

Table 5. Fall-run chinook salmon spawner escapement estimates for areas of the Klamath River basin upstream of the Trinity River basin, 1996.

	Method	1996		Total	1995
		Grilse	Adults		Total
Salmon River	Carcass mark/recapture	274	5,189	5,463	5,475
Scott River	Carcass mark/recapture	145	11,952	12,097	14,477
Shasta River	Weir count	46	1,404	1,450	13,511
Bogus Creek	Mark/recapture	377	10,420	10,797	46,432
Main stem Klamath ^{1/}	Redd count	88	2,741	2,829	8,173
Beaver Creek	Redd count			NS ^{3/}	817
Horse Creek	Redd count			NS	NS
Grider Creek	Redd count			NS	348
Thompson Creek	Redd count	2	117	119	123
Indian Creek	Redd count	14	742	756	408
Elk Creek	Redd count	7	395	402	285
Camp Creek ^{2/}	Redd count	17	885	902	350
Red Cap Creek	Redd count	31	1,557	1,588	385
Bluff Creek	Redd count	7	356	363	149
Clear Creek	Redd count	8	417	425	207
Aikens Creek	Redd count	0	8	8	0
Boise Creek	Redd count	1	29	30	14
Dillon Creek	Redd count	5	284	289	106
Hopkins Creek	Redd count			NS	NS
Independence Creek	Redd count	0	0	0	4
Slate Creek	Redd count	0	17	17	0
China Creek	Redd count	0	12 ^{1/}	12	NS
Perch Creek	Redd count	0	10	10	NS
TOTALS		1,022	36,535	37,557	91,264

^{1/} Estimate based on redd data from U.S. Fish and Wildlife Service, CCFWO, Arcata.

^{2/} Estimate of natural spawning. Additional "late fall" chinook taken for Camp Creek rearing program. Data unavailable.

^{3/} NS = not surveyed.

Table 5. Fall-run chinook salmon spawner escapement estimates for areas of the Klamath River basin upstream of the Trinity River basin, 1995.

	Method	1995			1994
		Grilse	Adults	Total	Total
Salmon River	Carcass mark/recapture	1,335	4,140	5,475	3,493
Scott River	Carcass mark/recapture	3,279	11,198	14,477	5,300
Shasta River	Weir count	695	12,816	13,511	5,203
Bogus Creek	Mark/recapture	1,207	45,225	46,432	8,260
Main stem Klamath ^{1/}	Redd count	1,571	6,602	8,173	3,874
Beaver Creek	Redd count	172	645	817	60
Horse Creek	Redd count			NS ^{3/}	0
Gridler Creek	Redd count	73	275	348	106
Thompson Creek	Redd count	26	97	123	0
Indian Creek	Redd count	86	322	408	209
Elk Creek	Redd count	60	225	285	123
Camp Creek ^{2/}	Redd count	73	277	350	119
Red Cap Creek	Redd count	81	304	385	190
Bluff Creek	Redd count	31	118	149	76
Clear Creek	Redd count	44	163	207	103
Aikens Creek	Redd count	0	0	0	0
Boise Creek	Redd count	3	11	14	2
Dillon Creek	Redd count	22	84	106	42
Hopkins Creek	Redd count			NS	0
Independence Creek	Redd count	1	3	4	22
Slate Creek	Redd count	0	0	0	0
TOTALS		8,759	82,505	91,264	27,182

^{1/} Estimate based on redd data from U.S. Fish and Wildlife Service, CCFWO, Arcata.

^{2/} Estimate of natural spawning. Additional "late fall" chinook taken for Camp Creek rearing program. Data unavailable.

^{3/} NS = not surveyed.

Table 5. Fall-run chinook salmon spawner escapement estimates for areas of the Klamath River basin upstream of the Trinity River basin, 1994.

	Method	1994			1993
		Grilse	Adults	Total	Total
Salmon River	Carcass mark/recapture	277	3,216	3,493	3,533
Scott River	Carcass mark/recapture	505	2,358	2,863	5,300
Shasta River	Weir count/spawner survey	1,840	3,363	5,203	1,426
Bogus Creek	Weir count	443	7,817	8,260	3,716
Main stem Klamath ^{1/}	Redd count	625	3,249	3,874	678
Beaver Creek	Redd count	10	250	260	346
Horse Creek	Redd count	0	0	0	28
Grider Creek	Redd count	4	102	106	96
Thompson Creek	Redd count	0	0	0	36
Indian Creek	Redd count	8	201	209	1,456
Elk Creek	Redd count	5	118	123	216
Camp Creek ^{2/}	Redd count	5	114	119	128
Red Cap Creek	Redd count	8	182	190	238
Bluff Creek	Redd count	3	73	76	18
Clear Creek	Redd count	4	99	103	NS ^{3/}
Aikens Creek	Redd count	0	0	0	NS
Boise Creek	Redd count	0	2	2	NS
Dillon Creek	Redd count	2	40	42	NS
Hopkins Creek	Redd count	0	0	0	NS
Independence Creek	Redd count	1	21	22	NS
Slate Creek	Redd count	0	0	0	NS
TOTALS		3,740	21,205	24,945	17,215

^{1/} Data from U.S. Fish and Wildlife Service, CCFWO, Arcata. ~~1/1~~

^{2/} Estimate of natural spawning. Additional chinook taken for Camp Creek rearing program.

Data unavailable.

^{3/} NS = not surveyed.

Table 5. Fall-run chinook salmon spawner escapement estimates for areas of the Klamath River basin upstream of the Trinity River basin, 1993.

	Method	1993			1992
		Grilse	Adults	Total	Total
Salmon River	Carcass mark/recapture	456	3,077	3,533	1,325
Scott River	Carcass mark/recapture	265	5,035	5,300	2,838
Shasta River	Weir count/spawner survey	85	1,341	1,426	586
Bogus Creek	Weir count	431	3,285	3,716	1,154
Main stem Klamath ^{1/}	Redd count	26	652	678	600
Beaver Creek	Redd count	13	333	346	16
Horse Creek	Redd count.	1	27	28	0
Grider Creek	Redd count	4	92	96	150
Thompson Creek	Redd count	1	35	36	12
Indian Creek	Mark/recapture	50	1,406	1,456	115
Elk Creek	Redd count	8	208	216	36
Camp Creek ^{2/}	Redd count	5	123	128	12
Red Cap Creek	Redd count	9	229	238	64
Bluff Creek	Redd count	1	17	18	28
TOTALS		1,355	15,860	17,215	6,936

^{1/} Data from U.S. Fish and Wildlife Service, CCFRO, Arcata.

^{2/} Estimate of natural spawning. Additional chinook taken for Camp Creek rearing program. Data unavailable.

Table 3. Fall-run chinook salmon spawner escapement estimates for areas of the Klamath River basin upstream of the Trinity River basin, 1992.

Method	1992		1991 Total
	Grilse	Adults Total	
Salmon River	547	778	1,325
Scott River	965	1,873	2,838
Shasta River	66	520	586
Bogus Creek	556	598	1,154
Main stem Klamath	234	366	600
Beaver Creek	6	10	16
Horse Creek	0	0	0
Grider Creek	53	97	150
Thompson Creek	4	8	12
Indian Creek	40	75	115
Elk Creek	13	23	36
Camp Creek ^{1/}	4	8	12
Red Cap Creek	23	41	64
Bluff Creek	10	18 ^{1/11}	28
TOTALS	2,521	4,415	6,936

Not Avail

^{1/} Estimate of natural spawning. Additional chinook taken for Camp Creek rearing program. Data unavailable

Table 3. Fall-run chinook salmon spawner escapement estimates for areas of the Klamath River basin upstream of the Trinity River basin, 1991.

	Method	1991			1990
		Grilse	Adults	Total	Total
Salmon River	Weir (mark/recapture)	196	1,402	1,598	6,511
Scott River	Weir (mark/recapture)	163	2,084	2,247	1,836
Shasta River	Weir (mark/recapture)	10	716	726	557
Bogus Creek	Weir (count/spawner survey)	20	1,261	1,281	785
Main stem Klamath	Historical	8	572	580	564
Beaver Creek	Redd count	0	2	2	2
Horse Creek	Redd count	0	0	0	0
Grider Creek	Redd count	2	92	94	118
Thompson Creek	Redd count	0	4	4	0
Indian Creek	Mark/recapture	4	231	235	162
Elk Creek	Redd count	2	76	78	37
Camp Creek	Redd count	0	30	30	37
Red Cap Creek	Redd count	1	60	61	114
TOTALS		406	6,530	6,936	10,723

Table 2. Klamath River tributary chinook spawner escapement estimates for Fall 1990.

Tributary	Grilse	Adults	Total
Scott River	171	829	1000
Salmon River	253	1571	1824
<u>Smaller Tributaries</u>			
Beaver Creek	0	2	2
Horse Creek	0	0	0
Grider Creek	0	118	118
Thompson Creek	0	0	0
Indian Creek	0	162	162
Elk Creek	0	37	37
Camp Creek	0	32	32
Redcap Creek	0	114	118
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Tributary Totals	0	465	465

Table 12. Klamath River Tributarys Chinook Spawner Escape-
ment Estimates for Fall 1989.

Stream	Grilse	Adults	Total
Shasta	128	1,449	1,577
Scott	2,216	2,138	4,354
Salmon	707	3,095	3,802
Bluff Creek	44	550	594 *
Redcap Creek	2937	208 470	277 508 *
Camp Creek	720	95 245	102 265 ¹⁾
Indian Creek	83	1,176	1,259
Elk Creek	821	26 258	82 *
Thompson Creek	2	30	32
Grider Creek	11	144	155
Beaver Creek	10	130	140
Clear Creek	11	141	152
Dillion Creek	8	95	103
Misc.

WGN/ccw

* USFS estimates (Bill Beaman + Jerry Bobory)

1) Kim Reardon trap

KLAMATH RIVER PROJECT
CHINOOK SPAWNING ESCAPEMENT
1988 ESTIMATES

STREAM	GRILSE	ADULTS	TOTAL	CARCASSES
				OBSERVED GRILSE/ADULTS
SHASTA RIVER	259	2,589	2,848	35/122
SCOTT RIVER	473	4,727	5,200	63/777
SALMON RIVER	327	3,273	3,600	18/159
MISCELLANEOUS TRIBS:				
BLUFF CREEK	71	711	782	
REDCAP CREEK	26	256	282	0/5
CAMP CREEK	14	138	152	0/8
INDIAN CREEK	175	1,749	1,924	9/324
ELK CREEK	23	228	251	0/35
THOMPSON CREEK	5	50	55	0/6
GRIDER CREEK	10	100	110	0/14
BEAVER CREEK	49	489	538	16/161
CLEAR CREEK	24	238	262	
DILLION CREEK	6	58	64	
MISC.	15	150	165	
SUBTOTAL	418	4,167	4,585	
GRAND TOTAL	1,477	14,756	16,233	

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KLAMATH RIVER CARCASS SURVEY ¹⁾

1997

Stream	Adults	Grise	Total
Scott River	7,769	797	8,566
Salmon River	3,832	118	3,950
Red Cap Creek ²⁾	125	15	140
Camp Creek ²⁾	100	10	110
Bluff Creek ²⁾	325	30	355
Indian Creek	523	5	528
Elk Creek ³⁾	50	5	55
Thompson Creek	276	11	287
Grider Creek	98	11	109
Horse Creek ⁴⁾	25	5	30
Beaver Creek	1264	95	1359
Cottonwood ⁵⁾	0	0	0
Misc. Streams ⁶⁾	500	50	550
Main Stem Klamath ⁷⁾	863	65	928

TOTALS 15,750 1717 16,967

- ¹⁾ Schafer Method unless otherwise noted
- ²⁾ Estimate provided by Six Rivers Nat. Forest, Hoquiam - estimated adults: grise ratio
- ³⁾ Estimate based on live fish redd site estimate
- ⁴⁾ Guess ⁵⁾ Not surveyed because fish could get past dam
- ⁶⁾ Estimated estimate. ⁷⁾ Based on observations of redd + carcass

12-1-86

12-1-86

KLAMATH RIVER SPAWNER ESCAPEMENT

ESTIMATES FOR 1986

<u>STREAM</u>	<u>GRILSE</u>	<u>ADULT</u>	<u>TOTAL</u>
SCOTT RIVER	4,503	3,538	8,041
SALMON RIVER	949	2,716	3,665
MISC. TRIBS (KLAMATH) above HOOPA RES.			
	120	480	600
Bluff Creek	100	400	500
CAMP CREEK	65	278	343
RED CAP CREEK	35	318	353
INDIAN CREEK	238	957	980
ELK CREEK	42	384	426
THOMPSON CREEK	20	356	376
HORSE CREEK	40	134	174
BEAVER CREEK	161	1,512	1,673
MISC. CREEKS	100	500	600
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Subtotal (CREEKS)	586	4,939	5,425
	606	4,919	5,525

FINAL ESTIMATES

1985

	ADULTS	GRILSE	TOTAL
TROIGATE HATCHERY	19,432 ¹⁾	2,678 ⁽²⁾	22,110
MAIN STEM	468	156	624
ROBUS CREEK	3,491 ¹⁾	1,156 ^(24.5)	4,647
SHASTA RIVER	2,897 ³⁾	2,227 ^(43.5)	5,124
SCOTT RIVER	3,051 ¹⁾	1,357 ^(40.2)	4,408
SALMON RIVER	2,259 ¹⁾	905 ^(28.6)	3,164
<u>SUBTOTAL</u>	<u>31,598</u>	<u>8,479</u>	<u>40,077</u>
RED CAP	779 ²⁾	162	941
CAMP CREEK	457	33	490
INDIAN	765	18	783
THOMPSON	632	74	706
BEETLE	87	20	107
GRILSE	88	88	176
BLANCH	1,306	199	1,505
WOTON & ODD	50	27	77
ETK	50	25	75
<u>SUBTOTAL</u>	<u>4,214</u>	<u>646^(15.3)</u>	<u>4,860</u>

1) ADULTS ≥ 62 cm

Grilse < 62 cm

2) ADULTS ≥ 60 cm

3) ADULTS ≥ 59 cm

35,812

9,125

44,937

TABLE 1. FALL CHINOOK SPAWNING ESCAPEMENT ESTIMATES
 KLAMATH RIVER
 1984

STREAM	ADULT	GRILSE	TOTAL
Scott River	1,443	358	1,801
Salmon River	1,226	216	1,442
Subtotal	2,669	574	3,243
Camp Creek	75	10	85
Redcap Creek	100	15	115
Indian Creek	50	10	60
Elk Creek	10	5	15
Thompson Creek	25	5	30
Grider Creek	75	10	85
Horse Creek	50	10	60
Beaver Creek	250	25	275
Cottonwood Creek	230	35	265
Subtotal	865	125	990
Clear Creek*	25	5	30
Dillion Creek*	25	5	30
Humbog Creek*	25	5	30
Miscellaneous*	50	10	60
Subtotal	125	25	150
GRAND TOTAL	3,659	724	4,383

(*) Estimates not based on carcass survey but on best available data.

TABLE 1. FALL CHINOOK SPAWNING ESCAPEMENT ESTIMATES
 KLAMATH RIVER
 1983

STREAM	ADULT	GRILSE	TOTAL
✓ Scott River	4,286	133	4,419
✓ Salmon River	1,400	75	1,475
Subtotal	5,686	208	5,894
✓ Beaver Creek	400	20	420
✓ Horse Creek	100	10	110
✓ Thompson Creek	75	10	85
Indian Creek	125	10	135
Griider Creek	120	10	130
✓ Camp Creek	100	10	110
✓ Redcap Creek	100	10	110
Subtotal	1,020	80	1,100
Clear Creek*	50	10	60
Dillion Creek*	50	10	60
Elk Creek*	50	10	60
Humbug Creek*	50	10	60
Cottonwood Creek*	100	20	120
Subtotal	300	60	360
GRAND TOTAL	7,006	348	7,354

(*) Estimates not based on carcass survey but on best available data.

Table 1. Summary of Estimated Chinook Spawners in
Upper Klamath River Tributaries, 1982

Stream	1982 Estimates			Four year mean (78-81)		
	Grilse	Adult	Total	Grilse	Adult	Total
Scott River	4,550 ^{1/} (3,014) ^{2/}	5,826 (3,936)	10,176 (6,940)	1,623	2,628	4,309
Salmon River	300	1,000	1,300	550	1,288	1,938
Beaver Creek	146	416	562			
Horse Creek	100	100	200			
Camp Creek	25	50	75			
Redcan Creek	25	50	75			

^{1/} Peterson estimate based on recoveries of chinook tagged at the weir.
^{2/} Schaefer estimate based on excess tagging and recovery.