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New \$
Improved
Version

TRINITY RIVER SALMON AND STEELHEAD HATCHERY: FIFTH YEAR OF OPERATION, 1962-1963^{1/}

REF 90074

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SUMMARY

The 1962-1963 run of king salmon, 9,451 fish, and steelhead trout, 1,687 fish, was trapped at the temporary hatchery. These fish were spawned if ripe or released downriver to spawn if green. All of the fish that were released downriver were marked by clipping the adipose fin.

A total of 1,848,400 king salmon swim-up fry was produced in the temporary incubator hatchery and released in the Trinity River. A total of 630,500 steelhead trout fingerlings is on hand and will be reared to yearlings for spring, 1964, release in the Trinity River.

Operation of the permanent Trinity River Hatchery began on May 15, 1963. A fish ladder at the temporary facilities allows migrating fish to utilize the river above the weir and to enter the trap at the new hatchery.

INTRODUCTION

This is the fifth fiscal year report covering operation of the Trinity River Salmon and Steelhead Hatchery. Reports covering operations of temporary facilities at Trinity River have been prepared since the 1958-59 fiscal year (Administrative Reports 59-13, 61-16, 62-2, 62-11). Copies of these are available upon request from Inland Fisheries Branch, Sacramento.

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 operation of the permanent installation on May 15, 1963, began with funds for operation and maintenance supplied by the Bureau on a reimbursable basis.

This report summarizes the number of fish trapped; fish spawned; production of eggs, fry, and fingerlings; river flow; and air and water temperatures from July 1, 1962, through June 30, 1963.

KING SALMON MAINTENANCE PROGRAM

During July 1962, a few spring-run king salmon appeared below the weir. No attempt was made to trap these fish inasmuch as cold water releases from Trinity Dam provided suitable holding temperatures through the summer months.

A total of 9,451 fall-run king salmon was trapped between September 13, and November 23, 1962.

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Holding ponds at the temporary hatchery were of very limited capacity, so it was necessary to sort the trapped fish and hold only those that were nearly ready for spawning. Unripe fish were marked and released about six miles downriver. When marked fish returned to the trap they were spawned, or if still unripe, were again released downriver.

SILVER SALMON MAINTENANCE PROGRAM

Only seven males and nine grilse were trapped, consequently no silver salmon eggs were taken.

STEELHEAD TROUT MAINTENANCE PROGRAM

From September 13, 1962, to May 3, 1963, a total of 1,687 adult steelhead trout was trapped. This was about half the 1961-62 fiscal year total.

A total of 2,466,100 eggs was taken from 629 females between March 1, and May 20, 1963. These eggs began to hatch on April 4, in the incubator hatchery and appeared to be in good condition until May 15. On that day fry about seven days old began to die in large numbers. All of the fry and eyed eggs then were moved to the newly built permanent hatchery from the temporary one. Heavy losses continued, however, with entire lots dying within a few days of hatching. Finally only about 200,000 Trinity River steelhead fingerlings were still alive. These had been the earliest to hatch.

Water samples taken shortly after this heavy fry loss disclosed heavy metals, principally iron, copper, zinc, and lead were present. Copper and zinc are known to be synergistic in toxic action when in combination.

The surviving Trinity River steelhead fingerlings and 500,000 steelhead fingerlings transferred to the hatchery from American River stock are being held for release as yearlings in the spring of 1964.

THE NEW HATCHERY

Construction of the permanent Trinity River Hatchery began September 1, 1961. On May 15, 1963, the Bureau of Reclamation released the completed hatchery to the Department of Fish and Game. Its operation began at this time with the transfer of steelhead fry and eyed eggs from the temporary hatchery.

The transfer of the hatchery from the U.S. Bureau of Reclamation to the California Department of Fish and Game was formalized at a dedication ceremony on June 15, 1963.

DISPOSITION OF LEWISTON FISH TRAPPING FACILITIES

The concrete weir which had been designed to direct migrating fish into the fish trap was provided with a fish ladder in order that the fish could continue upstream to the trap at the new hatchery. This ladder utilized parts of the existing fish ladder and water intake structure. The remainder of the trapping facilities were removed and the area leveled.

Much of the equipment in the temporary hatchery was salvaged for use at the permanent hatchery. The hatchery building has been utilized as a storage facility by the Bureau of Reclamation. With the consent of the Bureau of Reclamation, the office building has been dismantled and removed to the permanent hatchery to be assembled for use as a storage unit.

APPENDIX

4.

APPENDIX

Table A-1 compares the number of fish by species trapped at Lewiston Fish Trapping Facilities from September 13, 1962, through June 30, 1963.

Table A-2 is a chart of operation.

Tables A-3 through A-14 summarize daily air and water temperatures, weather conditions, river flow, and number of fish by species trapped at the Lewiston Fish Trapping Facility.

Figure A-1 is a map showing the location of Trinity River Hatchery and Trapping Facilities.

Figure A-2 is a general plan of the hatchery.

Figures A-3 and A-4 show weekly numbers of fall-run king salmon, and steel-head trout trapped.

TABLE A-1

Yearly Comparison of Fish Trapped at Lewiston
September 29, 1958 through June 30, 1963

Species	Sept. 29, 1958 through June 30, 1959		July 1, 1959 through June 30, 1960		July 1, 1960 through June 30, 1961		July 1, 1961 through June 30, 1962		July 1, 1962 through June 30, 1963	
	Adults	Grilse	Adults	Grilse	Adults	Grilse	Adults	Grilse	Adults	Grilse
King Salmon										
Adults	3,013		4,549		2,780		2,498		2,916	
Grilse	878		2,701		4,130		2,899		6,535	
Totals	3,891		7,250		6,910		5,397		9,451	
Silver Salmon										
Adults	583		93		138		318		7	
Grilse	33		26		70		37		9	
Totals	616		119		208		355		16	
Steelhead Trout										
Adults	2,880		2,071		3,526		3,243		1,687	

TABLE A-2

TRINITY RIVER HATCHERY 1962 - 1963

T A-3
Lewiston Fish Trapping Facilities
July, 1962

Date	Temperature (degrees F.)			Water	Flow of Trinity River at Lewiston (c.f.s.)*	Fish Trapped		
	Maximum	Minimum	Maximum			King Salmon Adults Grilse	Silver Salmon Adults Grilse	Steelhead Trout
1	85	42	61	56	Clear	187		
2	85	39	61	55	Clear	189		
3	86	41	63	56	Clear	189		
4	91	44	63	56	Cloudy	191		
5	93	43	64	58	Cloudy	193		
6	88	40	64	56	Clear	187		
7	90	45	64	58	Clear	187		
8	91	45	64	58	Clear	187		
9	90	43	64	58	Cloudy	189		
10	92	43	64	58	Cloudy	189		
11	89	41	64	58	Cloudy	189		
12	83	41	64	58	Cloudy	189		
13	88	41	64	58	Cloudy	189		
14	97	42	64	58	Cloudy	189		
15	89	42	64	58	Cloudy	189		
16	92	41	64	58	Cloudy	189		
17	95	41	64	58	Cloudy	189		
18	95	41	64	58	Cloudy	189		
19	91	41	64	58	Cloudy	189		
20	95	41	64	58	Cloudy	189		
21	96	41	64	58	Cloudy	189		
22	94	41	64	58	Cloudy	189		
23	94	41	64	58	Cloudy	189		
24	98	41	64	58	Cloudy	189		
25	100	50	64	59	Cloudy	189		
26	100	50	64	59	Cloudy	189		
27	102	52	64	58	Cloudy	189		
28	102	54	64	58	Cloudy	189		
29	104	55	64	58	Cloudy	189		
30	95	48	62	58	Cloudy	189		
31	97	50	62	57	Cloudy	189		
					Totals			

*From U.S. Bureau of Reclamation Records

8

TABLE A-4
Lewiston Fish Trapping Facilities
August, 1962

Temperature (degrees F.)						Flow of Trinity River at Lewiston (c.f.s.)*	Fish Trapped		
	Air		Water				King Salmon Adults	Silver Salmon Adults	Steelhead Trout
Date	Maximum	Minimum	Maximum	Minimum	Weather		Grilse	Grilse	
1	97	47	62	58	Clear	191			
2	97	46	62	58	Clear	181			
3	90	48	59	56	Cloudy	183			
4	79	54	60	56	Cloudy				
5	76	55	60	57	Cloudy				
6	80	46	59	56	Cloudy	185			
7	78	57	57	56	Rain	187			
8	60	53	52	51	Rain	193			
9	61	51	56	51	Cloudy	197			
10	72	50	59	54	Clear	193			
11	85	49	61	56	Clear				
12	90	49	61	56	Clear				
13	87	46	61	56	Clear	189			
14	91	48	62	56	Clear		189		
15	94	48	62	56	Clear	183			
16	97	46	62	56	Clear	187			
17	92	49	62	56	Clear	189			
18	85	48	61	56	Clear				
19	89	48	61	55	Clear				
20	93	45	61	55	Clear	195			
21	97	50	62	56	Clear	175			
22	93	50	62	56	Clear	177			
23	93	44	62	56	Clear	177			
24	95	44	61	56	Clear	181			
25	92	56	61	56	Clear				
26	82	46	62	55	Clear				
27	93	40	59	55	Clear	191			
28	90	39	59	55	Clear	187			
29	92	45	59	54	Clear	191			
30	84	40	59	55	Clear	195			
31	90	39	59	54	Clear	177			
Totals									

*From U.S. Bureau of Reclamation Records

T.E A-5

Lewiston Fish Trapping Facilities
September, 1962

Date	Temperature (degrees F.)				Weather	Flow of Trinity River at Lewiston (c.f.s.)*	Fish Trapped		
	Air	Water	Maximum	Minimum			King Salmon Adults Grilse	Silver Salmon Adults Grilse	Steelhead Trout
1	95	45	60	54	Clear				
2	97	48	59	54	Clear	185			
3	92	49	60	54	Clear	187			
4	93	45	60	54	Clear	187			
5	95	41	59	54	Clear	187			
6	98	47	59	54	Clear	187			
7	96	45	59	54	Clear	187			
8	91	43	59	54	Clear	187			
9	87	38	58	53	Cloudy	199			
10	91	43	58	53	Cloudy	201			
11	87	37	58	53	Cloudy	173			
12	91	40	58	53	Cloudy	177			
13	80	42	58	52	Cloudy	179			
14	84	47	58	53	Clear				
15	89	42	58	53	Clear				
16	95	40	58	52	Clear				
17	94	46	58	53	Clear				
18	79	34	56	52	Cloudy				
19	80	37	54	52	Clear				
20	83	38	55	52	Clear				
21	88	42	55	52	Rain				
22	90	40	55	52	Clear				
23	91	37	56	53	Cloudy				
24	89	38	56	53	Cloudy				
25	88	39	56	52	Rain				
26	84	44	52	50	Rain				
27	84	43	50	50	Rain				
28	59	47	53	50	Rain				
29	57	45	56	48	Cloudy				
30	72	45	56	50	Fog				
Totals							318	120	1
									15

*From U.S. Bureau of Reclamation Records

TABLE A-6
Lewiston Fish Trapping Facilities
October, 1962

Date	Temperature (degrees F.)			Weather	Flow of Trinity River at Lewiston (c.f.s.)*	Fish Trapped		
	Air	Water	Minimum			King Salmon Adults Gillse	Silver Salmon Adults Gillse	Steelhead Adults Trout
1	85	42	56	52	Cloudy	162	111	97
2	86	43	54	52	Rain	198	263	11
3	76	35	52	49	Cloudy	206	371	13
4	65	34	52	49	Clear	210	476	9
5	66	28	52	48	Clear	198	150	
6	73	37	52	49	Clear	204	226	
7	69	33	49	48	Rain		258	
8	54	31	52	48	Cloudy			
9	70	51	52	51	Rain	204	89	4
10	59	47	51	50	Cloudy	204	263	
11	62	44	50	49	Rain	260	371	
12	55	42	49	48	Rain	226	150	
13	60	42	49	48	Rain	258	229	
14	49	35	48	46	Cloudy			
15	56	34	50	47	Clear	246	316	44
16	61	28	50	47	Clear	216	59	31
17	67	27	50	48	Clear	210	71	19
18	78	31	50	47	Clear	206	66	17
19	74	31	52	49	Clear	208	71	6
20	78	45	52	49	Clear		256	
21	77	47	52	49	Clear			
22	76	44	52	49	Clear	212	190	589
23	76	38	52	49	Clear	210	160	461
24	79	39	53	49	Fog	212	75	302
25	77	42	53	49	Clear	216	79	441
26	74	42	50	49	Clear	216	80	385
27	68	46	50	49	Clear			
28	72	48	50	49	Clear	226	102	315
29	75	44	50	49	Clear	226	40	165
30	75	44	50	49	Clear	208	23	120
31	70	43	50	48	Clear			
Totals							2393	5974
								1
								276

*From U.S. Bureau of Reclamation Records

Turtle A-7

Lewiston Fish Trapping Facilities
November, 1962

Temperature (degrees F.)

Date	Air			Water			Flow of Trinity River at Lewiston (c.f.s.)*			King Salmon Adults Grilse			Silver Salmon Adults Grilse			Steelhead Trout				
	Maximum	Minimum	Medium	Maximum	Minimum	Medium	Clear	Cloudy	Rain	Clear	Cloudy	Rain	Clear	Cloudy	Rain	Clear	Cloudy			
1	72	42	52	48	48	48	Clear	212		49	150						3			
2	76	38	50	48	48	48	Clear	232		42	115	2					1			
3	65	47	50	49	48	48	Clear													
4	66	45	49	49	48	48	Clear													
5	63	38	48	48	48	48	Clear													
6	64	34	47	47	46	46	Clear													
7	61	32	47	47	46	46	Clear													
8	56	36	48	48	47	47	Rain													
9	56	33	44	44	43	43	Clear													
10	57	51	48	48	47	47	Rain													
11	51	36	47	47	46	46	Cloudy													
12	56	36	47	47	46	46	Cloudy													
13	56	37	47	47	46	46	Cloudy													
14	54	37	46	46	45	45	Clear													
15	55	31	46	46	45	45	Clear													
16	56	31	46	46	45	45	Clear													
17	53	33	46	46	45	45	Cloudy													
18	48	33	46	46	45	45	Cloudy													
19	55	34	55	38	47	46	Cloudy													
20	65	38	58	32	45	45	Cloudy													
21	60	29	56	35	41	41	Cloudy													
22	64	39	60	32	46	46	Cloudy													
23	56	29	56	35	46	46	Cloudy													
24	56	32	56	32	45	45	Cloudy													
25	50	41	50	35	46	46	Rain													
26	50	49	50	29	45	45	Rain													
27	49	30	49	22	43	43	Cloudy													
28	49	22	49	33	44	44	Rain													
29	49	22	49	33	44	44														
30	42	33	42	33	43	43														
Totals																205	441	6	8	32

*From U.S. Bureau of Reclamation Records

TABLE A-8
Lewiston Fish Trapping Facilities
December, 1962

Date	Temperature (degrees F.)			Flow of Trinity River			Fish Trapped		
	Air	Water	Weather	at Lewiston (C.f.s.)*	King Salmon Adults Grilse	Silver Salmon Adults Grilse	Steelhead Trout		
1	45	33	46	46	Rain				
2	45	39	45	45	Rain				
3	47	35	46	46	Cloudy				
4	55	36	46	46	Cloudy				
5	47	36	46	45	Cloudy				
6	46	36	46	45	Cloudy				
7	7	38	46	45	Cloudy				
8	9	39	46	45	Cloudy				
9	10	35	46	45	Cloudy				
10	11	34	46	45	Cloudy				
11	12	34	47	45	Cloudy				
12	13	34	47	45	Cloudy				
13	14	35	47	45	Cloudy				
14	15	35	47	45	Cloudy				
15	16	35	47	46	Cloudy				
16	17	35	47	46	Cloudy				
17	18	35	47	46	Cloudy				
18	19	35	47	46	Cloudy				
19	20	35	47	46	Cloudy				
20	21	35	47	46	Cloudy				
21	22	36	47	46	Cloudy				
22	23	36	47	46	Cloudy				
23	24	36	47	46	Cloudy				
24	25	35	47	46	Cloudy				
25	26	35	47	46	Cloudy				
26	27	35	47	46	Cloudy				
27	28	35	47	46	Cloudy				
28	29	35	47	46	Cloudy				
29	30	35	47	46	Cloudy				
30	31	35	47	46	Cloudy				
					Totals				

*From U.S. Bureau of Reclamation Records

TABLE A-9
Lewiston Fish Trapping Facilities
January, 1963

Temperature (dégrees F.)						Flow of Trinity River at Lewiston (c.f.s.)*	Fish Trapped		
	Air		Water		Weather		King Salmon Adults	Silver Salmon Adults	Steelhead Trout
Date	Maximum	Minimum	Maximum	Minimum	Weather				
1	53	33	44	44	Cloudy				
2	37	31	43	43	Cloudy	264			
3	45	31	44	41	Cloudy	160			
4	52	32	44	43	Clear	160			
5	59	25	43	41	Clear				
6	60	26	43	41	Clear				
7	63	24	43	41	Clear	136			
8	58	25	43	41	Clear	136			
9	52	27	43	41	Cloudy	200			
10	47	23	43	40	Clear	183			
11	47	14	40	40	Clear	175			
12	38	10	39	38	Clear				
13	46	13	39	36	Clear				
14	49	17	40	37	Clear	159			
15	52	22	40	39	Clear	150			
16	53	26	41	40	Fog	145			
17	51	23	42	40	Fog	145			
18	51	20	42	40	Clear	148			
19	53	16	41	40	Clear				
20	55	16	40	39	Clear				
21	36	18	41	39	Clear	154			
22	57	19	42	40	Clear	148			
23	59	20	42	40	Clear	139			
24	58	20	43	40	Clear	141			
25	59	21	43	41	Clear	143			
26	56	20	42	41	Clear				
27	52	21	42	40	Clear				
28	53	15	41	40	Cloudy	154			
29	36	21	40	40	Snow	148			
30	35	29	40	40	Rain	148			
31	53	26	46	43	Rain	248			

Totals

*From U.S. Bureau of Reclamation Records

TABLE A-10
Lewiston Fish Trapping Facilities
February, 1963

Date	Temperature (degrees F.)			Weather	Flow of Trinity River at Lewiston (c.f.s.)*	Fish Trapped		
	Maximum	Minimum	Maximum			King Salmon Adults Grilse	Silver Salmon Adults Grilse	Steelhead Trout
1	51	35	43	42	Rain	690		
2	50	39	45	44	Rain	240		
3	50	43	45	44	Rain			
4	61	43	46	45	Rain	248		
5	58	44	47	46	Cloudy	240		
6	61	43	48	46	Cloudy	234		
7	66	38	49	48	Cloudy	228		
8	63	40	48	48	Cloudy	225		
9	60	40	48	48	Rain			
10	57	45	48	47	Rain			
11	54	42	48	48	Clear	240		
12	60	40	48	48	Rain	240		
13	49	41	48	47	Cloudy	257		
14	56	39	45	45	Cloudy	7,060		
15	56	35	45	45	Cloudy	5,900		
16	52	39	44	44	Rain			
17	45	39	45	45	Cloudy			
18	54	36	45	45	Cloudy	3,176		
19	60	42	45	45	Cloudy	3,144		
20	58	49	45	45	Cloudy	3,176		
21	63	37	45	45	Clear	3,160		
22	65	34	45	45	Clear			
23	67	33	45	45	Cloudy			
24	66	38	45	45	Cloudy			
25	64	36	45	45	Cloudy			
26	42	36	46	44	Cloudy	3,176		
27	61	30	48	46	Cloudy	450		
28	64	30	48	46	Cloudy	296		
Totals						282		
							8	
							124	
							141	
							37	
							737	

*From U.S. Bureau of Reclamation Records

TABLE A-11
Lewiston Fish Trapping Facilities
March, 1963

Date	Temperature (degrees F.)			Water	Minimum	Maximum	Weather	Flow of Trinity River at Lewiston (c.f.s.)*		Fish Trapped		
	Air Maximum	Air Minimum	Water					King Salmon Adults Grilse	Silver Salmon Adults Grilse	Steelhead Trout		
1	64	34	49	46	47	48	Cloudy	266	266	104	7	
2	65	30	48	47	46	48	Cloudy			20	20	
3	51	26	48	45	47	47	Clear			157	11	
4	55	21	47	45	47	46	Cloudy			231	11	
5	59	33	47	46	48	48	Cloudy			217	11	
6	54	29	48	46	48	46	Cloudy			211	11	
7	56	31	48	46	48	46	Clear			195	28	
8	62	31	48	47	49	49	Cloudy			192	28	
9	63	31	49	47	49	48	Clear			192	20	
10	66	32	50	48	49	48	Clear			195	20	
11	64	26	49	48	49	48	Clear			188	11	
12	62	23	49	48	49	49	Clear			180	11	
13	57	20	49	46	46	46	Cloudy			195	11	
14	62	26	46	46	46	46	Cloudy			248	28	
15	46	23	46	46	46	46	Cloudy					
16	45	30	46	45	46	46	Snow					
17	46	31	46	45	46	45	Cloudy					
18	46	28	48	45	46	45	Cloudy					
19	58	27	50	46	47	46	Clear			261	54	
20	67	30	50	47	49	47	Clear			264	25	
21	57	30	49	47	49	47	Cloudy			168	39	
22	55	35	50	47	48	47	Rain			178	3	
23	49	31	48	47	47	46	Rain			183	11	
24	49	31	48	44	46	44	Cloudy			144		
25	54	28	46	44	46	45	Rain			148		
26	60	38	46	44	46	45	Rain			180		
27	49	38	46	45	47	45	Cloudy					
28	40	36	44	45	46	45	Rain			157	30	
29	51	39	46	46	46	46	Rain			3,243	12	
30	50	40	46	46	46	46	Rain					
31	54	38	48	46	46	46	Cloudy					
Totals											512	

*From U.S. Bureau of Reclamation Records

TABLE A-12
Lewiston Fish Trapping Facilities
April, 1963

Date	Temperature (degrees F.)			Water			Flow of Trinity River at Lewiston (c.f.s.)*			Fish Trapped		
	Air Maximum	Air Minimum	Maximum	Minimum	Weather	Cloudy	King Salmon	Silver Salmon	Adults Grilse	Adults Grilse	Steelhead	Trout
1	49	26	47	45	Cloudy	183						6
2	49	26	48	45	Cloudy	178						
3	52	31	46	46	Cloudy	140						34
4	48	38	48	46	Cloudy	138						
5	62	41	46	46	Rain	158						11
6	54	48	48	47	Rain	1,950						
7	58	41	48	47	Rain							
8	54	34	49	48	Rain							
9	50	36	48	48	Rain							
10	52	34	49	49	Rain							
11	51	29	48	48	Rain							
12	49	40	48	48	Rain							
13	51	45	48	48	Rain							
14	57	50	48	48	Rain							
15	59	32	48	48	Snow	7,150						
16	42	25	46	46	Clear	8,050						
17	50	29	48	48	Clear	7,150						
18	51	28	48	47	Rain	6,563						1
19	50	32	47	47	Snow	6,838						
20	45	30	46	46	Snow							
21	48	31	46	46	Clear							
22	53	30	47	46	Clear							
23	59	28	46	46	Clear							
24	66	28	46	46	Cloudy	9,450						
25	59	37	46	46	Rain	7,938						
26	49	38	46	45	Cloudy	6,975						
27	57	30	46	46	Clear	7,113						
28	62	39	46	46	Clear							
29	73	37	47	46	Clear							
30	69	39	50	47	Clear							
Totals												108

*From U.S. Bureau of Reclamation Records

TABLE A-13
Lewiston Fish Trapping Facilities
May, 1963

Date	Temperature (degrees F.)				Weather	Flow at Lewiston (c.f.s.)*	Fish Trapped		
	Air Maximum	Air Minimum	Water Maximum	Water Minimum			King Salmon Adults Grilse	Silver Salmon Adults Grilse	Steelhead Trout
1	70	37	50	45	Clear	124			
2	65	45	48	48	Cloudy	7,305			
3	60	42	46	46	Rain	160			
4	57	46	48	48	Cloudy	1,510			
5	55	47	45	49	Rain	2,516			
6	61	48	39	50	Rain	3,218			
7	68	47	34	34	Rain	3,789			
8	66	45	40	37	Rain	4,468			
9	59	59	58	58	Cloudy				
10	58	46	59	59	Cloudy				
11	61	59	64	64	Cloudy				
12	68	63	63	63	Cloudy				
13	74	74	76	76	Cloudy				
14	76	76	84	84	Cloudy				
15	87	87	89	89	Cloudy				
16	93	93	95	95	Cloudy				
17	53	53	58	58	Cloudy				
18	58	58	57	57	Cloudy				
19	58	58	57	57	Cloudy				
20	57	57	56	56	Cloudy				
21	53	53	58	58	Cloudy				
22	55	55	58	58	Cloudy				
23	58	58	57	57	Cloudy				
24	58	58	57	57	Cloudy				
25	-	-	57	57	Cloudy				
26	57	57	56	56	Cloudy				
27	51	51	58	58	Cloudy				
28	60	60	59	59	Cloudy				
29	59	59	60	60	Cloudy				
30	60	60	58	58	Cloudy				
31	46	46	51	51	Cloudy				
					Total	4,775			
							Totals	7	

*From U.S. Bureau of Reclamation Records

87

TABLE A-14
Lewiston Fish Trapping Facilities
June, 1963

Temperature (degrees F.)						Flow of Trinity River at Lewiston (c.f.s.)*	Fish Trapped		
	Air		Water				King Salmon Adults Grilse	Silver Salmon Adults Grilse	Steelhead Trout
Date	Maximum	Minimum	Maximum	Minimum	Weather				
1	80	43	60	59	Clear				
2	81	42	60	58	Clear				
3	80	40	60	57	Clear	4,076			
4	72	35	62	57	Cloudy	3,620			
5	71	37	62	60	Clear	3,542			
6	76	43	63	60	Clear	3,347			
7	70	35	64	61	Cloudy	3,038			
8	76	37	65	61	Clear				
9	83	46	65	60	Clear				
10	82	37	65	62	Clear	2,611			
11	73	40	67	64	Cloudy	2,457			
12	83	48	69	65	Cloudy	2,347			
13	91	57	69	65	Cloudy	2,245			
14	94	54	68	65	Cloudy	2,453			
15	88	55	70	65	Clear				
16	96	55	72	67	Rain				
17	96	53	72	67	Clear	1,925			
18	92	53	72	70	Cloudy	1,945			
19	90	46	72	68	Clear	1,945			
20	90	44	71	68	Clear	1,826			
21	77	41	69	67	Clear	1,691			
22	70	49	67	65	Rain				
23	67	43	66	63	Cloudy				
24	73	40	66	64	Cloudy	1,382			
25	80	42	68	63	Clear	2,376			
26	85	42	70	64	Clear	1,278			
27	84	43	68	66	Cloudy	1,302			
28	70	42	68	66	Cloudy	1,202			
29	68	33	67	65	Cloudy				
30	73	40	70	65	Cloudy				
Grand Totals	7/1/62 through 6/30/63					2,916	6,535	7	9 1,687

*From U.S. Bureau of Reclamation Records

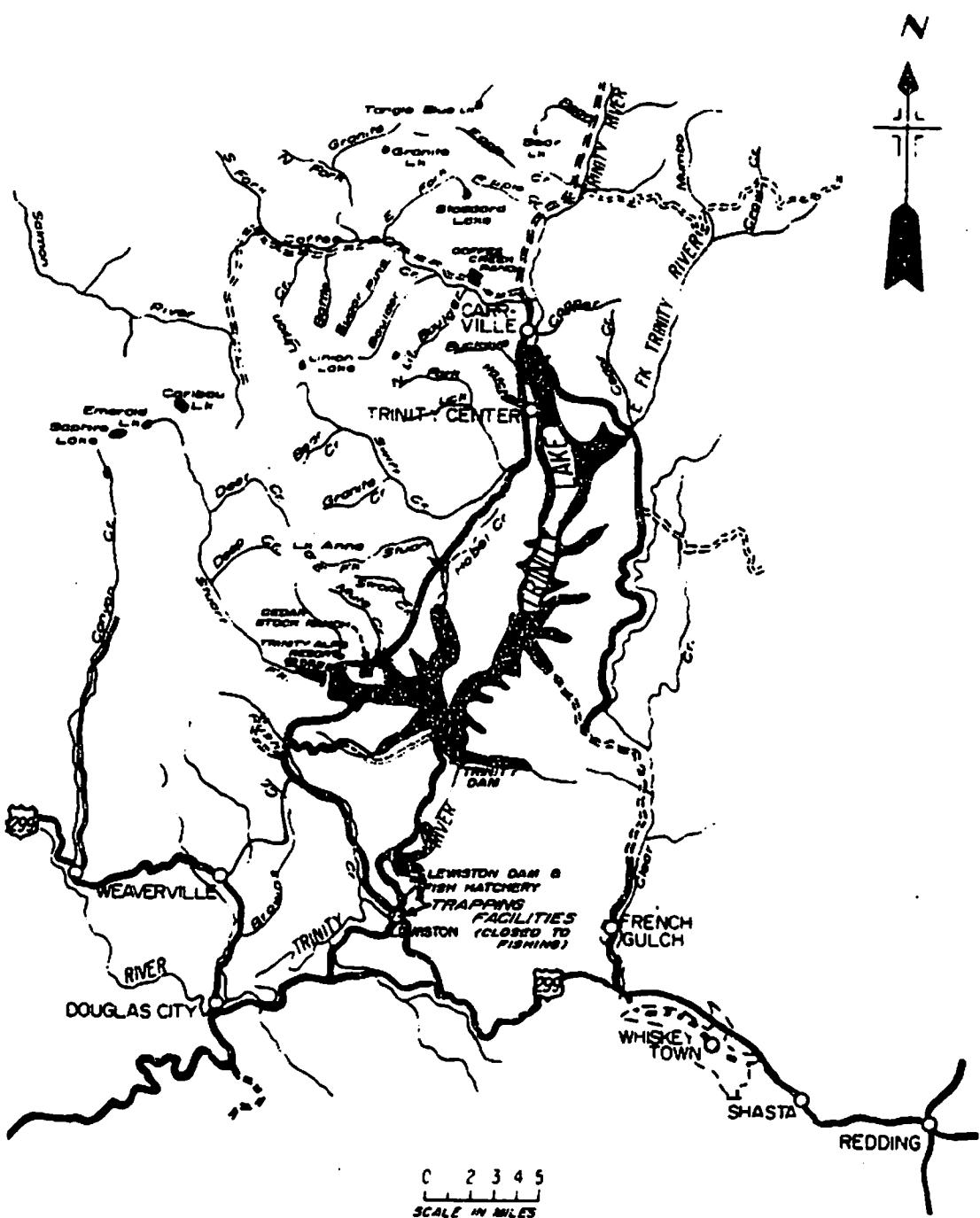
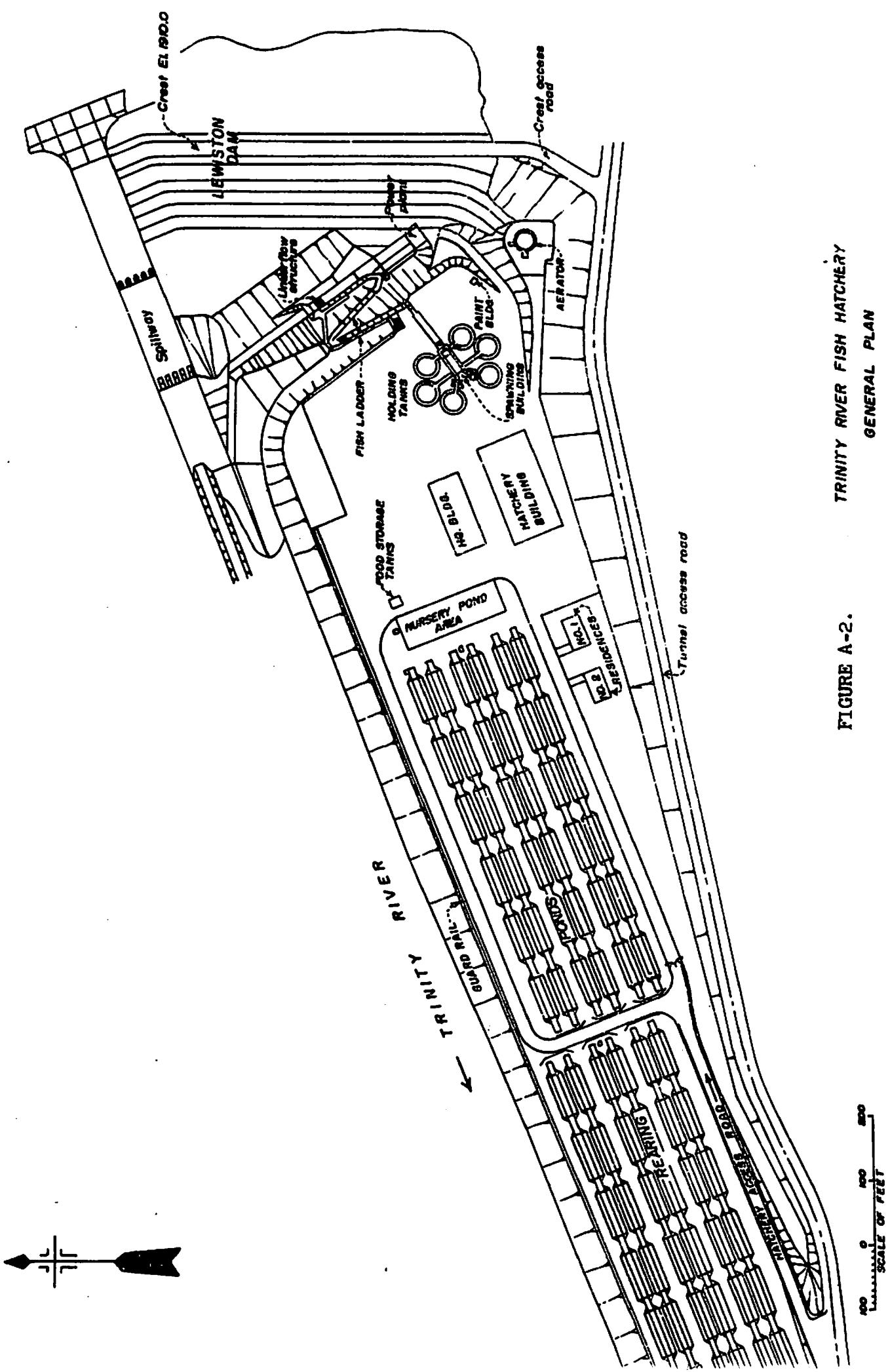


FIGURE A-1.
TRINITY RIVER FISH HATCHERY
LOCATION MAP

TRINITY RIVER FISH HATCHERY

GENERAL PLAN

FIGURE A-2.



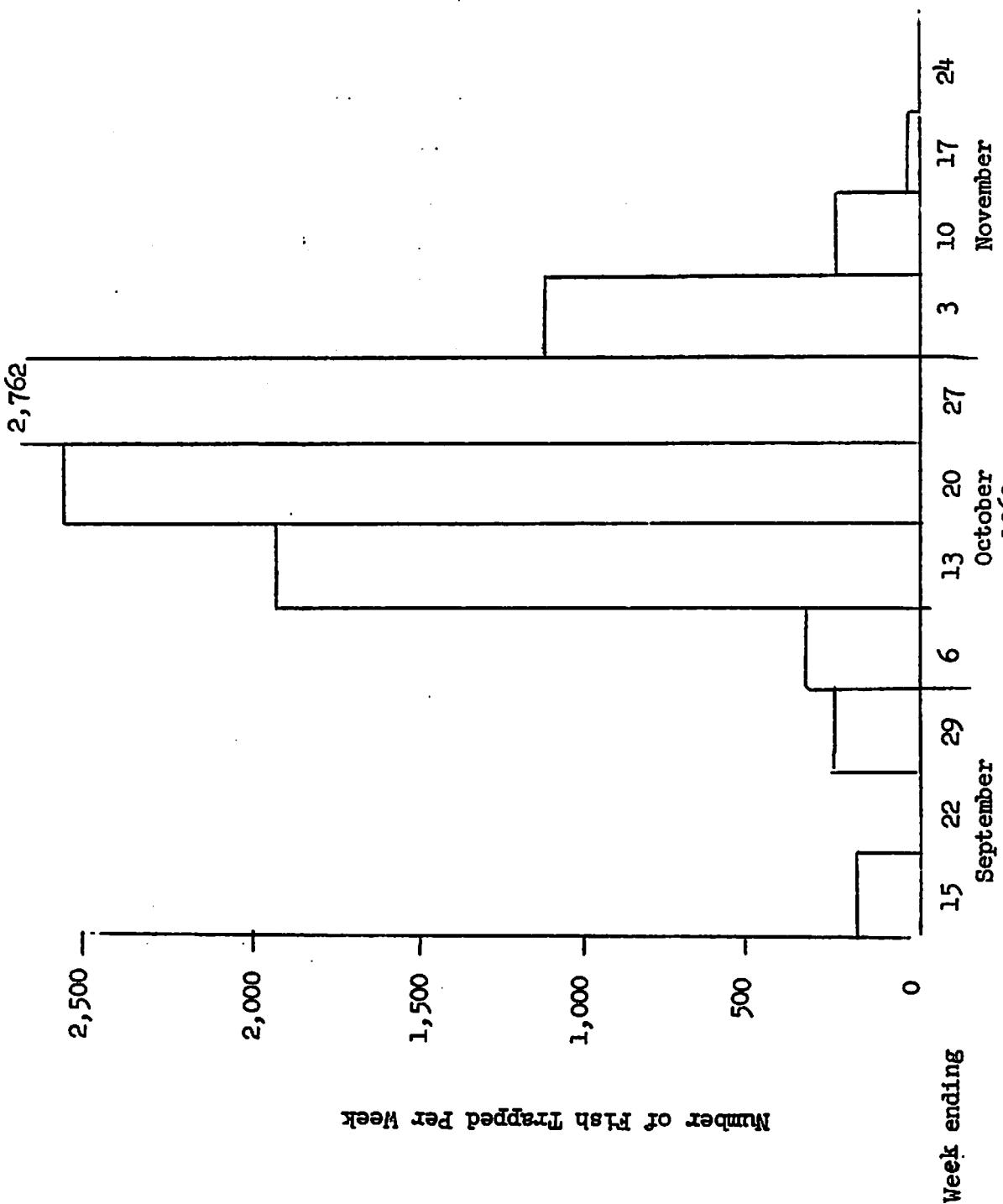


FIGURE A-3. Fall-run King salmon trapped at Lewiston Fish Trapping Facilities, September 13, 1962, through November 23, 1962.

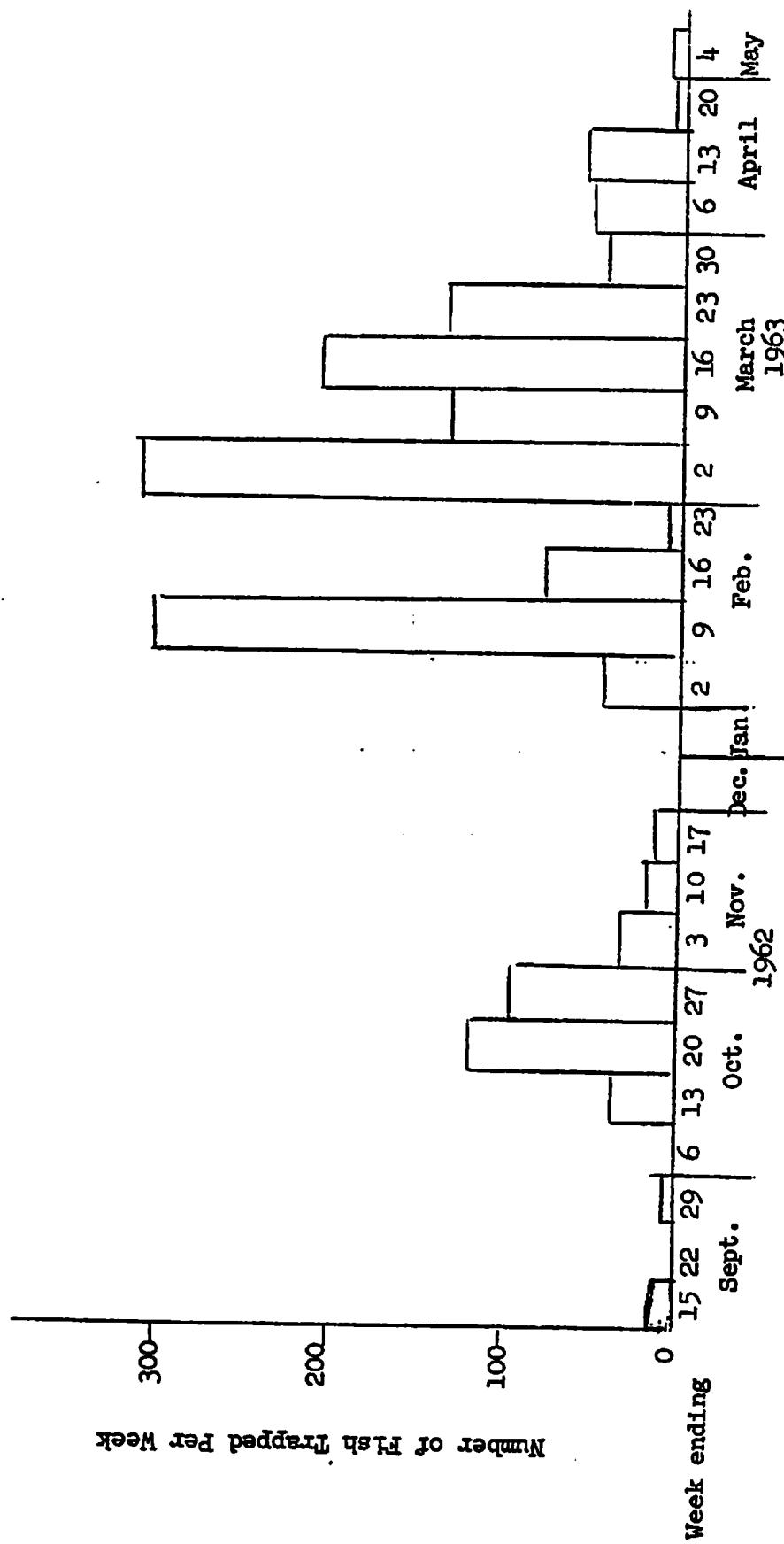


FIGURE A-4. Steelhead trout trapped at Lewiston Fish Trapping Facilities,
September 13, 1962, through May 3, 1963.