2004 SALMON INFORMATIONAL MEETING

2003 Fisheries and Escapements and 2004 Ocean Abundances

February 25, 2004

Flamingo Resort Hotel and Conference Center
2777 Fourth Street
Santa Rosa, California 95405

This packet is available on the Internet at

www.dfg.ca.gov/mrd/oceansalmon.html

Final Agenda

SALMON FISHERY INFORMATIONAL MEETING

Flamingo Hotel and Conference Center
2777 Fourth Street
Santa Rosa, California 95405
(707) 545-8530

Wednesday, February 25, 2004

9:00 a.m.

A. Opening Comments	Allen Grover, DFG
B. Moderator	Eric Larson, DFG
C. Review of Ocean Fisheries	
1. Sport Fishery	Marc Heisdorf, DFG
2. Commercial Fishery	Marc Heisdorf
3. Industry and Fishery Comments	Various Representatives
D. Review of River Fisheries and Spawning Escapements	
1. Central Valley Escapements	Matt Erickson, DFG
2. Klamath Escapements	Matt Erickson
3. Butte Creek Spring Chinook	Tracy McReynolds, DFG
4. California Coastal Chinook	Sara Borok, DFG
Lunch	
E. 2004 Ocean Abundance Projections and Management Objectives	
1. Sacramento and Klamath River Fall Chinook	Allen Grover, DFG
2. Oregon Natural Coho	Allen Grover
3. KOHM Catch and Effort Predictions	Allen Grover
4. Sacramento Winter/Spring Run Plan Amendment	Dan Viele, NMFS
5. CPFV Boat Limits	Tim Olivas, DFG
F. Break – 15 minutes	
G. Public Comments	Audience
H. Regulatory Schedule and Final Comments	Eric Larson, DFG

2004 PACIFIC FISHERY MANAGEMENT COUNCIL (PFMC) AND STATE OF CALIFORNIA REGULATION PROCESS

DATE	DESCRIPTION
February 25	2004 Salmon Informational Meeting held in Santa Rosa, California.
February thru March	State agencies, tribes, and fishers review preseason abundance projections and range of probable fishery options. The Klamath Fishery Management Council completes recommendations for ocean management options affecting Klamath River fall chinook.
Late February	*Review of 2003 Ocean Salmon Fisheries* available from PFMC (866) 806-7204 or their website (www.pcouncil.org). The report summarizes seasons, quotas, harvest, escapement, socioeconomic statistics, achievement of management goals and impacts on species listed under the Endangered Species Act.
March 2	*Preseason Report I-Stock Abundance Analysis for 2004 Ocean Salmon Fisheries* available from PFMC (866) 806-7204 or their website (www.pcouncil.org). The report provides key salmon stock abundance estimates and precision, harvest and escapement estimates when recent regulatory regimes are projected on 2004 abundance and other pertinent information to aid development of management options.
March 8-12	PFMC and advisory entities meet in Tacoma, Washington, California to adopt 2004 regulatory options for public review.
March 23	*Preseason Report II-Analysis of Proposed Regulatory Options for 2004 Ocean Salmon Fisheries* available from PFMC (866) 806-7204 or their website (www.pcouncil.org). The report includes the public hearing schedule, comment instructions, option highlights and tables summarizing the biological and economic impacts of the proposed management options.
March thru April	Management agencies, tribes, and public develop their final recommendations for the regulatory options
March 29-30	Sites and dates of public hearings to review the PFMC's proposed regulatory options are: Westport, Washington (March 29); North Bend, Oregon (March 29); and Fort Bragg, California (March 30).
April 5-9	PFMC and advisory entities meet in Vancouver, Washington to adopt final regulatory measures. The PFMC will tentatively adopt final regulatory measures for analysis by the STT.
Late April	*Preseason Report III-Analysis of Council Adopted Management Measures for 2004 Ocean Salmon Fisheries* available from PFMC (866) 806-7204 or their website (www.pcouncil.org). The report includes the final west coast ocean salmon fishing season structure and biological and economic impacts of the final management option.
May 1	National Marine Fisheries Service (NMFS) implements federal ocean salmon fishing regulations.

PFMC, KFMC, and Fish and Game Commission 2004 Meeting Schedule for Salmon Regulations

February 25	2004 Salmon Informational Meeting in Santa Rosa, California.
March 2-4	Annual Preseason KFMC meeting in Klamath, California.
March 4-5	Fish and Game Commission meeting in Redding, California for public input on salmon regulations.
March 8-12	PFMC and advisory entities meet in Tacoma, Washington to adopt 2004 federal regulatory options for public review. The KFMC will meet during the PFMC meeting.
March 30	PFMC public hearing in Fort Bragg, California to review the proposed regulatory options.
April 1-2	Fish and Game Commission meeting in Sacramento, California to review PFMC regulatory options.
April 5-9	PFMC and advisory entities meet in Sacramento, California to adopt final 2004 and preseason 2005 federal regulations. The KFMC will meet during the PFMC meeting.
April 22	Fish and Game Commission hold teleconference meeting to adopt final 2004 and preseason 2005 state regulations.

TABLE I-5. Council area **commercial and recreational** ocean salmon fishing **effort and landings** by management area. (Page 1 of 1)

	COMMERCIAL TROLL				RECREATIONAL					
	Effort (thousands of boat days	Catch (thousands of fish)			Effort (thousands of salmon angler	Catch (thousands of fish)				
Year	fished)	Chinook	Coho	Pink	trips)	Chinook	Coho	Pink	total	Salmon Per Angler Trip
- - - - - U.S./CANADA BORDER TO CAPE FALCON - - - - -										
Treaty Indian (U.S./Canada Border to Leadbetter Point):[a/]										
1997	0.371	13.969	15.660	1.710	-	-	-	-	-	-
1998	0.176	14.387	7.927	0.000	-	-	-	-	-	-
1999	0.383	27.412	33.447	1.563	-	-	-	-	-	-
2000	0.232	7.625	22.174	0.000	-	-	-	-	-	-
2001	0.625	28.100	57.520	2.614	-	-	-	-	-	-
2002	0.349	39.115	17.493	0.000	-	-	-	-	-	-
2003[b/]	0.330	34.674	10.912	0.243	-	-	-	-	-	-
Non-Indian:										
1997	0.552	6.447	0.000	0.005	31.377	4.144	31.075	1.410	36.629	1.167
1998	0.139	5.929	0.000	0.000	15.400	2.180	14.185	0.013	16.378	1.064
1999	0.757	17.628	3.815	0.053	58.189	10.820	47.663	2.194	60.677	1.043
2000	0.695	12.932	17.294	0.000	53.943	9.234	77.515	0.018	86.767	1.608
2001	1.015	26.514	17.479	0.044	149.643	25.592	207.251	3.921	236.764	1.582
2002	2.054	81.579	1.695	0.000	107.183	60.555	88.508	0.000	149.063	1.391
2003[b/]	2.212	69.775	15.668	0.258	144.093	36.536	168.846	13.400	218.782	1.518
- - - - - CAPE FALCON TO HUMBUG MOUNTAIN - - - - -										
1997	7.428	145.929	-	0.048	9.962	2.408	0.038	0.000	2.446	0.246
1998	6.960	123.468	-	0.001	9.743	2.019	0.093	0.000	2.112	0.217
1999	4.826	60.987	-	0.055	26.217	3.340	6.046	0.000	9.386	0.358
2000	6.927	130.164	-	0.003	48.111	12.878	19.401	0.000	32.279	0.671
2001	10.424	266.981	-	0.344	71.119	17.374	55.088	0.000	72.462	1.019
2002	10.843	284.589	-	0.000	75.868	34.792	22.026	0.000	56.818	0.749
2003[b/]	11.442	312.408	-	0.023	110.403	32.858	83.843	0.000	116.701	1.057
- - - - - HUMBUG MOUNTAIN TO HORSE MOUNTAIN TO (KMZ) - - - - -										
1997	0.477	5.026	-	0.000	35.535	14.070	0.328	0.000	14.398	0.405
1998	0.361	3.244	-	0.000	24.129	4.875	0.100	0.000	4.975	0.206
1999	0.473	4.219	-	0.000	33.612	9.638	0.177	0.000	9.815	0.292
2000	0.417	5.534	-	0.000	42.329	25.292	0.257	0.000	25.549	0.604
2001	0.794	9.123	-	0.000	50.794	20.032	0.255	0.000	20.287	0.399
2002	1.033	20.270	-	0.000	41.265	26.065	0.403	0.000	26.468	0.641
2003[b/]	0.664	9.289	-	0.000	30.561	14.203	0.189	0.000	14.392	0.471
- - - - - HORSE MOUNTAIN TO U.S./MEXICO BORDER - - - - -										
1997	18.770	485.992	-	0.000	215.418	219.985	0.285	0.000	220.270	1.023
1998	14.304	224.755	-	0.000	141.792	119.100	0.040	0.000	119.140	0.840
1999	16.262	288.062	-	0.000	129.228	81.654	0.477	0.000	82.131	0.636
2000	20.004	477.014	-	0.000	194.053	172.377	0.223	0.000	172.600	0.889
2001	13.610	187.521	-	0.007	140.442	85.959	1.143	0.000	87.102	0.620
2002	16.715	378.188	-	0.000	188.509	165.913	0.533	0.000	166.446	0.883
2003[b/]	15.463	484.615	-	0.000	116.548	84.327	0.449	0.000	84.776	0.727

a/ May through September.
b/ Preliminary.

TABLE I-4. Council area **commercial and recreational** ocean salmon fishing **effort and landings** by state. Data are provisional, pending further review of data compilation methods. A double dash ("- -") indicates no records are available. Fewer than 50 fish or pounds may be shown as zero. (Page 3 of 4)

	COMMERCIAL TROLL							RECREATIONAL					
		Catch											
		Thousands of Fish			Thousands of Pounds (Dressed Weight)				Catch (thousands of fish)				
Year or Average	Effort (thousands of days fished)	Chinook	Coho	Pink	Chinook	Coho	Pink	Effort (thousands of salmon angler trips)	Chinook	Coho	Pink	Total	Salmon Per Angler Trip
CALIFORNIA													
1966-70	NA	486.3	319.7	7.4	4,924.5	2,351.5	36.6	189.8	120.8	33.2	0.0	154.0	0.8
1971-75	45.2	562.7	361.8	4.7	5,743.0	2,211.3	22.4	247.4	169.6	48.3	0.0	217.9	0.9
1976-80	81.3	618.6	243.4	0.5	5,867.3	1,184.3	2.7	163.5	92.4	31.2	0.0	123.6	0.8
1981-85	59.8	462.7	58.7	2.4	4,453.6	344.9	13.6	147.2	108.8	19.9	0.0	128.7	0.9
1986-90	58.5	794.7	46.8	0.3	8,097.4	262.2	1.6	241.3	166.5	40.3	0.0	206.8	0.9
1991	35.3	294.9	82.3	0.0	3,237.9	459.2	0.0	196.6	80.8	69.3	0.0	150.1	0.8
1992	20.3	163.4	2.5	0.0	1,632.1	11.3	0.0	127.9	73.6	11.5	0.0	85.1	0.7
1993	25.9	279.6	-	0.0	2,536.9	-	0.0	174.9	110.0	29.8	0.0	139.8	0.8
1994	21.2	295.6	-	0.0	3,103.1	-	0.0	189.9	183.2	0.5	0.0	183.7	1.0
1995	25.8	679.3	-	0.0	6,633.5	-	0.0	378.5	397.2	0.9	0.0	398.1	1.1
1996	21.1	380.6	-	0.0	4,113.4	-	0.0	225.4	164.2	0.6	0.0	164.8	0.7
1997	18.9	487.7	-	0.0	5,247.8	-	0.0	234.3	229.0	0.5	0.0	229.5	1.0
1998	14.5	227.3	-	0.0	1,847.1	-	0.0	151.8	122.0	0.1	0.0	122.1	0.8
1999	16.5	290.9	-	0.0	3,845.8	-	0.0	147.1	87.8	0.6	0.0	88.4	0.6
2000	20.1	479.1	-	0.0	5,130.6	-	0.0	214.4	185.9	0.4	0.0	186.3	0.9
2001	13.9	193.0	-	0.0	2,408.3	-	0.0	165.1	98.8	1.3	0.0	100.1	0.6
2002	17.3	391.7	-	0.0	5,007.5	-	0.0	210.1	182.0	0.8	0.0	182.8	0.9
2003[c/]	15.6	488.8	-	0.0	6,356.3	-	0.0	132.3	93.1	0.6	0.0	93.7	0.7

TABLE B-1. **California** Central Valley **natural fall Chinook** salmon **spawning escapements** in thousands of fish.[a/] (Page 1 of 1)

Year or Average	Upper Sacramento River		Lower Sacramento River: Feather River		Lower Sacramento River: Yuba River		Lower Sacramento River: American River		Lower Sacramento River: Total		Sacramento River Totals		San Joaquin River Totals		Central Valley Totals	
	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks
1970-1975	56.3	17.7	41.0	10.3	11.0	1.7	39.1	3.7	91.1	15.6	147.5	33.4	16.0	2.6	163.5	35.9
1976-1980	65.4	17.5	34.0	3.5	7.4	1.6	28.5	1.3	69.9	6.5	135.2	24.0	2.9	0.8	138.1	24.8
1981-1985	57.4	22.2	36.3	5.2	12.8	5.1	32.3	5.0	81.4	15.3	138.8	37.5	34.9	10.7	173.7	48.2
1986-1990	87.4	17.2	38.7	6.4	9.3	2.4	24.4	3.3	72.4	12.2	159.8	29.4	10.8	4.4	170.6	33.8
1991	35.3	4.6	28.5	2.8	11.2	2.8	16.5	1.6	56.1	7.3	91.4	11.9	0.8	0.2	92.2	12.1
1992	31.7	9.1	19.8	4.3	4.5	1.8	3.4	1.4	27.7	7.6	59.5	16.7	1.1	0.8	60.6	17.5
1993	55.3	5.4	27.4	3.6	5.8	0.9	22.2	6.5	55.4	11.0	110.7	16.4	2.5	0.9	113.3	17.3
1994	66.4	20.4	31.0	7.4	7.0	3.8	28.6	2.9	66.6	14.1	133.0	34.5	4.4	1.3	137.4	35.8
1995	112.2	18.0	56.2	3.7	13.0	1.2	72.1	8.3	141.3	13.2	253.5	31.2	4.4	1.5	257.8	32.7
1996	131.3[b/]	11.6[b/]	44.6	12.6	23.5	4.4	67.7	7.0	135.8	24.0	267.1	35.7	5.7	6.0	272.8	41.6
1997	167.4	13.7	47.0	3.5	19.2	6.7	46.0	6.2	112.2	16.4	279.6	30.2	18.1	1.0	297.7	31.2
1998	60.7[b/]	5.1[b/]	39.6[c/]	3.4	26.7	4.4	41.1	13.7	107.4	21.5	168.1	26.6	13.3	6.4	181.5	32.9
1999	263.6	7.1	30.0[c/]	7.5	17.9	5.2	34.9	12.9	82.7	25.6	346.3	32.7	12.7	6.5	359.0	39.2
2000	153.6	3.9	101.4	6.5	12.9	1.9	93.7	6.2	208.0	14.6	361.6	18.5	36.5	2.6	398.1	21.1
2001	130.4	5.1	169.6	9.1	20.6	1.7	167.1	13.6	357.3	24.4	487.7	29.5	22.1	3.2	509.8	32.8
2002	481.9[d/]	9.0	93.8	11.4	18.4	4.8	95.7	10.6	207.9	26.8	689.8	35.8	24.1	4.2	714.0	40.0
2003[e/]	162.9	4.3	84.4	4.4	27.6	1.3	136.2	9.6	248.2	15.3	411.1	19.7	14.5	2.2	425.6	21.9

a/ Upper Sacramento River jack estimates based on Red Bluff Diversion Dam samples. All other estimates generally are based on carcass surveys. (Adult and jack numbers generally are based on a 24-inch fork length cut-off [unpublished CDFG data.]) Upper Sacramento River estimates also include Tehama-Colusa Spawning Channel for 1971 to 1980. For years prior to 2004, all numbers in this table were reviewed and updated by CDFG in 2003 to reflect CDFG final project reports.

b/ Total includes Butte Creek, for which a fall spawner survey was conducted in 1996 and 1998.

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

d/ Change is estimation methodology (due to extremely high Battle Creek escapement in 2002).

e/ Preliminary.

TABLE B-2. **California** Central Valley **hatchery fall Chinook** salmon **spawning escapements** in thousands of fish.[a/] (Page 1 of 1)

	Sacramento Hatcheries								San Joaquin Hatcheries							
Year or	Coleman[b/]		Feather River		Nimbus		Totals		Mokelumne River		Merced River		Totals		Central Valley Hatchery Totals	
Average	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults [c/]	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks
1970-75	1.6	1.1	3.6	1.3	7.8	1.2	13.6	3.6	0.3	0.2	0.4	0.0	0.7	0.2	14.3	3.8
1976-80	4.2	1.3	4.3	1.0	7.2	2.0	17.2	4.3	0.3	0.1	0.3	0.0	0.6	0.1	17.8	4.4
1981-85	11.6	3.7	6.8	0.9	10.1	2.3	29.8	6.9	0.8	0.7	0.8	0.4	1.6	1.2	31.4	8.1
1986-90	11.5	2.3	5.8	1.9	5.7	1.3	23.0	5.6	0.3	0.3	0.3	0.1	0.6	0.4	23.6	6.0
1991	10.0	0.7	9.2	1.5	6.8	0.4	26.0	2.5	0.0	0.0	0.0	0.0	0.1	0.0	26.1	2.5
1992	6.3	1.0	10.3	6.1	5.1	1.3	21.7	8.5	0.3	0.4	0.1	0.2	0.4	0.7	22.1	9.2
1993	7.1	0.5	10.2	1.8	7.3	3.3	24.6	5.6	1.5	0.6	0.2	0.2	1.8	0.8	26.4	6.4
1994	11.6	7.4	11.3	3.9	7.7	0.9	30.6	12.2	1.2	0.8	0.5	0.4	1.7	1.2	32.3	13.4
1995	24.8	1.9	11.6	0.6	5.2	1.3	41.5	3.8	2.4	0.9	0.3	0.3	2.7	1.2	44.2	5.0
1996	18.8	2.3	6.5	1.6	7.2	0.5	32.5	4.4	1.8	2.1	0.4	0.7	2.2	2.8	34.7	7.2
1997	44.6	6.1	13.4	1.8	5.3	0.3	63.3	8.2	6.3	0.2	0.8	0.1	7.1	0.3	70.4	8.5
1998	42.4	2.0	17.6	1.3	9.9	1.8	69.9	5.1	2.5	0.6	0.3	0.5	2.9	1.0	72.8	6.1
1999	23.2	3.8	11.1	1.3	6.2	3.6	40.5	8.6	1.6	1.5	0.6	1.0	2.3	2.5	42.8	11.1
2000	20.8	0.9	21.0	0.2	10.3	0.8	52.1	1.9	4.6	0.9	1.8	0.2	6.4	1.0	58.6	3.0
2001	23.7	1.0	23.8	0.6	9.7	2.0	57.2	3.6	4.3	1.4	1.1	0.5	5.5	1.9	62.7	5.5
2002	62.2	4.0	17.5	3.0	6.2	3.6	85.9	10.5	5.8	2.1	1.3	0.6	7.0	2.7	93.0	13.2
2003[d/]	83.0	5.3	13.6	1.4	11.9	3.0	108.5	9.7	5.1	3.0	0.4	0.2	5.5	3.2	114.0	12.8
GOALS[e/]	9.0	-	5.0	-	6.0	-	20.0	-	5.0	-	1.0	-	6.0	-	26.0	-

a/ Counts of fewer than 50 fish are shown as 0. For years prior to 2004, all numbers in this table were reviewed and updated by CDFG in 2003 to reflect CDFG final project reports.
b/ Fall spawning fish. Some spring run are included.
c/ Total adults in Sacramento Hatcheries include Tehama-Colusa Fish Facility for 1971 to 1985.
d/ Preliminary.
e/ Hatchery specific goals, not PFMC goals.

TABLE B-3. **Sacramento River late-fall, winter, and spring Chinook** salmon **spawning escapement** estimates in thousands of fish. (Page 1 of 1)

	Upper Sacramento River									Grand Totals	
	Late Fall [a/b/]		Winter [a/b/]		Spring						
					Tributary[c/]	Sacramento River[a/d/]		Feather River [d/e/]			
Year or Average	Adults	Jacks	Adults	Jacks	Adults and Jacks[f/]	Adults	Jacks	Adults	Jacks	Adults	Jacks
1971-1975	17.9	0.9	21.8	8.8	5.2	5.1	1.7	0.4	0.0	50.3	11.4
1976-1980	9.2	1.8	13.0	2.5	1.2	8.3	2.6	0.4	0.0	32.1	6.8
1981-1985	7.9	1.7	5.2	0.9	1.1	9.8	4.2	1.4	0.1	25.4	7.0
1986-1990	10.5	1.4	1.4	0.4	1.7	8.8	1.9	2.9	0.4	25.2	4.1
1991	6.6	0.5	0.2	g/	0.8	0.6	0.2	4.1	0.2	12.3	0.9
1992	9.7	0.7	1.2	0.1	1.2	0.3	0.1	1.3	0.2	13.6	1.0
1993	0.4	0.2	0.3	0.1	1.0	0.3	0.1	3.9	0.7	5.8	1.2
1994	0.5	0.1	0.1	0.1	1.7	0.5	0.4	2.8	0.9	5.5	1.5
1995	0.3[h/]	0.0[h/]	1.3	g/	9.4	0.3	0.1	5.0	0.4	16.3	0.5
1996	1.0[h/]	0.4[h/]	0.7	0.6	2.3	0.5	0.1	5.6	0.8	10.1	1.9
1997	4.2[h/]	0.4[h/]	0.5	0.4	1.3	0.0	0.1	3.0	0.7	9.0	1.5
1998	40.2[i/]	5.1[i/]	2.1	0.9	23.6	0.6	0.5	6.2	0.5	72.7	7.0
1999	24.5[i/]	4.0[i/]	0.8	2.5	6.1	0.1	0.1	3.5	0.2	35.0	6.8
2000	11.1[i/]	3.5[i/]	0.6	0.8	5.5	0.1	g/	3.4	0.3	20.6	4.6
2001	24.0[i/]	1.0[i/]	1.7	3.8	25.5 [j/]	1.0	k/	4.1	0.1	56.2	4.9
2002	39.7[i/]	0.4[i/]	7.6	1.6	17.6 [j/]	0.4	0.1	4.0	0.2	69.3	2.2
2003[l/]	9.4[i/]	0.2[i/]	6.2	3.6	21.8 [j/]	m/	m/	8.3	0.4	45.6	4.2

a/ Estimated number of jacks and adults based on sampling at Red Bluff Diversion Dam (unpublished CDFG data). Beginning in 1987 for late-fall and winter and 1994 for fall, estimates have been based on historical run patterns and partial counts at Red Bluff Diversion Dam, due to the raising of the dam gates during the last part of fall and late-fall runs and first part of the winter run.
b/ Variable numbers of late-fall and winter run are trapped at Keswick Dam and spawned at Coleman or Livingston Stone Hatcheries.
c/ Natural spawning spring run which are isolated from fall run. Primarily Mill, Deer, and Butte Creeks.
d/ Includes fish having characteristics of fall run hybrids. Spawning is not isolated from fall run.
e/ Primarily fish spawned at Feather River Hatchery.
f/ No data available for age composition of tributary spring run.
g/ Fewer than 50 fish.
h/ Primarily number of fish spawned at Coleman hatchery. No data are available for natural spawners, as gates were raised during the time coinciding with late-fall run.
i/ Data from carcass counts of natural spawners and fish spawned at Coleman hatchery.
j/ Includes Butte Creek spring run estimates.
k/ Jack proportion could not be determined.
l/ Preliminary.
m/ Estimates from mainstem Sacramento River not available.

Table 1. Preliminary Age Composition of the 2003 Klamath River fall chinook run as determined by the Klamath River Technical Advisory Team (Feb 5, 2004).

Escapement & Harvest	AGE 2	3	4	5	Total Adults	Total Run
Hatchery Spawners						
Iron Gate Hatchery (IGH)	290	17,427	14,459	84	31,970	32,260
Trinity River (TRH)	586	18,155	11,650	0	29,805	30,391
Hatchery Spawner subtotal	**876**	**35,582**	**26,109**	**84**	**61,775**	**62,651**
Natural Spawners						
Salmon River basin	73	1,245	2,039	17	3,302	3,375
Scott River basin	65	4,399	7,559	30	11,988	12,053
Shasta River Basin	155	2,798	1,325	11	4,134	4,289
Bogus Creek Basin	183	8,258	6,760	0	15,018	15,201
Klamath River mainstem (IGH to Shasta R)	237	6580	7407	89	14,076	14,313
Klamath River mainstem (Shasta R to Indian Cr)	61	1704	1919	23	3,646	3,707
Klamath Tributaries (above Reservation)	38	831	924	6	1,761	1,799
Yurok Reservation Tributaries	31	413	676	6	1,094	1,125
Klamath Basin subtotal	843	26,228	28,609	182	55,019	55,862
Trinity River (mainstem above WCW)	1,030	19,226	11,621	226	31,074	32,104
Trinity River (mainstem below WCW)	26	119	127	13	258	284
Trinity Tributaries (above Reservation)	109	135	454	13	602	711
Hoopa Reservation Tributaries	80	100	335	10	444	524
Trinity Basin subtotal	1,245	19,580	12,537	262	32,378	33,623
Natural Spawners subtotal	**2,088**	**45,808**	**41,146**	**444**	**87,397**	**89,485**
Total Spawner Escapement	**2,964**	**81,390**	**67,255**	**528**	**149,172**	**152,136**
Recreational Harvest						
Klamath River (below Hwy 101 bridge)	180	816	770	4	1,589	1,769
Klamath River (Hwy 101 to Coon Cr. Falls)	369	1,718	1,611	8	3,336	3,705
Klamath River (Coon Cr. Falls to IGH)	40	1,120	1,261	15	2,397	2,437
Trinity River basin (above WCW)	175	1,116	754	0	1,870	2,045
Trinity River basin (below WCW)	52	304	205	0	509	561
Subtotals	**816**	**5,074**	**4,601**	**27**	**9,701**	**10,517**
Tribal Harvest						
Klamath River (below Hwy 101)	15	3,947	18,362	239	22,548	22,563
Klamath River (Hwy 101 to Trinity mouth)	17	1,636	2,897	44	4,578	4,595
Trinity River (Hoopa Reservation)	12	1,390	1,381	0	2,771	2,783
Subtotals	**44**	**6,973**	**22,640**	**283**	**29,897**	**29,941**
Total Harvest	**860**	**12,047**	**27,241**	**310**	**39,598**	**40,458**
Totals						
Harvest and Escapement	3,824	93,437	94,496	838	188,770	192,594
Recreational Angling Dropoff Mortality 2.04%	17	104	94	0	198	215
Tribal Net Dropoff Mortality 8.7%	4	606	1,969	25	2,600	2,604
Total In-river Run	**3,845**	**94,147**	**96,559**	**862**	**191,568**	**195,413**

TABLE B-4. Summary of **Klamath River fall Chinook** salmon estimates in thousands of adults and jacks. (Page 1 of 2)

			Inriver Harvest				Spawning Escapement								
							Klamath River			Trinity River			Total		
Year	Category	Total Inriver Run	Indian	Sport	Total	Nonlanded Fishery Mortality	Hatchery	Natural	Total	Hatchery	Natural	Total	Hatchery	Natural	Total
1978	Adults	92.9	18.2	1.7	19.9	1.6	6.9	27.4	34.4	6.0	31.1	37.1	13.0	58.5	71.5
	Jacks	22.7	1.8	2.1	3.9	0.2	0.9	11.7	12.7	1.3	4.7	6.0	2.2	16.4	18.7
1979	Adults	51.3	13.7	2.1	15.8	1.2	2.3	22.6	24.9	1.3	8.0	9.4	3.6	30.6	34.3
	Jacks	11.7	1.4	2.2	3.5	0.2	0.3	2.8	3.1	1.0	3.9	4.9	1.2	6.8	8.0
1980	Adults	45.6	12.0	4.5	16.5	1.1	2.4	13.8	16.2	4.1	7.7	11.8	6.5	21.5	28.0
	Jacks	36.8	1.0	5.9	6.9	0.2	0.5	10.1	10.6	2.3	16.8	19.1	2.7	27.0	29.7
1981	Adults	80.3	33.0	6.0	39.0	3.0	2.1	18.5	20.6	2.4	15.3	17.7	4.4	33.9	38.3
	Jacks	28.1	2.5	7.3	9.7	0.4	0.5	10.6	11.1	1.0	5.9	6.9	1.5	16.5	18.1
1982	Adults	66.6	14.5	8.3	22.8	1.4	8.4	22.7	31.0	2.1	9.3	11.3	10.4	32.0	42.4
	Jacks	39.4	1.8	12.5	14.3	0.4	1.8	10.5	12.3	4.2	8.1	12.4	6.1	18.6	24.7
1983	Adults	57.5	7.9	4.2	12.1	0.8	8.4	13.5	21.9	5.5	17.3	22.8	13.9	30.8	44.6
	Jacks	3.8	0.2	0.4	0.5	0.0	0.5	1.7	2.2	0.3	0.9	1.1	0.8	2.5	3.3
1984	Adults	47.3	18.7	3.3	22.0	1.7	5.3	10.4	15.7	2.2	5.7	7.8	7.5	16.1	23.6
	Jacks	8.3	0.5	1.0	1.4	0.1	0.8	1.9	2.6	0.8	3.4	4.2	1.5	5.3	6.8
1985	Adults	64.4	11.6	3.6	15.1	1.1	20.0	16.5	36.4	2.6	9.2	11.8	22.5	25.7	48.2
	Jacks	69.4	1.6	11.2	12.8	0.4	2.2	6.5	8.7	18.2	29.5	47.6	20.3	36.0	56.3
1986	Adults	195.0	25.1	21.0	46.2	2.6	17.1	20.8	37.9	15.8	92.5	108.3	32.9	113.4	146.3
	Jacks	44.5	0.9	9.4	10.3	0.3	1.5	8.5	9.9	3.6	20.5	24.1	5.1	28.9	34.0
1987	Adults	209.1	53.1	20.2	73.3	5.0	15.2	29.8	45.0	13.9	71.9	85.9	29.1	101.7	130.8
	Jacks	19.0	0.4	5.4	5.9	0.1	1.8	2.8	4.6	2.5	5.9	8.4	4.3	8.8	13.1
1988	Adults	191.6	51.7	22.2	73.9	4.9	16.1	34.8	50.9	17.4	44.6	62.0	33.5	79.4	112.8
	Jacks	24.1	0.6	5.4	6.0	0.2	0.6	1.9	2.5	4.8	10.6	15.4	5.4	12.5	17.9
1989	Adults	124.3	45.6	8.8	54.3	4.1	10.9	14.4	25.3	11.1	29.4	40.6	22.0	43.9	65.9
	Jacks	9.1	0.2	2.3	2.5	0.1	0.8	3.0	3.8	0.2	2.5	2.8	1.1	5.5	6.6
1990	Adults	35.9	7.9	3.6	11.5	0.8	6.7	7.9	14.6	1.3	7.7	9.0	8.1	15.6	23.6
	Jacks	4.4	0.2	2.1	2.3	0.1	0.3	1.1	1.4	0.4	0.2	0.6	0.7	1.4	2.0
1991	Adults	32.7	10.2	3.4	13.6	1.0	4.0	6.8	10.8	2.5	4.9	7.3	6.5	11.6	18.1
	Jacks	1.8	0.1	0.7	0.7	0.0	0.1	0.3	0.4	0.2	0.4	0.6	0.3	0.7	1.0
1992	Adults	26.7	5.8	1.0	6.8	0.5	3.6	4.9	8.5	3.8	7.1	10.9	7.4	12.0	19.4
	Jacks	13.7	0.4	4.1	4.5	0.1	3.7	2.6	6.3	0.2	2.6	2.8	3.9	5.1	9.1
1993	Adults	57.2	9.6	3.2	12.8	0.9	20.8	16.0	36.8	0.8	5.9	6.7	21.6	21.9	43.5
	Jacks	7.6	0.2	1.9	2.1	0.1	0.9	1.4	2.2	0.7	2.5	3.2	1.6	3.8	5.4
1994	Adults	61.7	11.7	1.8	13.5	1.1	11.5	21.4	32.9	3.3	10.9	14.2	14.7	32.3	47.1
	Jacks	14.4	0.3	2.6	2.8	0.1	0.8	3.7	4.5	4.4	2.5	6.9	5.2	6.2	11.4

TABLE B-4. Summary of **Klamath River fall Chinook** salmon estimates in thousands of adults and jacks. (Page 2 of 2)

Year	Category	Total Inriver Run	Inriver Harvest			Nonlanded Fishery Mortality	Spawning Escapement								
							Klamath River			Trinity River			Total		
			Indian	Sport	Total		Hatchery	Natural	Total	Hatchery	Natural	Total	Hatchery	Natural	Total
1995	Adults	213.8	15.6	6.1	21.6	1.5	13.7	83.9	97.7	15.2	77.9	93.1	28.9	161.8	190.7
	Jacks	22.8	0.6	4.4	5.0	0.1	0.3	8.1	8.3	0.1	9.3	9.3	0.3	17.3	17.7
1996	Adults	175.8	56.5	12.8	69.2	5.2	13.6	38.7	52.3	6.4	42.6	49.1	20.0	81.3	101.4
	Jacks	9.5	0.2	2.3	2.5	0.1	0.5	1.7	2.2	0.2	4.5	4.7	0.8	6.2	7.0
1997	Adults	83.7	12.1	5.7	17.8	1.2	13.3	34.6	47.9	5.4	11.5	16.9	18.7	46.1	64.8
	Jacks	8.0	0.0	2.4	2.4	0.1	0.5	1.4	1.8	0.8	2.8	3.7	1.3	4.2	5.5
1998	Adults	90.6	10.2	7.7	17.9	1.0	14.9	18.0	33.0	14.3	24.5	38.8	29.2	42.5	71.7
	Jacks	4.6	0.1	1.1	1.2	0.0	0.4	0.9	1.3	0.2	2.0	2.2	0.6	2.9	3.5
1999	Adults	51.0	14.7	2.3	16.9	1.3	9.3	11.7	21.0	5.0	6.8	11.8	14.3	18.5	32.8
	Jacks	19.2	0.3	1.6	1.9	0.1	4.8	6.3	11.1	2.0	4.2	6.2	6.9	10.4	17.3
2000	Adults	218.1	29.4	5.7	35.1	2.7	71.6	58.4	130.0	26.0	24.3	50.3	97.6	82.7	180.3
	Jacks	10.2	0.3	1.6	1.9	0.1	0.8	2.9	3.7	1.1	3.5	4.6	1.9	6.4	8.3
2001	Adults	187.4	38.6	12.1	50.8	3.7	37.2	40.9	78.1	17.9	36.9	54.8	55.1	77.8	132.9
	Jacks	11.3	0.4	1.5	1.9	0.1	1.4	6.4	7.7	0.3	1.4	1.6	1.6	7.7	9.4
2002	Adults	160.8[a/]	24.6	10.5	35.1	2.4	23.7	54.2	77.9	3.5	11.4	14.9	27.2	65.6	92.8
	Jacks	9.2	0.1	0.9	1.0	0.0	1.3	1.5	2.8	1.0	2.3	3.4	2.3	3.9	6.2
2003[b/]	Adults	191.6	29.9	9.7	39.6	2.8	32.0	55.0	87.0	29.8	32.4	62.2	61.8	87.4	149.2
	Jacks	3.8	0.0	0.8	0.9	0.0	0.3	0.8	1.1	0.6	1.2	1.8	0.9	2.1	3.0
GOAL	Adults													35.0	

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

TABLE B-7. Summary of **California North Coast** salmon **spawning** stock surveys. (Page 1 of 1)

	Canon Creek (Mad River)[a/b/]			Sprowl Creek (Eel River)[a/c/]			Tomki Creek (Eel River)[d/]
Year	Number of Surveys	Chinook	Coho	Number of Surveys	Chinook	Coho	Chinook
1963-1964	12	70	55	-	-	-	-
1964-1965	NA	45	0	-	-	-	1,747
1965-1966	-	-	-	-	-	-	-
1966-1967	NA	334	3	3	1,189	6	-
1967-1968	-	-	-	-	-	-	-
1968-1969	-	-	-	-	-	-	-
1969-1970	-	-	-	-	-	-	-
1970-1971	NA	230	0	-	-	-	-
1971-1972	-	-	-	-	-	-	-
1972-1973	-	-	-	-	-	-	-
1973-1974	-	-	-	-	-	-	-
1974-1975	-	-	-	1	247	0	-
1975-1976	-	-	-	1	339	2	367
1976-1977	-	-	-	-	-	-	-
1977-1978	-	-	-	-	-	-	-
1978-1979	-	-	-	2	534	23	-
1979-1980	-	-	-	2	572	0	2,410
1980-1981	-	-	-	1	164	4	317
1981-1982	3	23	0	2	121	0	565
1982-1983	3	68	0	6	169	1	1,741
1983-1984	2	137	0	2	82	0	-
1984-1985[e/]	1	16	0	6	67	13	1,292
1985-1986	10	514	14	6	320	0	3,558
1986-1987[e/]	4	90	3	5	307	13	2,173
1987-1988	4	117	29	3	2,187	4	3,666
1988-1989	2	69	7	3	339	12	556
1989-1990[e/]	4	9	9	5	89	14	0
1990-1991	1	0	3	2	0	0	0
1991-1992[e/]	2	8	0	2	159	0	3
1992-1993[e/]	3	57	1	2	142	2	15
1993-1994	3	20	0	4	171	36	5
1994-1995	3	33	3	7	52	0	22
1995-1996[e/]	1	93	4	3	136	8	69
1996-1997	1	129	4	3	106	8	90
1997-1998	2	55	1	4	97	0	44
1998-1999	2	66	0	4	79	11	65
1999-2000[e/]	8	162	1	7	34	1	35
2000-2001[e/]	3	79	3	4	12	0	50
2001-2002	2	45	6	5	136	25	162 [f/]
2002-2003	3	402	1	6	267	17	5 [f/]
2003-2004[e/g/]	2	79	1	5	106	8	137[f/]

a/ Numbers reflect maximum annual counts of live fish and carcasses with adults and jacks combined. Counts in years of poor visibility are not shown.
b/ Survey area was from mouth to falls (2 miles).
c/ Survey area was the main stem and West Fork (4.5 miles).
d/ Total run size estimate including jacks and adults.
e/ Low flows this season appeared to increase main stem spawning and decrease tributary spawning.
f/ Survey methodology changed to using index sites and is not comparable to previous estimates.
g/ Preliminary.

TABLE II-3. **Klamath River fall chinook** ocean abundance (thousands), harvest rate, and river run size estimates (thousands) **by age**. (Page 1 of 1)

	Ocean Abundance Sept. 1 (t-1)			Annual Ocean Harvest Rate Sept. 1 (t-1) - Aug. 31 (t)		Klamath Basin River Run (t)				
Year (t)	Age-3	Age-4	Total	Age-3	Age-4	Age-2	Age-3	Age-4	Age-5	Total Adults
1981	493.2	57.0	550.2	0.21	0.53	28.2	64.1	14.4	1.8	80.3
1982	559.2	133.4	692.5	0.30	0.52	39.4	30.1	33.9	2.6	66.6
1983	317.9	114.4	432.3	0.19	0.60	3.8	35.9	20.7	0.9	57.5
1984	157.5	84.1	241.6	0.08	0.38	8.3	21.7	24.4	1.1	47.2
1985	374.6	56.9	431.5	0.11	0.25	69.4	32.9	25.7	5.8	64.4
1986	1307.9	141.1	1449.0	0.18	0.46	44.6	162.9	29.8	2.3	195.0
1987	786.3	343.2	1129.5	0.16	0.43	19.1	89.7	112.6	6.8	209.1
1988	750.5	236.2	986.7	0.20	0.39	24.1	101.2	86.5	3.9	191.6
1989	367.2	176.3	543.5	0.15	0.36	9.1	50.4	69.6	4.3	124.3
1990	177.7	103.1	280.8	0.30	0.55	4.4	11.6	22.9	1.3	35.9
1991	69.7	37.3	107.0	0.03	0.18	1.8	10.0	21.6	1.1	32.7
1992	39.5	28.3	67.7	0.02	0.07	13.7	6.9	18.8	1.0	26.7
1993	164.9	15.0	179.9	0.05	0.16	7.6	48.3	8.2	0.7	57.2
1994	116.2	39.6	155.8	0.03	0.09	14.4	36.0	24.7	1.0	61.7
1995	768.4	27.6	796.0	0.04	0.13	22.8	193.8	17.5	2.4	213.8
1996	190.5	225.6	416.1	0.05	0.16	9.5	38.8	136.7	0.3	175.8
1997	140.4	62.9	203.3	0.01	0.06	8.0	35.0	44.2	4.6	83.7
1998	154.6	44.9	199.5	0.00	0.09	4.6	59.2	29.7	1.7	90.6
1999	129.2	30.2	159.5	0.01	0.09	19.2	29.2	20.5	1.3	51.0
2000	617.0	44.2	661.3	0.06	0.10	10.2	187.1	30.5	0.5	218.1
2001	356.5	134.0	490.5	0.03	0.09	11.3	99.1	88.2	0.2	187.4
2002	496.1[a/]	99.4	595.4	0.02[a/]	0.15	9.2	94.6	62.5	3.7	160.8
2003	478.1[b/]	182.4[a/]	660.5	----[c/]	0.21[a/]	3.8	94.1	96.6	0.9	191.6

a/ Preliminary: incomplete cohort data (age-5 data unavailable).
b/ Preliminary: incomplete cohort data (age-4 and age-5 unavailable).
c/ Not Estimated: incomplete cohort data (age-4 and age-5 unavailable).

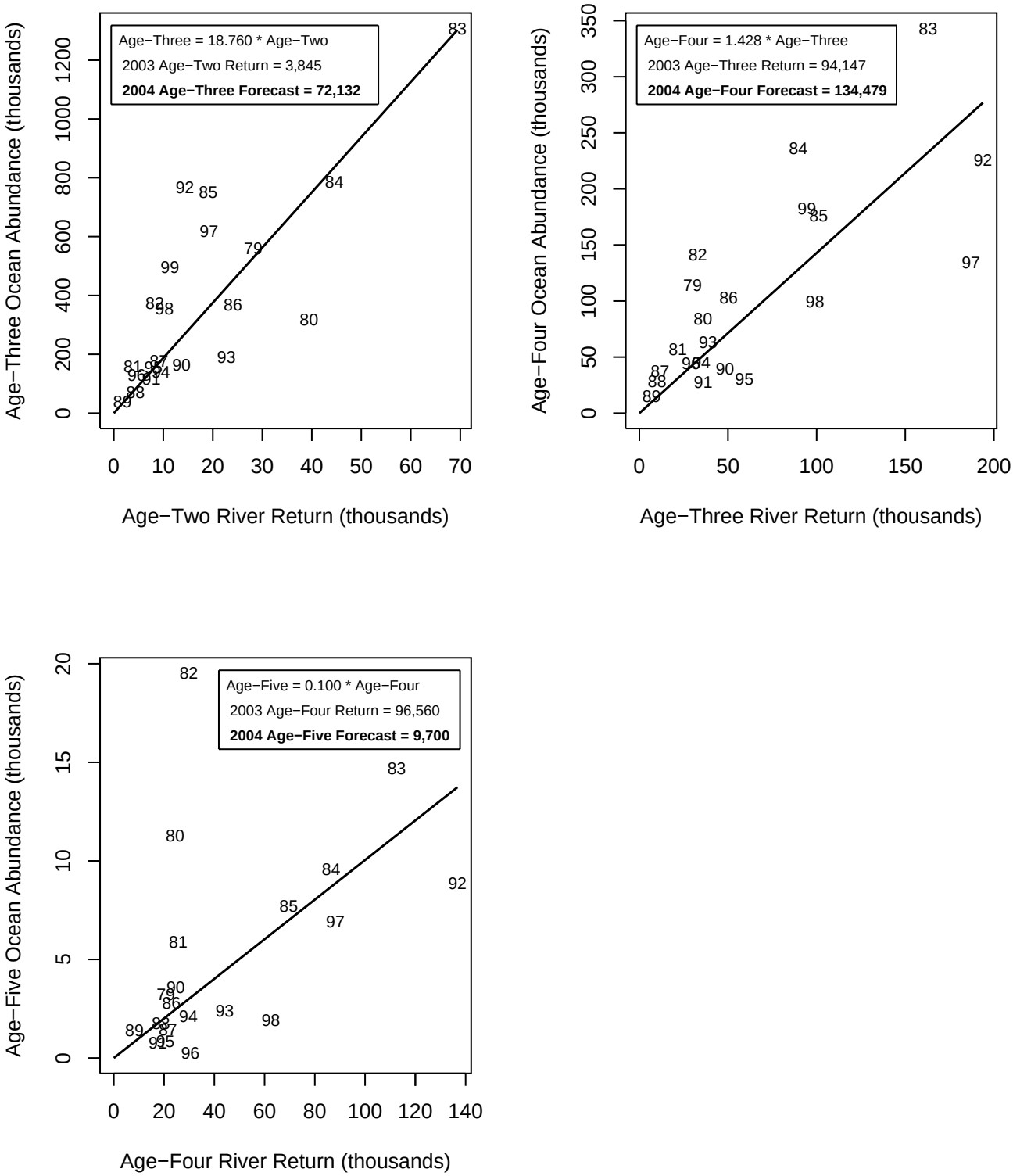

Figure 1. Regression estimators for Klamath River fall chinook ocean abundance (Sept. 1) based on that year's river return of same cohort. Numbers in plots denote brood years.

TABLE II-1. Indices of annual **abundance and ocean** fishery **impacts** on **California Central Valley chinook** in thousands of fish. (Page 1 of 1)

	Ocean Chinook Landings South of Pt. Arena			Hatchery and Natural Escapements of Central Valley Adults				
Year	Troll	Sport	Total	Fall	Other[a/]	Total	CVI Abundance (Ocean Landings + Escapement)	CVI Harvest Index (%)[b/]
1970	226.8	111.1	337.9	184.2	55.6[c/]	239.8	577.7	58
1971	150.7	166.3	317.0	191.3	62.0	253.3	570.3	56
1972	229.8	187.6	417.4	103.6	46.1	149.7	567.1	74
1973	422.5	180.9	603.4	223.1	27.1	250.2	853.6	71
1974	282.7	141.6	424.3	204.4	35.7	240.1	664.4	64
1975	234.4	92.7	327.1	160.2	47.6	207.8	534.9	61
1976	237.9	68.6	306.5	168.6	43.8	212.4	518.9	59
1977	263.8	76.6	340.4	162.8	42.8	205.6	546.0	62
1978	291.0	65.9	356.9	128.2	17.1	145.3	502.2	71
1979	234.1	108.5	342.6	171.9	11.3	183.2	525.8	65
1980	294.3	77.1	371.4	148.3	31.6	179.9	551.3	67
1981	289.9	73.8	363.7	195.1	21.6	216.7	580.4	63
1982	418.4	122.5	540.9	182.2	38.4	220.6	761.5	71
1983	178.2	53.0	231.2	129.9	14.3	144.2	375.4	62
1984	221.7	78.7	300.4	205.7	17.7	223.5	523.9	57
1985	212.3	121.8	334.1	312.7	20.4	333.1	667.2	50
1986	502.5	114.8	617.3	262.9	40.1	303.0	920.3	67
1987	446.8	152.8	599.6	202.8	22.1	224.9	824.5	73
1988	830.5	130.4	960.9	244.8	31.0	275.9	1,236.8	78
1989	363.8	130.9	494.7	155.0	17.0	172.0	666.7	74
1990	336.2	112.7	448.9	105.7	13.2	118.9	567.8	79
1991	254.6	62.1	316.7	118.3	16.4	134.6	451.3	70
1992	163.5	66.7	230.2	82.6	3.4	86.1	316.3	73
1993	259.7	99.3	359.0	139.7	5.7	145.4	504.4	71
1994	290.4	159.9	450.3	169.7	6.6	176.3	626.6	72
1995	670.6	354.6	1,025.2	302.1	16.4	318.5	1,343.7	76
1996	348.9	129.3	478.2	307.5	13.1	320.6	798.8	60
1997	482.2	208.4	690.6	368.2	46.6	414.7	1,105.3	62
1998	221.8	114.5	336.3	254.3	55.8	310.0	646.3	52
1999	285.6	76.4	362.0	401.7	21.4	423.1	785.1	46
2000	446.3	146.5	592.8	456.6	34.6	491.1	1,084.0	55
2001	172.5	59.9	232.4	572.5	77.8	650.3	882.7	26
2002	312.9	134.7	447.6	806.9	37.5	844.4	1,292.0	35
2003[d/]	239.2	68.4	307.6	539.6	55.1[e/]	594.7	902.3	34

a/ Spring run of the current calendar year and late fall and winter runs of the following calendar year.
b/ Ocean harvest landed south of Pt. Arena as a percent of the CVI.
c/ Percent of adults in 1970 spring run assumed the same as 1971 (72%, 5,500 total).
d/ Preliminary.
e/ Late-fall and winter run contributions not yet available; most recent 5-year average escapements used for these components.

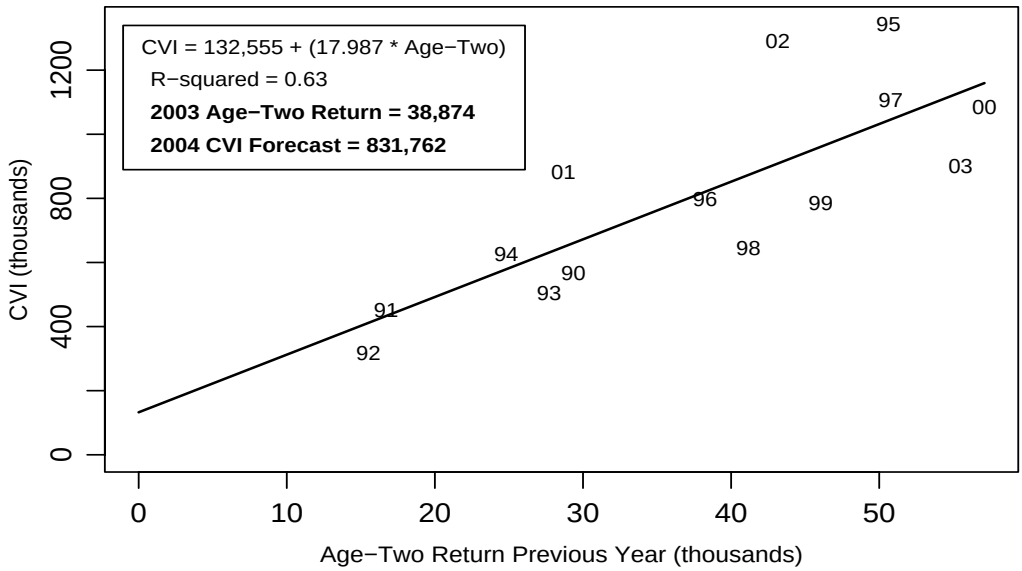

Figure 2. Regression estimator for CVI based upon previous year's river return of age-two Central Valley chinook, 1990-2003. Years shown are CVI years.

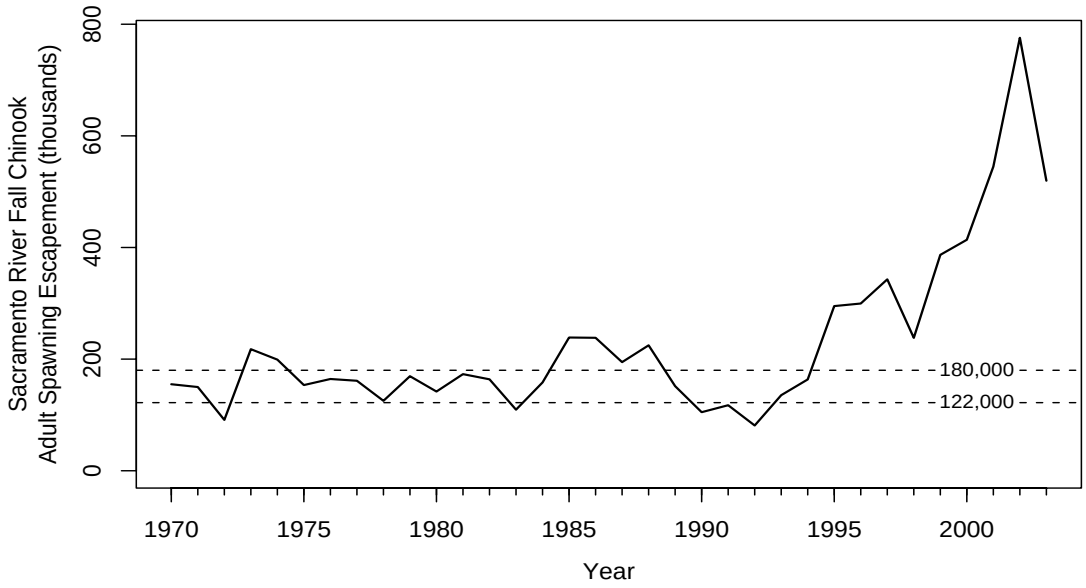

Figure 3. Spawning escapements of adult Sacramento River fall chinook, 1970-2003 and the goal range for the stock of 122,000 to 180,000 adult fish.

Evaluation Summary of Previous Salmon Informational Meetings

The representation among the user groups in 2003 was similar to previous meetings. The attendee's affiliation percentages are 46% agency, 36% commercial troller, 7% ocean sport angler, 9% conservation and 7% other.

Previous Meeting Evaluation Summary (5 point scale)

Year	Meeting Content	Meeting Organization	Number of Attendees	Evaluations Returned
2003	4.1	4.2	56	11
2002	4.5	4.9	60	14
2001	4.2	4.5	75	14
2000	4.2	4.5	79	14
1999	3.9	4.2	77	13
1998	4.3	4.6	75	25
Average	**4.2**	**4.5**	**70**	**15**

Please be sure to fill out the following evaluation sheet and return it to the sign-in tables.

We are very interested in your comments for future meetings.

Salmon Informational Meeting

EVALUATION

In order for these Salmon Informational Meetings to better meet your needs, please complete this evaluation.

EVALUATION SCALE

1	2	3	4	5
Poor		Fair		Good

1. Please indicate the interest group with which you are most closely affiliated.

   Ocean Sport Angler ____ River Sport Angler ____
   Commercial Troller ____ Resource Management ____
   Tribal Fisher ____ Conservation ____
   Other (please describe)

2. Using the above scale, please rate the information presented to you in terms of its usefulness to you and your constituency ____ (1 to 5)

   Comments

3. Using the above scale, please rate the organization of the meeting ____ (1 to 5)

   Comments

4. Other suggestions

Thank you for taking the time to complete this evaluation.