

Agenda

CALIFORNIA DEPARTMENT OF FISH AND GAME 2010 SALMON INFORMATION MEETING

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

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Thursday, February 25, 2010
12:00 p.m. – 3:00 p.m.

Welcome - Moderator

Opening Comments and Review Agenda

Marija Vojkovich, DFG

(12:00 PM)

Review of 2009 KMZ Sport Fishery

Marc Heisdorf, DFG

(12:10 PM)

Review of 2009 Central Valley (CV) System

1. Sacramento River fall Chinook escapement
2. Escapement of other CV Chinook stocks

Joe Duran, DFG

(12:20 PM)

Review of 2009 Klamath River Fall Chinook (KRFC)

1. KRFC escapement by basin / age composition
2. KRFC ocean abundance forecast by age

Jennifer Simon, DFG

(12:30 PM)

Klamath and Sacramento

Ocean Harvest Model Results

1. SRFC predictor results/ocean abundance forecast
2. PFMC conservation objectives for 2010 season
3. Harvest model results using 2009 regulations

Dr. Michael O'Farrell, NMFS

(12:45 PM)

NMFS Guidance for CA Stocks

Jennifer Ise, NMFS

(1:05 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, State of CA Principal Official, PFMC member
2. Mr. Dan Woford, PFMC member
3. Mr. David Crabbe, PFMC member
4. Mr. Jennifer Ise, 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
(2:55 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

2009 Klamath Management Zone Aug 29 – Sep 7 Recreational Salmon Fishery

Samplers Observed:

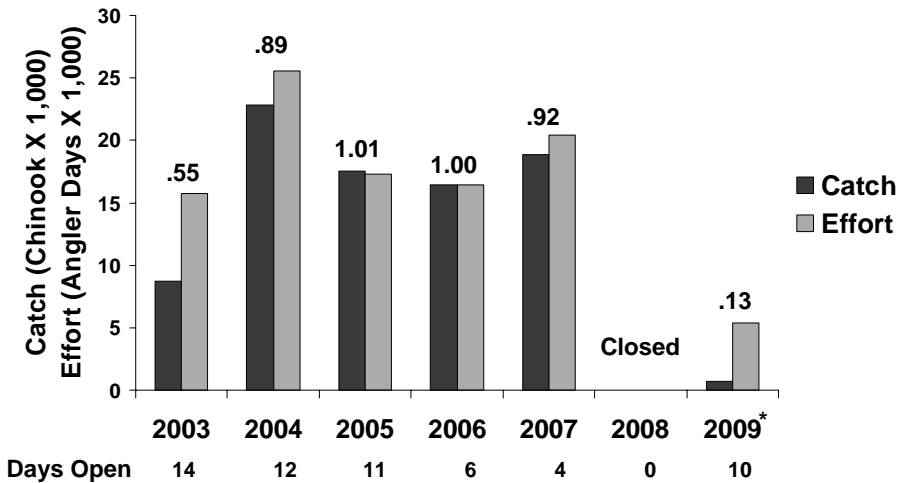
- 1,864 Salmon Anglers
- 251 Landed Chinook
- 38 Adipose Fin Clips



Estimated Catch and Effort

- 5,359 Salmon Anglers
- 672 Chinook Landed

Comparison of Recreational September KMZ Historical Catch and Effort 2003 – 2007



*includes 3 days from August

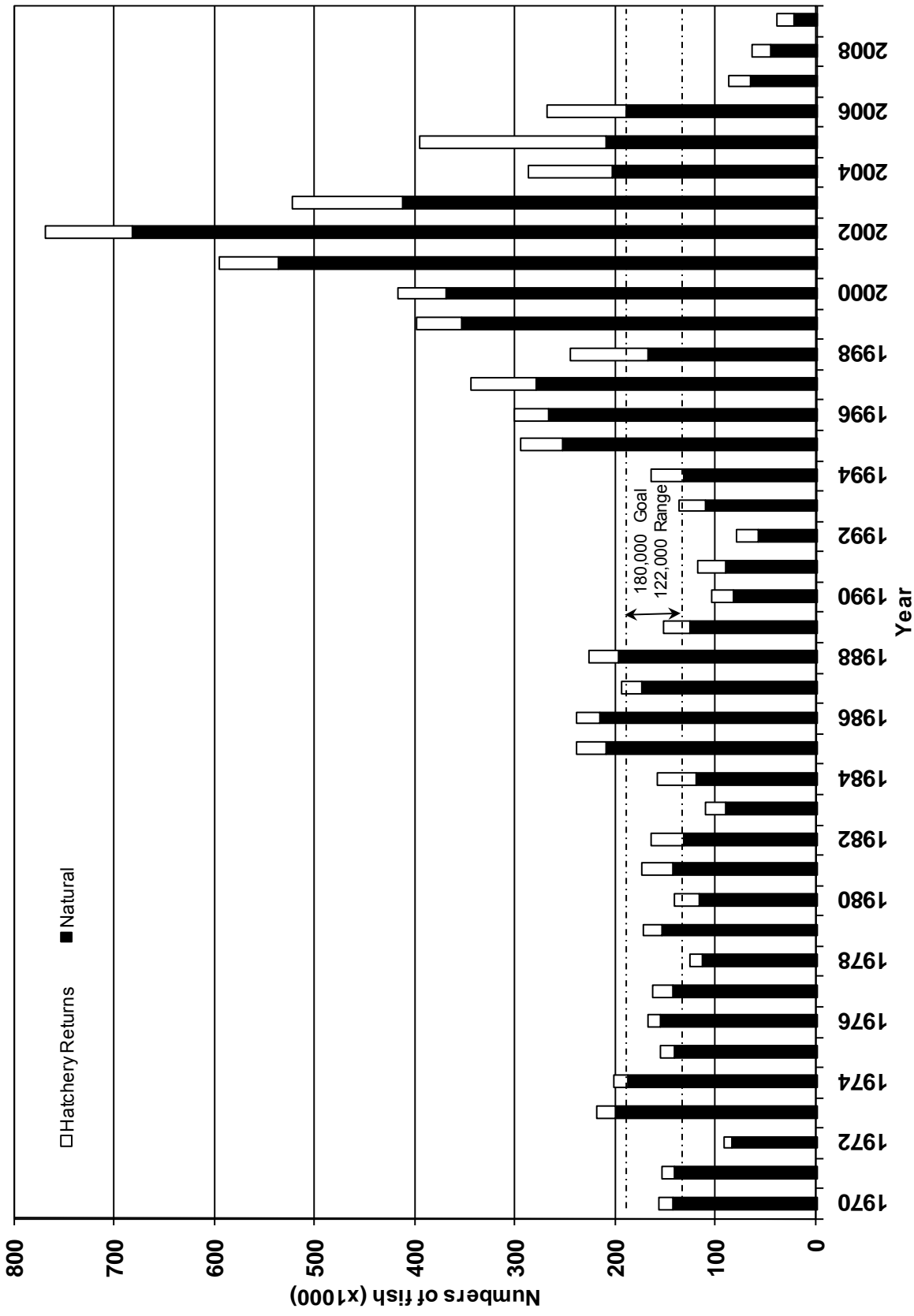


Figure II-1. Sacramento River adult fall Chinook spawning escapement, 1970-2009.

2009 Sacramento River Fall Chinook Hatchery and Natural Escapement

		Jacks	Adults	Total	% Jack	% SRFC Total
Upper Sacramento River Basin	Hatchery	719	5,433	6,152	12%	13%
	Natural	1,514	11,054	12,568	12%	26%
Feather River Basin	Hatchery	3,723	6,240	9,963	37%	20%
	Natural	1,559	7,923	9,482	16%	19%
American River Basin	Hatchery	1,126	5,762	6,888	16%	14%
	Natural	575	3,118	3,693	16%	8%
Total 2009 SRFC Escapement		9,216	39,530	48,746	19%	100%

Sacramento River Fall Chinook Escapement Estimates 1990 - 2009

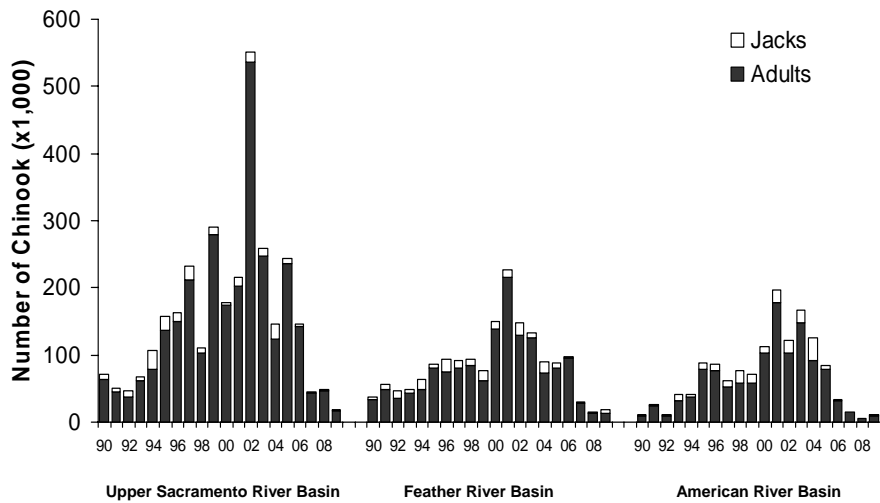


TABLE B-1. California Central Valley natural area fall Chinook salmon spawning escapement in numbers of fish.^{a/}

Year or Average	Upper Sacramento River												Lower Sacramento River			American River			Total			Sacramento River			San Joaquin River			Central Valley		
	River ^{b/c/}			Feather River			Yuba River			Sacramento River			Total			Totals			Totals			Totals			Totals					
	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		41,726	3,695		92,824	15,055		151,286	33,345		13,820	1,411		165,105	34,756		139,747	25,120				
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		174,252	48,496				
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		170,640	33,815		131,885	22,913				
1986-1990	87,396	17,244		38,709	6,426		8,309	2,131		28,549	4,151		69,436	10,637		129,259	22,009		2,626	904		131,885	22,913		272,837	41,640				
1991-1995	59,823	11,372		32,578	4,355		23,492	4,408		67,719	7,026		135,803	24,012		267,071	35,661		5,766	5,979		272,837	41,640		297,583	31,325				
1996	131,268	11,649		44,593	12,577		19,202	6,746		46,036	6,159		112,246	16,444		279,599	30,180		17,983	1,146		297,583	31,325		181,263	32,880				
1997	167,353	13,736		47,009	3,538		26,737	4,353		41,094	13,698		107,431	21,451		168,144	26,588		13,119	6,292		181,263	32,880		364,426	36,320				
1998	60,713	5,137		39,600 ^{d/}	3,400		18,778	5,452		48,311	8,688		97,089	21,640		369,214	18,604		10,708	7,185		364,426	36,320		406,110	21,182				
1999	256,629	7,495		30,000 ^{d/}	7,500		12,954	2,041		93,413	5,646		216,291	14,704		537,415	36,345		23,899	3,705		561,314	40,050		704,546	41,875				
2000	152,923	3,900		109,924	7,017		21,567	1,825		167,062	13,553		358,217	24,492		682,695	38,087		21,852	3,788		704,546	41,875		427,957	22,051				
2001	179,198	11,853		169,588	9,114		18,406	4,796		95,711	10,635		248,636	15,485		413,438	19,887		14,519	2,164		427,957	22,051		210,728	35,103				
2002	474,812 ^{e/}	11,259		93,766	11,397		26,820	1,489		136,238	9,627		132,930	24,573		203,478	31,793		7,250	3,310		210,728	35,103		226,549	13,521				
2003	164,802	4,402		85,578	4,369		9,260	5,208		75,090	13,774		113,990	8,677		210,706	11,944		15,843	1,577		226,549	13,521		194,975	6,646				
2004	70,548	7,220		48,580	5,591		16,251	987		54,001	2,842		103,338	3,223		189,284	5,954		5,691	692		194,975	6,646		68,085	1,674				
2005	96,716	3,267		43,738	4,848		7,998	233		21,755	1,145		33,919	532		66,564	1,510		1,521	164		68,085	1,674		47,954	3,105				
2006	85,946	2,731		73,585	1,845		2,523	81		9,855	130		10,578	814		45,944	2,789		2,010	316		47,954	3,105		1,394	688				
2007	32,645	978		21,541	321		3,084	424		1,791	154		11,041	2,134		22,095	3,648		1,394	688		23,489	4,336							
2008	35,366	1,975		5,703	236		3,973	662		3,118	575																			
2009 ^{f/}	11,054	1,514		3,950	897																									

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 since 1990 includes Sacramento River mainstem, Battle Creek, and Clear Creek; escapement from Mill, Deer, and Butte creeks are included 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	
	Coleman ^{b/}		Feather River		Nimbus ^{c/}		Totals		Mokelumne River		Merced River		Totals		Adults	Jacks		
	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults ^{d/}	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks				
1971-1975	1,373	1,167	3,882	1,387	7,791	1,311	4,065	13,661	305	156	480	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	136	15	2,937	1,353	82,843	3,681		
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 ^{e/}	5,433	719	6,240	3,723	5,756	1,126	5,568	17,435	730	823	112	137	842	960	18,277	6,528		
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.

2009 Other Central Valley Chinook Stocks Hatchery and Natural Escapement

		Jacks	Adults	Total	% Jack
Central Valley Spring Chinook	Hatchery	122	867	989	12%
	Natural	----	3,517	3,517	----
	Total	122	4,384	4,506	3%
Sacramento River Winter Chinook	Natural	54	4,483	4,537	1%
	Total	54	4,483	4,537	1%
Central Valley Late Fall Chinook	Hatchery	287	6,142	6,429	4%
	Natural	173	3,373	3,546	5%
	Total	460	9,515	9,975	5%
San Joaquin Fall Chinook	Hatchery	960	842	1,802	53%
	Natural	688	1,394	2,082	33%
	Total	1,648	2,236	3,884	42%

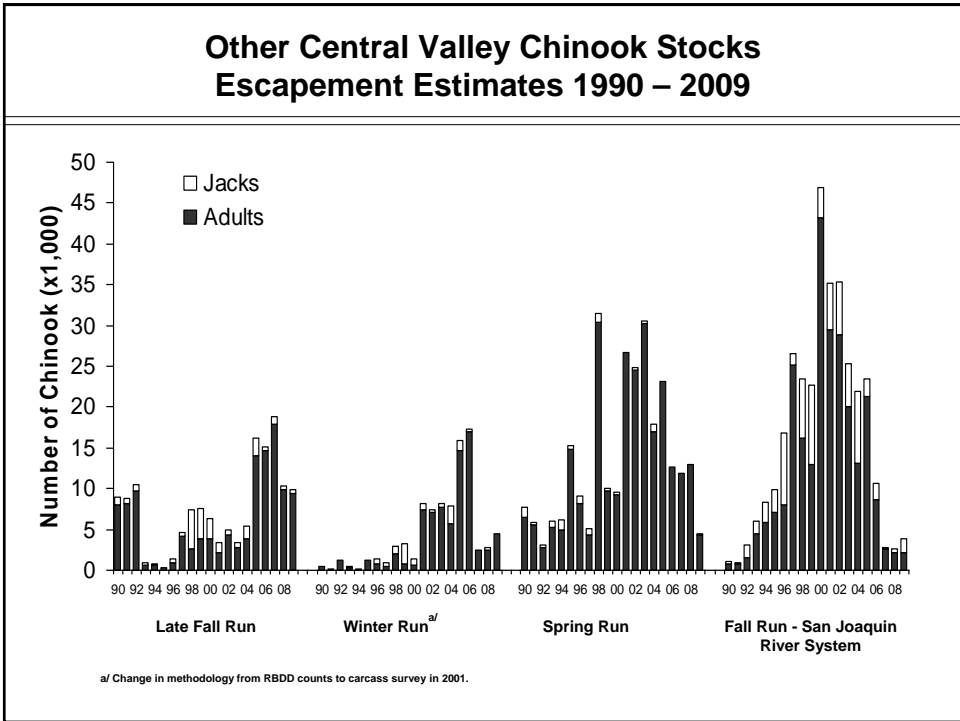


TABLE B-3. Sacramento River late-fall, winter, and spring Chinook salmon spawning escapement in numbers of fish.

Year or Average	Upper Sacramento River												
	Late Fall ^{a/b/c/}				Winter ^{d/}				Spring				
	Adults	Jacks	RBDD ^{a/c/}	Carcass Survey	Adults	Jacks	RBDD ^{a/c/}	Jacks	Adults	Jacks	Tributary ^{e/}	Sacramento River ^{a/f/}	Feather River ^{d/}
1971-1975	18,193	1,087	22,863	--	9,063	--	--	5,194	5,098	1,718	366	--	--
1976-1980	9,662	1,798	13,499	--	2,640	--	--	1,201	8,335	2,571	375	--	--
1981-1985	8,102	1,746	5,027	--	921	--	--	1,061	9,798	4,241	1,446	133	133
1986-1990	10,047	1,761	1,369	--	390	--	--	1,658	8,795	1,930	2,884	406	406
1991-1995	3,844 [/]	383 [/]	586	--	78	--	--	2,813	410	165	3,441	465	465
1996	1,003 [/]	382 [/]	708	--	629	--	--	2,322	314	64	5,571	810	810
1997	4,166 [/]	412 [/]	528	--	352	--	--	1,303	36	90	2,970	683	683
1998	40,185	5,055	2,079	--	923	--	--	23,609	624	491	6,240	506	506
1999	24,475	3,986	822	--	2,466	--	--	6,104	142	117	3,530	201	201
2000	10,478	2,554	563	--	789	--	--	5,504	94	38	3,657	315	315
2001	20,614	1,199	1,696	--	3,827	--	781	21,623 [/]	981	0 ^{h/}	4,052	83	83
2002	39,818	765	7,614	--	1,555	--	417	20,198 [/]	430	53	3,982	207	207
2003	8,122	613	6,172	--	3,585	--	543	21,798 [/]	0	0	8,373	389	389
2004	12,458	1,574	2,588	--	4,604	--	2,083	12,556 [/]	763	326	3,630	572	572
2005	14,047	2,141	3,521	--	1,778	--	1,156	21,319 [/]	21	9	1,811 ^{k/}	24 ^{k/}	24 ^{k/}
2006	14,709	351	4,792	--	2,623	--	378	10,669 [/]	0	0	2,052 ^{k/}	9 ^{k/}	9 ^{k/}
2007	18,060	801	3,004	--	3,140	--	131	8,951 [/]	226	22	2,669 ^{k/}	5 ^{k/}	5 ^{k/}
2008	9,946	381	1,504	--	2,131	--	204	11,943 [/]	0	0	1,056 ^{k/}	10 ^{k/}	10 ^{k/}
2009 ^{l/}	9,515	460	m/ [/]	--	m/ [/]	--	54	3,517 [/]	m/ [/]	m/ [/]	867 ^{k/}	122 ^{k/}	122 ^{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, 2009, a month later than normal; thus RBDD winter and spring run estimates are unavailable for 2009.

Chinook salmon production by Central Valley Hatcheries (in millions), brood years 2002-2008.

Hatchery	Run	Brood Year	CWT Tagged	Untagged	Total Released	% CWT
Coleman National Fish Hatchery	Fall	2002	0.20	13.84	14.04	1%
	Fall	2003	0.34	12.76	13.10	3%
	Fall	2004	0.14	11.71	11.85	1%
	Fall	2005	0.19	13.16	13.36	1%
	Fall	2006	3.23	9.09	12.32	26%
	Fall	2007	3.31	9.39	12.70	26%
	Fall	2008	3.50	10.52	14.02	25%
Feather R. Hatchery	Fall	2002	1.52	6.61	8.13	19%
	Fall	2003	0.94	7.39	8.33	11%
	Fall	2004	1.57	7.42	9.00	17%
	Fall	2005	1.58	8.76	10.35	15%
	Fall	2006	2.87	6.88	9.75	29%
	Fall	2007	3.07	7.08	10.15	30%
	Fall	2008	2.63	5.72	8.35	32%
Nimbus Fish Hatchery	Fall	2002	0.00	4.36	4.36	0%
	Fall	2003	0.09	4.48	4.58	2%
	Fall	2004	0.00	4.57	4.57	0%
	Fall	2005	0.00	3.00	3.00	0%
	Fall	2006	1.25	3.75	5.00	25%
	Fall	2007	1.22	3.68	4.89	25%
	Fall	2008	1.24	2.95	4.19	30%
Mokelumne R. Hatchery	Fall	2002	0.20	7.23	7.43	3%
	Fall	2003	0.20	6.07	6.26	3%
	Fall	2004	0.20	6.25	6.45	3%
	Fall	2005	0.19	6.35	6.54	3%
	Fall	2006	1.54	4.64	6.18	25%
	Fall	2007	1.15	3.45	4.60	25%
	Fall	2008	0.25	0.11	0.36	70%
Merced R. Fish Facility	Fall	2002	0.92	0.48	1.40	66%
	Fall	2003	0.56	0.31	0.87	64%
	Fall	2004	0.95	0.10	1.05	91%
	Fall	2005	0.60	0.38	0.97	62%
	Fall	2006	0.30	0.04	0.34	89%
	Fall	2007	0.00	0.22	0.22	0%
	Fall	2008	0.03	0.00	0.03	100%
Total Fall Production	Fall	2002	2.84	32.52	35.36	8%
	Fall	2003	2.13	31.01	33.14	6%
	Fall	2004	2.86	30.05	32.91	9%
	Fall	2005	2.57	31.65	34.22	8%
	Fall	2006	9.19	24.40	33.59	27%
	Fall	2007	8.75	23.81	32.55	27%
	Fall	2008	7.66	19.30	26.96	28%
Coleman National Fish Hatchery	Late	2002	0.99	0.02	1.01	98%
	Late	2003	1.02	0.03	1.05	97%
	Late	2004	0.97	0.03	0.99	97%
	Late	2005	0.97	0.03	1.01	97%
	Late	2006	1.05	0.06	1.11	95%
	Late	2007	1.04	0.03	1.06	98%
	Late	2008	1.07	0.04	1.11	97%
Feather R. Hatchery	Spring	2002	1.39	0.05	1.44	96%
	Spring	2003	0.92	0.97	1.88	49%
	Spring	2004	1.49	2.35	3.84	39%
	Spring	2005	1.80	0.01	1.80	100%
	Spring	2006	2.03	0.05	2.08	98%
	Spring	2007	2.62	0.06	2.69	98%
	Spring	2008	2.02	0.00	2.02	100%
Livingston Stone National Fish Hatchery	Winter	2002	0.214	0.011	0.225	95%
	Winter	2003	0.217	0.002	0.219	99%
	Winter	2004	0.144	0.024	0.168	86%
	Winter	2005	0.164	0.009	0.173	95%
	Winter	2006	0.182	0.015	0.196	93%
	Winter	2007	0.069	0.003	0.072	96%
	Winter	2008	0.134	0.012	0.146	91%

SUMMARY OF THE 2009 SACRAMENTO RIVER LATE-FALL-RUN CHINOOK SALMON FISHERY

Prepared by Rob Titus and Mike Brown
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Sacramento, CA 95826
contact: rtitus@dfg.ca.gov

Recreational fishing for late-fall-run Chinook salmon was allowed on the Sacramento River from Knights Landing to the Red Bluff Diversion Dam from November 16, 2009 through December 31, 2009. The bag and possession limit was 1 salmon daily, 1 salmon in possession. The season as designed, including a 15-day delay in start date compared to the 2008 season, avoided contact with Sacramento River fall-run and winter-run Chinook salmon. The fishery was monitored in its entirety by California Department of Fish and Game's (CDFG) Central Valley Angler Survey, using a simple, stratified-random sampling design that included both roving and access interview components, and the collection of coded-wire tags from adipose fin-clipped salmon for stock identification.

Estimated angling effort totaled 75,036 hours, corresponding to about 13,399 fishing trips. This overall level of effort was 15.8% lower than the total effort of 89,127 hours estimated in the 2008 fishery, perhaps due to the season being shortened by two weeks. However, total weekly effort in 2009 (10,719 hours per week) was comparable to that in 2008 (9,903 hours per week).

The fishery produced an estimated catch of 1,300 salmon, or about 72% of the 1,814 salmon caught in 2008. The estimated harvest was 1,256 salmon, which represented a retention rate of nearly 97%, very comparable to the 95% retention rate observed in 2008.

Based on observations of adipose fin-clipped salmon, 55.1% of the catch consisted of Chinook salmon of hatchery origin. Of 89 coded-wire tags recovered and read, all but two tagged salmon were late-fall-run Chinook from Coleman National Fish Hatchery. Based on known ages from coded-wire tags, the percentage of grilse (2-year-olds) in the harvest was 8%, 3-year-olds represented 71%, and 4-year-olds 21%. The remaining two non-late-fall-run Chinook were winter-run Chinook salmon from Livingston Stone National Fish Hatchery that had been captured on December 6, 2009 and December 26, 2009. No coded-wire tags were recovered from Chinook salmon of fall-run origin.

Overall, the design of the fishery was successful in focusing on the late-fall run to provide recreational angling opportunity for limited salmon harvest, while also protecting depleted fall-run and endangered winter-run Chinook salmon.

CDFG would like to thank the angling public for their cooperation in working with the Central Valley Angler Survey to provide data on their angling effort and catch, and for surrendering salmon heads for tag recovery.

Note: All statistics presented in this summary are preliminary and subject to change as they are finalized.

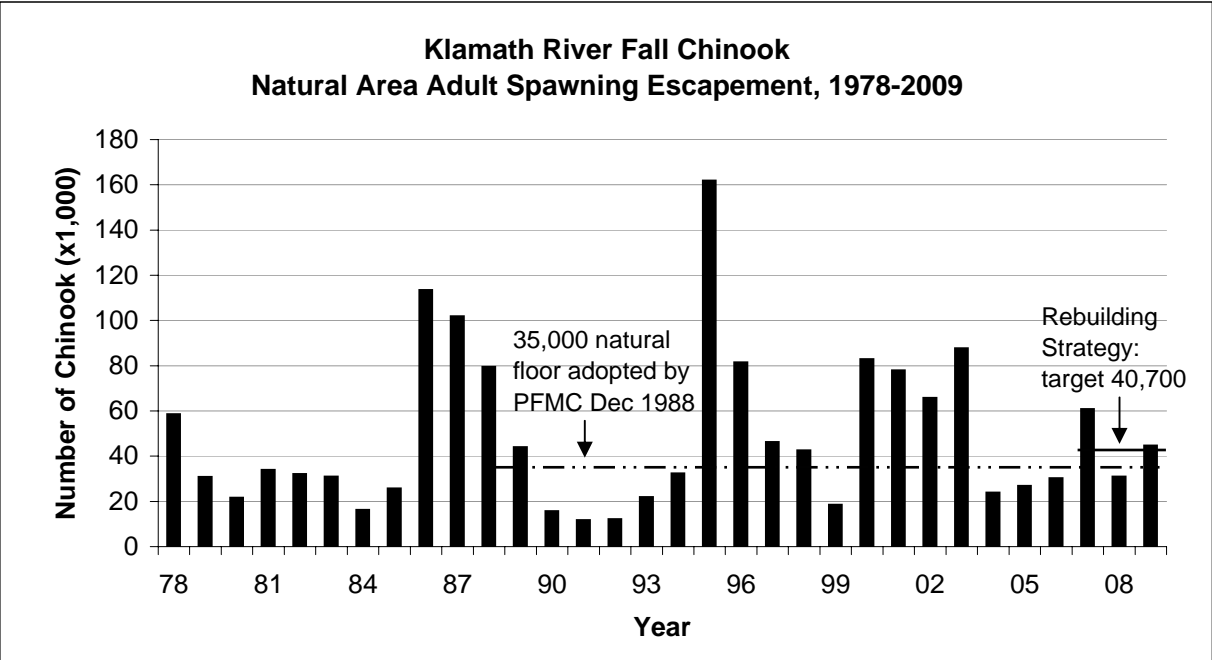
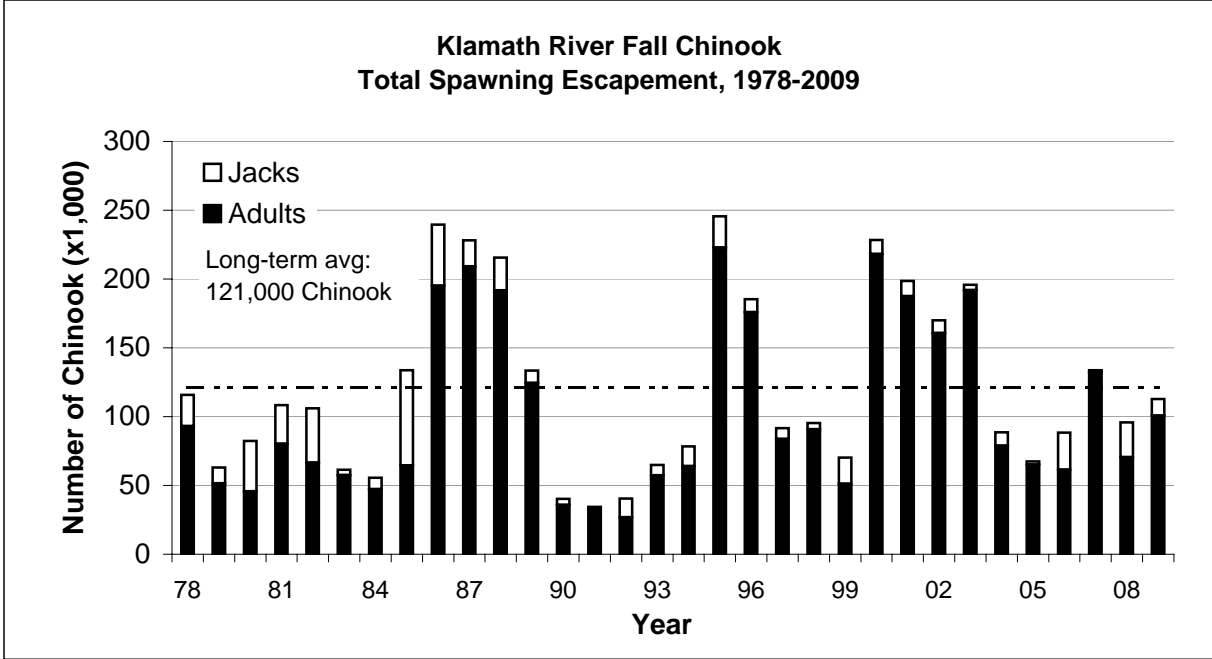
**Klamath River Fall Chinook Salmon Age-Specific Escapement,
River Harvest, and Run Size Estimates, 2009 Run**

Klamath River Technical Team

	Age				Total Adults	Total Run
	2	3	4	5		
Hatchery Spawners						
Iron Gate Hatchery	1,229	8,982	3,184	97	12,263	13,492
Trinity River Hatchery	<u>143</u>	<u>6,867</u>	<u>444</u>	<u>39</u>	<u>7,351</u>	<u>7,494</u>
Hatchery Spawners subtotal	1,372	15,849	3,628	136	19,614	20,986
					19%	19%
Natural Area Spawners						
Klamath Basin subtotal	1,948	22,842	3,558	1,345	27,743	29,691
Trinity Basin subtotal	<u>6,165</u>	<u>13,724</u>	<u>2,153</u>	<u>969</u>	<u>16,846</u>	<u>23,011</u>
Natural Spawners subtotal	8,113	36,566	5,711	2,314	44,589	52,702
					44%	47%
Recreational Harvest						
Klamath River harvest	2,033	4,050	605	166	4,820	6,853
Trinity River harvest	<u>182</u>	<u>605</u>	<u>91</u>	<u>59</u>	<u>755</u>	<u>937</u>
Recreational Harvest subtotal	2,215	4,655	696	225	5,575	7,790
					6%	7%
Tribal Harvest						
Klamath River harvest	82	16,603	5,142	2,489	24,234	24,316
Trinity River harvest	<u>96</u>	<u>3,217</u>	<u>689</u>	<u>247</u>	<u>4,153</u>	<u>4,249</u>
Tribal Harvest subtotal	178	19,820	5,831	2,736	28,387	28,565
					28%	25%
Klamath Fall Chinook Run	11,938	78,708	16,387	5,653	100,747	112,686
	11%	70%	15%	5%		

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

Sector	Adults		
	Preseason Forecast	Postseason Estimate	Pre / Post
<i>Run Size</i>	130,200	100,700	1.29
<i>Fishery Mortality</i>			
Tribal Harvest	30,900	28,400	1.09
Recreational Harvest	30,800	5,600	5.50
Drop-off Mortality	<u>3,300</u>	<u>2,600</u>	<u>1.27</u>
	65,000	36,600	1.78
<i>Escapement</i>			
Hatchery Spawners	24,600	19,600	1.26
Natural Area Spawners	<u>40,700</u>	<u>44,600</u>	<u>0.91</u>
	65,300	64,200	1.02



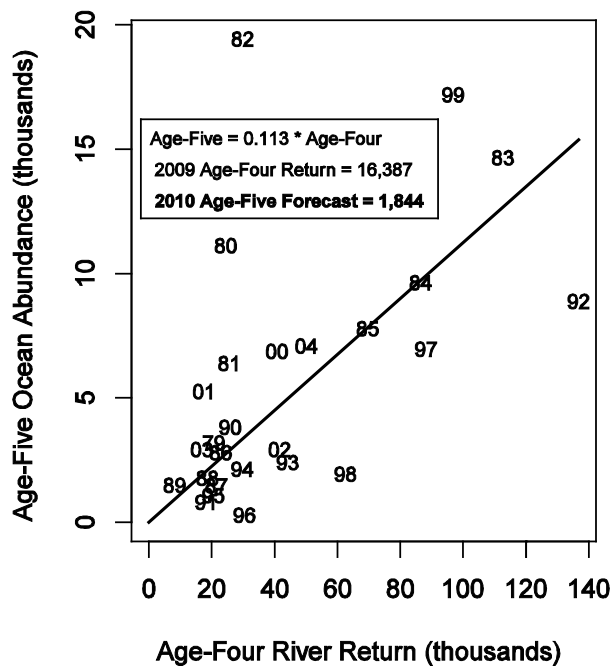
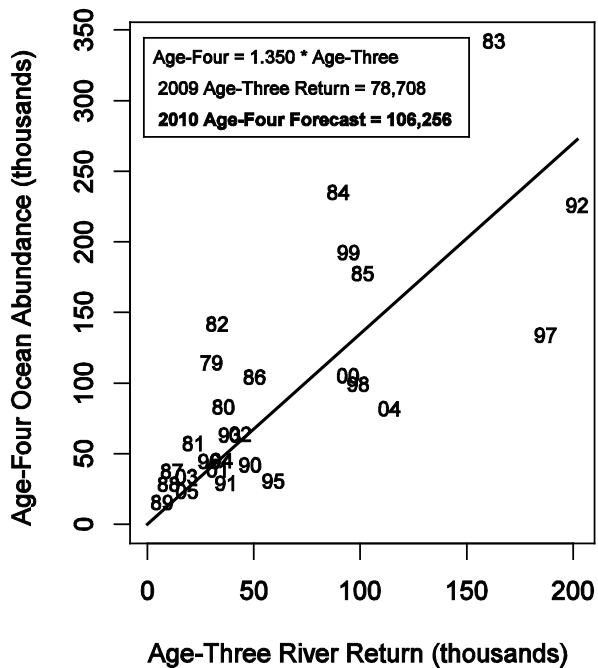
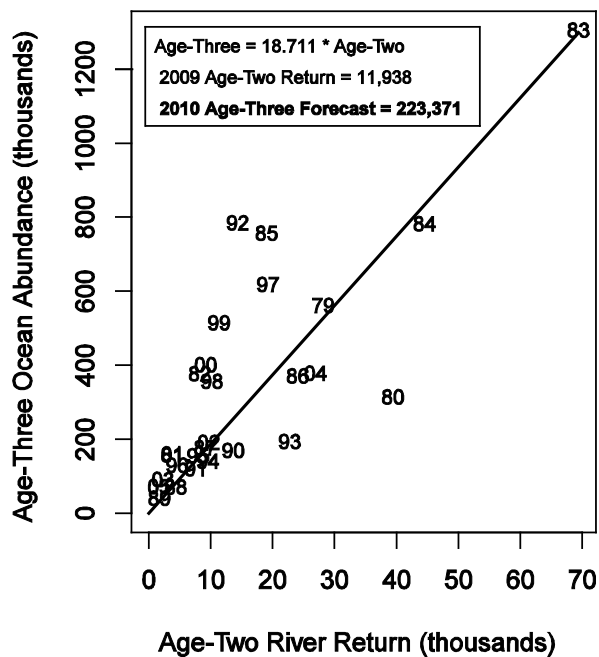


FIGURE II-3. Regression estimators for Klamath River fall Chinook ocean abundance (September 1) based on that year's river return of same cohort. Numbers in plots denote brood years.

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			
		Run	Indian	Sport	Total	Mortality	Hatchery	Natural	Total	Hatchery	Natural	Total	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	3,945	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	27,699	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	1,974	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	7,798	8,599	2,931	17,223	20,154
2009 ^{b/}	Adults	100,747	28,387	5,575	33,962	2,583	12,263	27,743	40,006	7,351	16,846	24,197	19,614	44,589	64,203
	Jacks	11,938	178	2,215	2,393	60	1,229	1,948	3,177	143	6,165	6,308	1,372	8,113	9,485
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 and 2009, fisheries were managed for a natural area spawning escapement of 40,700 adults.

Table 5. Age composition of the 2009 Klamath Basin fall Chinook run.

Escapement & Harvest	AGE				Total Adults	Total Run
	2	3	4	5		
Hatchery Spawners						
Iron Gate Hatchery (IGH)	1,229	8,982	3,184	97	12,263	13,492
Trinity River Hatchery (TRH)	143	6,867	444	39	7,351	7,494
Hatchery Spawner subtotal	1,372	15,849	3,628	136	19,614	20,986
Natural Spawners						
Salmon River Basin	516	1,291	511	403	2,204	2,720
Scott River Basin	44	1,794	106	267	2,167	2,211
Shasta River Basin	151	5,587	315	243	6,145	6,296
Bogus Creek Basin	471	4,836	552	66	5,455	5,926
Klamath River mainstem (IGH to Shasta R)	160	3150	1010	107	4,267	4,427
Klamath River mainstem (Shasta R to Indian Cr)	135	2724	863	92	3,678	3,813
Klamath Tributaries (above Trinity, including Pine Creek)	175	2,793	168	134	3,094	3,269
Blue Creek	<u>296</u>	<u>667</u>	<u>33</u>	<u>33</u>	<u>733</u>	<u>1,029</u>
Klamath Basin subtotal	1,948	22,842	3,558	1,345	27,743	29,691
Trinity River (mainstem above WCW)	5,787	12,883	2,022	909	15,814	21,601
Trinity River (mainstem below WCW)	195	435	68	31	534	729
Trinity Tributaries (above Reservation; below WCW)	70	155	24	11	190	260
Hoopla Reservation tributaries	<u>113</u>	<u>251</u>	<u>39</u>	<u>18</u>	<u>308</u>	<u>421</u>
Trinity Basin subtotal	6,165	13,724	2,153	969	16,846	23,011
Natural Spawners subtotal	8,113	36,566	5,711	2,314	44,589	52,702
Total Spawner Escapement	9,485	52,415	9,339	2,450	64,203	73,688
Recreational Harvest						
Klamath River (below Hwy 101 bridge)	319	966	154	71	1,191	1,510
Klamath River (Hwy 101 to Weitchpec)	1,559	1,825	111	80	2,015	3,574
Klamath River (Weitchpec to IGH)	155	1,259	340	15	1,614	1,769
Trinity River Basin (above WCW)	146	389	57	37	483	629
Trinity River Basin (below WCW)	36	216	34	22	272	308
Subtotals	2,215	4,655	696	225	5,575	7,790
Tribal Harvest						
Klamath River (below Hwy 101)	43	13,055	4,216	2,194	19,465	19,508
Klamath River (Hwy 101 to Trinity mouth)	39	3,548	926	295	4,769	4,808
Trinity River (Hoopla Reservation)	96	3,217	689	247	4,153	4,249
Subtotals	178	19,820	5,831	2,736	28,387	28,565
Total Harvest	2,393	24,475	6,527	2,961	33,962	36,355
Totals						
Harvest and Escapement	11,878	76,890	15,866	5,411	98,165	110,043
Recreational Angling Dropoff Mortality 2.04%	45	95	14	5	114	159
Tribal Net Dropoff Mortality 8.7%	15	1,723	507	239	2,469	2,484
Total River Run	11,938	78,708	16,387	5,653	100,748	112,686

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:

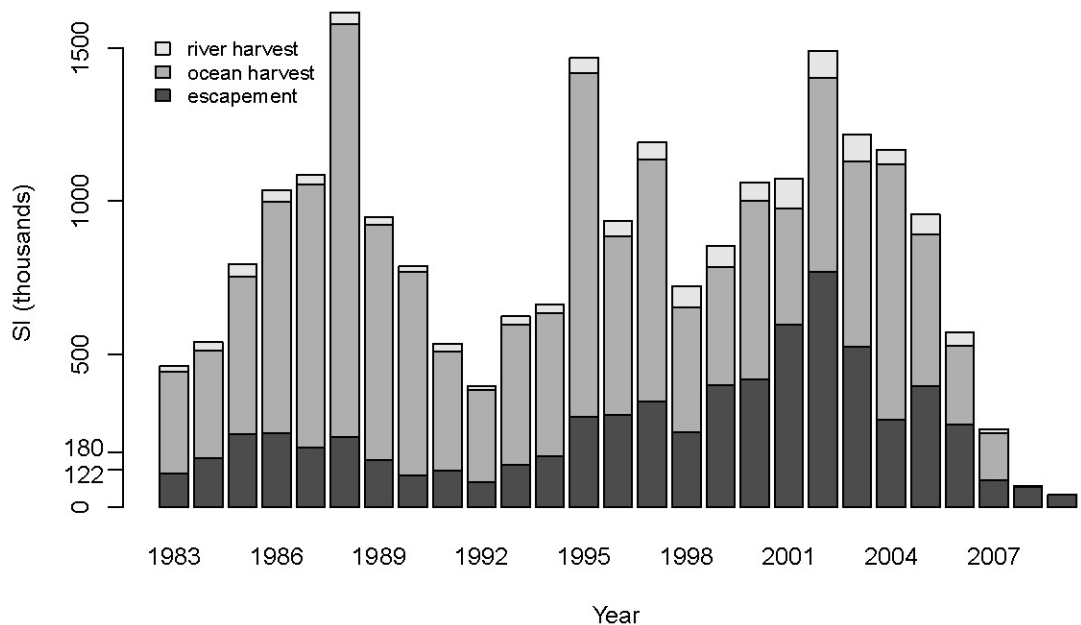
$$SI = H_{o,S} + H_r + E$$

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

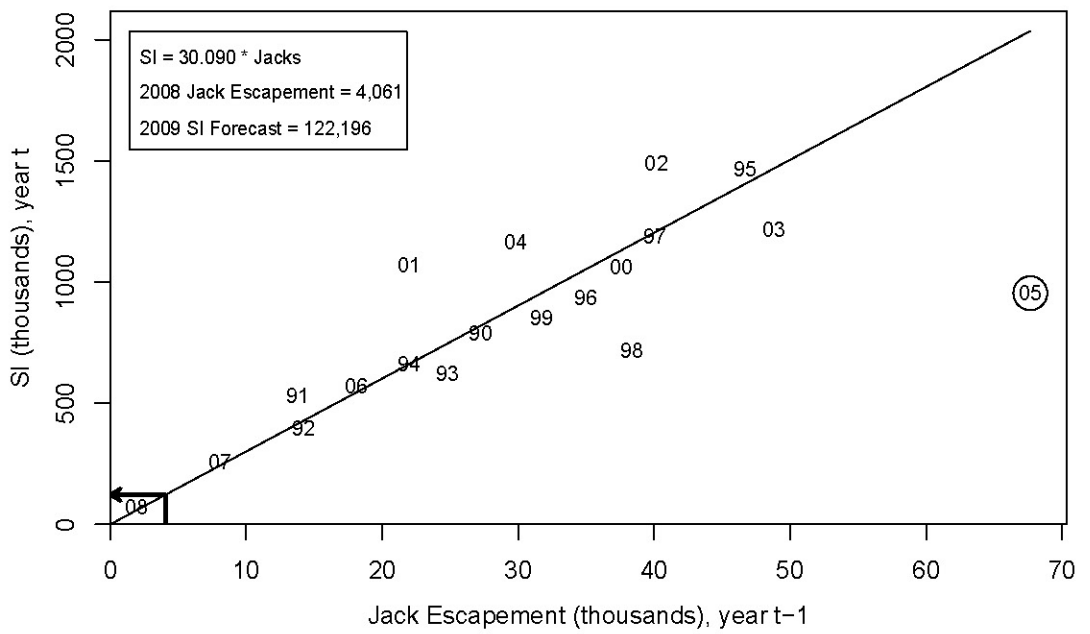
H_r = Sacramento River Basin harvest of SRFC

E = SRFC hatchery and natural-area escapement

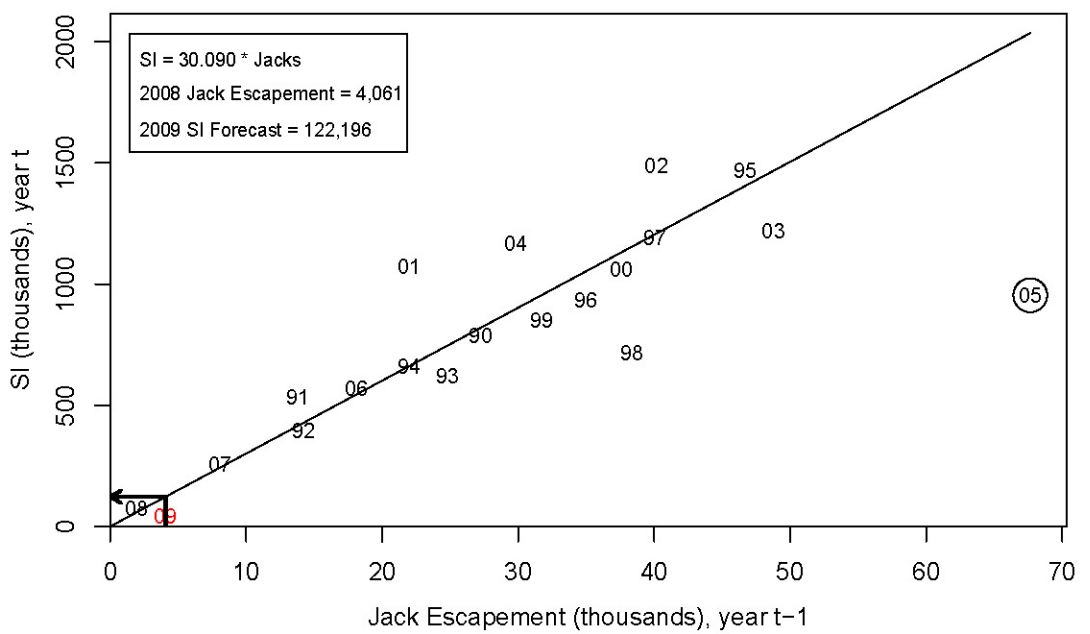
SI timeseries



2009 SI forecast: 122,196



2009 SI postseason estimate: 39,805



2010 SI forecast: 245,483

95% upper bound = 532,657

75% upper bound = 408,295

95% lower bound = 0

75% upper bound = 82,672

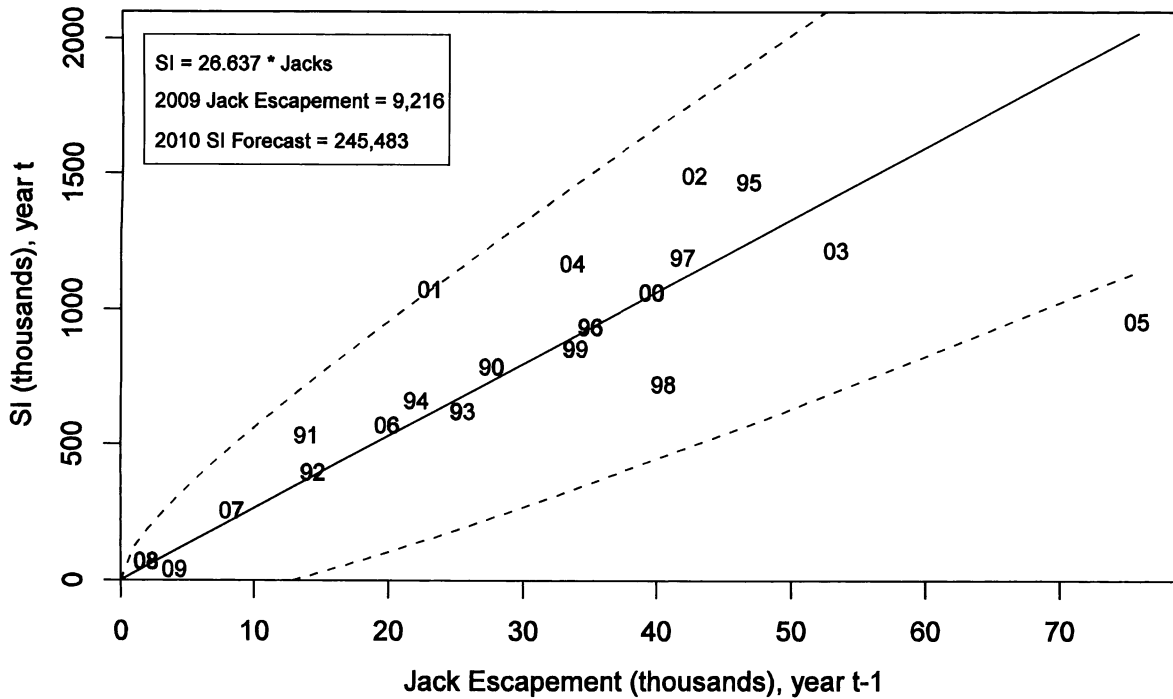


FIGURE II-2. Regression estimator for the SI based on previous year's escapement of Sacramento River fall Chinook jacks, 1990-2009. Years shown are SI years.

TABLE II-5. Performance of Chinook salmon stocks in relation to 2009 conservation objectives (preliminary data).

System and Stock	2009 Conservation Objective(s)	Achievement
Sacramento River Chinook		
Fall	122,000-180,000 natural and hatchery adults.	Preliminary estimate of 39,530 natural and hatchery adult fall Chinook, 32% of 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.	44,589 natural area spawners, 127% of FMP conservation objective; 110% of annual management objective.
California Coastal (Threatened)	No greater than 16.0% ocean harvest rate on age-4 Klamath River fall Chinook.	Preseason projection of <0.1%; no postseason estimate is currently available.

Salmon 2010 Preseason Process: Calendar of Events and Contact Information

March 3, 2010 - 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 <http://www.fgc.ca.gov/meetings/2010/2010mtgs.asp>
Doubletree Hotel Ontario Airport, 222 North Vineyard Avenue, Ontario, CA 91764
Telephone: (909) 937-0900

March 6-11, 2010 - Pacific Fishery Management Council Public Meeting

Council and advisory bodies meet to adopt the 2010 salmon management options for public review. Agenda and meeting materials available on line at <http://www.pcouncil.org/salmon/current-season-management/salmon-2009-preseason-process-work-sessions-and-hearings/>
Doubletree Hotel Sacramento, 2001 Point West Way, Sacramento, CA 95815
Telephone: (916) 929-8855

March 30, 2010 - 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. Hearing begins at 7 p.m.
Red Lion Hotel, Evergreen Room, 1929 Fourth Street, Eureka, CA 95521
Telephone: (707) 445-0844

April 7-8, 2010 - 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 <http://www.fgc.ca.gov/meetings/2010/2010mtgs.asp>
Beach Resort Monterey, 2600 Sand Dunes Drive, Monterey, CA
Telephone: (831) 394-3321

April 10-15, 2010 - Pacific Fishery Management Council Public Meeting

Council and advisory bodies meet to adopt 2010 management measures for implementation by the National Marine Fisheries Service. Agenda and meeting materials available on line at <http://www.pcouncil.org/salmon/current-season-management/salmon-2009-preseason-process-work-sessions-and-hearings/>
Sheraton Portland Airport Hotel, 8235 NE Airport Way, Portland, OR 97220
Telephone: (503) 249-7606

April 21, 2010 - California Fish and Game Commission Meeting - Teleconference

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

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@pacbell.net
PIERCE, MR. PAUL California Sport Fisheries	512 Pershing Drive San Leandro, CA 94577	Telephone: (510) 568-2713 Fax: (510) 432-8820 Email: SDAD111@aol.com
STONE, MR. CRAIG California Sport Fisheries	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 2009 Ocean Salmon Fisheries (includes in-river escapement data)

<http://www.pcouncil.org/salmon/stock-assessment-and-fishery-evaluation-safe-documents/review-of-2009-ocean-salmon-fisheries/>

Preseason Reports: Stock Abundance Analysis for 2010 Ocean Salmon Fisheries

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

Klamath Basin Age Composition and Stock Projection Reports

<http://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 2009 KMZ Sport Fishery	<input type="checkbox"/> Klamath and Sacramento Ocean Harvest Model Results
<input type="checkbox"/> Review of 2009 Central Valley (CV) System	<input type="checkbox"/> NMFS Guidance for CA Stocks
<input type="checkbox"/> Review of 2009 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.