

LYONS FERRY

FISCAL YEAR 1987
ANNUAL REPORT

Funded by:
U.S.F.W.S.



Project Leader: Lew Atkins

OPERATIONS REPORT

LYONS FERRY SALMON HATCHERY

AUGUST 1 TO DECEMBER 31, 1986

FUNDED BY U.S. FISH AND WILDLIFE

TABLE OF CONTENTS

INTRODUCTION -----	PAGE 1
TRAPPING OPERATIONS-----	PAGE 1
ESCAPEMENT AND SPAWNING 1986 BROOD-----	PAGE 2
WEEKLY BREAK DOWN FOR 1986 BROOD SPRING CHINOOK-----	PAGE 3
WEEKLY BREAKDOWN FOR 1986 BROOD SPRING CHINOOK EGG TAKE---	PAGE 4
INCUBATION SUMMARY 1986 SPRING CHINOOK-----	PAGE 5
WEEKLY BREAKDOWN FOR 1986 FALL CHINOOK ESCAPEMENT-----	PAGE 6
WEEKLY BREAKDOWN FOR 1986 FALL CHINOOK EGG TAKE-----	PAGE 7
INCUBATION SUMMARY FOR 1986 FALL CHINOOK-----	PAGE 8
FEED USAGE AUGUST 1 TO DECEMBER 31, 1986-----	PAGE 9
DISEASES AND TREATMENTS-----	PAGE 10
SUMMARY-----	PAGE 11

INTRODUCTION

LYONS FERRY HATCHERY IS LOCATED ON THE SNAKE RIVER IN FRANKLIN COUNTY. IT IS 7 MILES NORTH OF STARBUCK ON HIGHWAY 261. THE HATCHERY IS 56 MILES UPSTREAM FROM THE MOUTH OF THE SNAKE RIVER AND 380 MILES FROM THE PACIFIC OCEAN.

THE HATCHERY WAS CONSTRUCTED IN 1983 AND 1984 BY THE U.S. ARMY CORPS OF ENGINEERS. IT CONSISTS OF 28 RACEWAYS, HATCHERY BUILDING, STORAGE BUILDING, VISTOR CENTER, SPAWNING BUILDING, 2 ADULT PONDS AND FISH LADDER. THE VISTOR CENTER, STORAGE BUILDING, FISH LADDER AND WATER SUPPLY, WHICH IS WELL WATER, IS SHARED WITH THE GAME DEPT. HATCHERY.

THE RELEASE FIGURES FOR 1986 WERE 1,789,560 FINGERLING FALL CHINOOK AND 481,950 YEARING FALL CHINOOK.

THE FOLLOWING INFORMATION IS A REPORT SHOWING THE ENTIRE HATCHERY ACTIVITIES FROM AUGUST 1, 1986 TO DECEMBER 31, 1986.

TRAPPING OPERATIONS

TRAPPING FOR SPRING CHINOOK WAS DONE AT THE TUCANNON GAME HATCHERY SATELLITE POND. THE FIRST FISH WAS TRAPPED MAY 15, 1986 AND THE LAST FISH WAS TRAPPED JUNE 30, 1986. A TOTAL OF 247 ADULTS WERE TRAPPED WITH 131 OF THEM BEING PUT UPSTREAM TO SPAWN NATURAL.

TRAPPING FOR FALL CHINOOK WAS DONE AT ICE HARBOR DAM AND AT THE HATCHERY. THE FISH THAT ARE TRAPPED AT ICE HARBOR DAM ARE TRUCKED TO THE HATCHERY ADULT PONDS. THE FIRST FISH TRAPPED THERE WAS ON SEPTEMBER 5 AND THE LAST ONE TRAPPED ON OCTOBER 2, 1986. A TOTAL OF 212 ADULTS AND 23 MARKED JACKS WERE BROUGHT IN.

THE FIRST FISH TRAPPED AT THE HATCHERY WAS ON OCTOBER 6 AND THE LAST WAS TRAPPED ON NOVEMBER 14, 1986. A TOTAL OF 245 ADULTS AND 1125 JACKS WERE TRAPPED AT THE HATCHERY. THIS GAVE A GRAND TOTAL OF 457 ADULTS AND 1148 JACKS RETURNING IN 1986.

ESCAPEMENT AND SPAWNING AUGUST 1 THROUGH DECEMBER 31, 1986.

A SUMMARY DESCRIPTION FOR 1986 BROOD

TUCANNON SPRING CHINOOK

THE 1986 TRAPPING OF SPRING CHINOOK WAS 247 ADULTS. A TOTAL OF 131 FISH WERE PUT UPSTREAM FOR NATURAL SPAWNING AND 116 FISH WERE PUT INTO THE ADULT POND FOR HATCHERY SPAWNING. THE YEARS PRODUCTION WAS 188,000 EGGS TAKEN.

LYONS FERRY FALL CHINOOK

THE TRAPPING OF ADULTS STARTED SEPTEMBER 5 AT ICE HARBOR DAM. A TOTAL OF 212 ADULTS AND 23 MARKED JACKS WERE TRUCKED TO THE HATCHERY. A TOTAL OF 245 ADULTS AND 1,125 JACKS WERE TRAPPED AT THE HATCHERY. 143 FEMALES, 289 MALES AND 752 JACKS WERE SPAWNED. 6 FEMALES, 19 MALES AND 57 JACKS DIED IN THE HATCHERY PONDS. 339 JACKS WERE SOLD. THE YEARS PRODUCTION WAS 592,000 EGGS TAKEN. ALSO 749,000 EGGS WERE RECEIVED FROM KALAMA FALLS HATCHERY FOR A TOTAL OF 1,341,000 EGGS ON HAND.

EGG TAKE AND DISPOSITION for 1986 Brood TUCANNON SPRING CHINOOK Stock

Week Ending	No. Eggs Taken-est.	No. Eggs Received/From	No. Eggs Shipped/To	No. Eggs Lost	No. Eggs on Hand
SEPT. 6	30,799				30,799
SEPT. 13	70,983				101,782
SEPT. 20	71,633				173,415
SEPT. 27	10,286				183,701
OCT. 4	4,257				187,958
OCT. 11				799	187,159
OCT. 18				983	186,176
OCT. 25				2,205	183,971
NOV. 1				92	183,879
Report Total	187,958			3,793	183,879
Pre-Balance					
Season Total	187,958			3,793	183,879

INCUBATION SUMMARY

1986 TUCANNON SPRING CHINOOK

THE FIRST TAKE OF SPRING CHINOOK EGGS WAS ON SEPTEMBER 3, 1986. THE LAST SPAWNING WAS ON OCTOBER 1, 1986. THE FIRST TAKE WAS SHOCKED OCTOBER 7 AND THE LAST TAKE WAS SHOCKED NOVEMBER 1, 1986.

THE ACTUAL NUMBER OF EGGS TAKEN WAS 187,958 WITH A 3,793 EGGS LOSS. THIS WAS A 2.01 PER CENT EGGS LOSS. THE FEMALES AVERAGED 3,836 EGGS EACH.

ESCAPEMENT AND SPAWNING for 1986 Brood LYONS FERRY FALL CHINOOK Stock

Week Ending	Est Arrival		Upstream			Mortality			Spawned			Green/Strip/Bud/SG	Sold/Donated			Shipped		
	Week	Season	M	F	J	M	F	J	M	F	J		M	F	J	M	F	J
SEPT. 6	1	1																
SEPT. 13	25	26																
SEPT. 20	95	121																
SEPT. 27	71	192						1										
OCT. 4	20	212																
OCT. 11	16	228																
OCT. 18	10	238						1										
OCT. 25	1	239							1									136
NOV. 1	1	240			2			45	29	3	198							82
NOV. 8	9	249						4	5	9	229							121
NOV. 15	177	426								25	21							
NOV. 22					2					9	48	161						
NOV. 29					1			1	9	48	161							
DEC. 6					3		2	3	123	31	116							
DEC. 13					9			1	94	16	23							
DEC. 20					2			2	12	6	2							
Report Total	426	426			19		6	57	289	143	752							339
Pre-Balance																		
Season Total	426	426			19		6	57	289	143	752							339

EGG TAKE AND DISPOSITION for 1986 Brood LYONS FERRY FALL CHINOOK Stock

Week Ending	No. Eggs Taken-est.	No. Eggs Received/From	No. Eggs Shipped/To	No. Eggs Lost	No. Eggs on Hand
NOV. 1	5,493				5,493
NOV. 8	44,727				50,220
NOV. 15	103,005				153,225
NOV. 22	205,825				359,050
NOV. 29	122,213				481,263
DEC. 6	71,040	400,319 KALAMA FALLS		40,812	911,810
DEC. 13	25,626			7,732	929,704
DEC. 20	14,132			10,825	933,011
DEC. 27				4,511	928,500
DEC. 31		349,036 KALAMA FALLS			1,277,536
Report Total	592,061	749,355		23,561	1,277,536
Pre-Balance					
Season Total	592,061	749,355		23,561	1,277,536

INCUBATION SUMMARY

THE FIRST TAKE OF FALL CHINOOK EGGS WAS ON OCTOBER 22 AND THE LAST TAKE WAS ON DECEMBER 16, 1986. THERE WAS A TOTAL OF 592,061 EGGS TAKEN. A TOTAL OF 23,561 DEAD EGGS WERE PICKED OFF FOR A LOSS OF 3.98 PER CENT. THE FEMALES AVERAGED 4,386 EGGS EACH AND THE EGGS AVERAGED 1720 PER POUND.

749,355 EGGS WERE RECEIVED FROM KALAMA FALLS HATCHERY. THESE EGGS WERE FROM THE EGG BANK PROGRAM FISH.

FEED USAGE BY STOCK for AUGUST 1 through DECEMBER 31, 1986

Stock Feed Type/Size	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	Totals
1985 SPRING CHINOOK						
OMP 3/32	143	197	244	420	86	584
OMP 1/8						506
OMP 1/8 ROMET30					154	154
1985 FALL CHINOOK						
OMP 3/32	2,879	3,991	5,138	5,133	1,844	18,985
OMP 1/8 TM 50	130	20				150
OMP 1/8 ROMET30				500	1,975	2,475
OMP 1/8					1,961	1,961
1986 SPRING CHINOOK						
BIO-PRODUCTS STARTER #3					36	36
Report Total	3,152	4,208	5,382	6,053	6,056	24,851
Pre- Balance						
Season Total	3,152	4,208	5,382	6,053	6,056	24,851

DISEASES AND TREATMENTS

DATE	BROOD YEAR	SPECIES	POND NUMBER	TREATMENT	DISEASE
8/86	1985	FALL CHINOOK	14	TM-50	ERM
9/86	1985	FALL CHINOOK	14	TM-50	ERM
9/86	1986	SPRING CHINOOK	INCUBATION ROOM	FORMALIN	FUNGUS
10/86	1986	SPRING CHINOOK	INCUBATION ROOM	FORMALIN	FUNGUS
11/86	1985	FALL CHINOOK	11-12-13-14	ROMET-30	ERM
11/86	1986	FALL CHINOOK	INCUBATION ROOM	FORMALIN	FUNGUS
12/86	1985	FALL CHINOOK	11 THROUGH 28	ROMET-30	ERM
12/86	1985	SPRING CHINOOK	1	ROMET-30	ERM
12/86	1986	FALL CHINOOK	INCUBATION ROOM	FORMALIN	FUNGUS

SUMMARY

THE FALL CHINOOK EGG TAKE WAS DOWN THIS YEAR DUE TO A LACK OF ADULTS. THE EGGS RECIEVED FROM KALAMA FALLS HATCHERY WAS DOWN FROM LAST YEAR DUE TO A LACK OF ADULTS ALSO.

THE EGG TAKE OF THE SPRING CHINOOK IS WAY UP FROM LAST YEAR DUE TO A GOOD RUN AND IMPROVED TRAPPING. THIS IS THE APPROXMATE NUMBER OF EGGS NEED TO MEET THE PROGRAM NEEDS.

STILL HAVE A TOXICITY PROBLEM WITH THE WATER SUPPLY DUE TO MANGANESE. SO FAR NO SOLUTION TO THE PROBLEM.

OPERATIONS REPORT

LYONS FERRY SALMON HATCHERY

JANUARY 1, 1987 THROUGH JUNE 30, 1987

FUNDED BY U.S. FISH AND WILDLIFE

TABLE OF CONTENTS

INTRODUCTION -----PAGE 1
TRAPPING OPERATIONS-----PAGE 1
ESCAPEMENT AND SPAWNING 1987 BROOD-----PAGE 2
WEEKLY BREAKDOWN FOR 1987 SPRING CHINOOK ADULTS-----PAGE 3
REARING PROGRAM SUMMARY-----PAGE 4
PLANTS AND TRANSFERS FOR 1985 BROOD SPRINGS-----PAGE 5
PLANTS AND TRANSFERS FOR 1985 BROOD FALLS-----PAGE 6
PLANTS AND TRANSFERS FOR 1986 BROOD FALLS-----PAGE 7
FEED USAGE JANUARY 1 TO JUNE 30, 1987-----PAGE 8
FEED USAGE JANUARY 1 TO JUNE 30, 1987-----PAGE 9
DISEASES AND TREATMENTS-----PAGE 10
SUMMARY-----PAGE 11

INTRODUCTION

LYONS FERRY HATCHERY IS LOCATED ON THE SNAKE RIVER IN FRANKLIN COUNTY. IT IS 7 MILES NORTH OF STARBUCK ON HIGHWAY 261. THE HATCHERY IS 56 MILES UPSTREAM FROM THE MOUTH OF THE SNAKE RIVER AND 380 MILES FROM THE PACIFIC OCEAN.

THE HATCHERY WAS CONSTRUCTED IN 1983 AND 1984 BY THE U.S. ARMY CORPS OF ENGINEERS. IT CONSISTS OF 28 RACEWAYS, HATCHERY BUILDING, STORAGE BUILDING, VISITOR CENTER, SPAWNING BUILDING, 2 ADULT PONDS AND FISH LADDER. THE VISITOR CENTER, STORAGE BUILDING, FISH LADDER AND WATER SUPPLY, WHICH IS WELL WATER, IS SHARED WITH THE GAME DEPT. HATCHERY.

THE RELEASE FIGURES FOR 1987 WERE 12,922 YEARLING SPRING CHINOOK, 674,054 ZERO AGE FALL CHINOOK AND 386,918 YEARLING FALL CHINOOK.

// Releases

THE FOLLOWING INFORMATION IS A REPORT SHOWING THE ENTIRE HATCHERY ACTIVITIES FROM JANUARY 1, 1987 TO JUNE 30, 1987.

TRAPPING OPERATIONS

TRAPPING FOR SPRING CHINOOK WAS DONE AT THE TUCANNON GAME HATCHERY SATELLITE POND. THE FIRST FISH WAS TRAPPED APRIL 26, 1987 AND THE TRAPPING WAS STILL GOING ON AS OF THIS REPORT PERIOD. BY THE END OF JUNE A TOTAL OF 201 ADULTS WERE TRAPPED WITH 108 OF THEM BEING PUT UPSTREAM TO SPAWN NATURAL.

ESCAPEMENT AND SPAWNING JANUARY 1 THROUGH JULY 31, 1987
A SUMMARY DESCRIPTION FOR 1987 BROOD

TUCANNON SPRING CHINOOK

THE 1987 TRAPPING OF SPRING CHINOOK WAS 201 ADULTS. A TOTAL OF 108 FISH WERE PUT UPSTREAM FOR NATURAL SPAWNING AND 95 FISH WERE PUT INTO THE ADULT POND FOR HATCHERY SPAWNING. THROUGH THE END OF JUNE 3 MALES AND 1 FEMALES HAVE DIED IN THE POND.

ESCAPEMENT AND SPAWNING for 1987/8 brood TUCANNON SPRING CHINOOK Stock

Week Ending	1st Arrival			Upstream			Mortality			Spawmed			Green/Strip/Bud/So	Sold/Donated			Shipped			
	W	F	J	W	F	J	W	F	J	W	F	J		W	F	J	W	F	J	
MAY 2	2			2																
MAY 16	71	72		44			2													
MAY 23	22	95		1																
MAY 30	40	135		26																
JUNE 6	34	169		16																
JUNE 13	28	197		19			1													
JUNE 20	3	200																		
JUNE 27	1	201						1												
Report Total	201	201		108			3	1												
Pre-Balance																				
Season Total	201	201		108			3	1												

REARING PROGRAM SUMMARY

1985 TUCANNON SPRING CHINOOK

THE 1985 BROOD SPRING CHINOOK WERE PLANTED APRIL 6 TO APRIL 10, 1987. A TOTAL OF 12,922 WERE PLANTED AT 5.9 FISH PER POUND FOR A TOTAL OF 2,172 POUNDS. ALL FISH RELEASED WERE FIN CLIPPED AND CODED WIRE TAGGED. THE TOTAL FEED FED WAS 2,525 POUNDS, WITH A CONVERSION OF 1 : 1.16. 7

1986 TUCANNON SPRING CHINOOK

THE SPRING CHINOOK FRY WERE PONDED STARTING DECEMBER 8, 1986 AND THE LAST PONDING WAS DECEMBER 29, 1986. IN MAY ALL OF THE FISH WERE FIN ^{ad?} CLIPPED AND C.W.T.. A TOTAL OF 159,188 WERE TAGGED. TO DATE A TOTAL OF 4,082 POUNDS OF FEED HAVE BEEN FED. THE FISH WILL BE TRUCKED TO THE RELEASE POND AT THE TUCANNON HATCHERY IN DECEMBER 1987 FOR RELEASE IN APRIL 1988.

1985 LYONS FERRY FALL CHINOOK

THE 1985 BROOD FALL CHINOOK WERE PLANTED ON STATION APRIL 14, 1986. A TOTAL OF 230,413 WERE PLANTED, OF THESE 152,479 WERE AD CLIPPED AND C.W.T.: 1,075 WERE AD CLIPPED ONLY. ALSO 39,906 WERE BRANDED AND 653 WERE INJECTED WITH A P.I.T. TAG AND 36,300 WERE UNMARKED. THE BRANDED AND UNMARKED FISH WERE 9.4 PER POUND AT PLANTING AND THE C.W.T. FISH WENT OUT AT 6 FISH PER POUND. ON APRIL 16, 1987 A TOTAL OF 156,506 FISH AT 6.9 PER POUND WERE PUT ON A FISH RUN BARGE AND RELEASED BELOW ICE HARBOR DAM. THE YEARLINGS ACCOUNTED FOR 56,450 POUNDS OF FISH PLANTED. A TOTAL OF 100,338 POUNDS OF FEED WERE FED TO THE BROOD FOR A CONVERSION OF 1 : 1:28.

1986 LYONS FERRY FALL CHINOOK

THE FALL CHINOOK FRY WERE PONDED STARTING JANUARY 22 THROUGH MARCH 3, 1987. IN MAY A TOTAL OF 516,349 WERE FIN CLIPPED AND C.W.T.. ALSO 80,511 WERE FREEZE BRANDED. ON JUNE 1, 1987 A TOTAL OF 251,646 AD CLIPPED AND C.W.T. FISH WERE PLANTED AT THE HATCHERY SITE. ALSO 5,661 AD CLIPPED AND 80,484 BRANDED FISH WERE PLANTED ON SITE. ON JUNE 2 A TOTAL OF 255,998 MARKED FISH AND 80,265 UNMARKED FISH WERE LOADED ON A FISH TRANSPORTING BARGE AND WERE PLANTED BELOW ICE HARBOR DAM THE SAME EVENING. A TOTAL OF 424,000 FISH WERE KEPT FOR YEARLING RELEASE IN APRIL 1988.

PLANTS AND TRANSFERS for 1985 Brood TUCANNON SPRING CHINOOK Stock

Date	TRANSFERRED IN		TRANSFERRED OUT		PLANTED		Size	Location	Marks
	Number	Pounds	Number	Pounds	Number	Pounds			
APRIL 6-10					12,922	2,172	5.9	TUCANNON RIVER	AD & C.W.T.
Report Total					12,922	2,172			
Pre-Balance									
Season Total					12,922	2,172			

NOTES:

PLANTS AND TRANSFERS for 1985 Brood LYONS FERRY FALL CHINOOK Stock

Date	TRANSFERRED IN		TRANSFERRED OUT		PLANTED		Size	Location	Marks
	Number	Pounds	Number	Pounds	Number	Pounds			
APRIL 14					152,479	25,413	6	HATCHERY SITE	AD & C.W.T
APRIL 14					1,075	179	6	HATCHERY SITE	AD ONLY
APRIL 14					39,906	4,245	9.4	HATCHERY SITE	BRANDED
APRIL 14					653	69	9.4	HATCHERY SITE	P.I.T TAGGED
APRIL 14					36,300	3,862	9.4	HATCHERY SITE	UNMARKED
APRIL 16					156,036	22,614	6.9	BELOW ICE HARBOR	AD & C.W.T.
APRIL 16					470	68	6.9	BELOW ICE HARBOR	AD ONLY
Report Total					386919	56,450			
Pre-Balance					1,789,560	23,345			
Season Total					2,176,479	79795			

NOTES:

PIANES AND TRANSFERS for 1986 Brood LYONS FERRY FALL CHINOOK Stock

Date	TRANSFERRED IN		TRANSFERRED OUT		PIANTED		Sibe	Location	Marks
	Number	Pounds	Number	Pounds	Number	Pounds			
JUNE 1					251,646	5,243	48	HATCHERY SITE	AD & C.W.T.
JUNE 1					5,661	118	48	HATCHERY SITE	AD ONLY
JUNE 1					80,484	1,059	76	HATCHERY SITE	BRANDED
JUNE 2					255,998	3,606	71	BELOW ICE HARBOR	AD & C.W.T.
JUNE 2					2,065	29	71	BELOW ICE HARBOR	AD ONLY
JUNE 2					78,200	745	105	BELOW ICE HARBOR	NO MARKS
Report Total					674,054	10,800			
Pre-Balance									
Season Total					674,054	10,800			

NOTES:

FEED USAGE BY STOCK FOR JANUARY 1 through JUNE 30, 1987

Stock Feed Type/Size	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	Totals
<u>1985 FALLS</u>							
OMP 1/8	6,579	4,352	11,609	9,877			32,417
1/8 GALLIMYCIN	2,020	8,080	640	621			11,361
<u>1986 FALLS</u>							
BIO STARTER	25	212	123				360
1/32 OMP		262	906				1,168
3/64 OMP		24	462	54			540
BIO 3/64 GALLIMYCIN			679	1,073			1,752
1/16 OMP			39	2,221	1,954		4,214
3/32 OMP					6,152	2,304	8,456
<u>1985 SPRINGS</u>							
1/8 OMP	50	205	420	150			825
<u>1986 SPRINGS</u>							
BIO STARTER	50						50
1/32 OMP	86	35					121
Report Total	8,810	13,170	14,878	13,996	8,106	2,304	61,264
Pre-Balance							
Season Total							

FEED USAGE BY STOCK for JANUARY 1 through JUNE 30, 1987

Stock Feed Type/Size	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	Totals
1986 SPRINGS							
3/64 OMP	70	168	15				253
BIO 3/64 GALL- IMYCIN		122	150				272
1/16 OMP			400				400
3/32 OMP				865	819	1,266	2,950
Report Total	70	290	565	865	819	1,266	3,875
Pre-Balance	8,810	13,170	14,878	13,996	8,106	2,304	61264
Season Total	8,880	13,460	15443	14,861	8,925	3,570	65,139

DISEASES AND TREATMENTS

DATE	BROOD YEAR	SPECIES	POND NUMBER	TREATMENT	DISEASE
1/87	1986	FALL CHINOOK	INCUBATION ROOM	FORMALIN	FUNGUS
1/87	1985	FALL CHINOOK	15 to 26 29	GALLIMYCIN	KIDNEY DISEASE
2/87	1985	FALL CHINOOK	15 to 26 29	GALLIMYCIN	KIDNEY DISEASE
2/87	1986	SPRING CHINOOK	& 2	GALLIMYCIN	KIDNEY DISEASE
3/87	1985	FALL CHINOOK	13	GALLIMYCIN	KIDNEY DISEASE
3/87	1986	SPRING CHINOOK	1 & 2	GALLIMYCIN	KIDNEY DISEASE
3/87	1986	FALL CHINOOK	3 TO 7	GALLIMYCIN	KIDNEY DISEASE
4/87	1985	FALL CHINOOK	14	GALLIMYCIN	KIDNEY DISEASE
4/87	1986	FALL CHINOOK	5 TO 10	GALLIMYCIN	KIDNEY DISEASE
4/87	1986	FALL CHINOOK	3	DIQUAT	BACTERIAL GILL
5/87	1987	SPRING CHINOOK	ADULT POND	FORMALIN	FUNGUS
6/87	1987	SPRING CHINOOK	ADULT POND	MALICHITE	FUNGUS

SUMMARY

WE ARE STILL HAVEING A TOXICITY PROBLEM WITH THE WATER SUPPLY. IT CAUSES A LOW GRADE STRESS TO THE FISH AT ALL TIMES. STILL NO SOLUTION TO THE PROBLEM YET.

THE OVERALL HEALTH OF THE FISH HAS BEEN GOOD. THE BARGEING OF THE FISH BELOW ICE HARBOR DAM LOOKS GOOD WITH NO PROBLEMS WITH THE PROJECT.

THE 1987 BROOD SPRINGS ARE HOLDING GOOD WITH LOW MORTALITY AS OF NOW. THE RUN IS DOWN FROM LAST YEAR BUT THE WATER FLOW IS WAY DOWN FROM NORMAL AND THIS COULD BE A FACTOR IN THE LOW RUN NUMBERS.