2003 SALMON INFORMATIONAL MEETING

2002 Fisheries and Escapements and 2003 Ocean Abundances

February 24, 2003

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

Final Agenda

SALMON FISHERY INFORMATIONAL MEETING

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

Monday, February 24, 2003

9:00 a.m.

A. Opening Comments	Allen Grover, DFG
B. Moderator	Eric Larson, DFG
C. Review of Ocean Fisheries	
1. Sport Fishery	Scott Barrow, DFG
2. Commercial Fishery	Scott Barrow
3. Industry and Fishery Comments	Various Representatives
D. Review of River Fisheries and Spawning Escapments	
1. Sacramento River Chinook	Randy Benthin, DFG
2. Butte Creek Spring Chinook	Tracy McReynolds, DFG
3. San Joaquin Fall Chinook	Tim Heyne, DFG
4. Klamath Fall Chinook	Sara Borok, DFG
5. DFG Klamath Fish Kill Report	Neil Manji, DFG
Lunch	
E. Ocean Abundance Projections	
1. Sacramento and Klamath River Fall Chinook	Allen Grover, DFG
2. Oregon Natural Coho	Allen Grover
3. KOHM Catch and Effort Predictions	Michael Mohr, NMFS
F. Management Objectives	
1. Sacramento Winter/Spring Run Plan Amendment	Dan Viele, NMFS
2. Fish and Game Commission	Bob Treanor, FGC
F. Public Comments	Audience
G. Regulatory Schedule and Final Comments	Eric Larson, DFG

2003 PACIFIC FISHERY MANAGEMENT COUNCIL (PFMC) AND STATE OF CALIFORNIA REGULATION PROCESS

DATE	DESCRIPTION
February 24	2003 Salmon Informational Meeting is held in Santa Rosa, California.
Late February	*Review of 2002 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.
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.
March 1	*Preseason Report I-Stock Abundance Analysis for 2003 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 2003 abundance and other pertinent information to aid development of management options.
March 10-14	PFMC and advisory entities meet in Sacramento, California to adopt 2003 regulatory options for public review.
Late March	*Preseason Report II-Analysis of Proposed Regulatory Options for 2003 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 31 To April 1	Sites and dates of public hearings to review the PFMC's proposed regulatory options are: Westport, Washington (March 31); North Bend, Oregon (March 31); and Eureka, California (April 1).
April 7-11	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 2003 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.

Table I-5. Council area commercial and recreational ocean salmon fishing effort and landings by management area.

	COMMERCIAL TROLL				RECREATIONAL					
	Effort (thousands of days fished)	Catch (thousands of fish)			Effort (thousands of salmon angler trips)	Catch (thousands of fish)				Salmon Per Angler Trip
Year		Chinook	Coho	Pink		Chinook	Coho	Pink	total	
- - - - - U.S.-CANADA BORDER TO CAPE FALCON - - - - -										
Treaty Indian (north of Leadbetter Point):[a/]										
1997[b/]	0.371	13.969	15.660	1.810	-	-	-	-	-	-
1998[b/]	0.176	14.637	8.007	0.000	-	-	-	-	-	-
1999[b/]	0.383	27.412	33.447	1.563	-	-	-	-	-	-
2000[b/]	0.232	7.625	22.174	0.000	-	-	-	-	-	-
2001[b/]	0.304	28.100	57.520	1.030	-	-	-	-	-	-
2002[b/]										
Non-Indian:										
1997	0.452	6.447	0.000	0.005	33.301	4.152	32.569	1.410	38.131	1.145
1998	0.139	5.929	0.000	0.000	21.767	2.292	22.887	0.013	25.192	1.157
1999	0.730	17.456	3.815	0.053	57.883	10.820	47.663	2.194	60.677	1.048
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	149.817	25.592	207.538	3.921	237.051	1.580
2002[b/]										
- - - - - CAPE FALCON TO HUMBUG MOUNTAIN - - - - -										
1997	7.428	145.929	0.000	0.048	9.962	2.408	0.038	0.000	2.446	0.246
1998	6.960	123.468	0.000	0.001	9.743	2.019	0.093	0.000	2.112	0.217
1999	4.826	60.987	0.000	0.055	26.217	3.340	6.046	0.000	9.386	0.358
2000	6.927	130.164	0.000	0.003	48.111	12.878	19.401	0.000	32.279	0.671
2001	10.424	266.981	0.000	0.344	71.119	17.374	55.088	0.000	72.462	1.019
2002[b/]	10.827	284.492	0.000	0.000	72.013	34.313	21.520	0.000	55.833	0.775
- - - - - HUMBUG MOUNTAIN TO HORSE MOUNTAIN TO (KMZ) - - - - -										
1997	0.477	5.026	0.000	0.000	35.535	14.070	0.328	0.000	14.398	0.405
1998	0.361	3.244	0.000	0.000	24.129	4.875	0.100	0.000	4.975	0.206
1999	0.473	4.219	0.000	0.000	33.612	9.638	0.177	0.000	9.815	0.292
2000	0.417	5.534	0.000	0.000	42.329	25.292	0.257	0.000	25.549	0.604
2001	0.794	9.123	0.000	0.000	50.794	20.032	0.255	0.000	20.287	0.399
2002[b/]	1.011	19.974	0.000	0.000	39.092	26.007	0.403	0.000	26.410	0.676
- - - - - HORSE MOUNTAIN TO U.S.-MEXICO BORDER - - - - -										
1997	18.770	485.992	-	0.000	215.418	219.885	0.285	0.000	220.170	1.022
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[b/]	16.409	373.418	-	0.000	185.457	163.279	0.533	0.000	163.812	0.883

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.

	COMMERCIAL TROLL							RECREATIONAL					
	Effort	Catch						Effort	Catch (thousands of fish)				
	(thousands of days	Thousands of Fish			Thousands of Pounds (Dressed Weight)			(thousands of salmon angler					Salmon Per
Year	fished)	Chinook	Coho	Pink	Chinook	Coho	Pink	trips)	Chinook	Coho	Pink	Total	Angler Trip
1966	- -	553.6	445.8	1.0	5,979.0	3,467.5	0.5	128.7	73.6	32.4	0.0	106.0	0.8
1967	- -	337.9	414.1	30.4	3,866.4	3,375.9	159.4	210.8	72.6	50.3	0.0	122.8	0.6
1968	- -	472.0	362.4	0.5	4,612.5	2,337.6	1.8	185.7	154.2	40.4	0.0	194.6	1.0
1969	- -	551.4	193.3	4.9	4,895.3	1,234.5	21.1	218.7	155.8	28.2	0.0	184.0	0.8
1970	43.7	516.6	182.9	0.1	5,269.5	1,341.8	0.2	205.1	147.8	14.6	0.0	162.4	0.8
1971	38.6	433.9	442.1	1.2	4,925.8	3,183.8	7.2	296.3	188.3	67.4	0.0	255.7	0.9
1972	37.8	492.2	158.0	0.0	5,372.8	1,050.4	0.2	242.9	200.5	44.6	0.0	245.1	1.0
1973	55.6	817.0	348.1	19.0	7,586.8	1,993.9	88.3	259.6	198.0	31.6	0.0	229.6	0.9
1974	51.1	491.6	656.9	0.3	5,048.5	3,700.1	0.9	255.4	157.5	76.6	0.0	234.1	0.9
1975	43.0	578.7	204.0	3.1	5,781.3	1,128.3	15.5	182.5	103.7	21.2	0.0	125.0	0.7
1976	60.0	539.9	621.8	0.0	4,943.9	2,843.8	0.0	187.2	81.0	57.9	0.0	138.9	0.7
1977	61.5	600.2	45.2	1.8	5,637.0	283.2	9.3	181.3	103.6	14.2	0.0	117.8	0.7
1978	98.4	637.7	315.8	0.0	5,492.4	1,295.1	0.0	150.7	72.7	41.2	0.0	114.0	0.8
1979	104.1	726.8	184.4	0.7	7,547.8	1,198.0	3.8	153.7	119.6	21.3	0.0	140.9	0.9
1980	82.5	588.7	49.8	0.1	5,715.2	301.6	0.4	144.4	85.2	21.2	0.0	106.4	0.7
1981	68.5	588.1	83.9	5.4	5,534.8	477.2	28.3	123.0	84.0	10.6	0.0	94.6	0.8
1982	93.1	765.2	91.9	0.0	7,448.6	551.9	0.0	171.3	137.2	26.7	0.0	163.9	1.0
1983	43.5	294.0	59.9	0.0	2,144.4	266.4	0.0	122.7	63.8	27.2	0.0	91.1	0.7
1984	42.2	299.8	47.0	0.0	2,621.2	348.4	0.0	127.0	87.8	19.0	0.0	106.8	0.8
1985	51.6	366.3	11.0	6.8	4,519.2	80.4	39.7	191.9	171.1	15.8	0.0	186.9	1.0
1986	54.7	825.6	36.4	0.0	7,396.8	201.6	0.0	195.6	141.6	18.7	0.0	160.3	0.8
1987	58.6	876.3	43.7	0.9	9,047.2	245.6	3.4	268.3	192.5	47.3	0.0	239.8	0.9
1988	75.7	1,317.2	51.0	0.0	14,430.8	319.5	0.0	245.4	171.8	34.4	0.0	206.2	0.8
1989	57.4	530.9	41.9	0.7	5,489.8	230.6	4.5	244.9	186.6	49.6	0.0	236.2	1.0
1990	46.2	423.4	61.0	0.0	4,122.4	313.7	0.0	252.1	139.8	51.6	0.0	191.5	0.8
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[c/]	17.0	386.7	-	0.0	4,941.4	-	0.0	206.9	179.3	0.8	0.0	180.2	0.9

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

	Upper Sac. River		Lower Sacramento River								Sacramento River Totals		San Joaquin River Totals		Central Valley Totals	
			Feather River		Yuba River		American River		Total							
Year	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks
1970	64.0	21.0	45.0	13.0	12.0	2.0	26.0	3.0	83.0	18.0	147.0	39.0	30.0	8.0	177.0	47.0
1971	62.6	24.4	34.0	10.0	5.3	0.4	36.0	6.0	75.3	16.4	137.9	40.8	40.0	4.0	177.9	44.8
1972	35.0	20.0	27.0	16.0	4.0	5.0	13.0	4.0	44.0	25.0	79.0	45.0	12.0	2.0	91.0	47.0
1973	48.0	19.0	52.0	13.0	22.0	2.0	77.0	5.0	151.0	20.0	199.0	39.0	6.5	0.7	205.5	39.7
1974	66.0	16.0	54.0	7.0	16.0	1.0	52.0	2.0	122.0	10.0	188.0	26.0	3.7	0.7	191.7	26.7
1975	71.0	25.0	35.0	3.0	5.0	1.0	29.0	3.0	69.0	7.0	140.0	32.0	5.8	0.9	145.8	32.9
1976	79.0	14.0	50.0	6.0	3.3	0.5	22.0	1.0	75.3	7.5	154.3	21.5	3.5	0.5	157.8	22.0
1977	46.8	28.4	36.0	2.0	7.0	2.0	40.0	2.0	83.0	6.0	129.8	34.4	0.6	0.1	130.4	34.5
1978	76.0	10.0	29.0	4.0	6.0	1.0	12.0	1.0	47.0	6.0	123.0	16.0	2.3	0.3	125.3	16.3
1979	77.0	44.0	25.0	3.0	10.0	2.0	36.0	1.0	71.0	6.0	148.0	50.0	4.0	0.5	152.0	50.5
1980	53.0	5.0	30.0	2.0	10.0	2.0	32.0	2.0	72.0	6.0	125.0	11.0	5.0	1.0	130.0	12.0
1981	51.0	35.0	41.0	4.0	12.0	2.0	38.0	5.0	91.0	11.0	142.0	46.0	15.9	8.9	157.9	54.9
1982	37.0	17.0	41.0	7.0	23.5	15.9	29.0	4.0	93.5	26.9	130.5	43.9	14.0	3.0	144.5	46.9
1983	40.6	24.7	19.1	4.5	11.4	2.4	19.0	7.4	49.5	14.3	90.1	39.0	11.1	32.2	101.2	71.2
1984	48.7	27.5	36.2	6.5	7.1	2.6	25.2	2.2	68.5	11.3	117.2	38.8	40.8	16.1	158.0	54.9
1985	107.7	25.3	46.5	3.7	10.1	2.9	44.7	11.4	101.3	18.0	209.0	43.3	72.6	3.5	281.6	46.8
1986	109.5	12.5	41.0	6.4	17.0	2.4	44.9	4.4	102.9	13.2	212.4	25.7	23.2	2.8	235.6	28.5
1987	73.4	41.4	43.6	11.6	15.2	3.5	18.2	3.0	77.0	18.1	150.4	59.5	15.8	9.1	166.2	68.6
1988	125.2	20.0	51.0	3.0	6.7	1.8	14.1	1.8	71.8	6.6	197.0	26.6	20.7	1.2	217.7	27.8
1989	65.9	16.8	31.5	3.5	8.3	1.6	14.7	2.4	54.5	7.5	120.4	24.3	3.2	0.1	123.6	24.4
1990	50.8	6.2	25.0	3.0	3.5	0.5	5.6	1.1	34.1	4.6	84.9	10.8	0.9	0.1	85.8	10.9
1991	33.6	4.7	25.2	2.5	11.4	2.7	16.5	1.7	53.1	6.9	86.7	11.6	0.6	0.2	87.3	11.8
1992	33.0	7.3	19.8	4.3	4.5	1.4	4.9	2.1	29.2	7.8	62.2	15.1	1.1	0.9	63.3	16.0
1993	54.4	6.9	24.3	3.1	5.5	0.8	19.1	3.4	48.9	7.3	103.3	14.2	2.3	0.9	105.6	15.1
1994	50.4	14.5	29.6	6.7	7.0	3.9	25.5	2.2	62.1	12.8	112.5	27.3	5.3	1.6	117.8	28.9
1995	92.8	6.6	56.2	3.4	12.2	1.1	65.0	3.0	133.4	7.5	226.2	14.1	1.5	1.1	227.7	15.2
1996	83.8[b/]	10.4[b/]	46.3	10.2	18.4	4.6	63.0	4.0	127.7	18.8	211.5	29.2	8.4	7.7	219.9	36.9
1997	154.8	20.3	38.2	17.2	19.0	6.8	47.3	4.7	104.5	28.7	259.3	49.0	19.8	0.9	279.1	49.9
1998	60.1[b/]	5.3[b/]	39.6	3.4	25.7	5.1	43.0	14.3	108.2	22.9	168.3	28.2	12.6	6.0	180.9	34.1
1999	148.3	4.5	31.2	4.7	17.9	5.2	34.9	12.9	83.9	22.8	232.3	27.3	8.3	9.4	240.6	36.6
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	36.1	3.0	397.7	21.5
2001	126.3	5.1	161.2	8.6	20.6	1.7	167.1	13.6	348.9	23.9	475.3	29.1	21.6	3.3	496.9	32.4
2002[c/]	481.9	9.0	84.4	9.0	18.5	5.1	107.8	16.4	210.7	30.5	692.7	39.5	24.1	4.2	716.8	43.7

a/ Upper Sacramento River jack estimates based on Red Bluff Diversion Dam samples. All other estimates 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 1971-80.

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

c/ Preliminary.

TABLE B-2. **California** Central Valley **hatchery fall chinook** salmon **spawning escapements** in thousands of fish.[a/]

	Sacramento Hatcheries								San Joaquin Hatcheries							
	Coleman[b/]		Feather River		Nimbus		Totals		Mokelumne River		Merced River		Totals		Central Valley Hatchery Totals	
Year	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks	Adults	Jacks
1970	3.0	0.5	2.4	0.9	7.8	0.8	13.2	2.2	0.3	0.2	0.0	0.0	0.3	0.2	13.5	2.4
1971	1.5	0.5	2.3	1.2	7.9	1.3	11.7	3.0	0.8	0.1	0.2	0.0	1.0	0.1	12.7	3.1
1972	1.6	1.2	1.4	2.2	5.4	1.7	8.4	5.1	0.1	0.3	0.1	0.0	0.2	0.3	8.6	5.4
1973	3.0	0.8	7.2	1.3	10.8	1.7	21.0	3.8	0.3	0.1	0.3	0.1	0.6	0.2	21.6	4.0
1974	1.3	0.3	4.3	1.1	7.3	0.7	12.9	2.1	0.1	0.1	0.9	0.1	1.0	0.2	13.9	2.3
1975	1.8	0.6	4.2	1.1	6.6	0.8	12.6	2.5	0.2	0.2	0.6	0.0	0.8	0.2	13.4	2.7
1976	1.8	0.5	4.3	0.9	4.3	0.9	10.4	2.3	0.0	0.0	0.6	0.0	0.6	0.0	11.0	2.3
1977	4.7	0.5	6.8	2.0	6.4	0.5	17.9	3.0	0.0	0.0	0.4	0.0	0.4	0.0	18.3	3.0
1978	1.1	0.8	3.9	0.9	6.1	2.1	11.1	3.8	0.5	0.0	0.0	0.0	0.5	0.0	11.6	3.8
1979	4.7	3.9	3.6	0.6	7.0	3.2	15.3	7.7	0.5	0.1	0.1	0.1	0.6	0.2	15.9	7.9
1980	8.8	0.7	3.0	0.7	13.5	2.0	25.3	3.4	0.4	0.2	0.2	0.0	0.6	0.2	25.9	3.6
1981	5.7	7.5	7.3	1.0	17.8	2.8	30.8	11.3	0.0	0.0	0.6	0.3	0.6	0.3	31.4	11.6
1982	16.2	3.3	6.4	1.2	8.1	2.8	30.7	7.3	1.8	0.9	0.2	0.0	2.0	0.9	32.7	8.2
1983	5.4	3.4	6.1	1.6	6.4	2.5	17.9	7.5	1.7	2.9	0.2	1.6	1.9	4.5	19.8	12.0
1984	18.7	2.9	8.9	0.4	10.2	2.0	37.8	5.3	0.0	0.0	1.7	0.2	1.7	0.2	39.5	5.5
1985	13.1	3.2	5.6	0.2	7.3	1.8	26.0	5.2	0.2	0.0	1.1	0.1	1.3	0.1	27.3	5.3
1986	11.3	1.2	5.7	2.8	5.6	0.1	22.6	4.1	0.3	0.2	0.5	0.2	0.8	0.4	23.4	4.5
1987	11.3	7.1	6.5	3.6	3.4	2.9	21.2	13.6	0.1	0.5	0.5	0.4	0.6	0.9	21.8	14.5
1988	12.5	1.1	6.2	0.3	8.0	0.7	26.7	2.1	0.1	0.0	0.4	0.0	0.5	0.0	27.2	2.1
1989	10.2	1.8	6.5	1.1	9.2	0.5	25.9	3.4	0.0	0.0	0.1	0.0	0.1	0.0	26.0	3.4
1990	13.5	1.2	4.3	1.9	4.6	0.3	22.4	3.4	0.0	0.0	0.1	0.0	0.1	0.0	22.5	3.4
1991	10.0	0.7	7.9	1.4	6.8	0.4	24.7	2.5	0.0	0.0	0.3	0.1	0.3	0.1	25.0	2.6
1992	6.2	1.0	10.3	6.1	5.1	1.3	21.6	8.4	0.3	0.4	0.1	0.3	0.4	0.7	22.0	9.1
1993	7.1	0.6	9.8	1.6	7.3	3.3	24.2	5.5	1.5	0.6	0.2	0.2	1.7	0.8	25.9	6.3
1994	11.5	7.4	10.1	5.0	7.6	3.3	29.2	15.7	1.2	0.8	0.6	0.3	1.8	1.1	31.0	16.8
1995	24.8	1.9	11.6	0.6	5.2	1.3	41.6	3.8	2.4	0.9	0.3	0.3	2.7	1.2	44.3	5.0
1996	18.8	2.4	6.5	1.6	7.6	0.5	32.9	4.4	1.8	2.1	0.7	0.4	2.5	2.5	35.4	6.9
1997	45.4	6.1	13.4	1.7	5.8	0.3	64.6	8.1	6.3	0.2	0.8	0.1	7.1	0.3	71.7	8.4
1998	42.4	1.9	16.8	1.0	9.9	1.8	69.2	4.8	2.5	0.6	0.4	0.4	2.9	1.0	72.1	5.7
1999	23.7	3.2	11.1	1.3	6.2	3.6	41.0	8.1	1.6	1.5	0.6	1.0	2.3	2.5	43.3	10.6
2000	20.8	0.9	21.0	0.2	10.2	0.8	52.0	1.9	4.6	0.9	1.8	0.2	6.4	1.1	58.4	3.0
2001	23.7	1.0	28.4	0.9	9.7	2.0	61.8	3.9	4.3	1.4	1.1	0.5	5.5	1.9	67.3	5.8
2002[c/]	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	13.3
GOALS	9.0	7.5	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.
b/ Fall spawning fish. Some spring run are included.
c/ Preliminary.

TABLE B-3. **Sacramento River late-fall, winter and spring chinook** salmon **spawning escapement** estimates in thousands of fish.

	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	17.7	1.5	22.9	9.0	5.2	5.3	1.8	0.4	0.0	51.5	12.3
1976-1980	10.4	0.8	13.5	2.6	1.2	8.8	2.8	0.4	0.0	34.3	6.2
1981	6.3	0.7	18.3	1.7	0.3	12.8	8.2	0.8	0.2	38.5	10.8
1982	4.1	0.8	1.0	0.3	2.7	19.5	4.0	1.8	0.2	29.1	5.3
1983	12.9	2.3	1.4	0.4	0.6	3.3	0.6	1.6	0.1	19.8	3.4
1984	6.5	3.9	0.8	1.9	0.2	3.9	4.2	1.3	0.3	12.7	10.3
1985	8.0	2.2	3.6	0.3	0.7	7.2	3.5	1.6	0.0	21.1	6.0
1986	6.6	0.4	2.1	0.5	2.2	15.4	1.3	1.2	0.2	27.5	2.4
1987	12.6	3.1	1.9	0.3	0.3	7.2	4.0	0.9	0.3	22.9	7.7
1988	15.7	0.9	1.9	1.0	2.2	8.0	1.8	7.2	0.3	35.0	4.0
1989	10.1	1.3	0.6	0.1	1.9	4.6	0.6	4.4	0.7	21.6	2.7
1990	6.6	1.8	0.4	g/	1.4	3.3	0.6	1.4	0.2	13.1	2.6
1991	7.4	1.2	0.2	g/	0.9	0.6	0.2	3.3	0.2	12.4	1.6
1992	9.4	1.0	1.2	0.1	1.2	0.4	0.1	1.3	0.2	13.5	1.4
1993	5.0	1.0	0.3	0.1	1.0	0.3	0.1	3.9	3.9	10.5	5.1
1994	5.0	1.0	0.1	0.1	1.7	0.4	0.3	2.8	0.9	10.0	2.3
1995	0.6[h/]	0.1[h/]	1.3	g/	9.3	0.3	0.0	5.0	0.4	16.5	0.5
1996	1.0[h/]	0.4[h/]	0.7	0.6	2.3	0.2	0.1	5.3	0.7	9.5	1.8
1997	0.4[h/]	0.5[h/]	0.5	0.4	1.4	0.0	0.1	3.0	0.7	5.3	1.7
1998	11.2[i/]	1.6[i/]	2.0	0.9	23.6	0.3	0.2	6.8	0.8	44.0	3.5
1999	7.5[i/]	1.2[i/]	0.8	2.5	6.0	0.2	0.2	3.5	0.2	18.0	4.1
2000	10.2[i/]	2.5[i/]	0.6	0.8	5.5	0.1	g/	3.4	0.3	19.8	3.6
2001	14.5[i/]	0.7[i/]	1.7	3.8	12.5	1.0	j/	2.4	g/	32.1	4.5
2002[k/]	29.3[i/]	0.2[i/]	7.6	1.6	12.7	0.4	0.1	4.0	0.2	54.0	2.1

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/ Jack proportion could not be determined.

k/ Preliminary.

Table 1. Age Composition of the 2002 Klamath River fall chinook run as determined by the Klamath River Technical Advisory Team, with assistance from CDFG's Klamath and Trinity River projects.*

Escapement & Harvest	AGE 2	3	4	5	Total Adults	Total Run
Hatchery Spawners						
Iron Gate Hatchery (IGH)	1,296	13,425	10,183	57	23,665	24,961
Trinity River (TRH)	1,034	2,431	1,004	80	3,515	4,549
Hatchery Spawner subtotal	**2,330**	**15,856**	**11,187**	**137**	**27,180**	**29,510**
Natural Spawners						
Salmon River basin	72	1,206	1,279	0	2,486	2,558
Scott River basin	47	2,479	1,656	127	4,261	4,308
Shasta River Basin	386	4,286	2,088	58	6,432	6,818
Bogus Creek Basin	305	15,373	2,130	27	17,529	17,834
Klamath River mainstem (IGH to Shasta R)	503	8513	7985	44	16,542	17,045
Klamath River mainstem (Shasta R to Indian Cr)	155	2629	2466	14	5,108	5,263
Klamath Tributaries above Reservation	44	775	551	18	1,344	1,388
Yurok Reservation Tributaries	12	165	174	0	339	351
Klamath Basin subtotal	1,524	35,426	18,329	286	54,041	55,565
Trinity River mainstem above WCW	2,217	6,741	3,327	813	10,881	13,098
Trinity River mainstem below WCW	40	120	59	14	194	234
Trinity Tributaries above Reservation	66	201	99	24	324	390
Hoopa Reservation Tributaries	42	128	63	15	206	248
Trinity Basin subtotal	2,365	7,190	3,548	866	11,605	13,970
Natural Spawners subtotal	**3,889**	**42,616**	**21,877**	**1,152**	**65,646**	**69,535**
Total Spawner Escapement	**6,219**	**58,472**	**33,064**	**1,289**	**92,826**	**99,045**
Angler Harvest						
Klamath River (below Hwy 101 bridge)	274	1,784	1,414	87	3,285	3,559
Klamath River (Hwy 101 to Coon Cr. Falls)	283	1,777	1,407	86	3,269	3,552
Klamath River (Coon Cr. Falls to IGH)	93	2,126	1,089	0	3,216	3,309
Trinity River basin (above WCW)	170	415	57	1	473	643
Trinity River basin (below WCW)	51	80	87	0	167	218
Subtotals	**871**	**6,182**	**4,054**	**174**	**10,410**	**11,281**
Indian Net Harvest						
Klamath River (below Hwy 101)	17	9,226	9,701	774	19,701	19,718
Klamath River (Hwy 101 to Trinity mouth)	41	1,713	1,440	104	3,257	3,298
Trinity River (Hoopa Reservation)	68	579	557	32	1,168	1,236
Subtotals	**126**	**11,518**	**11,698**	**910**	**24,126**	**24,252**
Total in-river Harvest	**997**	**17,700**	**15,752**	**1,084**	**34,536**	**35,533**
Totals						
In-River Harvest and Escapement	7,216	76,172	48,816	2,374	127,362	134,578
Angling Mortality (2% of harvest)	17	124	81	4	209	226
Net Mortality (8% of harvest)	10	921	936	73	1,930	1,940
Fish Die Off	2,003	17,012	12,304	1,233	30,550	32,553
Total In-river Run	**9,246**	**94,229**	**62,137**	**3,684**	**160,051**	**169,297**

TABLE B-4. Summary of **Klamath River fall chinook** salmon estimates in thousands of adults and jacks.

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
1978	Adults	92.8	18.2	1.7	19.9	1.5	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	51.2	13.7	2.1	15.8	1.1	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	80.1	33.0	6.0	39.0	2.8	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	0.3	0.5	10.6	11.1	1.0	5.9	6.9	1.5	16.5	18.1
1982	Adults	66.5	14.5	8.3	22.8	1.3	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	0.7	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	47.1	18.7	3.3	22.0	1.6	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	1.0	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	0.3	2.2	6.5	8.7	18.2	29.5	47.6	20.3	36.0	56.3
1986	Adults	194.8	25.1	21.0	46.2	2.4	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	208.8	53.1	20.2	73.3	4.7	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	191.3	51.7	22.2	73.9	4.6	16.1	34.8	50.9	17.4	44.6	62.0	33.5	79.4	112.8
	Jacks	24.0	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	124.0	45.6	8.8	54.3	3.8	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	35.8	7.9	3.6	11.5	0.7	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	32.6	10.2	3.4	13.6	0.9	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	57.1	9.6	3.2	12.8	0.8	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	61.6	11.7	1.8	13.5	1.0	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.

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	213.7	15.6	6.1	21.7	1.4	13.7	67.9	87.7	15.2	77.9	97.6	28.9	161.7	190.7
	Jacks	22.8	0.6	4.4	5.0	0.1	0.3	8.5	8.8	0.1	9.3	13.1	0.3	17.7	17.7
1996	Adults	175.4	56.5	12.8	69.2	4.8	13.6	38.7	52.3	6.4	42.6	49.1	20.0	81.0	101.0
	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	8.1	8.9
1997	Adults	83.7	12.1	5.7	17.8	1.0	13.3	34.6	47.9	5.4	11.5	16.9	18.7	46.1	64.8
	Jacks	7.9	0.1	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	90.5	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	50.9	14.7	2.3	16.9	1.2	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	217.9	29.4	5.7	35.1	2.5	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	187.1	38.6	12.1	50.8	3.3	37.2	40.9	78.1	17.9	36.9	54.8	55.1	77.8	132.9
	Jacks	11.4	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[a/]	Adults	159.0[b/]	24.1	10.4	34.5	2.1	23.7	54.0	77.7	3.5	11.6	15.1	27.2	65.7	92.8
	Jacks	9.2	0.2	0.9	1.0	0.0	1.3	1.5	2.8	1.0	2.4	3.4	2.3	3.9	6.2

a/ Preliminary.
b/ Total inriver run includes an estimated 29,500 fish that died prior to spawning in September 2002.

TABLE B-7. Summary of **California north coast** salmon **spawning** stock surveys.

	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[e/g/]	1	267	0	3	256	11	5 [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** and ocean abundance.

	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	28.1	64.0	14.3	1.8	80.1
1982	557.4	133.4	690.8	0.30	0.52	39.4	30.0	33.9	2.6	66.5
1983	318.0	113.9	431.9	0.19	0.60	3.8	35.8	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	47.1
1985	375.2	56.9	432.1	0.11	0.25	69.4	32.9	25.6	5.8	64.4
1986	1308.8	141.3	1450.1	0.18	0.46	44.5	162.7	29.8	2.3	194.8
1987	786.4	343.4	1129.8	0.16	0.43	19.0	89.6	112.4	6.8	208.8
1988	750.4	236.2	986.7	0.20	0.39	24.0	101.0	86.4	3.9	191.3
1989	367.0	176.3	543.3	0.15	0.36	9.1	50.3	69.4	4.3	124.0
1990	177.6	103.1	280.7	0.30	0.55	4.4	11.6	22.9	1.3	35.8
1991	69.6	37.3	106.8	0.03	0.18	1.8	10.0	21.5	1.1	32.6
1992	39.4	28.2	67.6	0.02	0.07	13.7	6.9	18.7	1.0	26.7
1993	164.7	15.0	179.6	0.05	0.16	7.6	48.3	8.2	0.7	57.1
1994	116.1	39.6	155.7	0.03	0.09	14.4	36.0	24.6	1.0	61.6
1995	767.6	27.6	795.2	0.04	0.13	22.8	193.8	17.5	2.4	213.7
1996	190.2	225.2	415.4	0.05	0.16	9.5	38.7	136.4	0.3	175.4
1997	140.2	62.8	203.1	0.01	0.06	8.0	35.0	44.1	4.6	83.7
1998	154.4	44.8	199.2	0.00	0.09	4.6	59.2	29.6	1.7	90.6
1999	129.1	30.2	159.3	0.01	0.09	19.2	29.1	20.5	1.3	50.9
2000	616.6	44.2	660.8	0.06	0.10	10.2	186.9	30.4	0.5	217.9
2001	376.2[a/]	133.9	510.1	0.02[a/]	0.09	11.3	99.0	88.0	0.2	187.2
2002	510.1[b/]	110.6[a/]	620.6	----[c/]	0.16[a/]	9.2	94.2	62.1	3.7	160.1

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).

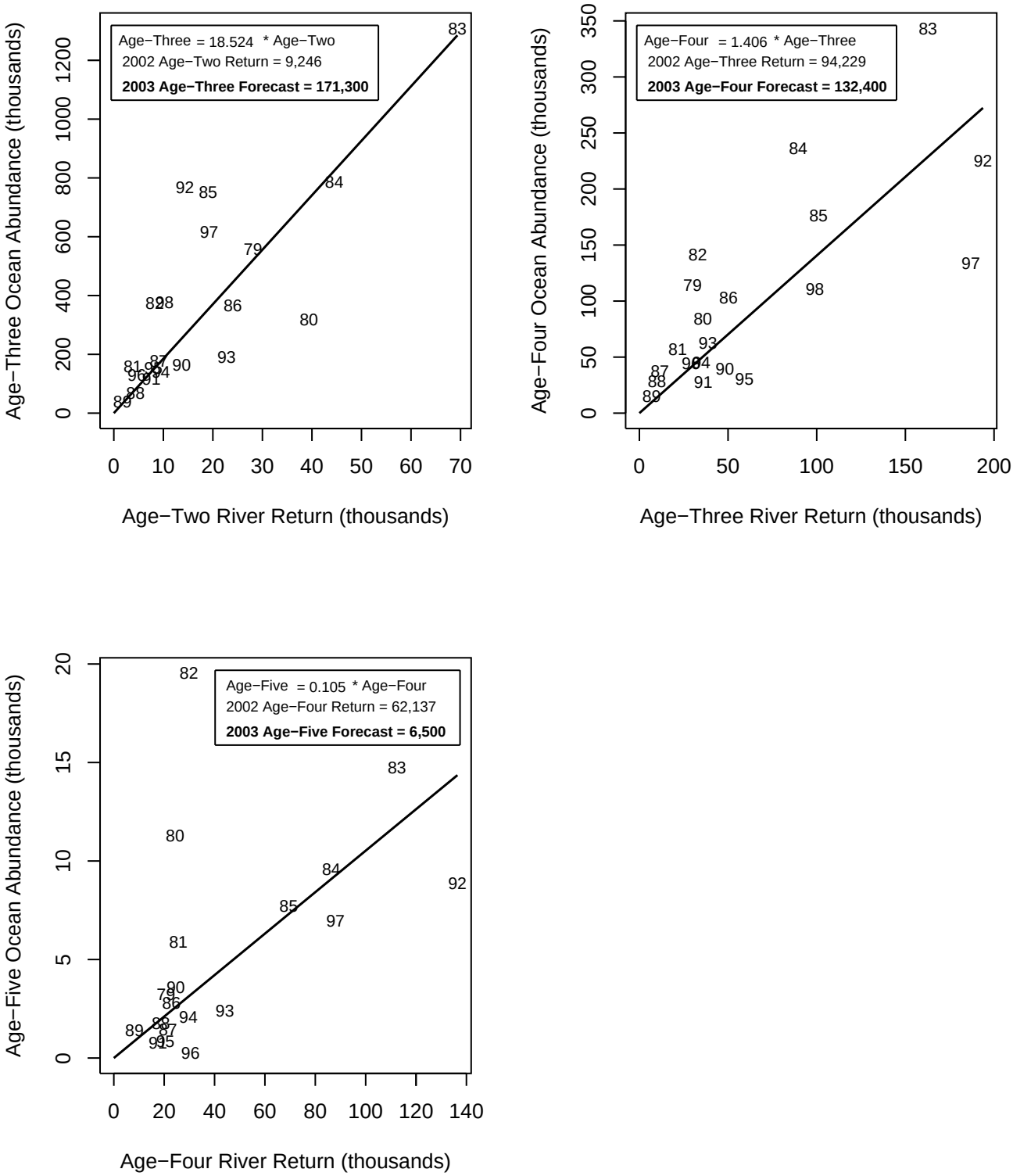

Figure II−3. Regression estimators for Klamath River fall chinook ocean abundance (Sept. 1) based on that year's river return of same cohort. Numbers in plots denote brood years.

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

	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	190.5	55.6[c/]	246.1	584.0	58
1971	150.7	166.3	317.0	190.6	62.0	252.6	569.6	56
1972	229.8	187.6	417.4	99.6	46.1	145.7	563.1	74
1973	422.5	180.9	603.4	227.1	27.1	254.2	857.6	70
1974	282.7	141.6	424.3	205.6	35.7	241.3	665.6	64
1975	234.4	92.7	327.1	159.2	47.6	206.8	533.9	61
1976	237.9	68.6	306.5	168.8	43.8	212.6	519.1	59
1977	263.8	76.6	340.4	148.7	42.8	191.5	531.9	64
1978	291.0	65.9	356.9	136.9	17.1	154.0	510.9	70
1979	234.1	108.5	342.6	167.9	11.3	179.2	521.8	66
1980	294.3	77.1	371.4	155.9	31.6	187.5	558.9	66
1981	289.9	73.8	363.7	189.3	18.8	208.1	571.8	64
1982	418.4	122.5	540.9	177.2	38.3	215.5	756.4	72
1983	178.2	53.0	231.2	121.0	12.8	133.8	365.0	63
1984	221.7	78.7	300.4	197.5	17.0	214.5	514.9	58
1985	212.3	121.8	334.1	308.9	18.1	327.0	661.1	51
1986	502.5	114.8	617.3	259.0	33.2	292.2	909.5	68
1987	446.8	152.8	599.6	188.0	25.5	213.5	813.1	74
1988	830.5	130.4	960.9	244.9	28.0	272.9	1233.8	78
1989	363.8	130.9	494.7	149.6	17.9	167.5	662.2	75
1990	336.2	112.7	448.9	108.3	13.7	122.0	570.9	79
1991	254.6	62.1	316.7	112.3	15.4	127.7	444.4	71
1992	163.5	66.7	230.2	85.3	8.2	93.5	323.7	71
1993	259.7	99.3	359.0	131.5	10.3	141.8	500.9	72
1994	290.4	159.9	450.3	148.8	6.8	155.6	605.9	74
1995	670.6	354.6	1025.2	272.0	16.3	288.3	1313.5	78
1996	348.9	129.3	478.2	255.3	8.7	264.0	742.2	64
1997	482.5	208.4	690.9	350.8	17.6	368.4	1,059.3	65
1998	221.8	114.5	336.3	253.0	39.1	292.1	628.4	54
1999	285.6	76.4	362.0	283.9	20.6	304.5	666.5	54
2000	446.3	146.5	592.8	456.1	25.2	481.3	1,074.1	55
2001	172.5	59.9	232.4	564.2	52.8	617.0	849.4	27
2002[d/]	308.6	132.3	440.9	809.8	34.2[e/]	844.0	1,284.9	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 II−1. Regression estimator for CVI based on previous year's river return of age−two Central Valley chinook, 1990−2002. Years shown are CVI year.

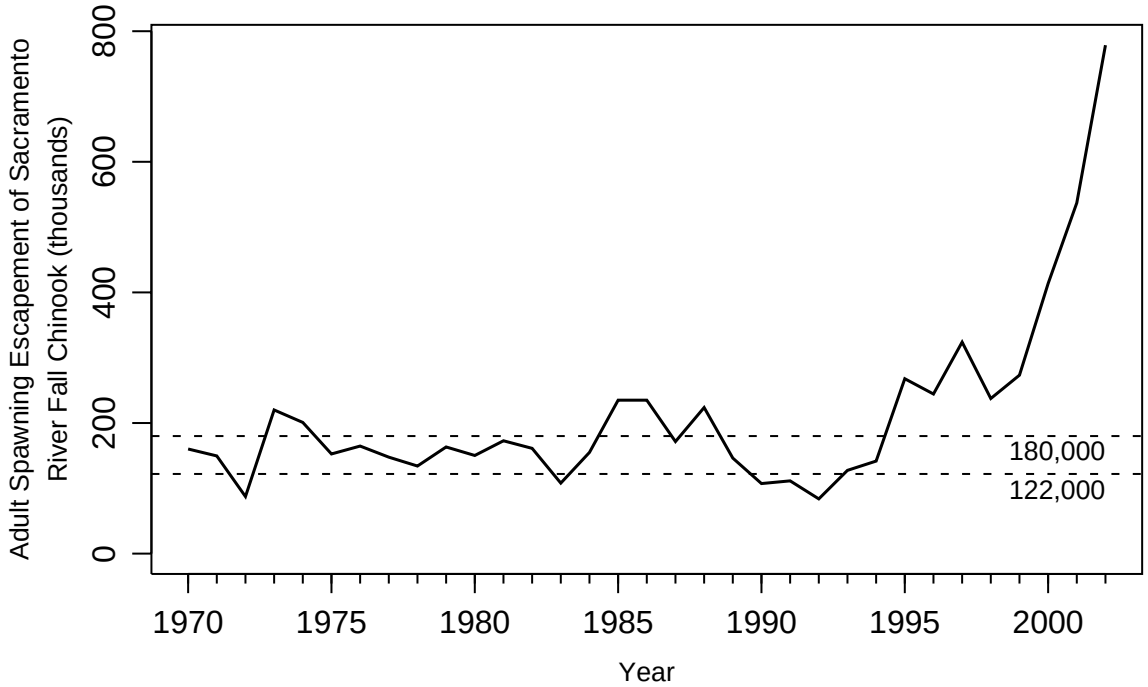

Figure II−2. Spawning escapements of adult Sacramento River fall chinook, 1970−2002 and the goal range for the stock of 122,000 to 180,000 adult fish.

Evaluation Summary of Previous Salmon Informational Meetings

Our 2002 meeting was held on a Saturday meeting in Sacramento while all of our previous meetings were held in Santa Rosa during a weekday.

The representation among the user groups in 2002 was similar to previous meetings. The attendee's affiliation percentages are 57% agency, 18% commercial troller, 3% ocean sport angler, 10% river sport angler, 2% charter boat, and 10% other. We had more river sport, conservation, and other affiliation attendees in 2002, but fewer charter boat attendees.

Previous Meeting Evaluation Summary (5 point scale)

Year	Meeting Content	Meeting Organization	Number of Attendees	Evaluations Returned
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**	**73**	**16**

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.