0	3	321.33	0.00	0.00	11.67	0.00	0.00	0.00	0.00	0.00
	17	4/19-4/22	3730	3890	49.8	49.9	4	388.25	0.00	0.00	37.00	0.00	0.00	0.00	0.50	0.00
	18	4/26-4/29	4260	4460	50.5	51.2	4	127.00	0.00	0.00	11.25	0.00	0.00	0.75	0.50	0.25
	19	5/3-5/6	3820	4110	51.2	53.7	4	94.75	0.00	0.00	12.50	0.00	0.00	1.25	0.25	0.00
	20	5/10-5/13	3160	3490	54.6	57.7	4	52.75	0.00	0.00	6.00	0.00	0.00	2.00	0.00	0.00
	21	5/17-5/20	3190	3240	55.0	57.7	4	16.00	0.00	0.00	3.00	0.00	0.00	1.25	0.00	0.00
	22	5/24-5/27	2280	3400	42.8	56.7	4	16.75	0.00	0.00	3.50	0.00	0.00	2.00	0.00	0.00
	23	6/1-6/3	3170	3340	56.0	56.7	3	18.33	0.00	0.00	0.00	0.00	0.00	2.67	0.67	0.00
	24	6/7-6/10	2720	2900	58.2	59.3	4	9.75	0.00	0.00	0.25	0.00	0.00	1.25	0.75	0.00
	25	6/14-6/17	2340	2480	62.8	63.6	4	4.75	0.00	0.00	0.50	0.00	0.00	0.50	0.00	0.00
	26	6/21-6/22	2080	2160	64.9	66.5	2	2.50	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00

* temperature recorded at time of trap check



USFWS 2011 Mainstem Klamath River YOY Chinook Salmon Clinical Signs of Disease Summary

U.S. Fish & Wildlife Service, Arcata Fish & Wildlife Office, 1655 Heindon Road, Arcata, CA 95521, (707)822-7201

Preliminary Data - Subject to Revis

Site	Calendar Week	Sampling Dates	Weekly Mean IGD Flow (cfs)	Water Temp. (F)*		Belly Condition			Gills					
						Sample Size	Distended		Sample Size	Color		Condition		
							n	%		n	%	Eroded or Fungal	%	
Kinsman	9	2/25	1360	-	-	0	-	-	0	-	-	-	-	
	10	3/1-3/3	1940	43.6	44.9	13	0	0.0%	0	-	-	-	-	
	11	3/8-3/11	2661	43.9	45.1	10	0	0.0%	2	0	0.0%	0	0.0%	
	12	3/15	3050	44.4	44.4	5	0	0.0%	4	0	0.0%	0	0.0%	
	13	-	3850	-	-	-	-	-	-	-	-	-	-	
	14	3/29-3/30	4834	45.2	45.9	7	0	0.0%	0	-	-	-	-	
	15	4/5-4/7	4731	46.7	48.9	15	0	0.0%	0	-	-	-	-	
	16	4/13-4/14	3464	46.6	48.5	40	1	2.5%	37	1	2.7%	0	0.0%	
	17	4/18-4/21	3666	48.2	49.9	64	0	0.0%	59	1	1.7%	0	0.0%	
	18	4/26-4/28	4396	45.9	50.2	8	0	0.0%	7	0	0.0%	0	0.0%	
	19	5/3-5/5	4023	49.1	51.3	33	0	0.0%	33	0	0.0%	0	0.0%	
	20	5/10-5/12	3350	52.9	53.8	59	0	0.0%	58	0	0.0%	0	0.0%	
	21	5/17-5/19	3199	52.8	58.2	23	0	0.0%	23	0	0.0%	0	0.0%	
	22	5/24-5/26	3227	54.1	56.1	24	0	0.0%	24	0	0.0%	0	0.0%	
	23	6/1-6/2	3186	53.8	55.0	3	0	0.0%	2	0	0.0%	0	0.0%	
	24	6/7-6/9	2849	58.8	60.0	17	0	0.0%	16	1	6.3%	0	0.0%	
	25	6/14-6/16	2410	63.0	63.1	18	0	0.0%	18	1	5.6%	0	0.0%	
	26	6/21-6/22	2084	64.0	66.5	9	0	0.0%	9	0	0.0%	0	0.0%	
	I-5	10	3/2-3/3	1940	42.5	44.1	0	-	-	0	-	-	-	-
		11	3/8-3/10	2661	43.0	44.1	59	0	0.0%	0	-	-	-	-
		12	3/15-3/17	3050	42.8	44.1	9	0	0.0%	0	-	-	-	-
		13	-	3850	-	-	-	-	-	-	-	-	-	-
		14	3/29-3/30	4834	44.9	45.0	1	0	0.0%	0	-	-	-	-
		15	4/5-4/7	4731	46.8	47.0	2	0	0.0%	0	-	-	-	-
		16	4/12-4/14	3464	47.2	48.0	15	0	0.0%	1	0	0.0%	0	0.0%
		17	4/19-4/21	3666	48.7	49.2	20	0	0.0%	15	0	0.0%	0	0.0%
18		4/26-4/28	4396	49.8	52.6	9	0	0.0%	5	1	20.0%	0	0.0%	
19		5/3-5/5	4023	51.0	54.6	12	0	0.0%	7	0	0.0%	0	0.0%	
20		5/10-5/12	3350	53.4	57.0	20	0	0.0%	15	1	6.7%	0	0.0%	
21		5/17-5/19	3199	55.4	58.1	40	0	0.0%	39	0	0.0%	2	5.1%	
22		5/24-5/26	3227	55.2	56.7	46	0	0.0%	41	2	4.9%	10	24.4%	
23		6/1-6/2	3186	56.0	56.7	22	0	0.0%	21	2	9.5%	1	4.8%	
24		6/7-6/9	2849	58.9	60.9	38	0	0.0%	34	0	0.0%	0	0.0%	
25		6/14-6/16	2410	61.8	64.3	33	0	0.0%	33	2	6.1%	2	6.1%	
26		6/21-6/23	2084	65.7	66.6	32	0	0.0%	32	0	0.0%	0	0.0%	
Klamathon		10	3/3	1940	43.0	43.0	1	0	0.0%	0	-	-	-	-
		11	3/10	2661	-	-	0	-	-	0	-	-	-	-
		12	3/17	3050	44.4	44.4	25	0	0.0%	0	-	-	-	-
		13	-	3850	-	-	-	-	-	-	-	-	-	-
		14	-	4834	-	-	-	-	-	-	-	-	-	-
		15	4/7	4731	47.9	47.9	30	0	0.0%	4	0	0.0%	0	0.0%
		16	4/12	3464	50.0	50.0	6	0	0.0%	0	-	-	-	-
		17	4/21	3666	51.6	51.6	6	0	0.0%	0	-	-	-	-
		18	4/28	4396	51.3	51.3	7	0	0.0%	0	-	-	-	-
	19	5/5	4023	54.9	54.9	15	0	0.0%	2	0	0.0%	0	0.0%	
	20	5/11	3350	56.1	56.1	9	0	0.0%	3	0	0.0%	0	0.0%	
	21	5/18	3199	57.8	57.8	30	0	0.0%	29	0	0.0%	0	0.0%	
	22	5/25	3227	56.2	56.2	23	0	0.0%	23	0	0.0%	0	0.0%	
	23	6/2	3186	57.5	57.5	1	0	0.0%	1	0	0.0%	0	0.0%	
	24	6/9	2849	-	-	0	-	-	0	-	-	-	-	
	25	6/16	2410	64.2	64.2	17	0	0.0%	17	0	0.0%	0	0.0%	
	26	6/21	2084	66.0	66.0	27	0	0.0%	27	0	0.0%	0	0.0%	
	Bogus	10	3/2-3/3	1940	42.8	42.8	60	0	0.0%	0	-	-	-	-
		11	3/8-3/10	2661	43.3	43.4	90	0	0.0%	0	-	-	-	-
		12	3/15-3/17	3050	43.4	44.1	90	0	0.0%	1	0	0.0%	0	0.0%
		13	-	3850	-	-	-	-	-	-	-	-	-	-
		14	3/29-3/31	4834	44.9	45.7	90	0	0.0%	0	-	-	-	-
		15	4/5-4/6	4731	47.5	48.5	60	0	0.0%	0	-	-	-	-
		16	4/12-4/14	3464	48.2	49.0	90	0	0.0%	6	1	16.7%	0	0.0%
		17	4/19-4/21	3666	49.8	49.9	90	0	0.0%	2	0	0.0%	0	0.0%
		18	4/26-4/28	4396	50.6	51.2	90	0	0.0%	8	0	0.0%	0	0.0%
19		5/3-5/5	4023	51.2	53.7	90	0	0.0%	8	1	12.5%	0	0.0%	
20		5/10-5/12	3350	54.6	57.7	90	0	0.0%	53	1	1.9%	0	0.0%	
21		5/17-5/19	3199	55.0	57.7	48	1	2.1%	41	4	9.8%	0	0.0%	
22		5/24-5/26	3227	55.7	56.7	51	0	0.0%	44	0	0.0%	2	4.5%	
23		6/1-6/2	3186	56.0	56.7	29	0	0.0%	24	2	8.3%	0	0.0%	
24		6/7-6/9	2849	58.2	58.9	23	0	0.0%	15	0	0.0%	0	0.0%	
25		6/14-6/16	2410	62.8	63.6	12	0	0.0%	9	1	11.1%	0	0.0%	
26		6/21-6/22	2084	64.9	66.5	2	0	0.0%	2	0	0.0%	0	0.0%	

* temperature recorded at time of trap check



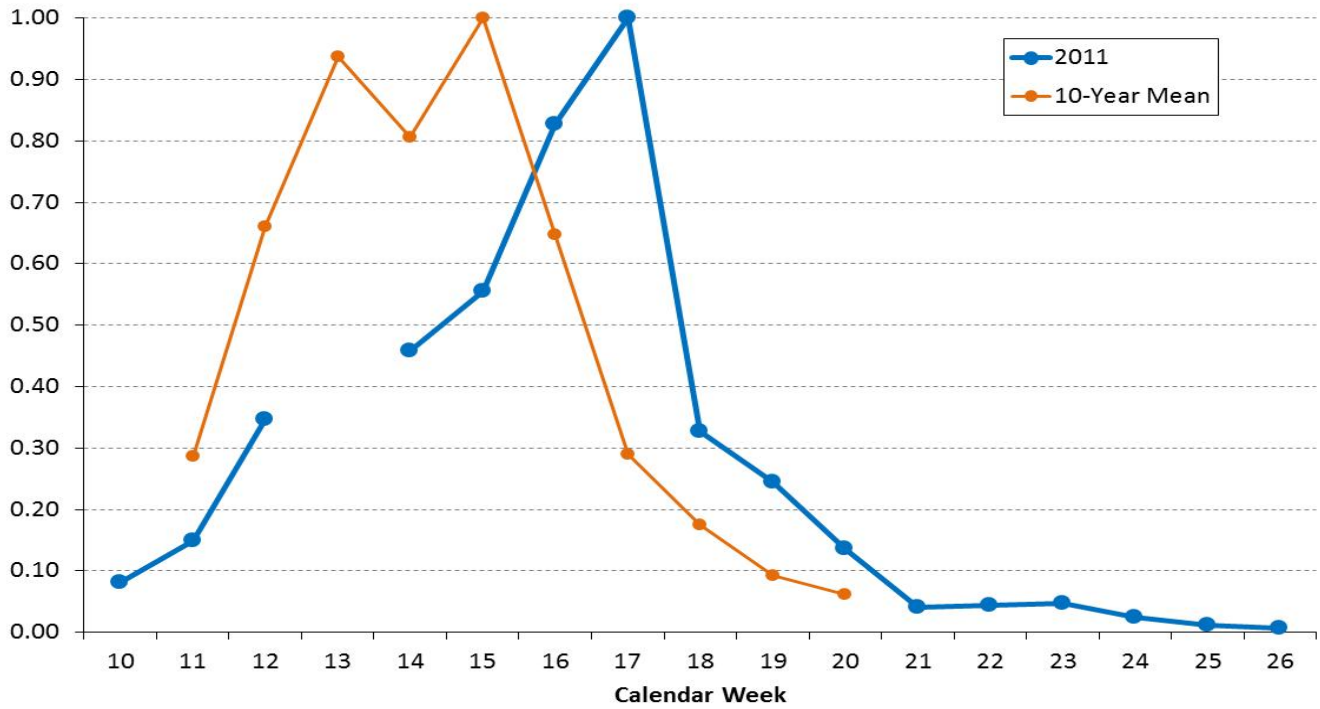
USFWS 2011 Mainstem Klamath River YOY Chinook and Coho Salmon Size Summary

U.S. Fish & Wildlife Service, Arcata Fish & Wildlife Office, 1655 Heindon Road, Arcata, CA 95521, (707)822-7201

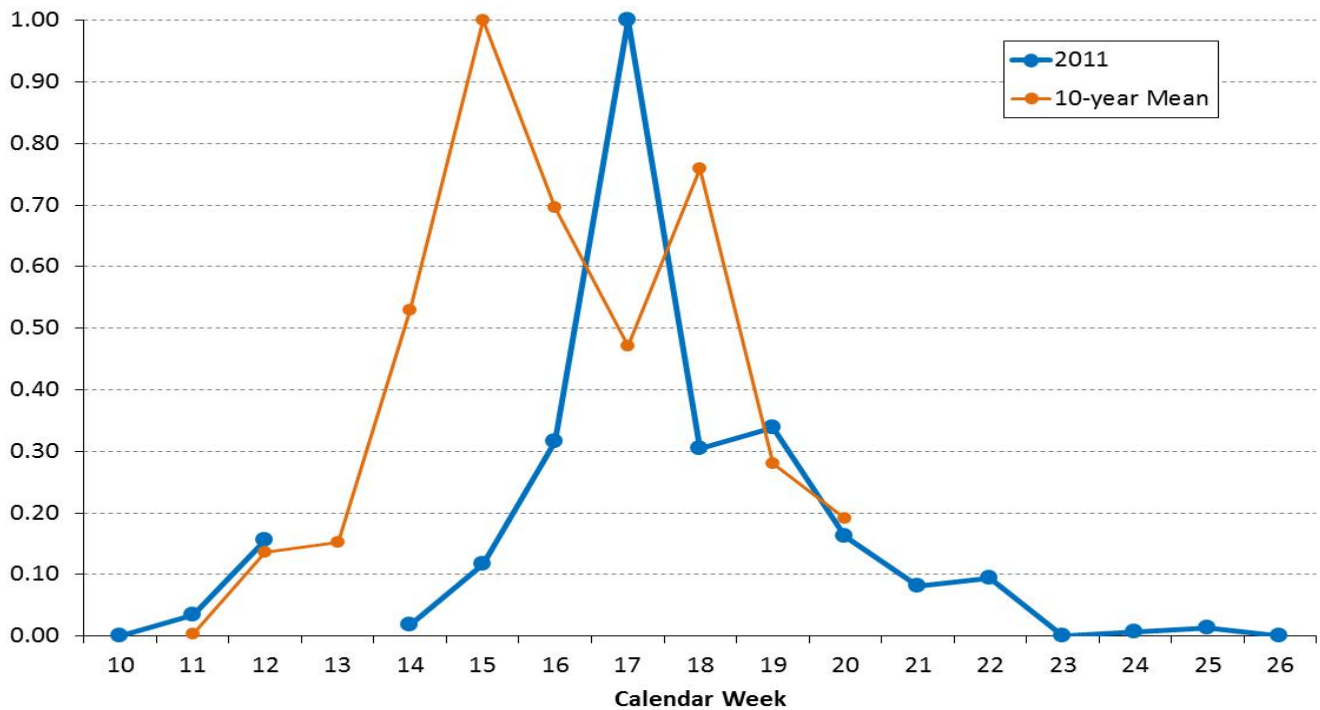
Preliminary Data - Subject to Revision

Site	Calendar Week	2011 Sampling Dates	YOY Chinook (No Ad Clip) - Fork Length Data								YOY Coho - Fork Length Data								
			2011				Last 10-years				2011				Last 10-years				
			n	Min. (mm)	Max. (mm)	Mean (mm)	% > 55 mm	n	Years of data	Mean (mm)	n	Min. (mm)	Max. (mm)	Mean (mm)	% > 55 mm	n	Years of data	Mean (mm)	
Kinsman (RST)	10	3/1-3/3	14	38	43	40.2	0.0%	104	2	39.7	0	-	-	-	-	0	0	-	
	11	3/8-3/10	10	39	57	45.0	10.0%	296	8	40.1	0	-	-	-	-	0	0	-	
	12	3/15	5	42	51	46.6	0.0%	575	9	41.5	0	-	-	-	-	4	2	35.3	
	13	-	0	-	-	-	-	584	7	43.4	0	-	-	-	-	31	3	36.2	
	14	3/29-3/30	13	38	44	40.7	0.0%	662	9	47.0	5	32	35	33.8	0.0%	51	8	35.0	
	15	4/5-4/7	15	30	43	39.1	0.0%	652	9	47.9	17	30	37	34.4	0.0%	63	6	35.4	
	16	4/13-4/14	40	38	87	52.3	25.0%	647	9	53.2	1	33	33	33.0	0.0%	107	7	36.6	
	17	4/19-4/21	64	43	75	56.1	37.5%	623	10	53.9	0	-	-	-	-	34	4	37.1	
	18	4/26-4/28	10	36	70	55.5	50.0%	513	8	60.1	8	35	37	35.8	0.0%	47	7	39.8	
	19	5/3-5/5	53	43	74	59.4	73.6%	619	9	59.4	9	34	38	36.0	0.0%	80	7	43.9	
	20	5/10-5/12	59	44	87	61.9	79.7%	564	9	65.8	2	36	37	36.5	0.0%	61	7	46.4	
	21	5/17-5/19	23	52	86	62.1	73.9%	566	10	68.0	0	-	-	-	-	64	6	54.6	
	22	5/24-5/26	25	45	86	65.7	84.0%	527	10	74.4	13	36	57	44.2	15.4%	65	7	51.8	
	23	6/1-6/2	4	42	93	60.5	50.0%	491	9	74.8	4	43	74	54.5	50.0%	66	7	54.2	
	24	6/7-6/9	20	37	113	80.7	95.0%	506	9	76.1	4	39	69	52.0	25.0%	36	7	57.1	
	25	6/14-6/16	24	58	114	90.8	100.0%	401	8	78.4	7	46	71	61.0	71.4%	21	6	59.9	
	26	6/21-6/22	18	45	114	91.2	94.4%	230	5	79.8	9	50	73	60.9	77.8%	15	3	60.0	
	27	6/29	0	-	-	-	-	90	4	78.3	0	-	-	-	-	18	3	58.4	
	28	7/6-7/7	0	-	-	-	-	2	1	61.5	0	-	-	-	-	2	1	62.0	
	I-5 (RST)	10	3/2-3/3	0	-	-	-	-	0	0	-	0	-	-	-	-	0	0	-
		11	3/8-3/10	32	32	42	39.0	0.0%	204	7	37.3	0	-	-	-	-	0	0	-
		12	3/15-3/17	4	39	41	40.0	0.0%	330	8	38.5	0	-	-	-	-	0	0	-
		13	-	0	-	-	-	-	450	7	38.2	0	-	-	-	-	4	2	37.2
		14	3/29-3/30	1	38	38	38.0	0.0%	524	8	38.4	0	-	-	-	-	11	3	35.3
		15	4/5-4/7	2	36	37	36.5	0.0%	593	8	39.9	3	35	39	36.3	0.0%	15	6	35.7
		16	4/12-4/14	16	36	54	40.9	0.0%	588	8	41.8	10	34	43	36.3	0.0%	30	6	35.0
		17	4/19-4/21	20	34	58	48.1	11.1%	501	8	45.2	8	32	49	37.8	0.0%	23	5	36.6
		18	4/26-4/28	9	34	69	49.0	33.3%	470	8	48.5	1	38	38	38.0	0.0%	4	3	37.0
19		5/3-5/5	13	37	70	53.5	61.5%	395	7	51.4	3	34	36	35.0	0.0%	16	5	41.4	
20		5/10-5/12	21	39	92	62.5	70.0%	393	6	51.8	9	39	63	50.9	33.3%	23	4	46.9	
21		5/17-5/19	44	41	84	65.8	81.0%	257	6	64.1	15	43	84	58.9	60.0%	22	3	51.3	
22		5/24-5/26	58	40	92	71.3	81.0%	156	6	70.2	18	43	72	53.9	33.3%	18	1	49.6	
23		6/1-6/2	29	40	103	83.7	93.5%	117	4	79.9	7	53	66	59.7	85.7%	7	1	59.7	
24		6/7-6/9	50	42	115	88.0	92.0%	100	3	81.5	8	54	69	59.3	62.5%	8	1	59.3	
25		6/14-6/16	36	49	112	92.1	97.6%	44	2	81.7	9	58	81	68.8	100.0%	9	1	68.8	
26		6/21-6/23	44	54	116	97.4	95.5%	47	2	83.4	18	59	82	69.1	100.0%	18	1	69.1	
27		6/29-6/30	0	-	-	-	-	2	1	82.5	0	-	-	-	-	0	0	-	
28		7/6-7/7	0	-	-	-	-	0	0	-	0	-	-	-	-	0	0	-	
Bogus (Frame)		10	3/2-3/3	60	32	40	36.3	0.0%	60	1	36.3	0	-	-	-	-	0	0	-
		11	3/8-3/10	90	31	42	37.1	0.0%	592	8	37.1	2	33	35	34.0	0.0%	2	1	34.0
		12	3/15-3/17	88	33	47	36.7	0.0%	908	9	37.6	13	33	37	35.0	0.0%	159	4	35.3
		13	-	0	-	-	-	-	833	9	38.0	0	-	-	-	-	158	6	35.6
		14	3/29-3/31	90	34	43	38.0	0.0%	985	10	38.0	2	37	37	37.0	0.0%	363	9	38.1
		15	4/5-4/6	60	34	43	38.1	0.0%	871	9	38.6	7	33	38	34.9	0.0%	432	9	35.0
		16	4/12-4/14	90	32	52	39.3	0.0%	967	9	39.8	34	31	44	35.4	0.0%	589	9	35.2
		17	4/19-4/21	90	35	49	38.3	0.0%	951	10	41.5	73	31	41	34.9	0.0%	498	10	37.7
		18	4/26-4/28	89	34	56	39.1	1.1%	1017	10	43.9	42	31	51	35.6	0.0%	586	9	36.8
	19	5/3-5/5	90	34	64	39.8	1.1%	700	10	45.0	31	32	50	37.4	0.0%	271	8	39.7	
	20	5/10-5/12	90	35	69	47.4	23.3%	473	6	45.7	18	34	45	38.6	0.0%	131	4	42.3	
	21	5/17-5/19	50	37	72	52.0	26.0%	245	4	48.8	10	42	56	47.9	10.0%	23	3	42.4	
	22	5/24-5/26	54	39	82	54.9	48.1%	92	3	59.4	13	37	58	49.6	15.4%	14	2	46.8	
	23	6/1-6/2	32	37	86	52.9	21.9%	32	1	52.9	0	-	-	-	-	0	0	-	
	24	6/7-6/9	28	37	96	57.5	39.3%	28	1	57.5	1	38	38	38.0	0.0%	1	1	38.0	
	25	6/14-6/16	16	39	119	67.1	50.0%	16	1	67.1	2	62	64	63.0	100.0%	2	1	63.0	
	26	6/21-6/22	5	54	111	80.8	80.0%	5	1	80.8	0	-	-	-	-	0	0	-	

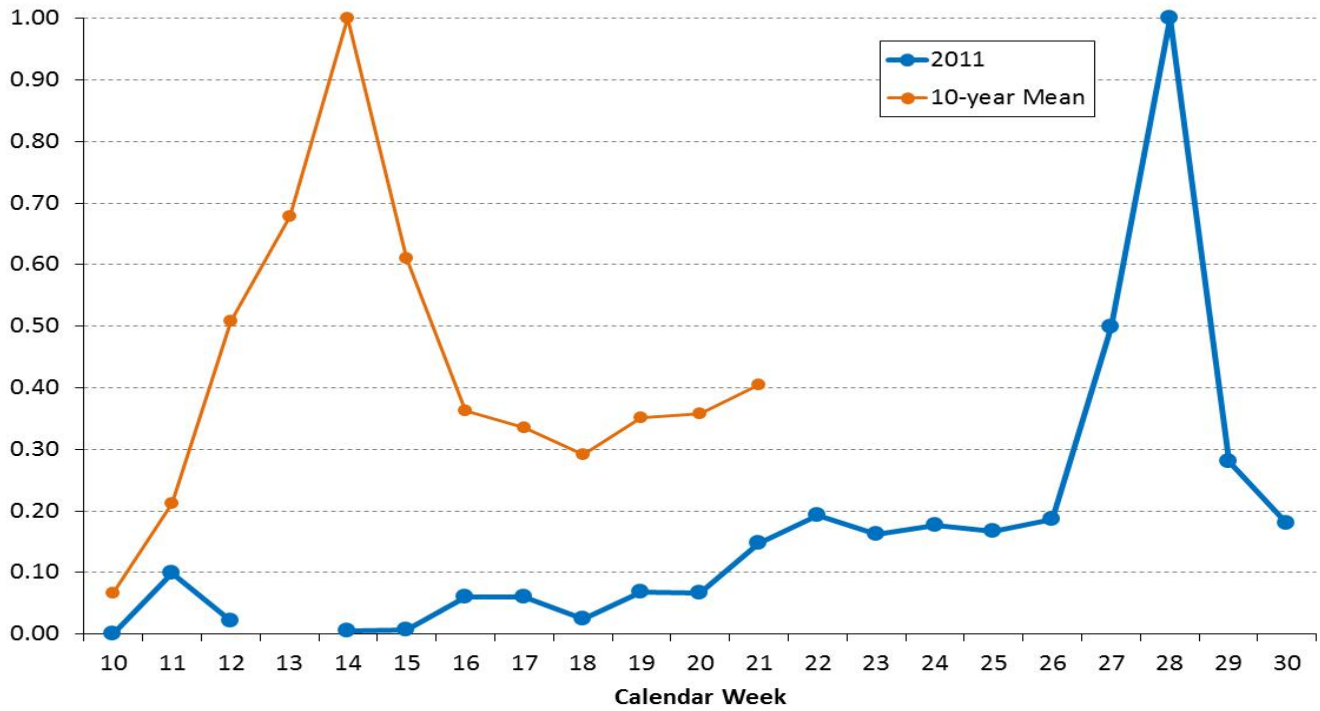
**Normalized Proportion of Maximum Catch per Day
YOY Wild Chinook Salmon - Bogus Site Frame Net**



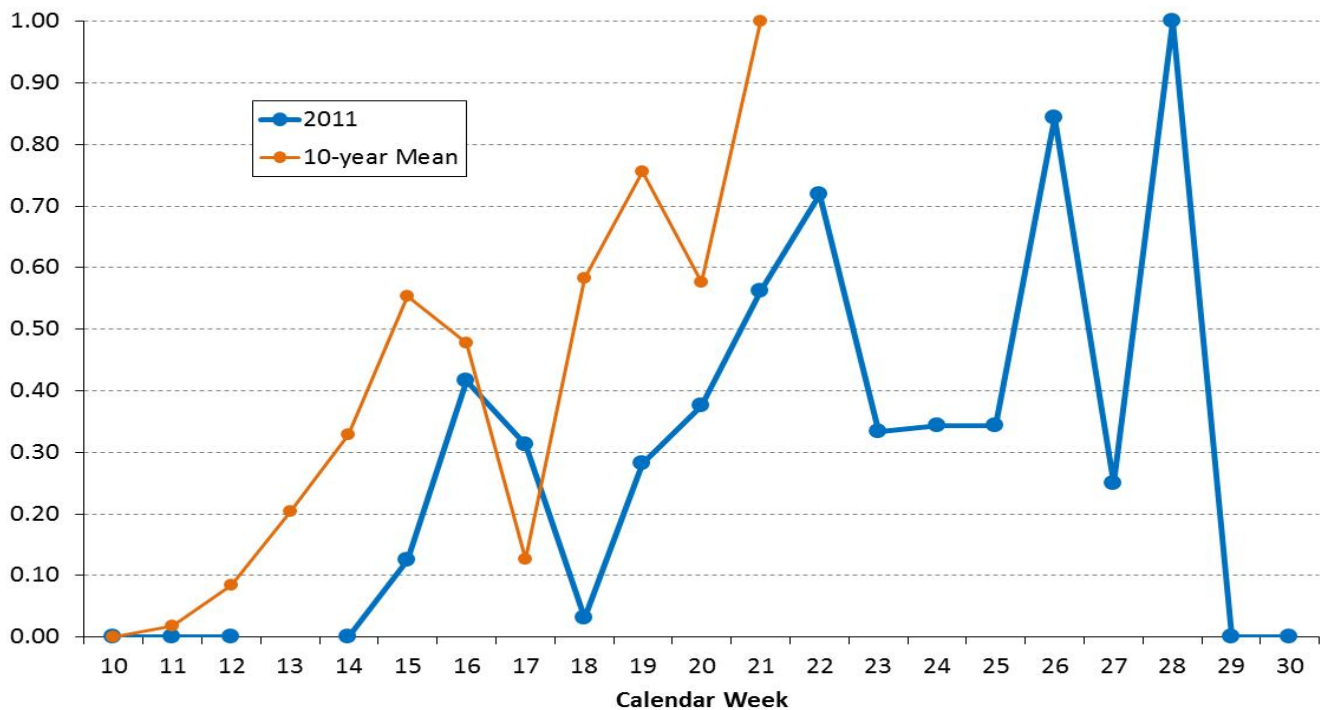
**Normalized Proportion of Maximum Catch per Day
YOY Coho Salmon - Bogus Site Frame Net**



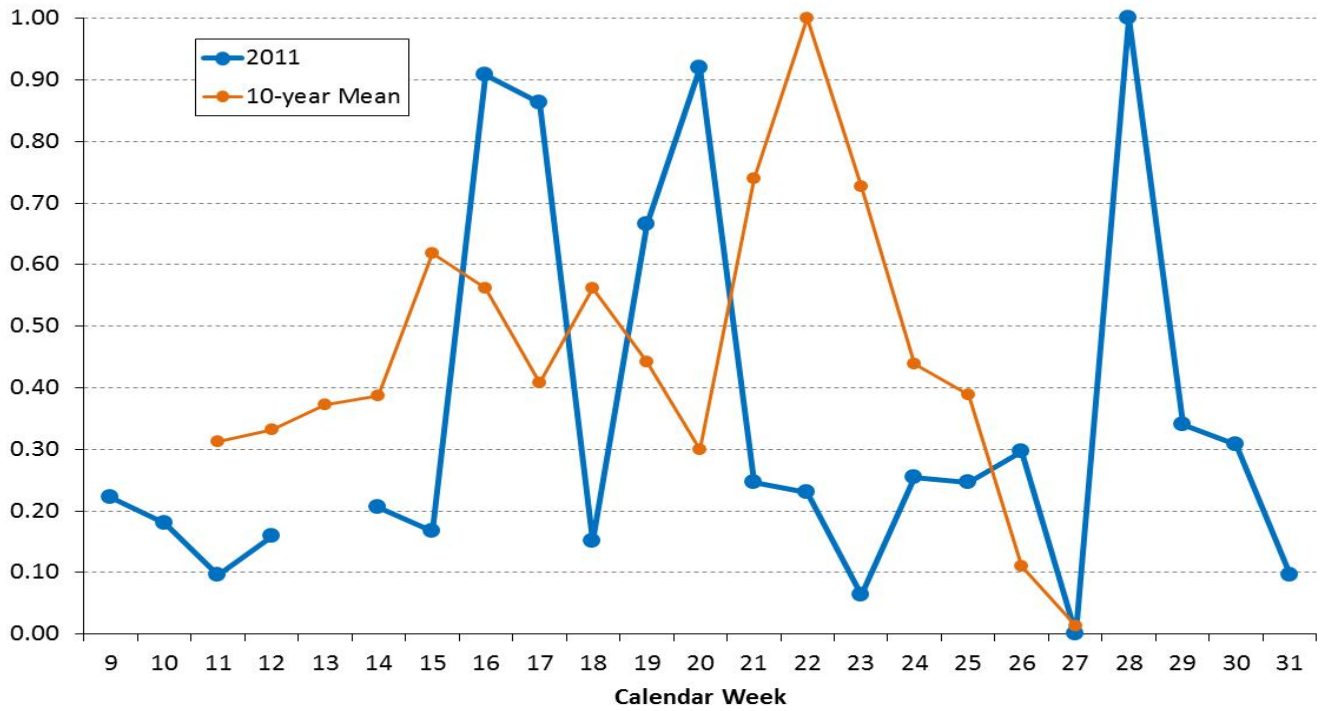
**Normalized Proportion of Maximum Catch per Day
YOY Wild Chinook Salmon - I-5 Site RST's**



**Normalized Proportion of Maximum Catch per Day
YOY Coho Salmon - I-5 Site RST's**



**Normalized Proportion of Maximum Catch per Day
YOY Wild Chinook Salmon - Kinsman Site RST's**



**Normalized Proportion of Maximum Catch per Day
YOY Coho Salmon - Kinsman Site RST's**

