

Agenda

CALIFORNIA DEPARTMENT OF FISH AND GAME 2011 SALMON INFORMATION MEETING

Sonoma County Water Agency
404 Aviation Boulevard
Santa Rosa, California 95403

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Tuesday, March 1, 2011
11:00 a.m. – 2:30 p.m.

Welcome - Moderator Opening Comments and Review Agenda	Marija Vojkovich, DFG (11:00 AM)
Review of 2010 Ocean Sport and Commercial Fishery	Jennifer Simon, DFG (11:10 AM)
DFG California Recreational Fisheries Survey Constant Fractional Marking Program Recoveries	Melodie Palmer-Zwahlen, DFG (11:30 AM)
Review of 2010 Central Valley (CV) System 1. Sacramento River fall Chinook escapement 2. Escapement of other CV Chinook stocks	Brett Kormos, DFG (11:50 AM)
Review of 2010 Klamath River Fall Chinook (KRFC) 1. KRFC escapement by basin / age composition	Morgan Knechtle, DFG (12:15 PM)
Klamath and Sacramento Ocean Harvest Model Results 1. SRFC predictor results/ocean abundance forecast 2. KRFC predictor results/ocean abundance forecast 3. PFMC conservation objectives for 2011 season 4. Harvest model results using 2010 regulations	Dr. Michael O'Farrell, NMFS (12:35 PM)
NMFS Guidance for CA Stocks	Heidi Taylor, NMFS (1:00 PM)
BREAK (10 minutes)	(1:15 PM)
Welcome Back / Introduction of CA Panel	Marija Vojkovich, DFG (1:25 PM)
Public Comment to California Salmon Management Panel	(1:30 PM)

Panel Members

1. Ms. Marija Vojkovich, DFG Marine Region, PFMC DFG Designee
2. Mr. Dan Wolford, PFMC member
3. Mr. David Crabbe, PFMC member
4. Mr. Mark Helvey, NMFS Southwest Region, PFMC NMFS Designee
5. Mr. Jim Hie, Salmon Advisory Subpanel, Conservation
6. Mr. Duncan MacLean, Salmon Advisory Subpanel, Vice-Chair, CA Troll
7. Mr. Paul Pierce, Salmon Advisory Subpanel, CA Sport Fisheries
8. Mr. Craig Stone, Salmon Advisory Subpanel, CA Charter Boat
9. Dr. Michael O'Farrell, NMFS SWFSC, PFMC Salmon Technical Team
10. Ms. Melodie Palmer-Zwahlen, DFG, PFMC Salmon Technical Team

Closing Comments and Evaluation Form

Marija Vojkovich, DFG
(2:25 PM)

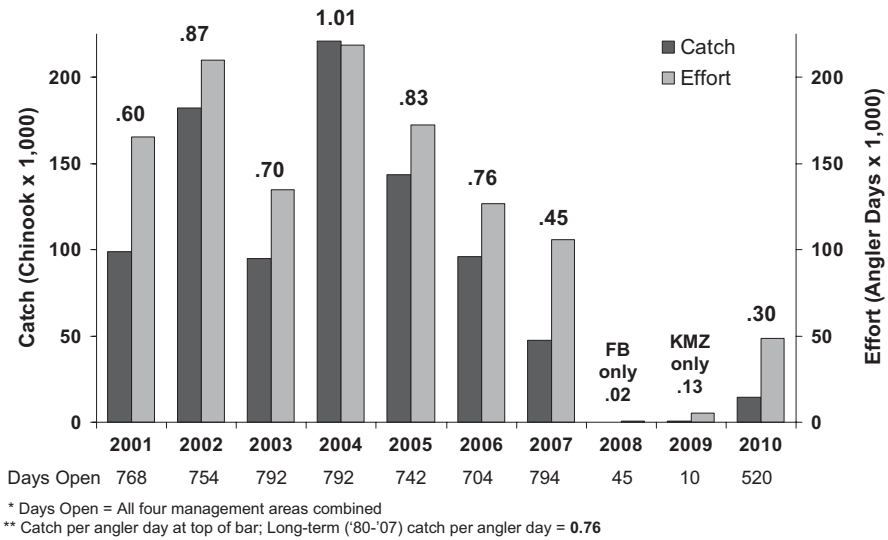
DFG: California Department of Fish and Game

NMFS: National Marine Fisheries Service

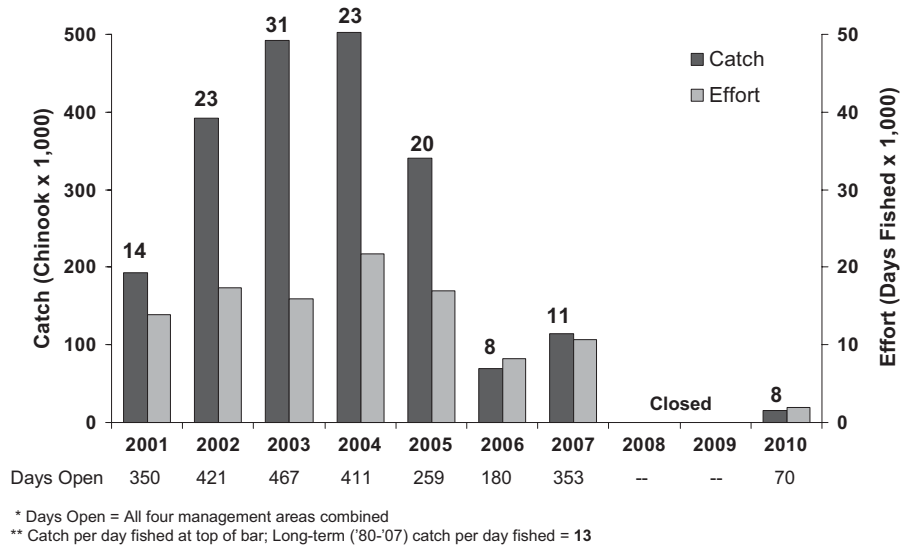
PFMC: Pacific Fishery Management Council

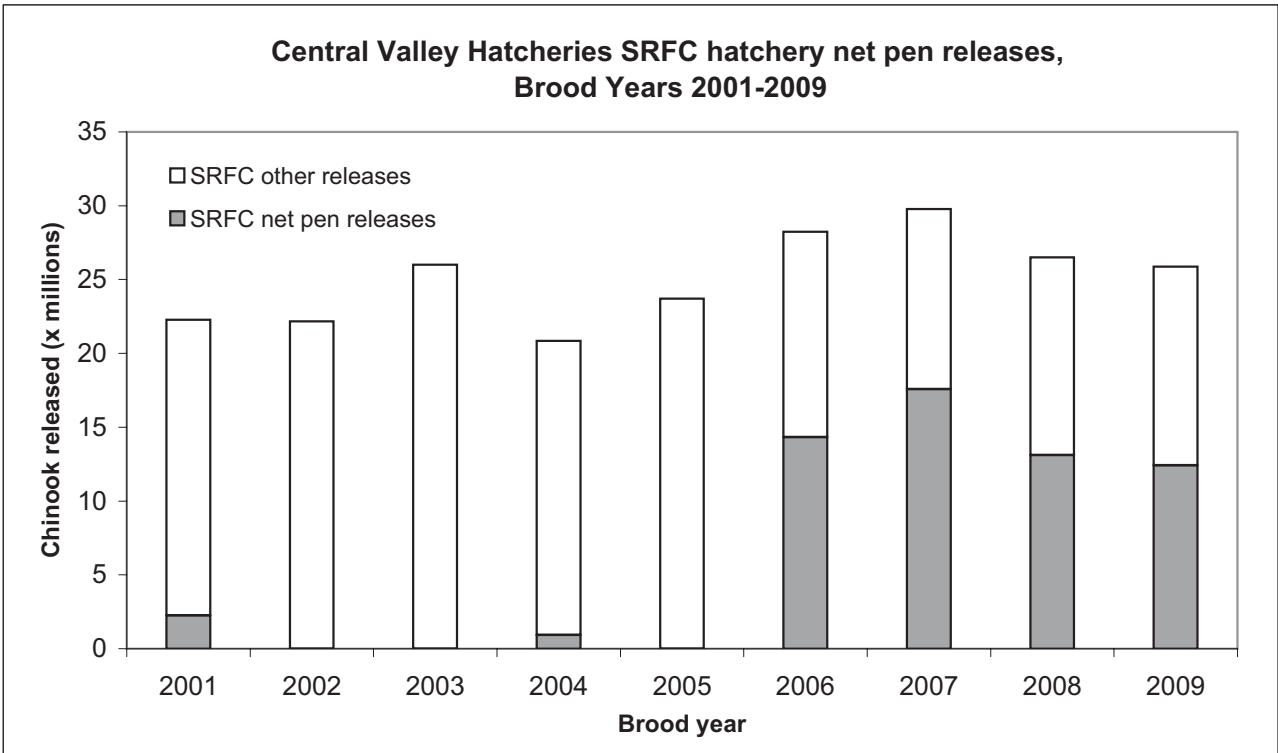
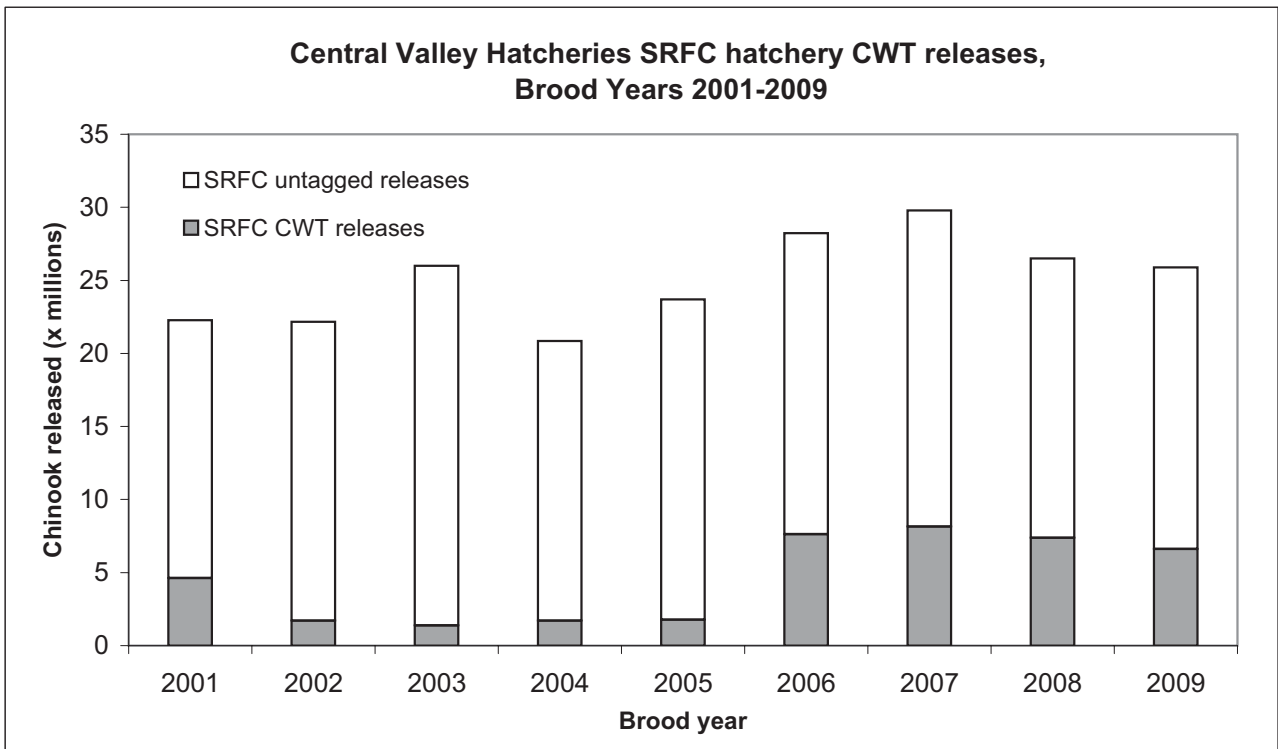
SWFSC: Southwest Fisheries Science Center, Santa Cruz

Comparison of Historical Recreational Catch and Effort, 2001-2010



Comparison of Historical Commercial Catch and Effort, 2001-2010





Chinook salmon production by Central Valley Hatcheries (in millions), brood years 2001-2009.

Hatchery	Run	Brood Year	CWT Tagged	Untagged	Total Released	% CWT	Net pens	%net pen
Coleman National Fish Hatchery	Fall	2001	2.156	9.162	11.318	19%		
	Fall	2002	0.197	13.841	14.038	1%		
	Fall	2003	0.338	12.763	13.101	3%		
	Fall	2004	0.144	11.709	11.854	1%		
	Fall	2005	0.194	13.161	13.354	1%		
	Fall	2006	3.228	9.088	12.316	26%		
	Fall	2007	3.313	9.387	12.701	26%	1.267	10.0%
	Fall	2008	3.500	10.457	13.957	25%	1.428	10.2%
	Fall	2009	2.740	8.829	11.569	24%	1.359	11.7%
Feather River Hatchery	Fall	2001	1.76	4.975	6.734	26%	1.425	21.2%
	Fall	2002	1.52	6.614	8.132	19%		
	Fall	2003	0.94	7.386	8.329	11%		
	Fall	2004	1.57	7.425	8.997	17%	0.935	10.4%
	Fall	2005	1.58	8.764	10.347	15%		
	Fall	2006	2.87	6.919	9.786	29%	8.190	83.7%
	Fall	2007	3.07	7.080	10.148	30%	9.423	92.8%
	Fall	2008	2.63	5.718	8.351	32%	7.761	92.9%
	Fall	2009	2.53	7.173	9.700	26%	9.658	99.6%
Nimbus Fish Hatchery	Fall	2001	0.71	3.508	4.222	17%	0.822	19.5%
	Fall	2002						
	Fall	2003	0.09	4.485	4.578	2%		
	Fall	2004						
	Fall	2005						
	Fall	2006	1.53	4.603	6.130	25%	6.130	100.0%
	Fall	2007	1.77	5.165	6.931	25%	6.880	99.3%
	Fall	2008	1.24	2.954	4.195	30%	3.925	93.6%
	Fall	2009	1.35	3.265	4.613	29%	1.392	30.2%
Sacramento River Fall Chinook	SRFC	2001	4.63	17.645	22.274	21%	2.25	10.1%
	SRFC	2002	1.71	20.455	22.170	8%	0.00	0.0%
	SRFC	2003	1.37	24.634	26.008	5%	0.00	0.0%
	SRFC	2004	1.72	19.134	20.850	8%	0.94	4.5%
	SRFC	2005	1.78	21.924	23.701	7%	0.00	0.0%
	SRFC	2006	7.62	20.610	28.233	27%	14.32	50.7%
	SRFC	2007	8.15	21.632	29.780	27%	17.57	59.0%
	SRFC	2008	7.37	19.130	26.503	28%	13.11	49.5%
	SRFC	2009	6.62	19.267	25.882	26%	12.41	47.9%
Mokelumne River Hatchery	Fall	2001	0.92	4.922	5.847	16%		
	Fall	2002	0.21	7.224	7.432			
	Fall	2003	0.20	6.068	6.264	3%		
	Fall	2004	0.20	6.241	6.446			
	Fall	2005	0.21	6.333	6.539			
	Fall	2006	1.27	3.801	5.075	25%	0.06	4.4%
	Fall	2007	0.65	1.972	2.624	25%	0.55	84.4%
	Fall	2008	0.27	0.005	0.276	98%		
	Fall	2009	2.12	0.017	2.132	99%	2.02	95.3%
Merced R. Fish Facility	Fall	2001	0.93	0.557	1.491	63%		
	Fall	2002	0.92	0.476	1.399	66%		
	Fall	2003	0.56	0.312	0.869	64%		
	Fall	2004	0.95	0.097	1.046	91%		
	Fall	2005	0.62	0.375	0.999	62%		
	Fall	2006	0.30	0.039	0.343	89%		
	Fall	2008	0.03	0.002	0.035	95%		
	Fall	2009	0.15	0.011	0.165	94%		
	Coleman National Fish Hatchery	Late	2001	1.06	0.006	1.069	99%	
Late		2002	0.98	0.024	1.008	98%		
Late		2003	1.02	0.030	1.048	97%		
Late		2004	0.97	0.030	0.995	97%		
Late		2005	0.96	0.043	1.006	96%		
Late		2006	1.12	0.068	1.187	94%		
Late		2007	1.02	0.029	1.051	97%		
Late		2008	1.07	0.036	1.109	97%		
Late		2009	1.12	0.039	1.155	97%		
Feather R. Hatchery	Spring	2001	0.59	1.547	2.133	27%	0.33	55.7%
	Spring	2002	1.39	0.053	1.443	96%	0.69	49.5%
	Spring	2003	0.92	0.967	1.882	49%		
	Spring	2004	1.78	2.062	3.842	46%		
	Spring	2005	1.80	0.006	1.805	100%		
	Spring	2006	2.03	0.049	2.080	98%		
	Spring	2007	2.62	0.065	2.686	98%	1.24	47.4%
	Spring	2008	2.02	0.003	2.024	100%	1.01	49.8%
	Spring	2009	2.09	0.040	2.126	98%	1.06	50.8%
Livingston Stone Nat. Fish Hatchery	Winter	2001	0.24	0.010	0.252	96%		
	Winter	2002	0.22	0.011	0.233	95%		
	Winter	2003	0.22	0.002	0.219	99%		
	Winter	2004	0.14	0.025	0.168	85%		
	Winter	2005	0.16	0.009	0.173	95%		
	Winter	2006	0.18	0.015	0.196	93%		
	Winter	2007	0.07	0.003	0.072	96%		
	Winter	2008	0.13	0.012	0.146	91%		
	Winter	2009	0.18	0.015	0.199	92%		

a/ Estimates obtained from Regional Mark Processing Center, CDFG hatchery database & hatchery personnel

b/ Untagged includes shed tagged

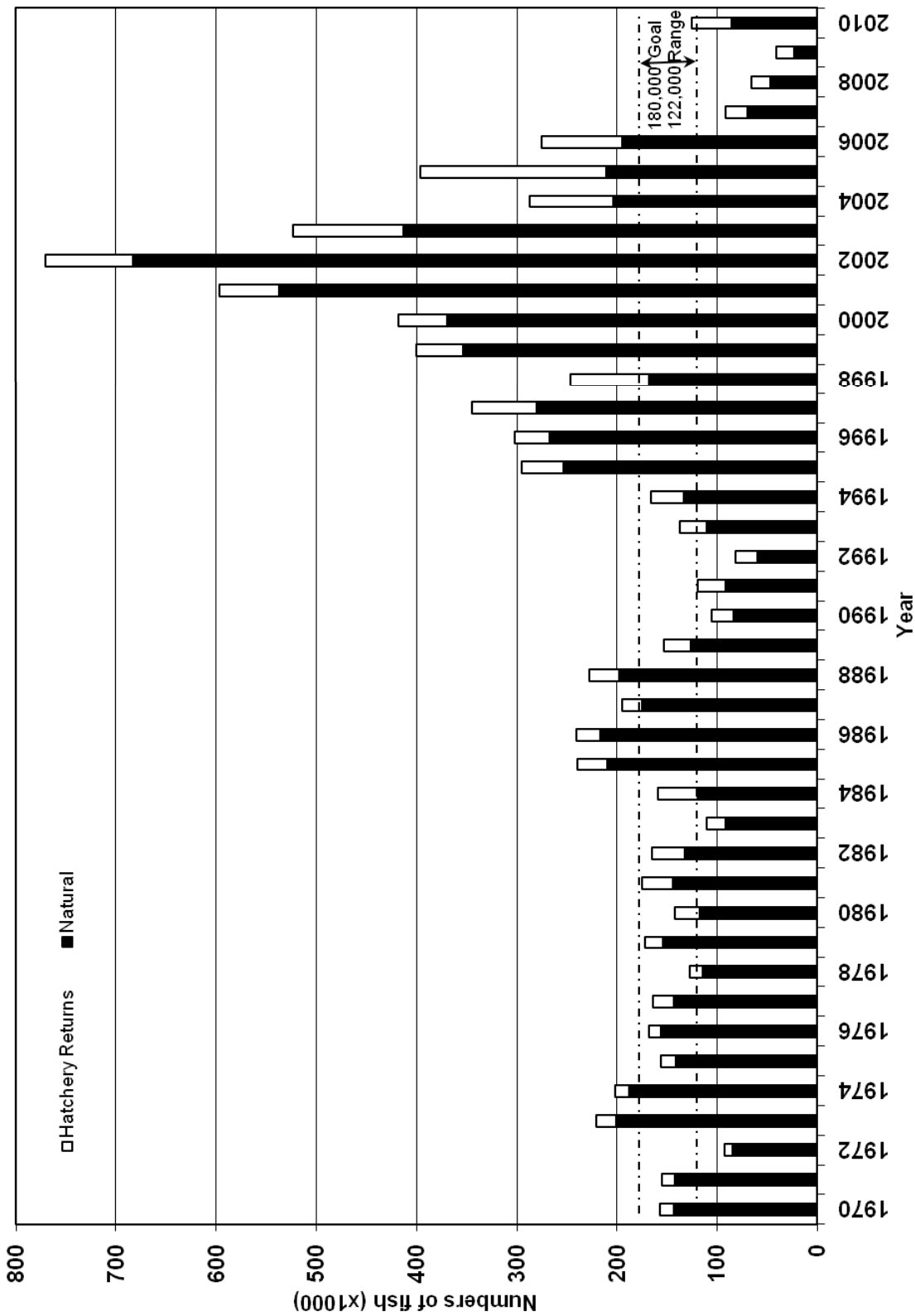


Figure II-1. Sacramento River adult fall Chinook spawning escapement, 1970-2010.

2010 Sacramento River Fall Chinook Hatchery and Natural Escapement

		Jacks	Adults	Total	% Jack	% SRFC Total
Upper Sacramento River Basin	Hatchery	8,572	8,666	17,238	50%	11%
	Natural	6,872	25,682	32,554	21%	21%
Feather River Basin	Hatchery	2,757	17,215	19,972	14%	13%
	Natural	5,151	54,138	59,289	9%	39%
American River Basin	Hatchery	2,389	13,821	16,210	15%	11%
	Natural	1,742	5,831	7,573	23%	5%
Total 2010 SRFC Escapement		27,483	125,353	152,836	18%	100%

Sacramento River Fall Chinook Escapement Estimates 1990 - 2010

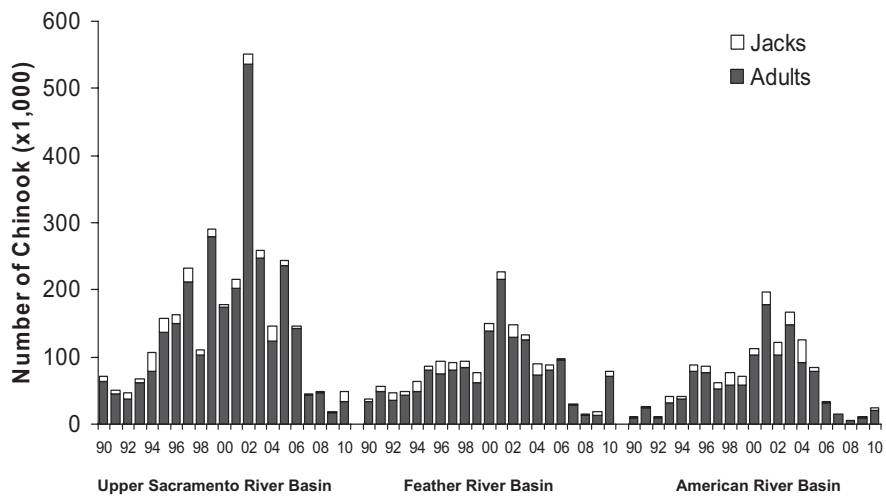


TABLE B-1. California Central Valley natural area fall Chinook salmon spawning escapement in numbers of fish.^{a/}

Year or Average	Upper Sacramento River ^{b/c/}						Lower Sacramento River						American River			Total			Sacramento River			San Joaquin River			Central Valley					
	River ^{b/c/}		Feather River		Yuba River		Jacks		Adults		Jacks		Adults		Jacks		Adults		Jacks		Adults		Jacks		Adults		Jacks			
	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks		
1971-1975	58,462	18,289	40,221	9,745	10,877	1,615	3,695	41,726	3,695	92,824	15,055	151,286	33,345	13,820	1,411	165,105	34,756													
1976-1980	67,012	17,905	33,954	3,544	7,387	1,563	28,509	1,344	69,850	6,452	136,862	24,356	2,886	763	139,747	25,120														
1981-1985	57,913	22,432	36,252	5,243	12,825	5,146	32,332	4,954	81,409	15,343	139,322	37,775	34,930	10,721	174,252	48,496														
1986-1990	87,396	17,244	38,709	6,426	9,261	2,444	24,420	3,323	72,390	12,193	159,787	29,437	10,853	4,377	170,640	33,815														
1991-1995	60,151	11,496	32,578	4,355	8,309	2,131	28,549	4,151	69,436	10,637	129,587	22,134	2,626	904	132,212	23,038														
1996	131,268	11,649	44,593	12,577	23,492	4,408	67,719	7,026	135,803	24,012	267,071	35,661	5,766	5,979	272,837	41,640														
1997	167,353	13,736	47,009	3,538	19,202	6,746	46,036	6,159	112,246	16,444	279,599	30,180	17,983	1,146	297,583	31,325														
1998	60,713	5,137	39,600 ^{d/}	3,400	26,737	4,353	41,094	13,698	107,431	21,451	168,144	26,588	13,119	6,292	181,263	32,880														
1999	256,629	7,495	30,000 ^{d/}	7,500	18,778	5,452	48,311	8,688	97,089	21,640	353,718	29,135	10,708	7,185	364,426	36,320														
2000	152,923	3,900	109,924	7,017	12,954	2,041	93,413	5,646	216,291	14,704	369,214	18,604	36,896	2,578	406,110	21,182														
2001	179,198	11,853	169,588	9,114	21,567	1,825	167,062	13,553	358,217	24,492	537,415	36,345	23,899	3,705	561,314	40,050														
2002	474,812 ^{e/}	11,259	93,766	11,397	18,406	4,796	95,711	10,635	207,883	26,828	682,695	38,087	21,852	3,788	704,547	41,875														
2003	164,802	4,402	85,578	4,369	26,820	1,489	136,238	9,627	248,636	15,485	413,438	19,887	14,519	2,164	427,957	22,051														
2004	70,548	7,220	48,580	5,591	9,260	5,208	75,090	13,774	132,930	24,573	203,478	31,793	7,250	3,310	210,728	35,103														
2005	96,716	3,267	43,738	4,848	16,251	987	54,001	2,842	113,990	8,677	210,706	11,944	15,843	1,577	226,549	13,521														
2006	89,933	2,874	75,545	1,869	7,891	230	21,755	1,145	105,191	3,244	195,124	6,118	5,622	669	200,746	6,787														
2007	36,079	978	21,541	321	2,523	81	9,855	130	33,919	532	69,998	1,510	1,521	164	71,519	1,674														
2008	36,274	2,074	5,703	236	3,084	424	1,791	154	10,578	814	46,852	2,888	2,010	316	48,862	3,204														
2009	12,277	1,624	3,950	897	3,992	803	3,118	575	11,060	2,275	23,337	3,899	1,394	688	24,731	4,587														
2010 ^{f/}	25,682	6,872	40,981	3,933	13,157	1,218	5,831	1,742	59,969	6,893	85,651	13,765	4,003	934	89,654	14,699														

a/ Most estimates based on carcass surveys with a jack length cut-off. In 2004, CDFG reviewed and updated 1971-2003 escapement estimates to reflect final project reports.

b/ Upper Sacramento mainstem estimates generally based on carcass surveys with a jack length cut-off, however jack estimates from Red Bluff Diversion Dam (RBDD) reports have occasionally been used. Early (pre-2001) mainstem Sacramento River adult and jack estimates based on RBDD passage.

c/ Upper Sacramento River escapement includes Sacramento River mainstem; Battle, Clear, Mill, Deer, Butte, Cottonwood, and Cow creeks; and other small tributaries when surveys were conducted. Specific escapement estimates by tributary can be found at www.calfish.org.

d/ Survey methodology was variable; may not be comparable to other surveys.

e/ Change in estimation methodology due to extremely high Battle Creek escapement.

f/ Preliminary.

TABLE B-2. California Central Valley hatchery fall Chinook salmon escapement in numbers of fish.^{a/}

Year or Average	Sacramento Hatcheries												San Joaquin Hatcheries						Central Valley Hatchery Totals			
	C oleman ^{b/}			F eather River ^{b/}			Nimbus ^{c/}			Totals ^{d/}			Mokelumne River			Merced River			Totals		Adults	Jacks
	Adults	Jacks	Totals	Adults	Jacks	Totals	Adults	Jacks	Totals	Adults	Jacks	Totals	Adults	Jacks	Totals	Adults	Jacks	Totals	Adults	Jacks		
1971-1975	1,373	1,167	3,882	1,387	7,791	1,311	4,065	13,661	305	156	460	19	765	175	14,427	4,240						
1976-1980	4,239	1,292	4,261	1,043	7,845	2,270	5,040	17,804	271	59	346	23	617	82	18,421	5,122						
1981-1985	11,557	3,734	6,845	884	10,543	2,444	7,877	30,303	759	734	797	449	1,556	1,183	31,859	9,060						
1986-1990	11,507	2,288	5,837	1,947	6,927	1,943	6,178	24,271	278	286	299	140	577	426	24,847	6,604						
1991-1995	11,948	2,295	10,537	2,762	7,669	1,664	6,721	30,154	1,077	554	239	233	1,316	788	31,471	7,509						
1996	18,848	2,330	6,494	1,613	9,219	2,273	6,216	34,561	1,828	2,055	395	746	2,223	2,801	36,784	9,017						
1997	44,590	6,080	13,358	1,770	7,293	2,435	10,285	65,241	6,305	189	838	108	7,143	297	72,384	10,582						
1998	42,400	1,951	17,567	1,322	17,797	3,979	7,253	77,763	2,686	585	347	452	3,033	1,037	80,796	8,290						
1999	23,194	3,776	12,822	1,104	10,095	5,543	10,422	46,112	1,611	1,542	650	987	2,261	2,529	48,372	12,952						
2000	20,793	866	16,470	1,676	11,060	1,893	4,435	48,323	4,637	887	1,615	331	6,252	1,218	54,575	5,653						
2001	23,710	988	24,001	871	11,649	4,547	6,406	59,360	4,467	1,427	1,137	523	5,604	1,950	64,964	8,356						
2002	61,895	4,029	17,516	2,991	7,762	8,146	15,166	87,173	5,800	2,119	1,250	588	7,050	2,707	94,223	17,873						
2003	82,882	5,352	13,615	1,352	13,081	7,032	13,736	109,578	5,108	3,009	392	157	5,500	3,166	115,078	16,902						
2004	52,145	17,027	15,769	5,535	15,493	21,390	43,952	83,407	5,477	4,879	456	594	5,933	5,473	89,340	49,425						
2005	139,979	2,694	20,597	1,787	24,723	3,437	7,918	185,299	5,035	528	346	75	5,381	603	190,680	8,521						
2006	56,819	1,013	13,400	634	9,687	681	2,328	79,906	2,801	1,338	130	20	2,931	1,358	82,837	3,686						
2007	11,543	201	5,169	172	4,664	21	394	21,376	1,004	40	70	9	1,074	49	22,450	443						
2008	10,181	458	5,031	323	3,300	453	1,234	18,512	116	123	39	37	155	160	18,667	1,394						
2009	5,433	719	6,240	3,723	5,863	1,126	5,568	17,536	730	823	109	137	839	960	18,375	6,528						
2010 ^{e/}	8,666	8,572	17,215	2,757	13,821	2,389	13,718	39,702	3,543	1,733	115	31	3,658	1,764	43,360	15,482						
GOALS ^{f/}	12,000	-	6,000	-	4,000	-	-	22,000	5,000	-	1,000	-	6,000	-	26,000	-						

a/ In 2004, CDFG reviewed and updated 1971-2003 adult and jack spawner escapements based on final project reports.

b/ Chinook spawning during the fall; may include spring run fish.

c/ Nimbus Hatchery adult and jack counts include fish taken at Nimbus Weir, 1979-current.

d/ Total adults in Sacramento Hatcheries include Tehama-Colusa Fish Facility escapements, 1971-1985.

e/ Preliminary.

f/ Current hatchery-specific goals, not PFMC goals.

2010 Other Central Valley Chinook Stocks Hatchery and Natural Escapement					
		Jacks	Adults	Total	% Jack
Central Valley Late Fall Chinook	Hatchery	824	4,618	5,442	15%
	Natural	176	4,229	4,405	4%
	Total	1,000	8,847	9,847	10%
Sacramento River Winter Chinook	Natural	41	1,555	1,596	3%
	Total	41	1,555	1,596	3%
Central Valley Spring Chinook	Hatchery	6	1,655	1,661	0.3%
	Natural	---	2,951	2,951	---
	Total	6	4,606	4,612	---
San Joaquin Fall Chinook	Hatchery	1,764	3,658	5,422	33%
	Natural	934	4,003	4,937	19%
	Total	2,698	7,661	10,359	26%

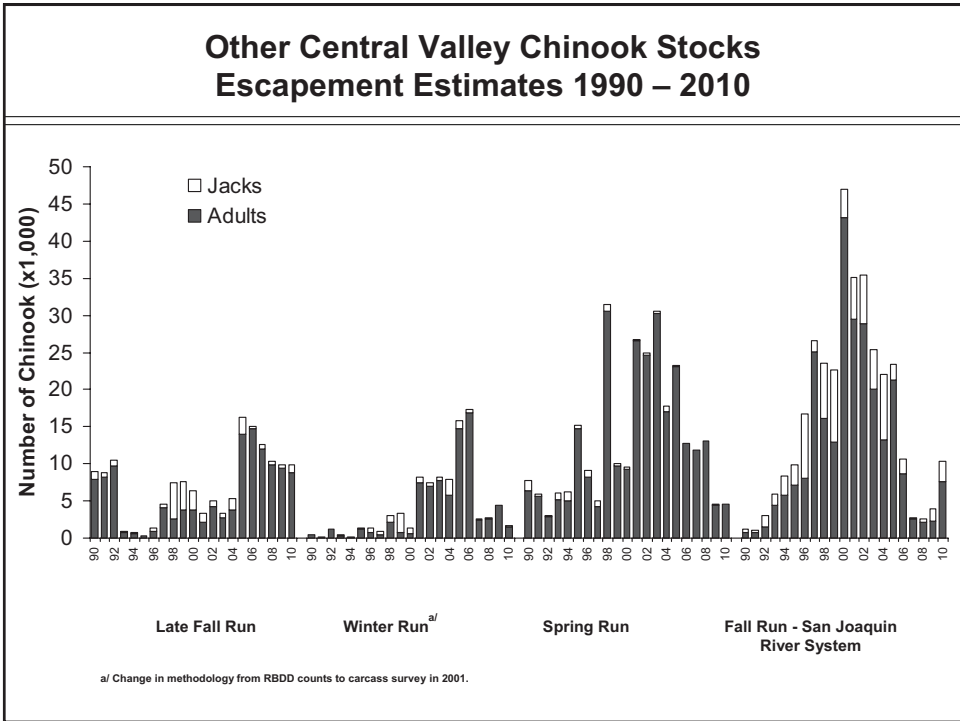


TABLE B-3. Sacramento River late-fall, winter, and spring Chinook salmon spawning escapement in numbers of fish. Upper Sacramento River

Year or Average	Late Fall ^{a/b/c/}						Winter ^{d/}						Spring					
	Adults		Jacks		RBDD ^{a/c/}		Carcass Survey		Tributary ^{e/} Adults and Jacks ^{h/}		Sacramento River ^{a/h/}		Feather River ^{e/}					
	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks				
1971-1975	18,193	1,087	22,863	9,063	--	--	5,194	5,098	1,718	366	--	--	366	--				
1976-1980	9,662	1,798	13,499	2,640	--	--	1,201	8,335	2,571	375	--	--	375	--				
1981-1985	8,102	1,746	5,027	921	--	--	1,061	9,798	4,241	1,446	133	133	1,446	133				
1986-1990	10,047	1,761	1,369	390	--	--	1,658	8,795	1,930	2,884	406	406	2,884	406				
1991-1995	3,844 [/]	383 [/]	586	78	--	--	2,813	410	165	3,441	465	465	3,441	465				
1999-2000	16,061 [/]	2,478 [/]	940	1,032	--	--	7,768	242	160	4,393	503	503	4,393	503				
2001	20,614	1,199	1,696	3,827	7,443	781	21,623 [/]	981	0 ^{h/}	4,052	83	83	4,052	83				
2002	39,818	765	7,614	1,555	7,047	417	20,198 [/]	430	53	3,982	207	207	3,982	207				
2003	8,122	613	6,172	3,585	7,675	543	21,798 [/]	0	0	8,373	389	389	8,373	389				
2004	12,458	1,574	2,588	4,604	5,786	2,083	12,556 [/]	763	326	3,630	572	572	3,630	572				
2005	14,047	2,141	3,521	1,778	14,683	1,156	21,319 [/]	21	9	1,811 ^{k/}	24 ^{k/}	24 ^{k/}	1,811 ^{k/}	24 ^{k/}				
2006	14,709	351	4,792	2,623	16,764	385	10,669 [/]	0	0	2,052 ^{k/}	9 ^{k/}	9 ^{k/}	2,052 ^{k/}	9 ^{k/}				
2007	11,954	714	3,004	3,140	2,402	131	8,951 [/]	226	22	2,669 ^{k/}	5 ^{k/}	5 ^{k/}	2,669 ^{k/}	5 ^{k/}				
2008	9,946	381	1,504	2,131	2,521	204	11,943 [/]	0	0	1,056 ^{k/}	10 ^{k/}	10 ^{k/}	1,056 ^{k/}	10 ^{k/}				
2009	9,515	460	m/	m/	4,363	53	3,517 [/]	m/	m/	867 ^{k/}	122 ^{k/}	122 ^{k/}	867 ^{k/}	122 ^{k/}				
2010 ^{l/}	8,847	1,000	m/	m/	1,555	41	2,951 [/]	m/	m/	1,655 ^{k/}	6 ^{k/}	6 ^{k/}	1,655 ^{k/}	6 ^{k/}				

a/ Estimated number of jacks and adults based on sampling at Red Bluff Diversion Dam (RBDD) from unpublished CDFG data. Beginning in 1987 for late-fall and winter runs, estimates have been based on historical run patterns and partial counts at RBDD due to raising of dam gates during the last part of the late-fall run and first part of the winter run.

b/ Since 1998, late-fall adult and jack estimates are based on carcass counts of natural spawners plus fish spawned at Coleman Hatchery.

c/ Variable numbers of late-fall and winter run are trapped at Keswick Dam and spawned at Coleman or Livingston Stone Hatcheries.

d/ RBDD and carcass survey estimates represent alternative methods for determining winter run Chinook escapement.

e/ Natural spawning spring run which are isolated from fall run; primarily Mill Creek, Deer Creek, and Butte Creek escapement.

f/ Sacramento River spring run estimates are the total RBDD counts minus the spring run numbers in the upper Sacramento tributaries. If this number is less than or equal to zero, then upper Sacramento River spring run estimates are zero.

g/ Feather River spring run estimates are primarily fish returning to Feather River Hatchery. Spring run are not distinguished from fall run in the natural spawning surveys and are reported in the fall run natural escapement numbers.

h/ Jack proportion could not be determined.

i/ Primarily number of fish spawned at Coleman Hatchery 1991-1997. No data are available for natural spawners, as RBDD gates were raised during the time coinciding with the late-fall run.

j/ Methodology change from using snorkel survey to carcass survey for Butte Creek spring run estimates.

k/ Methodology change for distinguishing spring run Chinook at Feather River Hatchery was implemented in 2005. Fish arriving at the hatchery prior to the spring Chinook spawning period were tagged and returned to the river. The spring Chinook escapement estimate is the number of these tagged fish that subsequently returned to the hatchery during the spring Chinook spawning period.

l/ Preliminary.

m/ RBDD did not go into operation until June 15th, a month later than normal; thus RBDD winter and spring run estimates are unavailable.

Klamath River Fall Chinook Salmon Age-Specific Escapement, River Harvest, and Run Size Estimates, 2010 Run

Klamath River Technical Team
24 February 2011

Summary

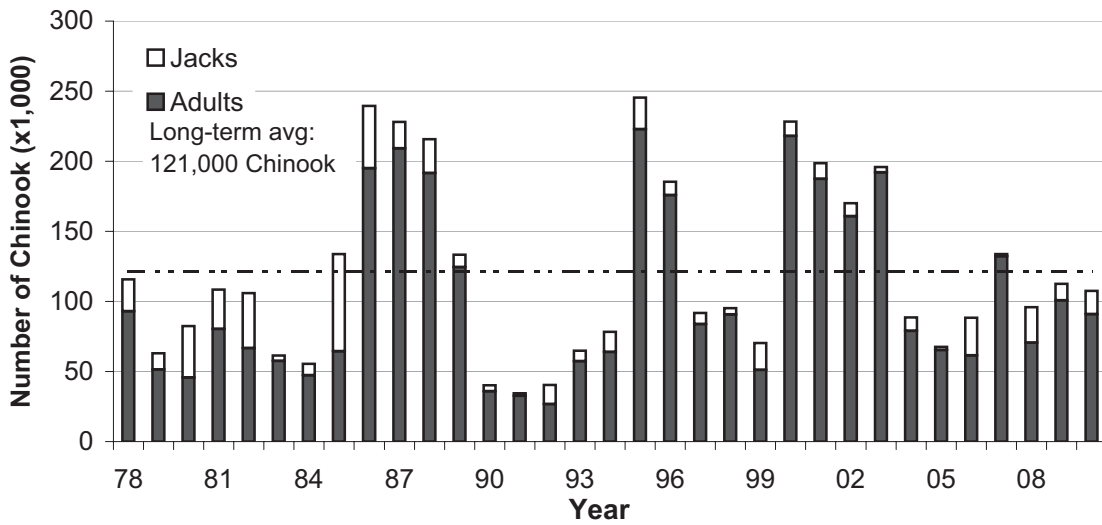
The number of Klamath River fall Chinook salmon returning to the Klamath River Basin (Basin) in 2010 was estimated to be:

<i>Age</i>	<i>Run Size</i>	
	<i>Number</i>	<i>Proportion</i>
2	16,652	0.15
3	46,182	0.43
4	44,411	0.41
5	379	0.00
Total	107,624	1.00

Preseason forecasts of the number of fall Chinook salmon adults returning to the Basin and the corresponding post-season estimates are:

<i>Sector</i>	<i>Adults</i>		
	<i>Preseason Forecast</i>	<i>Postseason Estimate</i>	<i>Pre / Post</i>
<i>Run Size</i>	110,700	91,000	1.22
<i>Fishery Mortality</i>			
Tribal Harvest	34,600	30,000	1.15
Recreational Harvest	12,000	3,000	4.00
Drop-off Mortality	3,300	2,700	1.22
	49,900	35,700	1.40
<i>Escapement</i>			
Hatchery Spawners	20,200	18,100	1.12
Natural Area Spawners	40,700	37,200	1.09
	60,900	55,300	1.10

**Klamath River Fall Chinook
Total Spawning Escapement, 1978-2010**



**Klamath River Fall Chinook
Natural Area Adult Spawning Escapement, 1978-2010**

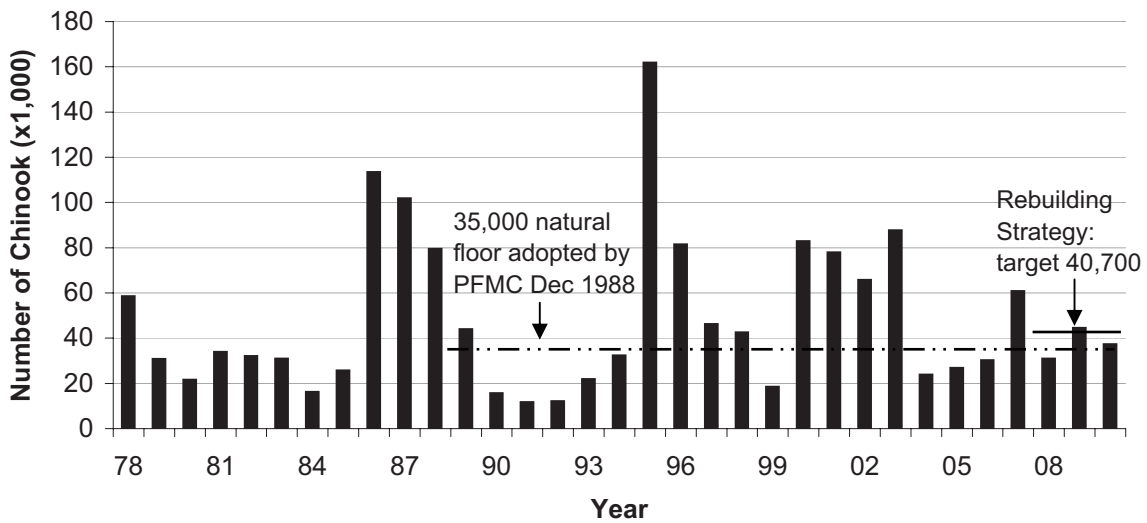


TABLE B-4. Summary of Klamath River fall Chinook salmon estimates in numbers of adults and jacks.

Year or Average	Category	Nonlanded					Spawning Escapement									
		Total Inriver		Inriver Harvest		Fishery	Klamath River		Trinity River		Total		Total			
		Run	Indian	Sport	Total	Mortality	Hatchery	Natural	Total	Hatchery	Natural	Total	Hatchery	Natural	Total	
1978-1980	Adults	63,306	14,621	2,777	17,398	1,329	3,886	21,277	25,163	3,823	15,593	19,416	7,709	36,871	44,579	
	Jacks	23,731	1,379	3,385	4,764	189	544	8,224	8,768	1,515	8,495	10,010	2,059	16,719	18,778	
1981-1985	Adults	63,230	17,128	5,096	22,224	1,593	8,812	16,313	25,125	2,934	11,354	14,288	11,746	27,667	39,413	
	Jacks	29,811	1,287	6,447	7,734	243	1,162	6,227	7,389	4,888	9,556	14,444	6,050	15,783	21,833	
1986-1990	Adults	151,203	36,669	15,145	51,814	3,498	13,194	21,543	34,737	11,912	49,242	61,154	25,106	70,785	95,891	
	Jacks	20,227	446	4,924	5,370	139	1,009	3,460	4,469	2,285	7,964	10,248	3,294	11,423	14,718	
1991-1995	Adults	80,666	10,574	3,094	13,668	983	12,980	26,594	39,574	5,104	21,339	26,442	18,084	47,932	66,016	
	Jacks	12,038	291	2,741	3,032	81	1,140	3,216	4,356	1,134	3,435	4,569	2,274	6,651	8,925	
1996	Adults	175,773	56,476	12,766	69,242	5,172	13,622	38,680	52,302	6,411	42,646	49,057	20,033	81,326	101,359	
	Jacks	9,532	190	2,312	2,502	64	543	1,696	2,239	249	4,478	4,727	792	6,174	6,966	
1997	Adults	83,736	12,087	5,676	17,763	1,167	13,275	34,637	47,912	5,387	11,507	16,894	18,662	46,144	64,806	
	Jacks	7,993	35	2,409	2,444	52	452	1,380	1,832	820	2,845	3,665	1,272	4,225	5,497	
1998	Adults	90,647	10,187	7,710	17,897	1,043	14,923	18,028	32,951	14,296	24,460	38,756	29,219	42,488	71,707	
	Jacks	4,639	53	1,108	1,161	28	403	881	1,284	192	1,974	2,166	595	2,855	3,450	
1999	Adults	51,048	14,660	2,282	16,942	1,322	9,290	11,660	20,950	5,037	6,797	11,834	14,327	18,457	32,784	
	Jacks	19,248	271	1,616	1,887	57	4,830	6,293	11,123	2,027	4,154	6,181	6,857	10,447	17,304	
2000	Adults	218,077	29,415	5,650	35,065	2,673	71,635	58,388	130,023	25,976	24,340	50,316	97,611	82,728	180,339	
	Jacks	10,246	303	1,582	1,885	58	839	2,891	3,730	1,070	3,503	4,573	1,909	6,394	8,303	
2001	Adults	187,333	38,645	12,134	50,779	3,608	37,204	40,944	78,148	17,908	36,890	54,798	55,112	77,834	132,946	
	Jacks	11,343	399	1,500	1,899	66	1,364	6,378	7,742	267	1,369	1,636	1,631	7,747	9,378	
2002	Adults	160,788 ^{a/}	24,574	10,495	35,069	2,351	23,667	54,225	77,892	3,516	11,410	14,926	27,183	65,635	92,818	
	Jacks	9,226	126	870	996	29	1,294	1,529	2,823	1,037	2,338	3,375	2,331	3,867	6,198	
2003	Adults	191,949	30,034	9,680	39,714	2,810	31,970	55,423	87,393	29,812	32,219	62,031	61,782	87,642	149,424	
	Jacks	3,845	44	814	858	21	290	848	1,138	574	1,254	1,828	864	2,102	2,966	
2004	Adults	78,943	25,803	4,003	29,806	2,325	10,582	10,711	21,293	12,399	13,120	25,519	22,982	23,831	46,813	
	Jacks	9,646	168	2,741	2,909	71	937	846	1,783	1,044	3,839	4,883	1,980	4,685	6,665	
2005	Adults	65,227	8,016	1,985	10,001	738	13,955	13,554	27,509	13,744	13,235	26,979	27,689	26,789	54,488	
	Jacks	2,296	70	1,030	1,100	27	42	398	440	59	670	729	101	1,068	1,169	
2006	Adults	61,374	10,283	62	10,345	1,344	11,604	14,264	25,868	7,918	15,899	23,817	19,522	30,163	49,685	
	Jacks	26,935	415	5,527	5,942	149	2,386	6,516	8,902	4,076	7,866	11,942	6,462	14,382	20,844	
2007	Adults	132,131	27,573	6,312	33,885	2,526	16,969	21,292	38,261	18,081	39,378	57,459	35,050	60,670	95,720	
	Jacks	1,684	21	369	390	10	180	232	412	33	839	872	213	1,071	1,284	
2008	Adults	70,554	22,259	1,919	24,178	24,178	9,101	19,020	28,121	4,451	11,830	16,281	13,552	30,850	44,402	
	Jacks	25,247	641	4,308	4,949	144	2,130	9,425	11,555	801	11,555	8,599	2,931	17,223	20,154	
2009	Adults	100,644	28,387	5,651	34,038	2,583	12,263	27,743	40,006	7,351	16,666	24,017	19,614	44,409	64,023	
	Jacks	11,914	178	2,214	2,392	60	1,229	1,948	3,177	143	6,142	6,285	1,372	8,090	9,462	
2010 ^{b/}	Adults	90,972	29,996	3,035	33,031	2,670	10,276	15,166	25,442	7,774	22,055	29,829	18,050	37,221	55,271	
	Jacks	16,652	436	1,832	2,268	75	1,071	1,811	2,882	1,432	9,995	11,427	2,503	11,806	14,309	
GOAL	Adults														≥35,000 ^{c/}	

a/ Total inriver run includes an estimated 30,550 fish that died prior to spawning in September 2002.

b/ Preliminary.

c/ In 2008-2010, fisheries were managed for a natural area spawning escapement of 40,700 adults.

Table 5. Age composition of the 2010 Klamath Basin fall Chinook run.

Escapement & Harvest	2	3	AGE 4	5	Total Adults	Total Run
<u>Hatchery Spawners</u>						
Iron Gate Hatchery (IGH)	1,071	6,899	3,376	1	10,276	11,347
Trinity River Hatchery (TRH)	1,432	3,958	3,810	6	7,774	9,206
Hatchery Spawner subtotal	2,503	10,857	7,186	7	18,050	20,553
<u>Natural Spawners</u>						
Salmon River Basin	356	1,610	868	0	2,478	2,834
Scott River Basin	394	399	1,714	0	2,113	2,507
Shasta River Basin	87	239	1,020	0	1,259	1,346
Bogus Creek Basin	291	2,243	932	4	3,179	3,470
Klamath River mainstem (IGH to Shasta R)	180	1088	1293	12	2,392	2,572
Klamath River mainstem (Shasta R to Indian Cr)	95	588	698	6	1,292	1,387
Klamath Tributaries (above Trinity River)	274	704	959	0	1,663	1,937
Blue Creek	134	335	455	0	790	924
Klamath Basin subtotal	1,811	7,206	7,939	22	15,166	16,977
Trinity River (mainstem above WCW)	9,764	11,587	9,765	195	21,547	31,311
Trinity River (mainstem below WCW)	15	17	15	0	32	47
Trinity Tributaries (above Reservation; below WCW)	69	82	69	1	152	221
Hoopaa Reservation tributaries	147	174	147	3	324	471
Trinity Basin subtotal	9,995	11,860	9,996	199	22,055	32,050
Natural Spawners subtotal	11,806	19,066	17,935	221	37,221	49,027
Total Spawner Escapement	14,309	29,923	25,121	228	55,271	69,580
<u>Recreational Harvest</u>						
Klamath River (below Hwy 101 bridge)	162	198	306	6	510	672
Klamath River (Hwy 101 to Weitchpec)	1,320	838	384	3	1,225	2,545
Klamath River (Weitchpec to IGH)	89	595	280	0	875	964
Trinity River Basin (above WCW)	127	112	74	3	190	317
Trinity River Basin (below WCW)	134	141	90	4	235	369
Subtotals	1,832	1,884	1,134	16	3,035	4,867
<u>Tribal Harvest</u>						
Klamath River (below Hwy 101)	20	8,584	13,052	89	21,725	21,745
Klamath River (Hwy 101 to Trinity mouth)	156	2,616	1,823	22	4,461	4,617
Trinity River (Hoopaa Reservation)	260	1,990	1,807	14	3,810	4,070
Subtotals	436	13,190	16,682	125	29,996	30,432
Total Harvest	2,268	15,074	17,816	141	33,031	35,299
<u>Totals</u>						
Harvest and Escapement	16,577	44,997	42,937	369	88,302	104,879
Recreational Angling Dropoff Mortality 2.04%	37	38	23	0	62	99
Tribal Net Dropoff Mortality 8.7%	38	1,147	1,451	10	2,608	2,646
Total River Run	16,652	46,182	44,411	379	90,972	107,624

Sacramento Index (SI)

- ▶ The SI is an index of preseason (September 1) ocean abundance for Sacramento River fall Chinook.
- ▶ It is forecast annually prior to the March Council meeting.
- ▶ Definition:

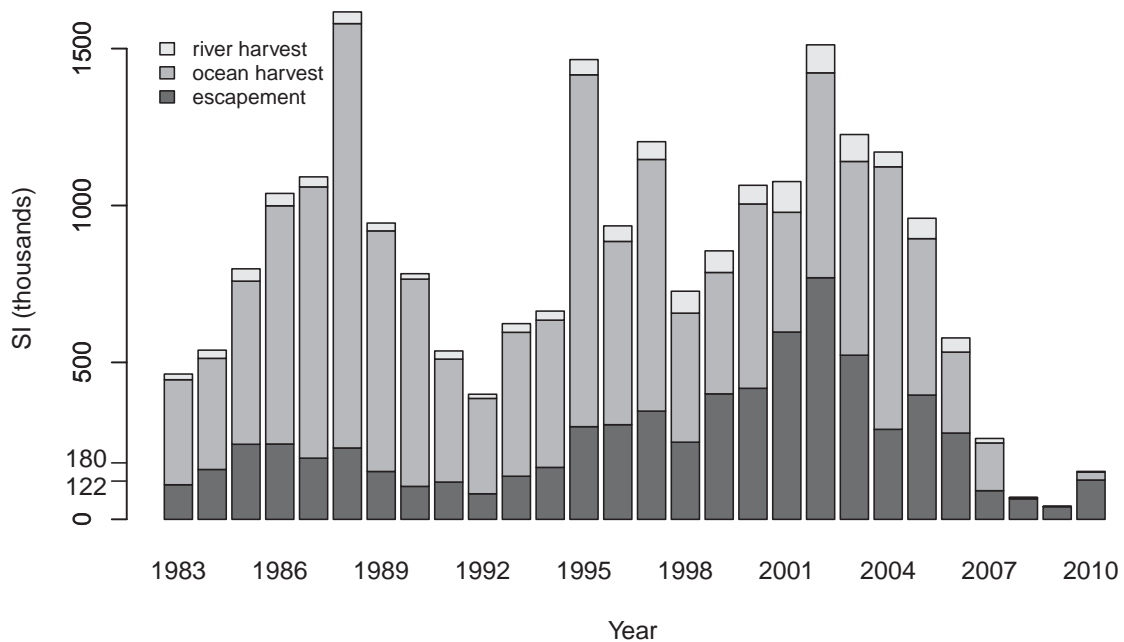
$$SI = H_{o,S} + H_r + E$$

$H_{o,S}$ = Sept-Aug ocean harvest of SRFC south of Cape Falcon, OR

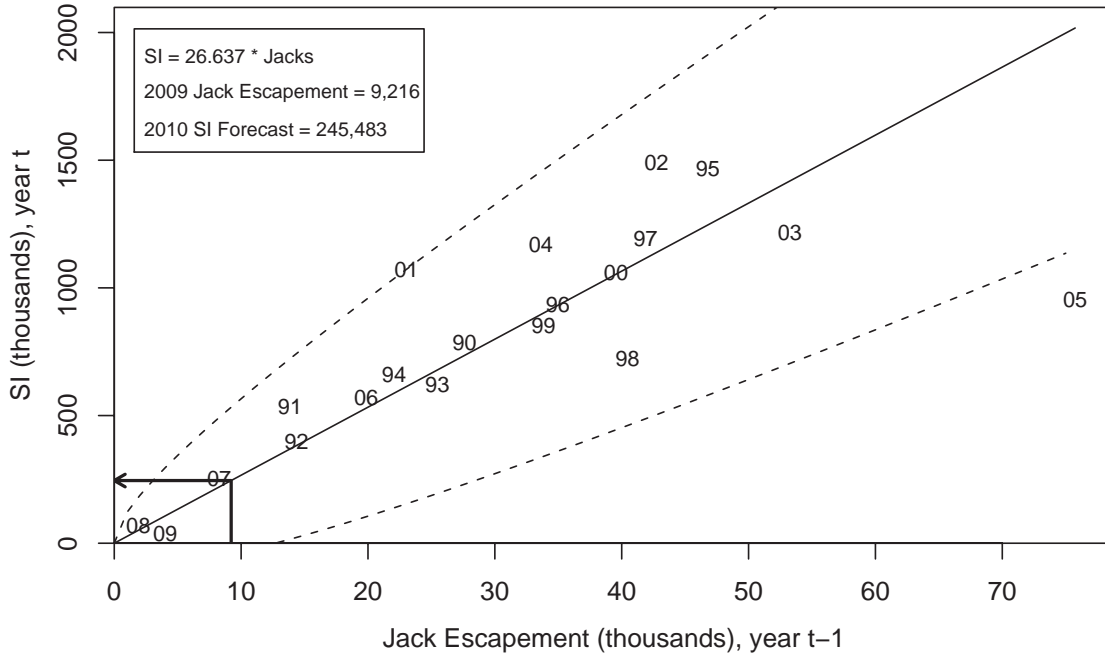
H_r = Sacramento River Basin harvest of SRFC

E = SRFC hatchery and natural-area escapement

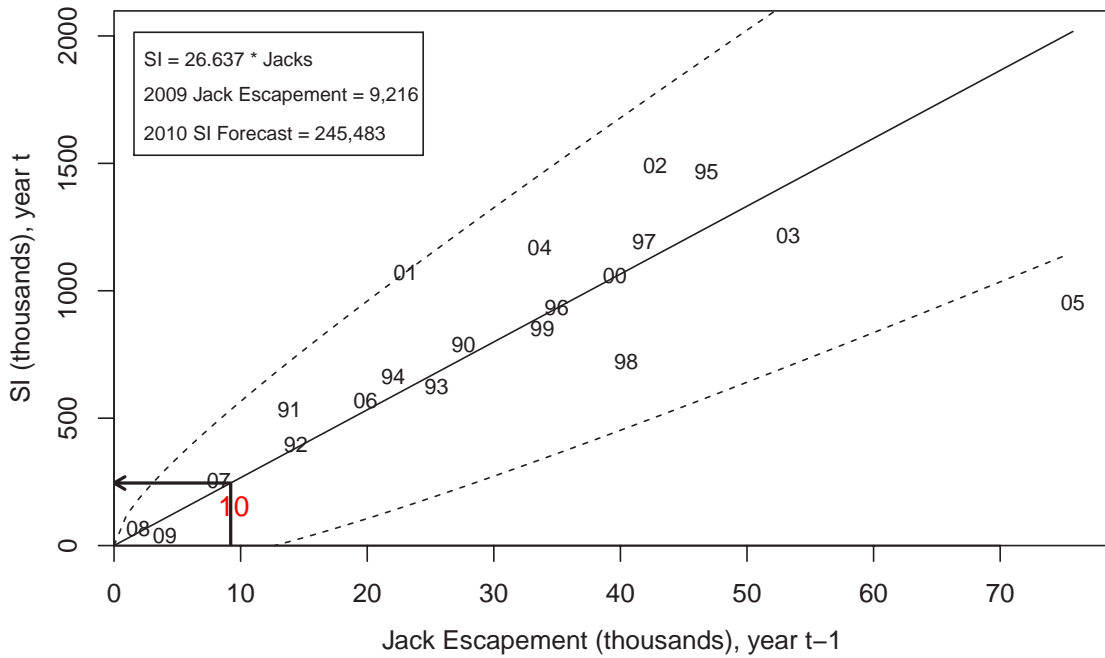
SI time series



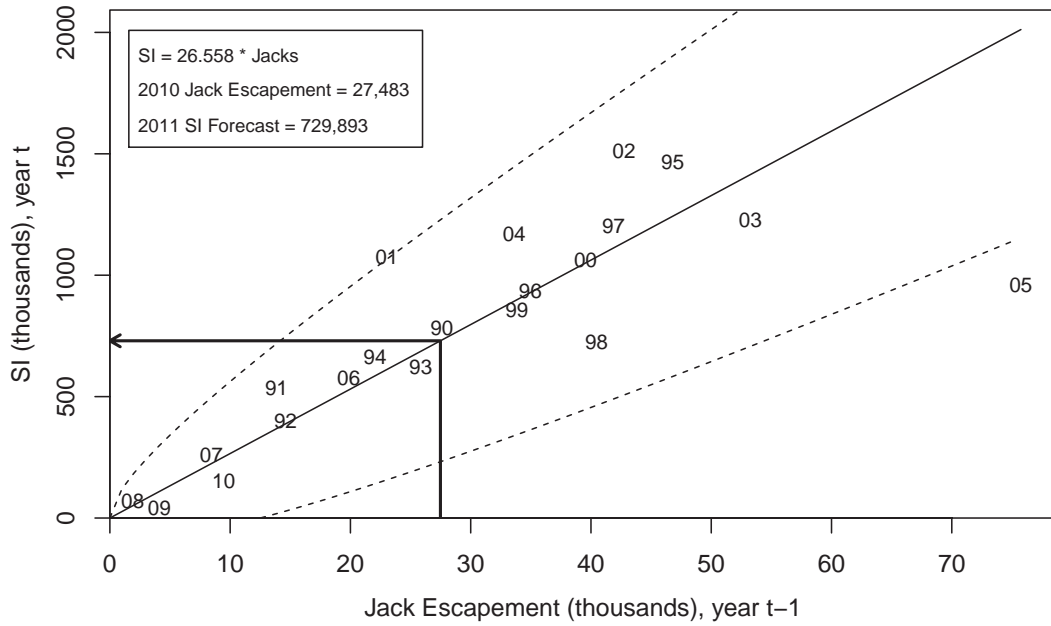
2010 SI forecast: 245,483



2010 SI postseason estimate: 152,857



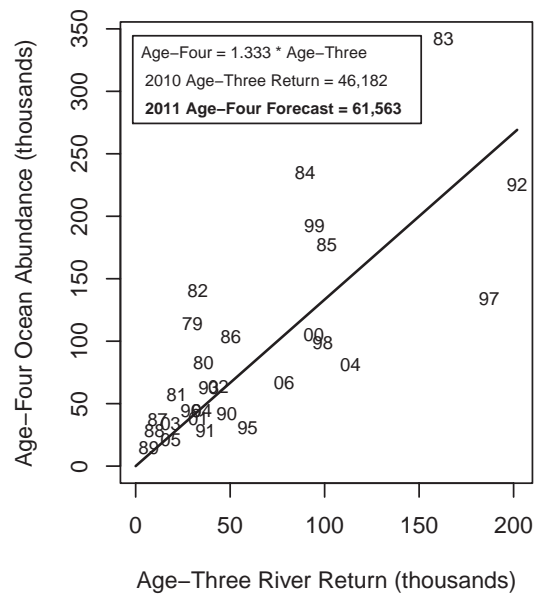
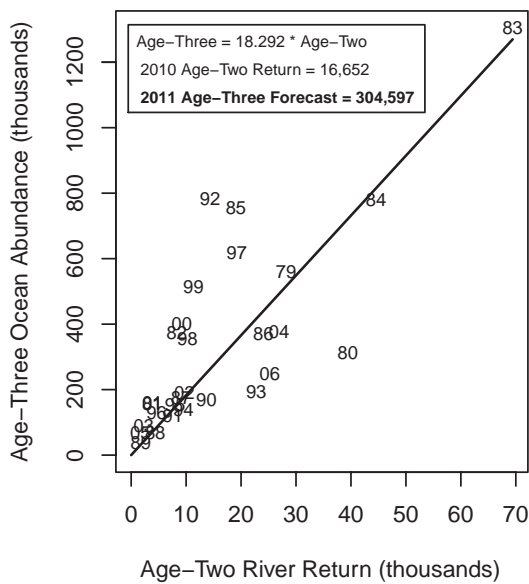
2011 SI forecast: 729,893



95% upper bound = 1,228,114
95% lower bound = 231,671

75% upper bound = 1,012,867
75% lower bound = 446,918

2011 Klamath forecast: 371,144



KRFC 2010 abundance forecast: 331,500
age-3: 223,400
age-4: 106,300

TABLE II-5. Performance of Chinook salmon stocks in relation to 2010 conservation objectives (preliminary data).

System and Stock	2010 Conservation Objective(s)	Achievement
Sacramento River Chinook		
Fall	122,000-180,000 hatchery and natural area adult spawners. 180,000 target for 2010.	125,353 hatchery and natural area adult spawners; 3% above the lower end of the escapement goal range.
Winter (Endangered)	NMFS ESA consultation standard defines specific limits on management measures to protect Sacramento River winter and spring Chinook.	Commercial and recreational seasons south of Point Arena conformed with the consultation standard.
Spring (Threatened)	Same objective as for winter Chinook.	Objective met-see winter Chinook achievement.
California North Coast Chinook		
Klamath River Fall	Minimum escapement of 40,700 natural adult spawners.	37,221 natural area spawners, 106% of FMP conservation objective; 91% of 2010 management objective.
California Coastal (Threatened)	No greater than 16.0% ocean harvest rate on age-4 Klamath River fall Chinook.	Preseason projection of 12.3%; no postseason estimate is currently available.

Salmon 2011 Preseason Process: Calendar of Events and Contact Information

March 3, 2011 - California Fish and Game Commission Meeting

The public may address and/or ask questions of the Commission relating to the implementation of its policies or any other matter within the jurisdiction of the Commission. Agenda and video available on line at www.fgc.ca.gov/meetings/2011/2011mtgs.asp
Embassy Suites at Los Angeles Airport, 9801 Airport Blvd., Los Angeles CA, 90045
Telephone: (310) 215-1000

March 5-10, 2011 - Pacific Fishery Management Council Public Meeting

Council and advisory bodies meet to adopt the 2011 salmon management options for public review. Agenda and meeting materials available on line at: www.pcouncil.org.
Hilton Vancouver Washington, 301 W. 6th Street, Vancouver, WA, 98660
Telephone: (360) 993-4500

March 29, 2011 - Pacific Fishery Management Council Public Hearing

A public hearing will be held to receive comments on the proposed ocean salmon fishery management options adopted by the Council.
Red Lion Hotel, Evergreen Room, 1929 Fourth Street, Eureka, CA 95521
Telephone: (707) 445-0844

April 6-7, 2011 - California Fish and Game Commission Meeting

The public may address and/or ask questions of the Commission relating to the implementation of its policies or any other matter within the jurisdiction of the Commission. Agenda and video available on line at www.fgc.ca.gov/meetings/2011/2011mtgs.asp
Lake Natoma Inn, 702 Gold Lake Drive, Folsom CA, 95630
Telephone: (916) 351-1500

April 9-14, 2011 - Pacific Fishery Management Council Public Meeting

Council and advisory bodies meet to adopt 2011 management measures for implementation by the National Marine Fisheries Service. Agenda and meeting materials available on line at www.pcouncil.org
San Mateo Marriott, 1770 South Amphlett Blvd, San Mateo, California, 94402
Telephone: (650) 653-6000

April 21, 2011 - California Fish and Game Commission Meeting - Teleconference

The Commission will consider adoption of the proposed regulation changes. Agenda and audio available on line at: www.fgc.ca.gov/meetings/2010/2010mtgs.asp
Resources Building, Fish and Game Commission Conference Room
1416 Ninth Street, Room 1320, Sacramento, CA
Telephone: (916) 653-4899

Who can I contact?

Contact a member of the Salmon Advisory Sub-panel:

HIE, MR. JIM Conservation	Pacific Marine Conservation Council 1423 Vista Ave Napa, CA 94559	Telephone: (707) 695-8661 Fax: (707) 265-0304 Email: jnahie@att.net
ORCUTT, MR. MIKE California Tribes	Hoopa Valley Tribe PO Box 930, Hoopa, CA 95546-0417	Telephone: (530) 625-4267 Fax: (530) 625-4995 Email: director@hoopa-nsn.gov
MACLEAN, MR. DUNCAN Vice-Chair, California Troll	Owner F/V Barbara Faye PO Box 1942 El Granada, CA 94018-1942	Telephone: (650) 726-1373 Fax: (650) 712-8744 Email: b-faye@comcast.net
PIERCE, MR. PAUL California Sport Fisheries	Coastside Fishing Club 512 Pershing Drive San Leandro, CA 94577	Telephone: (510) 568-2713 Fax: (510) 432-8820 Email: SDAD111@aol.com
STONE, MR. CRAIG California Charter Boat	Emeryville Sportfishing 3310 Powell St. Emeryville, CA 94608	Telephone: (510) 654-6040 Fax: (510) 654-2106 Email: emvlsport@aol.com

Contact the PFMC staff officer for salmon: CHUCK TRACY (Chuck.Tracy@noaa.gov)

Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 101, Portland, OR 97220-1384
Telephone: (503) 820-2280, Toll Free: 1-866-806-7204
Fax: (503) 820-2299
www.pcouncil.org

On-Line Resources:

Review of 2010 Ocean Salmon Fisheries (includes in-river escapement data)

www.pcouncil.org/salmon/stock-assessment-and-fishery-evaluation-safe-documents/review-of-2010-ocean-salmon-fisheries/

Preseason Reports: Stock Abundance Analysis for 2011 Ocean Salmon Fisheries

www.pcouncil.org/salmon/stock-assessment-and-fishery-evaluation-safe-documents/preseason-reports/

Klamath Basin Age Composition and Stock Projection Reports

www.pcouncil.org/salmon/background/document-library/

EVALUATION

To improve future *Salmon Information Meetings* and to better meet your needs, please complete this evaluation.

1. Indicate the interest group with which you are affiliated.

<input type="checkbox"/> Fishing Dependant Business	<input type="checkbox"/> Tribal
<input type="checkbox"/> Ocean Commercial	<input type="checkbox"/> Conservation
<input type="checkbox"/> Ocean Sport	<input type="checkbox"/> Resource Management
<input type="checkbox"/> River Sport	<input type="checkbox"/> Other (please describe)

2. What information did you find most useful?

<input type="checkbox"/> Review of 2010 Sport Fishery and Commercial Fishery	<input type="checkbox"/> Klamath and Sacramento Ocean Harvest Model Results
<input type="checkbox"/> Review of 2010 Central Valley (CV) System	<input type="checkbox"/> NMFS Guidance for CA Stocks
<input type="checkbox"/> Review of 2010 Klamath River Fall Chinook (KRFC)	<input type="checkbox"/> Public Comment to CA Salmon Management Panel
<input type="checkbox"/> SRFC Ocean Abundance Projection	

3. What information would you like presented in the future?

4. Do you have additional recommendations or comments the Ocean Salmon Project can forward to your representative?

5. What meeting organization comments or suggestions do you have?

6. Additional comments or suggestions about the meeting are appreciated.