

REF 90087

ANNUAL REPORT
TRINITY RIVER SALMON AND STEELHEAD HATCHERY
1974-75/

by

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ABSTRACT

This report describes the operation of Trinity River Salmon and Steelhead Hatchery for the period July 1, 1974 through June 30, 1975. King salmon (Oncorhynchus tshawytscha), silver salmon (O. kisutch), steelhead (Salmo gairdnerii) and sea-run brown trout (S. trutta) were reared.

Tables present the numbers of adults spawned and eggs and fish produced and planted. The appendix tables present the numbers of eggs and fish shipped and received, and daily weather, water temperature, and fish trapping data for the fiscal year.

1/ Anadromous Fisheries Branch Administrative Report No. 76-6
Submitted for publication September 1975.

INTRODUCTION

This is the seventeenth consecutive fiscal year report covering operation of the Trinity River Salmon and Steelhead Hatchery, located near Lewiston, Trinity County. The hatchery was constructed by the United States Bureau of Reclamation to compensate for spawning areas blocked by the Trinity River project. The California Department of Fish and Game began operation of the permanent installation on May 15, 1963. Operation and maintenance costs are paid by the Bureau.

This report describes operation of the hatchery from July 1, 1974 through June 30, 1975. Copies of previous annual reports are available upon request from the Anadromous Fisheries Branch, Sacramento.

PRODUCTION SUMMARY

King salmon entered the hatchery from September 3 through November 21. Silver salmon began entering the hatchery October 15. The run ended December 12. Steelhead were trapped at the hatchery from September 12 until April 16. Brown trout entered the hatchery between October 10 and November 25.

Production data are summarized as follows:

Production Summary, 1974-75 Season

Species	Number trapped	Number females spawned	Eggs taken or received	Number fingerlings planted	Yearlings or brood stock planted	Total kg planted	On hand June 30, 1975
King salmon	8,064	2,169	6,054,000	2,267,075	730,775	45,122	796,000
Silver salmon	95	23	53,500		252,905	13,753	47,000
Steelhead	372	246	1,461,612 ^{a/}		226,452	2,962	1,220,000
Brown trout	32	7	13,200		17,820	499	11,700
TOTALS	8,563	2,445	7,582,312	2,267,075	1,227,952	62,336	2,074,700

^{a/} Comprised of 626,000 Trinity River-, 516,612 Iron Gate-, and 319,000 Mad River-strain.

HATCHERY OPERATION

All production fish were reared on a diet of Oregon Moist Pellet (OMP). A total of 186,440 kg (411,100 lb) of feed produced 62,336 kg (137,451 lb) of fish during fiscal year 1974-75. The feed conversion rate (kg of feed required to produce 1 kg of fish) was 3.0.

The L. R. Meyer Co. of Escondido, California was the successful bidder for salmon carcasses at Trinity River Hatchery during the 1974-75 season. Mr. Meyer's crew picked up 19,710 kg (43,460 lb) of king and silver salmon at the hatchery. No fish were given to charitable institutions this year.

The hatchery had 12,244 visitors in 1974-75. Guided tours were provided for several of the larger groups of visitors, most of which were from schools in the area.

KING SALMON MAINTENANCE PROGRAM

History of the 1974 Run

King salmon began arriving at the hatchery on June 21, 1974 and continued throughout the summer. The ladder was opened on August 30. Spawning operations began September 3.

Spring Run

Between August 30 and October 7, 1974, 4,481 king salmon, thought to be mostly spring-run, were trapped. This number included 2,364 males, 1,886 females, and 231 grilse. King salmon males < 56 cm (22 inches) FL are considered grilse. A total of 1,248 females was spawned from September 3 through October 7, 1974, producing 3,445,000 eggs, an average of 2,760/female. Egg size averaged 91/ounce.

Fall Run

A total of 3,583 king salmon was trapped from October 8 to November 21: 2,183 males, 954 females, and 446 grilse. All were assumed to be fall run. There were 921 fall-run females spawned, all from October 10 through November 21, 1974. They produced 2,609,000 eggs, an average of 2,833/female. Egg size averaged 102/ounce.

Marked King Salmon Returns

All king salmon entering the hatchery were examined for marks. We recovered five; all were measured (see following table). These fish were probably 1970 broodyear spring-run fish released as yearlings at Iron Gate Hatchery in 1971 and 1972.

Lengths of Marked King Salmon Recovered at Trinity Hatchery, 1974-75 Season

Mark	LV	LV	LV	LV	RV
FL (inches)	24	26	27	28	29
Sex	M	F	M	M	

held at the hatchery for later release as yearlings.
Approximately 400,000 fall-run and 400,000 spring-run fingerlings are being

			TOTAL
Date	Size	Number	
6/5/75 Spring run	4.6 g (99/lb)	368,775	
6/6/75	" 5.0 g (90/lb)	571,500	
6/7/75	" 5.0 g (90/lb)	216,200	
6/8/75	" 4.9 g (92/lb)	86,450	
6/9/75	" 5.0 g (91/lb)	109,500	
6/10/75	" 4.9 g (92/lb)	271,200	
6/11/75	" 5.0 g (91/lb)	298,350	
6/12/75	" 4.0 g (113/lb)	3.8 g (119/lb)	6/12/75
Fall run			" 3.9 g (117/lb)
			6/13/75
			" 4.0 g (100/lb)
			6/14/75
			" 4.5 g (91/lb)
			6/15/75
			" 5.0 g (92/lb)
			6/16/75
			" 4.9 g (92/lb)
			6/17/75
			" 5.0 g (91/lb)
			6/18/75
			" 4.5 g (91/lb)
			6/19/75
			" 3.8 g (119/lb)
			345,100

A total of 2,267,075 1974 broodyear King Salmon fingerlings was planted in the Trinity River below the weir located 1.6 km (1 mile) downstream from the hatchery as follows:

Planting 1974 Broodyear King Salmon

A total of 798,376 1973 broodyear King Salmon was planted last fiscal year as fingerlings. Of the 2,833,000 King Salmon (fall- and spring-run) eggs taken in 1973 1,529,151 (54%) were eventually planted.

			TOTAL
Date	Size	Number	
12/13/74 Spring run	45.4 g (10.0/lb)	10,500	
12/14/74	" 37.2 g (12.2/lb)	85,705	
12/15/74	" 35.7 g (12.7/lb)	61,595	
12/21/74 Fall run	36.9 g (12.3/lb)	91,020	
12/22/74	" 34.9 g (13.0/lb)	78,000	
3/10/75	" 60.5 g (7.5/lb)	45,000	
3/11/75	" 63.9 g (7.1/lb)	53,250	
3/12/75	" 57.5 g (7.9/lb)	71,495	
3/13/75	" 59.7 g (7.6/lb)	35,720	
3/14/75	" 70.9 g (6.4/lb)	67,200	
3/15/75	" 67.8 g (6.7/lb)	42,210	
			3/13/75 Spring run
			" 57.5 g (7.9/lb)
			3/12/75
			" 59.7 g (7.6/lb)
			3/11/75
			" 63.9 g (7.1/lb)
			3/10/75
			" 60.5 g (7.5/lb)
			3/11/75
			" 57.5 g (7.9/lb)
			3/12/75
			" 59.7 g (7.6/lb)
			3/13/75
			" 70.9 g (6.4/lb)
			3/14/75
			" 67.8 g (6.7/lb)
			42,210

None were marked (see following table).

A total of 730,775 1973 broodyear King Salmon was planted this fiscal year as yearlings. All were planted in the Trinity River near the hatchery.

Planting 1973 Broodyear King Salmon

SILVER SALMON MAINTENANCE PROGRAM

History of the 1974 Run

Silver salmon entered the hatchery from October 15 to December 12, 1974. A total of 95 fish was trapped including 32 males, 23 females, and 40 grilse. Silver salmon males < 56 cm (22 inches) FL are considered grilse. None were marked. All 23 females were spawned from October 31 through December 12, producing 53,500 eggs, an average of 2,326/female. Egg size averaged 86/ounce.

No silver salmon eggs were transferred to other hatcheries nor were any fingerlings (1974 broodyear fish) planted this fiscal year. We had an estimated 47,000 1974 broodyear fish on hand June 30, 1974.

Planting 1973 Broodyear Silver Salmon

All 1973 broodyear silver salmon on hand were planted as follows:

Date	Size	Number
3/6/75	35 g (12.9/lb)	92,880
3/7/75	35 g (12.8/lb)	66,240
3/7/75	91 g (5.0/lb)	22,500
3/10/75	86 g (5.3/lb)	71,285
TOTAL		252,905

STEELHEAD MAINTENANCE PROGRAM

History of the 1974-75 Steelhead Run

Steelhead began entering the trap at the hatchery on September 12, 1974. On or about February 1, 1975 a temporary trap was placed in the ladder facility in the weir 1.6 km (1 mile) downstream from the hatchery. When the run ended on April 16 a total of 372 steelhead had been trapped. Of this number 182 were males, and 190 were females. From February 5 through April 10, 171 females were spawned, producing 626,000 eggs, an average of 3,660/female. Egg size averaged 228/ounce. We shipped 125,190 of these eggs to Iron Gate Hatchery (Appendix Table 1). Three shipments of steelhead eggs (totaling 516,612) were received by transfer from Iron Gate Hatchery (Appendix Table 1).

The reciprocal transfers of eggs were part of an experiment designed to obtain information about a ceratomyxa problem in the Klamath-Trinity system.

Marked Steelhead Returns

Of the 372 steelhead trapped at Trinity Hatchery during the 1974-75 season, 19 (5%) were marked. All marked fish were measured (see following table). None of the marked adults we recovered match any reported marked groups released in the Klamath River system since 1971.

Fork Lengths (to nearest inch) of Marked Steelhead Recovered at Trinity Hatchery, 1974-75 Season

Mark	FL	Sex	Mark	FL	Sex	Mark	FL	Sex
Ad	{ 22 24	F M	LP	20	M		24	F
An	26	F	RP	21	M	RM	23	F
An-LV	{ 19 19	M F	IM	{ 23 22 21 20 23	F M F F M		{ 21 25 18 17	M F F M
LV-IM	20	F						

Mad River Strain Steelhead

In June, 1974 153 adult steelhead which had been trapped at Mad River Hatchery were hauled to Trinity River Hatchery and placed in a series of raceway ponds nearest the employee houses. Three of the fish failed to survive the trip but the rest remained in excellent condition. All of the females (75) were spawned between January 17 and March 26, 1974, and produced 319,000 eggs, an average of 4,253/female. Egg size averaged 147/ounce. A total of 137,995 of these eggs was transferred to Mad River Hatchery.

Planting 1974 Broodyear Steelhead

Trinity River Strain

The 1974 broodyear Trinity River strain steelhead were planted as follows:

Date	Size	Mark	Release site	Number
5/ 5/75	78 g (5.8/lb)	D-LM	Weir	16,906
6/12/75	68 g (6.7/lb)	None	Big Bar-	511
6/13/75	68 g (6.7/lb)	"	"	535
TOTAL				17,952

Approximately 81,000 Trinity River strain steelhead are being held at the hatchery to be released as two year olds in the spring of 1976.

Iron Gate Strain

The 1974 broodyear Iron Gate strain steelhead were planted as follows:

Date	Size	Mark	Release site	Number
3/2/75	7.6 g (60/lb)	None	Trinity Lake	168,000
3/3/75	7.6 g (60/lb)	"	"	40,500
TOTAL				208,500

The above fish were planted in Trinity Lake to comply with recently instituted policy prohibiting the planting in anadromous streams of steelhead less than 15.2 cm (6 inches) FL.

Approximately 87,000 1974 broodyear Iron Gate strain steelhead are being held at the hatchery to be released as two year olds in the spring of 1976.

BROWN TROUT MAINTENANCE PROGRAM

History of the 1974 Brown Trout Run

Between October 10 and November 25, 1974 32 brown trout (13 males and 19 females) were trapped at the hatchery. From November 18 through December 9, seven of the females were spawned. They produced 13,200 eggs, an average of 1,886/female. Egg size averaged 256/ounce.

Planting 1973 Broodyear Brown Trout

The 1973 broodyear brown trout were planted as follows:

Date	Size	Mark	Release site	Number
4/14/75	28 g (16.2/lb)	None	Weir	17,820

Of the 55,227 1973 broodyear brown trout eggs taken last season, 17,820 (32%) were later planted in the Trinity River.

Appendix Table 1

Eggs and Fish Shipped from and Received at
Trinity River Hatchery, July 1, 1974-June 30, 1975

Shipped	Number	Date	To
Steelhead eggs (1975 broodyear) summer-run, Mad River strain	80,740	3/19/75	Mad River Hatchery
"	46,755	4/ 3/75	"
Steelhead eggs (1975 broodyear) winter-run, Trinity River strain	125,190	4/ 8/75	Iron Gate Hatchery
Steelhead eggs (1975 broodyear) summer-run, Mad River strain	10,500	4/15/75	Mad River Hatchery
TOTAL SHIPPED	263,185		

Received	Number	Date	From
Steelhead eggs (1975 broodyear) winter-run, Klamath River strain	69,090	3/12/75	Iron Gate Hatchery
"	278,562	3/20/75	"
"	168,960	3/25/75	"
TOTAL RECEIVED	516,612		

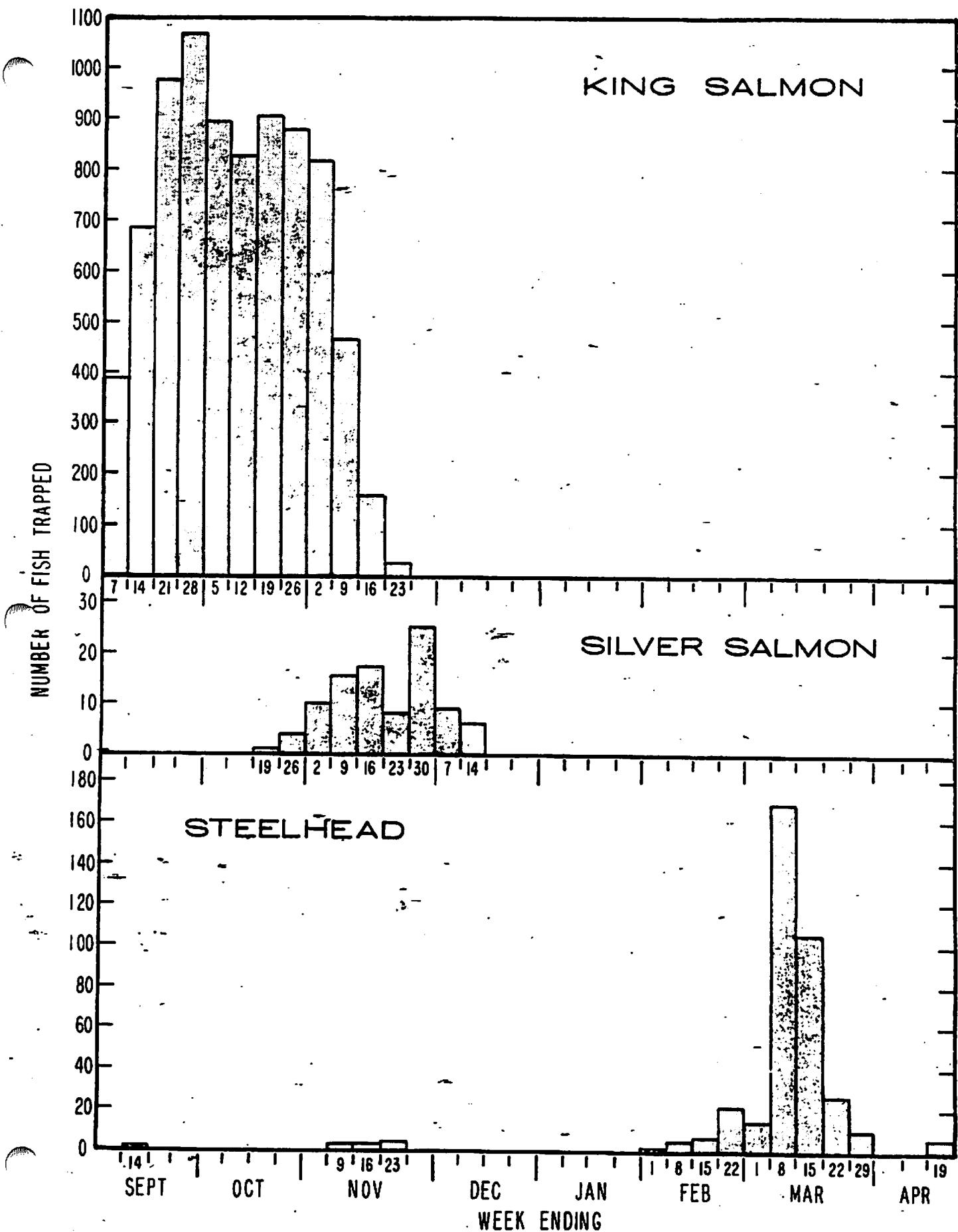


Figure 1. Salmon and steelhead trapped at Trinity River Fish Hatchery. Weekly counts during 1974-75 season.

Appendix Table 2
Yearly Comparison of Fish Trapped at Lewiston
July 1, 1969 through June 30, 1975

Species	July 1, 1969 through June 30, 1970	July 1, 1970 through June 30, 1971	July 1, 1971 through June 30, 1972	July 1, 1972 through June 30, 1973	July 1, 1973 through June 30, 1974	July 1, 1974 through June 30, 1975
King Salmon						
Male	624	773	3,648	5,217	2,483	4,547
Female	832	725	4,645	5,825	1,152	2,840
Total Adults	1,456	1,498	8,293	11,042	3,635	7,387
Grilse	1,130	2,946	928	339	1,577	677
Totals	2,586	4,444	9,221	11,381	5,212	8,064
Silver Salmon						
Male	153	1,410	28	28	3,808	32
Female	132	1,396	11	30	3,787	23
Total Adults	285	2,806	39	58	7,595	55
Grilse	1,711	341	8	2,612	486	40
Totals	1,996	3,147	47	2,670	8,081	95
Steelhead Trout						
Adults	241	67	242	271	162	372
Brown Trout						
Adults	70	23	7	111	39	32

Appendix Table 3
Trinity River Salmon and Steelhead Hatchery Weather
and Water Data, and Counts of Fish during Spawning
Operations, July 1, 1974, through June 30, 1975

July	Temperature F			Weather	Flow of Trinity River at Lewiston (cfs)*		Fish trapped		
	Air		Water		King salmon		Silver salmon	Adults	Grilse
	Maximum	Minimum	Maximum	Minimum	Adults	Grilse			
1	52	46	54	50	50	clear	163		
2	93	88	53	51	51	clear	160		
3	103	49	53	50	50	clear	160		
4	94	51	52	49	49	partly cloudy	159		
5	85	45	53	49	49	clear	158		
6	72	51	52	48	48	cloudy-rain	158		
7	60	45	49	48	48	rain	159		
8	72	70	49	47	47	partly cloudy	158		
9	78	86	46	47	47	partly cloudy	157		
10	70	91	43	48	48	clear	154		
11	14	86	50	49	49	partly cloudy	154		
12	13	91	50	52	52	clear	154		
13	14	94	88	51	51	clear	155		
14	15	86	48	48	48	partly cloudy	154		
15	16	88	50	51	51	clear	154		
16	17	93	56	56	52	partly cloudy	155		
17	18	94	56	56	51	clear	155		
18	19	93	56	52	52	partly cloudy	155		
19	20	98	53	52	51	clear	156		
20	21	99	53	52	51	clear	156		
21	22	97	53	52	51	clear	156		
22	23	101	52	50	50	clear	156		
23	24	106	55	53	50	clear	158		
24	25	108	57	52	50	clear	158		
25	26	99	62	53	49	partly cloudy	166		
26	27	98	58	51	49	partly cloudy	116		
27	28	103	56	53	50	clear	400		
28	29	104	57	53	50	clear	330		
29	30	106	56	51	51	clear	281		
30	31	106	56	51	51	clear	241		

* From USGS records.

Appendix Table 3 (Continued)

August	Temperature F				Weather	Flow of Trinity River (cfs)*	Fish trapped		
	Air Maximum	Air Minimum	Water Maximum	Water Minimum			King salmon Adults	Silver salmon Adults	Steelhead
1	103	58	53	51	clear	267			
2	106	56	54	51	partly cloudy	238			
3	106	59	54	52	partly cloudy	190			
4	102	60	54	52	partly cloudy	162			
5	75	60	53	51	rain	161			
6	96	62	52	51	cloudy-clear	160			
7	86	50	53	50	clear	160			
8	95	49	53	51	clear	160			
9	96	59	54	52	clear	160			
10	102	52	53	52	clear	159			
11	98	53	54	52	clear	158			
12	93	48	53	50	clear	164			
13	89	43	52	50	clear	163			
14	92	44	52	49	clear	160			
15	92	46	52	49	clear	147			
16	90	47	53	49	clear	144			
17	90	45	53	50	clear	161			
18	80	42	52	50	partly cloudy	161			
19	82	44	52	50	clear	161			
20	92	43	52	50	clear	160			
21	94	46	53	50	clear	160			
22	94	43	53	50	clear	158			
23	98	52	53	51	clear	158			
24	100	52	54	52	clear	158			
25	100	52	54	52	clear	158			
26	97	52	53	51	clear	158			
27	99	50	53	50	clear	160			
28	97	52	54	50	clear	160			
29	95	52	53	51	clear	159			
30	93	52	53	50	clear	160			
31	90	54	53	50	clear	160			

* From USGS records.

Appendix Table 3 (Continued)

September	Temperature F			Weather	Flow of Trinity River at Lewiston (cfs)*			Fish trapped		
	Air		Water		King salmon		Silver salmon	Adults		Steelhead
	Maximum	Minimum	Maximum		Adults	Grilse	Adults	Grilse	Adults	Grilse
1	92	46	53	50	clear		188			
2	94	45	53	50	clear		212			
3	96	47	53	50	clear		174	8		
4	96	50	52	50	clear		209			
5	78	49	52	50	clear		209		203	5
6	97	43	52	50	clear		209			
7	93	46	51	50	partly cloudy		206			
8	93	46	52	50	clear		209			
9	90	50	52	51	clear		211			
10	93	50	52	51	clear		212		349	17
11	87	48	52	51	clear		212			
12	91	40	52	51	clear		212		297	24
13	90	41	52	50	clear		209			
14	92	38	51	50	clear		211			
15	95	40	51	49	clear		212			
16	98	41	52	50	clear		212		135	24
17	102	42	51	49	clear		213			
18	102	43	52	49	clear		214			
19	105	45	51	50	clear		212		191	24
20	100	46	51	49	clear		211			
21	102	46	51	49	clear		209			
22	96	46	51	48	clear		212		602	27
23	97	46	50	48	clear		209			
24	101	45	50	48	clear		212			
25	102	45	49	48	clear		212			
26	97	45	49	48	clear		212		118	22
27	90	36	50	48	clear		212			
28	90	36	50	48	clear		212			
29	84	41	50	47	clear		212			
30	90	40	50	47	clear		212		386	34
TOTALS									3,358	185
										1

* From USGS records.

Appendix Table 3 (Continued)

October	Temperature F				Weather	Flow of Trinity River at Lewiston (cfs)*	Fish trapped		
	Air Maximum	Air Minimum	Water Maximum	Water Minimum			King salmon Adults	Silver salmon Grilse	Steelhead
1	93	40	49	47	clear	209			
2	86	44	50	48	partly cloudy	209			
3	85	42	50	48	clear	209	440	29	
4	78	38	49	47	partly cloudy	209			
5	76	34	49	48	clear	209			
6	81	32	49	47	partly cloudy	209			
7	86	33	49	47	clear	208	452	17	
8	67	43	48	48	clear	207			
9	80	39	49	47	clear	206			
10	81	37	48	47	clear	207	312	40	
11	82	35	49	47	clear	208			
12	88	34	49	47	clear	209			
13	90	34	50	47	clear	211			
14	88	35	49	47	clear	213			
15	90	36	49	47	clear	237	417	34	1
16	85	34	49	47	clear	257			
17	80	33	49	47	partly cloudy	256			
18	88	36	49	47	clear	256	412	40	
19	84	36	48	47	partly cloudy	256			
20	77	33	48	46	clear	256			
21	75	30	47	45	clear	257	431	61	1
22	78	30	47	45	clear	257			
23	67	32	47	45	clear	257			
24	72	32	47	45	clear	258	348	35	2
25	70	34	47	45	partly cloudy	260			
26	68	39	47	46	partly cloudy	260			
27	54	45	46	46	rain	262			
28	52	46	46	46	rain	263	344	55	3
29	62	34	46	45	clear	261			
30	51	38	46	45	cloudy	260			
31	50	38	46	45	clear	260	333	79	4
TOTALS						3,189	390	11	4

* From USGS records.

Appendix Table 3 (Continued)

November	Temperature F				Weather	Flow of Trinity River at Lewiston (cfs)*	Fish trapped					
	Air		Water				King salmon		Silver salmon			
	Maximum	Minimum	Maximum	Minimum			Adults	Grilse	Adults	Grilse	Steelhead	
1	58	38	46	45	clear	259						
2	62	28	46	45	clear	260						
3	67	30	46	45	clear	260						
4	61	33	46	45	fog-clear	260	242	31	7	2	1	
5	57	37	47	45	fog-clear	261						
6	62	39	47	46	fog-clear	261						
7	50	47	47	46	rain	262	160	29	5	1	2	
8	52	37	47	46	clear	261						
9	53	36	47	46	rain	262						
10	64	42	47	47	fog-clear	262						
11	61	40	47	46	fog-clear	261						
12	60	40	48	46	fog-clear	261	91	21	3	2	3	
13	65	39	48	46	fog-clear	261						
14	65	42	48	47	fog-clear	263	33	14	8	4	15	
15	60	41	48	47	fog-clear	234						
16	58	40	48	47	fog-clear	212						
17	51	39	47	47	fog-cloudy	212						
18	55	40	47	47	partly cloudy	212	8	5	3	2	2	
19	55	34	47	47	partly cloudy	215						
20	54	36	47	47	partly cloudy	213						
21	53	44	47	47	rain	213	6	2	2	1	2	
22	51	30	47	46	fog-clear	212						
23	49	32	47	46	fog-clear	212						
24	56	36	47	46	fog-clear	212						
25	51	39	46	46	clear	212			6	15		
26	50	36	46	46	clear	213						
27	55	34	46	46	fog-clear	213						
28	53	30	46	45	fog-clear	213						
29	55	31	46	45	fog-clear	214			2	2		
30	57	29	46	45	fog-clear	214						
TOTALS							540	102	36	29	10	

* From USGS records.

Appendix Table 3 (Continued)

December	Temperature F				Weather	Flow of Trinity River at Lewiston (cfs)*	Fish trapped				
	Air Maximum	Air Minimum	Water Maximum	Water Minimum			King salmon Adults	King salmon Grilse	Silver salmon Adults	Silver salmon Grilse	Steelhead
1	51	29	46	45	fog-clear	213					
2	41	33	45	45	rain	188				2	
3	49	40	45	45	rain	168					
4	53	36	45	45	clear	167					
5	46	34	45	45	drizzle	167					
6	51	37	45	45	cloudy-rain	166			4	3	
7	52	31	45	45	fog-clear	166					
8	56	39	45	45	fog-clear	167					
9	52	33	45	45	fog-cloudy	167			4	1	
10	42	35	45	45	fog-cloudy	167					
11	44	36	45	45	rain	168					
12	52	43	45	45	rain	167				1	
13	52	32	45	44	partly cloudy	166					
14	46	39	45	44	rain	167					
15	51	42	45	44	fog-cloudy	166					
16	49	41	45	45	clear	166					
17	44	33	45	45	partly cloudy	168					
18	45	34	45	45	fog-clear	170					
19	50	32	45	44	fog-clear	169					
20	56	35	45	44	fog-clear	170					
21	46	37	45	45	rain-clear	169					
22	44	24	45	44	clear	168					
23	41	22	44	44	fog-clear	167					
24	42	20	44	43	partly cloudy	168					
25	44	22	44	43	clear	166					
26	40	24	43	43	cloudy-rain	168					
27	36	33	43	43	snow-rain	170					
28	34	27	43	42	clear	168					
29	38	23	42	42	clear	164					
30	47	26	42	42	partly cloudy	165					
31	42	41	49	20	fog-clear	165					
TOTALS							8	7			

* From USGS records.

Appendix Table 3 (Continued)

January	Temperature F				Weather	Flow of Trinity River at Lewiston (cfs)*	Fish trapped					
	Air		Water				King salmon	Silver salmon				
	Maximum	Minimum	Maximum	Minimum			Adults	Grilse				
1	44	22	42	41	fog-clear	166						
2	43	20	41	40	partly cloudy	166						
3	38	20	41	40	cloudy-rain	167						
4	42	30	41	41	partly cloudy	167						
5	38	34	41	41	cloudy-rain	171						
6	39	32	41	40	snow-cloudy	170						
7	36	31	41	41	rain	173						
8	41	34	41	41	rain-snow	174						
9	36	24	41	40	snow	172						
10	44	32	41	41	partly cloudy	171						
11	48	30	41	41	fog	171						
12	40	34	42	41	partly cloudy	171						
13	45	32	42	41	fog-clear	170						
14	42	30	42	41	fog-clear	172						
15	39	32	42	41	fog-clear	161						
16	50	32	42	42	fog-clear	162						
17	49	33	43	42	partly cloudy	161						
18	52	34	44	44	fog	163						
19	54	32	44	43	fog-clear	164						
20	53	34	44	43	fog-clear	164						
21	54	31	44	43	fog-clear	164						
22	56	33	45	44	fog-clear	163						
23	61	33	45	44	fog-clear	161						
24	61	35	46	44	fog-clear	163						
25	58	39	46	45	fog-clear	163						
26	50	30	45	45	clear	163						
27	44	20	45	44	fog-clear	163						
28	37	18	44	43	snow	163						
29	41	21	44	43	fog-clear	163						
30	45	18	44	43	clear	166						
31	32	26	43	43	snow	170						
TOTALS										1		

* From USGS records.

Appendix Table 3 (Continued)

February	Temperature F				Weather	Flow of Trinity River at Lewiston (cfs)*	Fish trapped		
	Air Maximum	Air Minimum	Water Maximum	Water Minimum			King salmon Adults	Silver salmon Adults	Steelhead Grilse
1	42	28	43	42	cloudy-snow	173			
2	46	32	43	42	cloudy	171			
3	44	32	43	42	snow-rain	171			
4	45	28	42	42	partly cloudy	170			1
5	36	31	42	41	snow-rain	170			1
6	42	34	42	42	rain	170			3
7	44	38	42	42	rain	171			
8	46	39	42	42	rain	172			
9	46	36	43	42	fog-drizzle	172			
10	50	33	43	42	partly cloudy	170			
11	44	43	46	36	cloudy	170			
12	32	32	42	42	snow	180			2
13	55	31	43	42	cloudy-rain	175			2
14	59	28	43	42	clear	170			2
15	52	24	44	42	cloudy	168			
16	46	28	43	42	clear	168			
17	56	22	44	42	clear	169			
18	43	28	43	42	rain	171			9
19	44	33	43	42	rain	174			
20	49	29	43	42	clear	172			12
21	49	29	43	42	clear	172			
22	63	22	42	42	clear	172			
23	67	25	44	42	clear	172			
24	70	27	46	42	clear	172			1
25	69	30	46	43	fog-clear	172			
26	52	33	45	44	rain	172			11
27	47	41	45	45	rain	173			
28	61	43	47	45	fog-clear	173			2
TOTALS									46

* From USGS records.

Appendix Table 3 (Continued)

March	Temperature F				Weather	(cfs)*	Flow of		
	Air		Water				Trinity River	at Lewiston	King salmon
	Maximum	Minimum	Maximum	Minimum			Adults	Grilse	Silver salmon
1	56	44	46	46	rain		173		
2	53	42	47	45	cloudy		172		
3	54	40	47	46	cloudy		171		
4	66	37	43	46	fog-clear		171		
5	66	35	48	46	cloudy-rain		170		
6	54	38	47	46	rain		170		
7	50	45	47	47	rain		181		
8	54	42	47	46	cloudy		177		
9	53	44	46	46	cloudy		173		
10	54	38	47	46	partly cloudy		172		
11	58	26	48	47	fog-clear		172		
12	54	32	48	46	fog		172		
13	40	38	47	47	rain		170		
14	59	33	47	46	fog-clear		789		
15	39	36	47	47	rain		687		
16	42	30	46	46	cloudy		591		
17	32	32	45	45	snow		521		
18	35	32	44	44	rain		439		
19	48	33	45	44	rain-snow		349		
20	48	27	44	43	partly cloudy		296		
21	33	32	43	42	snow		213		
22	46	30	42	42	snow		168		
23	40	30	43	42	rain		166		
24	38	32	43	42	rain		171		
25	49	31	43	42	clear-windy		170		
26	53	23	43	42	clear		167		
27	52	27	45	42	clear		165		
28	54	31	45	43	clear		163		
29	72	26	46	43	clear		161		
30	73	34	47	45	clear		161		
31	54	27	47	45	clear		163		
TOTALS							1		
									308

* From USGS records.

Appendix Table 3 (Continued)

	Flow of Trinity River at Lewiston						Fish trapped			
	April			(cfs)*			King salmon		Silver salmon	
	Air Maximum	Air Minimum	Water Maximum	Water Minimum	Weather	Adults Grilse	Adults Grilse	Steelhead		
1	58	24	46	45	clear	163				
2	53	29	46	45	cloudy	163				
3	50	32	45	43	cloudy-snow	160				
4	58	29	44	43	rain	162				
5	40	31	44	43	cloudy	161				
6	54	32	45	43	snow-cloudy	160				
7	47	35	44	43	rain-clear	160				
8	55	34	45	44	fog-clear	161				
9	62	30	46	44	fog-cloudy	161				
10	58	30	46	44	fog-clear	160				
11	65	34	46	44	fog-clear	160				
12	65	29	47	44	fog-clear	160				
13	68	34	47	45	clear-cloudy	160				
14	48	33	45	45	rain-hail	160				
15	48	27	45	45	cloudy	160				
16	47	27	45	43	partly cloudy	161				
17	60	27	45	44	partly cloudy	164				
18	61	32	47	44	partly cloudy	163				
19	66	34	47	45	cloudy	163				
20	72	32	48	45	fog-clear	162				
21	72	31	49	46	clear	162				
22	59	30	47	45	cloudy	163				
23	45	38	46	45	rain	164				
24	50	43	45	45	rain	164				
25	53	31	45	44	hail-cloudy	163				
26	62	30	46	44	fog-clear	163				
27	66	37	47	45	clear	163				
28	68	31	48	46	clear	162				
29	73	31	49	47	clear	162				
30	75	35	49	47	clear	162				
TOTALS										

* From USGS records.

Appendix Table 3 (Continued)

May	Temperature F				Weather	Flow of Trinity River at Lewiston (cfs)*	Fish trapped			
	Air		Water				King salmon	Silver salmon	Adults	Grilse
	Maximum	Minimum	Maximum	Minimum			Adults	Grilse		Steelhead
1	78	52	43	29	49	47	244			
2	71	54	43	29	49	48				
3	72	55	45	30	49	49	337			
4	76	65	46	35	49	49				
5	80	72	52	36	49	48	436			
6	73	66	50	39	52	48	528			
7	75	67	47	40	48	48	609			
8	71	69	51	37	50	48	723			
9	76	66	51	46	51	48	795			
10	75	73	51	47	49	49	920			
11	71	71	48	40	48	48	1040			
12	89	86	76	37	51	49	1140			
13	86	86	75	48	50	49	1250			
14	80	75	46	46	50	49	1380			
15	89	86	75	45	49	49	1470			
16	86	86	75	45	50	49	1580			
17	89	86	75	45	50	49	1670			
18	86	86	75	45	50	49	1780			
19	69	64	64	46	50	49	1870			
20	76	76	64	35	50	49	1990			
21	80	80	76	41	50	47	2090			
22	85	85	76	41	51	47	2210			
23	80	82	76	41	51	48	2180			
24	82	86	76	41	51	48	2130			
25	86	86	76	41	51	49	2080			
26	86	86	76	41	51	49	1990			
27	86	86	76	41	51	49	1940			
28	86	86	76	41	51	48	1880			
29	92	92	87	47	50	50	1830			
30	99	99	87	47	51	50	1770			
31	99	99	87	51	53	49	1730			
							1670			
							1630			

* From USGS records.

Appendix Table 3 (Continued)

June	Temperature F			Weather	Trinity River at Lewiston (cfs)*	Fish trapped		
	Air		Water			King salmon	Silver salmon	Adults
	Maximum	Minimum	Maximum			Adults	Grilse	Steelhead
1	61	49	49	43	1580	partly cloudy		
2	66	52	49	47	1550	partly cloudy		
3	86	46	49	46	1540	clear		
4	87	48	50	47	1530	clear		
5	97	52	50	47	1530	clear		
6	92	47	50	48	1540	clear		
7	89	50	49	47	1540	clear		
8	90	47	50	46	1540	clear		
9	90	46	50	47	1500	clear		
10	97	46	50	47	1450	clear		
11	95	49	51	47	1110	clear		
12	99	50	51	47	1340	clear		
13	98	55	51	48	1300	clear		
14	88	50	51	47	1220	clear		
15	98	55	51	48	1180	partly cloudy		
16	88	51	51	48	1130	partly cloudy		
17	74	80	45	47	1070	partly cloudy		
18	76	74	45	47	1010	partly cloudy		
19	88	88	43	46	961	clear		
20	76	80	45	47	897	partly cloudy		
21	88	88	43	47	833	partly cloudy		
22	87	45	53	47	787	cloudy		
23	89	46	50	48	746	cloudy		
24	73	42	48	46	678	clear		
25	77	36	48	46	634	clear		
26	79	36	49	46	572	clear		
27	77	43	50	48	511	partly cloudy		
28	80	43	51	48	467	partly cloudy		
29	87	43	51	49	415	partly cloudy		
30	77	47	50	49	7,387	7,387	677	40
						TOTALS July 1, 1974-June 30, 1975	372	

* From USGS records.