

REF 90675

**Klamath River Basin Fall Chinook Salmon Spawner Escapement, In-river Harvest and Run-size Estimates
1978-2002 a/**

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SPAWNER ESCAPEMENT

	1999			2000			2001		
	Grilse	Adults	Totals	Grilse	Adults	Totals	Grilse	Adults	Totals
Hatchery Spawners									
Iron Gate Hatchery (IGH)	4,830	9,290	14,120	839	71,635	72,474	1,364	37,204	38,568
Trinity River Hatchery (TRH)	2,027	5,037	7,064	1,070	25,976	27,046	267	17,908	18,175
Subtotals	6,857	14,327	21,184	1,909	97,611	99,520	1,631	55,112	56,743
Natural Spawners									
Trinity River basin									
above Willow Creek, excluding TRH	4,154	6,753	10,907	3,376	23,468	26,844	1,336	35,991	37,327
Salmon River basin	110	670	780	228	1,544	1,772	743	2,607	3,350
Scott River basin	563	3,021	3,584	524	5,729	6,253	744	5,398	6,142
Shasta River basin	1,901	1,296	3,197	1,271	11,025	12,296	2,641	8,452	11,093
Bogus Creek basin	2,628	3,537	6,165	373	34,678	35,051	648	11,927	12,575
Main Stem Klamath River n/									
(excluding IGH)	630	1,978	2,608	184	3,271	3,455	1,016	9,832	10,848
Misc. Klamath-Trinity tributaries o/									
above Hoopa and Yurok Reservations	251	777	1,028	261	2,051	2,312	565	2,969	3,534
Hoopa and Yurok Reservation tribs. p/	210	425	635	177	962	1,139	54	657	711
Subtotals	10,447	18,457	28,904	6,394	82,728	89,122	7,747	77,833	85,580
Total Spawner Escapement	17,304	32,784	50,088	8,303	180,339	188,642	9,378	132,945	142,323

IN-RIVER HARVEST

	1999			2000			2001		
	Grilse	Adults	Totals	Grilse	Adults	Totals	Grilse	Adults	Totals
Angler Harvest									
Klamath River (below Hwy 101 bridge)	37	177	214	108	1,190	1,298	298	4,620	4,918
Klamath River (Hwy 101 to Coon Cr Falls)	869 ^y	1,112 ^y	1,981 ^y	972	1,006	1,978	825	1,960	2,785
Klamath River (Coon Cr Falls to IGH)	138 ^z	571 ^z	709 ^z	117	1,549	1,666 ^{so}	242	3,041	3,283
Trinity River basin above Weitchpec. aa/	572	422	994	385	1,905	2,290	135	2,513	2,648
Subtotals	1616	2282	3898	1582	5650	7232	1,500	12,134	13,634
Indian Net Harvest e/									
Klamath River (below Hwy 101 bridge)	126	4,387	4,513	35	17,278	17,313	261	28,967	29,228
Klamath River (Hwy 101 to Trinity mouth)	49	7,295	7,344	140	6,175	6,315	78	4,724	4,802
Trinity River (Hoopa Reservation)	96	2,978	3,074	128	5,962	6,090	60	4,954	5,014
Subtotals	271	14,660	14,931	303	29,415	29,718	399	38,645	39,044
Total In-river Harvest	1,887	16,942	18,829	1,885	35,065	36,950	1,899	50,779	52,678

IN-RIVER RUN

	1999			2000			2001		
	Grilse	Adults	Totals	Grilse	Adults	Totals	Grilse	Adults	Totals
Totals									
In-river Harvest and Escapement	19,191	49,726	68,917	10,188	215,404	225,592	11,277	183,724	195,001
Angling Mortality (2% of harvest) f/	32	46	78	32	113	145	30	243	273
Net Mortality (8% of harvest) g/	22	1,173	1,195	24	2,533	2,577	32	3,092	3,124
Total In-river Run	19,245	50,945	70,190	10,244	217,870	228,114	11,339	187,059	198,398

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SPAWNER ESCAPEMENT

	2002			2003			2004		
	Grise	Adults	Totals	Grise	Adults	Totals	Grise	Adults	Totals
Hatchery Spawners									
Iron Gate Hatchery (IGH)	1,296	23,665	24,961						
Trinity River Hatchery (TRH)	1,034	3,515	4,549						
Hatchery Spawner Subtotals:	2,330	27,180	29,510						
Natural Spawners									
Main Stem Klamath River (n/)									
(excluding IGH)	658	21,650	22,308						
Shasta River basin	386	6,432	6,818						
Scott River basin	47	4,261	4,308						
Salmon River basin	72	2,486	2,558						
Bogus Creek basin	305	17,529	17,834						
Misc. Klamath tributaries (o/)									
(below Yurok Reservation)	14	1,244	1,358						
Yurok Reservation tribs. (Klamath River) (p/)	12	339	351						
Klamath Natural Spawner Subtotals:	1,524	54,041	55,565						
Main Stem Trinity River (dd/)									
(excluding TRH)	2,257	11,075	13,332						
Misc. Trinity tributaries (o/)									
(above Hoopa Reservation)	66	324	390						
Hoopa Reservation tribs. (Trinity River) (p/)	42	206	248						
Trinity Natural Spawner Subtotals:	2,365	11,605	13,970						
Natural Spawner Subtotals:	3,889	65,646	69,535						
Total Spawner Escapement	6,219	92,826	99,045						

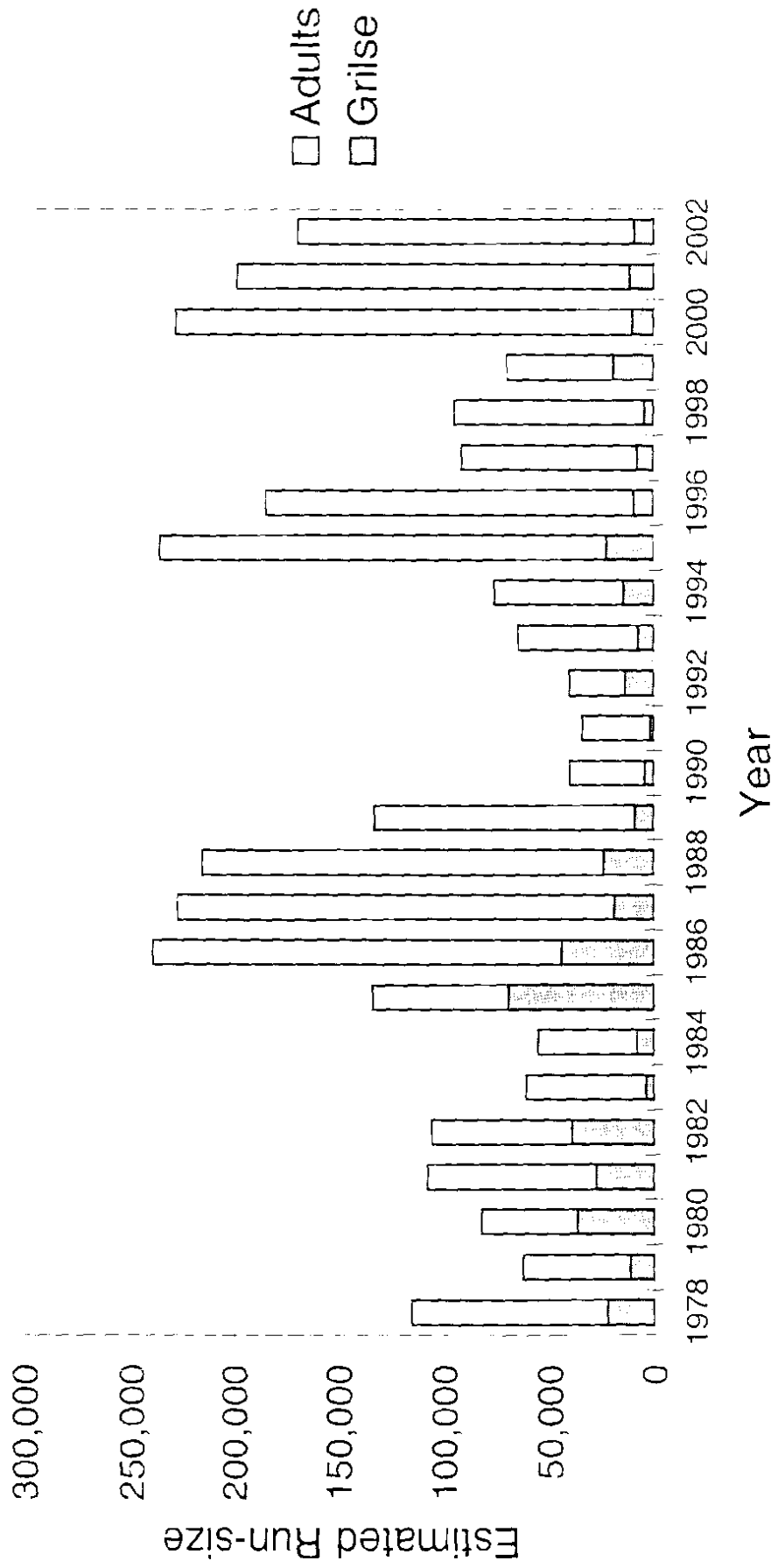
IN-RIVER HARVEST

	2002			2003			2004		
	Grise	Adults	Totals	Grise	Adults	Totals	Grise	Adults	Totals
Angler Harvest									
Klamath River (below Hwy 101 bridge)	274	3,285	3,559						
Klamath River (Hwy 101 to Coon Cr Falls)	283	3,269	3,552						
Klamath River (Coon Cr Falls to IGH)	93	3,216	3,309						
Trinity River basin above Weitchpec aa/	221	640	861						
Angler Harvest Subtotals:	871	10,410	11,281						
Indian Net Harvest e/									
Klamath River (below Hwy 101 bridge)	17	19,701	19,718						
Klamath River (Hwy 101 to Trinity mouth)	41	3,257	3,298						
Trinity River (Hoopa Reservation)	68	1,168	1,236						
Indian Net Harvest Subtotals:	126	24,126	24,252						
Total In-river Harvest	997	34,536	35,533						

IN-RIVER RUN

	2002			2003			2004		
	Grise	Adults	Totals	Grise	Adults	Totals	Grise	Adults	Totals
Totals									
In-river Harvest and Escapement	7,216	127,362	134,578						
Angling Mortality (29% of harvest) (f/)	17	209	226						
Net Mortality (8% of harvest) (g/)	10	1,930	1,940						
Fish Die Off (e/)	2,003	30,550	32,553						
Total In-river Run	9,246	160,051	169,297						

Klamath River Basin Fall-Run Chinook Salmon Run-size Estimates, 1978-2002



**Footnotes for Klamath River Basin Fall Chinook Salmon Spawner Escapement,
In-river Harvest and Run-size Estimates, 1978-2002⁴**

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- a/ Prepared February 18, 2003. All figures are California Department of Fish and Game (CDFG) counts/estimates unless otherwise indicated. All figures for Iron Gate and Trinity River hatcheries represent counts of fish entering those facilities. All spawner escapement figures for the Shasta River basin for 1978-1987 and 1989-2002, plus those for Bogus Creek basin for 1980-1991 are based on counts made at counting stations located near the mouths of those streams. All remaining spawner escapements and all harvest figures are estimates developed from data obtained through ongoing field investigations in the Klamath-Trinity system. Figures for years through 2001 are final; 2002 figures are preliminary, subject to revision.
- b/ Figure not available.
- c/ USFWS estimate.
- d/ In 1978, the Klamath River system sport salmon fishing season was closed August 25. There was essentially no sport harvest of fall chinook in the Trinity River basin in 1978.
- e/ USFWS estimates for years through 1982; 1983 through 1993 estimates jointly made by USFWS and Hoopa Valley Business Council Fisheries Department (HVBCFD); 1994 through 2002 estimates jointly made by HVBCFD for the Hoopa Reservation and Yurok Tribal Fisheries Department for the Yurok Reservation.
- f/ Factors for non-landed catch mortality calculated by the Klamath River Technical Advisory Team (KRTAT, 1986, "Recommended Spawning Escapement Policy for Klamath River Fall-run Chinook").
- g/ U.S. Forest Service estimate.
- n/ HVBCFD estimate. Estimate for streams in Hoopa Reservation only.
- i/ In 1985, the Klamath River system sport salmon fishing season was closed to the taking of all salmon below the U.S. Highway 101 bridge from September 9 through December 31; the Klamath from the U.S. Highway 101 bridge to Iron Gate Dam and the Trinity River from its mouth to Lewiston Dam were closed to the taking of salmon 22 inches and longer from September 23 through December 31, 1985.
- j/ Estimates for Hoopa Reservation portion of catch (=947 grilse and 1,941 adults) are of catch occurring during open fishing periods only.
- k/ Estimates jointly made by USFWS and HVBCFD.
- l/ Final figures for Salmon River basin natural spawners shown in the December 11, 1991 table were incorrect. Corrected figures, plus necessary revisions to the 1990 totals, are presented here.
- m/ Figure does not include adults that, following entry into Iron Gate Hatchery, were returned to the river alive and un-spawned, and which are presumed to have spawned naturally. This includes 2,333 fish in 1994 and 8,932 fish in 1995.
- n/ CDFG estimate based on USFWS redd count data THROUGH 2000. Estimates for 2001-02 are USFWS estimates based on a combination of redd count data (Shasta River downstream to Indian Cr.) and carcass mark-recapture estimates upstream of the Shasta River.
- o/ CDFG and USFS, estimates.
- p/ HVBCFD and YTFD estimates. YTFD fish count for Blue Creek is based on one survey conducted at peak of spawning and should not be construed as an escapement estimate. HVBCFD tributary estimates based on redd counts.
- q/ 750 of these adults were harvested between I-5 and IGH after the river reopened to sport angling on 13 OCT, 1995.
- r/ Includes 51 grilse and 178 adults harvested in the main stem Trinity River between Willow Creek weir and the mouth of the Trinity River. HVBCFD estimate.
- s/ Includes 251 grilse and 645 adults harvested in the main stem Trinity River between Willow Creek weir and the mouth of the Trinity River. HVBCFD estimate.
- t/ Additional, but unknown harvest occurred upstream of Interstate 5 for jacks between Oct.2-18 after the 28 day Awindow® and Oct.18-Nov.30th for all chinook after Iron Gate Hatchery reached its= required 8,000 adult chinook spawning escapement.
- u/ includes 298 grilse and 799 adults harvested in the main stem Trinity River between Willow Creek weir and the mouth of the Trinity River. HVBCFD estimate.
- v/ Additional, but unknown harvest occurred upstream of Interstate 5 for jacks between Oct.4-17 after the 28 day Awindow® and Oct.17-Nov.30th for all chinook after Iron Gate Hatchery reached its= required 8,000 adult chinook spawning escapement.

**Footnotes for Klamath River Basin Fall Chinook Salmon Spawner Escapement,
In-river Harvest and Run-size Estimates, 1978-2002^a**

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- x/ Includes fish originally classified as grilse, based on the 24 inch TL specified in the 1998 sport angling regulations, which were re-classified as adult based on preliminary analysis of 1998 data.
- y/ Includes 21 Grilse and 42 adults harvested after the lower river reopened on Oct 15, 1999.
- z/ Harvest estimate based on creel census data and includes 54 grilse and 206 adults harvested during the secondary season allowed above the Interstate 5 bridge after IGH achieved 8,000 adult spawners.
- aa/ Harvest estimate based on HVBCFD creel census below the Willow Creek Weir and CDFG=s estimate based on tag returns for the Trinity River above Willow Creek Weir.
- bb/ Harvest estimate based on creel census data and includes 113 grilse and 938 adults harvested during the secondary season allowed above the Interstate 5 bridge after IGH achieved 8,000 adult spawners.
- cc/ Includes 9 jacks and 252 adults estimated to have spawned in the mainstem Trinity River downstream of the Willow Creek Weir. Estimate based on HVBCFD expanded redd count data.
- dd/ Estimates upstream of Willow Creek weir provided by CDFG; estimates downstream of Willow Creek weir provided by HVBCFD.
- ee/ Prespawn mortality estimate for Chinook salmon that died in the lower Klamath River fish die off, 2002. Estimate provided by USFWS.