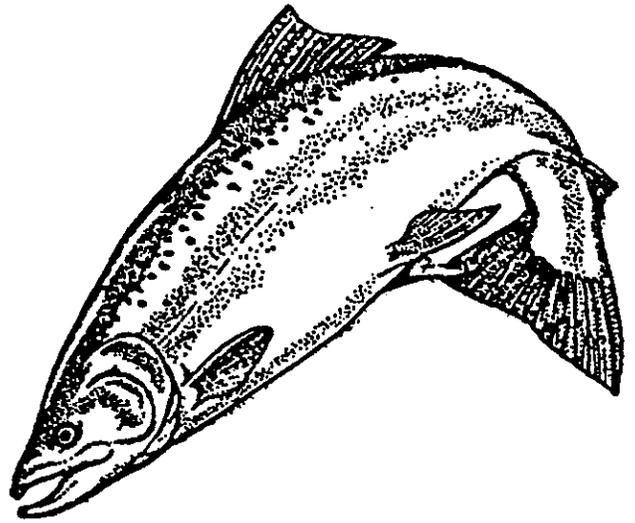


WALLOWA FISH HATCHERY



Operation and Maintenance Annual Report



October 1, 1990 - September 30, 1991

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WALLOWA ACTIVITY

OCTOBER 1, 1990 - SEPTEMBER 30, 1991

INTRODUCTION NARRATIVE

OPERATIONS:

Wallowa Hatchery is part of the Lower Snake River Compensation Program (LSRCP). Mitigation goals for Wallowa Hatchery are 2,755,000 eyed steelhead eggs (2,275,000 Wallowa stock and 480,000 Imnaha stock) and acclimation of 1,025,000 steelhead smolts. Two satellite stations, Big Canyon (Wallowa River System) and Little Sheep (Imnaha River System), are used for adult trapping, spawning, and smolt acclimation.

Production goals were met for the last production year with 1,993,337 (5691) steelhead eggs shipped to Irrigon Hatchery. Lyons Ferry Hatchery received 421,025 (5691) Wallowa stock eyed steelhead eggs and a surplus of 812,000 (5691) eyed eggs were shipped to Idaho Fish and Game. Imnaha Stock returns were down and only 338,744 (2991) eyed steelhead eggs were shipped to Irrigon Hatchery.

A total of 875,642 steelhead smolts were released from Wallowa and Big Canyon acclimation ponds, and 192,401 steelhead smolts were released from Little Sheep Satellite.

Spring Chinook (8191) also returned to Big Canyon. No spring chinook smolts were released from this facility in 1991.

Legal rainbow for Northeast Oregon and coho for Phillips Reservoir were produced at Wallowa Hatchery. This activity was funded by State wildlife funds. A total of 33,000 rainbow (45,000 lbs.) and 127,000 coho (1,235 lbs.) were produced at Wallowa Hatchery. Rainbow production significantly increased over 1990 as Wallowa Lake is again being stocked from Wallowa Hatchery.

Adult steelhead returns to Wallowa Hatchery were down approximately 50% from 1990 returns while returns to Big Canyon increased by 28%. Adults were transferred to Wallowa Hatchery from Washington Department of Wildlife (Cottonwood Trap) to help meet egg take goals. Returns to Little Sheep were down 60% from 1990. Many of the adults entered the trap ripe and were spawned without holding them to ripen.

MAINTENANCE:

Many projects were accomplished by the hatchery crew this year:

The old handrails were removed and new ones installed to meet safety regulations on ponds 1-6.

New course mesh screens have been installed on all the screens for the steelhead acclimation ponds at Wallowa in an effort to pass the heavy debris load that is in the water supply.

A cover was built to insulate the upper well and keep it from freezing in the winter.

The old wooden flag pole which had fallen down was replaced with a new aluminum pole.

A contractor was hired to install 240 feet of culvert in a ditch behind one of the residence. Then the crew hauled in the fill dirt and seeded the area into lawn.

The adult barriers at Wallowa and Big Canyon were both been modified to allow flood waters to pass.

A section of the old pipeline that connects to the new incubation line sprang a leak. A contractor was hired and replaced a section of the old iron pipe.

The crew installed a drip system to irrigate the trees and shrubs at Big Canyon.

High water in May washed gravel into the intake pool at Big Canyon. A contractor was hired and removed 1,100 yards of gravel to get the pool back to its original operating condition.

The crew removed 150 yards of dirt and sand from the acclimation pond at Little Sheep.

Work has started on the clean up contract at Little Sheep.

MAJOR PURCHASES:

Major purchases during the fiscal year were:

1. A 1991 Dodge 3/4 ton 4x4 pickup.
2. A 386 computer with monitor and printer.
3. An egg counter with summer steelhead plates.
4. Modules for alarm systems at Wallowa and Big Canyon.
5. Course mesh screens for acclimation pond at Wallowa.
6. Removal of gravel at Big Canyon Intake.
7. Repair of incubation line and valve replacement at Wallowa.
8. Replacement of domestic water tank at Big Canyon.

PERSONNEL:

Mike Gribble, from Bonneville Hatchery, was promoted to Manager-2 in February of 1991. The other two permanent positions are Bobby Jones, Tech-2 and Mike Parrish, Tech-1. Ken Spade and Kerry Beneath, seasonal Tech-2's, operated satellite facilities at Big Canyon and Little Sheep. The three seasonal Tech-1 positions were filled by Bob Brookshire, Gary Guttering, and Jeff Nelson.

Terry Blessing, a laborer 1, worked during the spawning season after two seasonals went to other jobs.

Two local youths were hired to work here during the summer as part of the YCC program.

Lee Scott has gone, as he finished the Umatilla Tribal training in August.

Present Personnel are:

Mike Gribble	Fish and Wildlife Manager-2
Bobby Jones	Fish and Wildlife Technician-2
Mike Parrish	Fish and Wildlife Technician-1

The following tables depict rearing, liberations, adult collection, and spawning of stocks cultured and handled by Wallowa Hatchery during this fiscal year.

STOCK	COHO ¹	Sandy River
	Lot No.	1190

REARING

Eggs transferred in	125,000	From Sandy Hatchery 01/09/91
Fry loss	1,263	
Percent hatch	99.2	
No. ponded	122,797	
Total mortality	568	
Percent mortality to stocking	4.6	
End season adjustment	+4,963	
Total pounds of food fed	1,238	
Total gain	1,133	
Conversion rate	1.1	

LIBERATION

<u>Date</u>	<u>Location</u>	<u>Number</u>	<u>Pounds</u>	<u>No. / lb.</u>
06/17/91	Phillips Res.	113,290	1,100	103.0
06/20/91	Phillips Res.	13,902	135	103.0
<hr style="border-top: 1px dashed black;"/>				
Total		127,192	1,235	

Total distribution trips 2

¹ Funding for the production and distribution of these fish is from the State Wildlife Fund and General Fund.

SPRING CHINOOK Carson / Lookingglass CR.
Lot No. 8191

ADULT RETURNS

BIG CANYON TRAP

Date of first return	06/12/91	
Date of last return	07/18/91	
No. of males, females jacks returning	(16) (19) (3)	
Date of peak returns	07/12/91	
No. of males, females, jacks transported out	(6) (11) (0)	To Wallowa
Mortality of all adult returns	0	

LOOKINGGLASS HATCHERY

Date of first return	06/04/91	
Date of last return	08/26/91	
No. of males, females, jacks returning	(40) (32) (1)	
Date of peak returns	06/19/91	
No. of males and females released to spawn naturally	0	
No. of males, females, jacks transported out	(18) (12) (0)	To Wallowa
Mortality of all adult returns	1	

WALLOWA

No. of males, females, jacks transported in	(24) (23) (0)	From Lookingglass, and Big Canyon
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SPAWNING RECORD

WALLOWA

<u>Date spawned</u>	<u>Egg take</u>	<u>Females</u>
Killed	No eggs taken	

STOCK	SUMMER STEELHEAD	Imnaha R & Tribs.
	Lot No.	2990

ADULT RETURNS

LITTLE SHEEP TRAP.

Date of first return	3/20/90
Date of last return	5/14/90
No. of males, females returning	(476) (505)
Date of peak returns	4/17/90
No. of males and females released to spawn naturally	300-316
Mortality of all adult returns	19

SPAWNING RECORD

LITTLE SHEEP TRAP

<u>Date spawned</u>	<u>Egg take</u>	<u>Females</u>
4/05/90	85,000	21
4/12/90	164,000	38
4/19/90	200,000	36
4/26/90	136,000	33
5/03/90	114,000	22
5/10/90	77,000	14
5/17/90	61,000	12
5/22/90	12,000	3

TOTALS	849,000	179
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REARING

Eggs transferred in 5/04/90 To 5/22/90	850,000	From Little Sheep Trap
Eggs transferred out 5/07/90 To 5/23/90	536,000	To Irrigon
Shock loss	290,000	At Wallowa
Fry loss	23,000	At Wallowa
Smolts Transferred in 04/23/91		¹ From Irrigon to Little Sheep For Acclimation and liberation No rearing

LIBERATION

<u>Date</u>	<u>Location</u>	<u>Number</u>	<u>Pounds</u>	<u>No. / lb.</u>
04/23/91	Sheep Creek L	192,401	37,505	5.13

Total		192,401	37,505	

Total distribution trips 2

¹For rearing at Irrigon see Irrigon Activity October 1, 1990-September 30, 1991.

STOCK	SUMMER STEELHEAD	Imnaha R & Tributaries.
	Lot No. 2991	

ADULT RETURNS

LITTLE SHEEP TRAP

Date of first return 03/12/91
 Date of last return 06/06/91
 No. of males, females returning (232) (163) (0)
 Date of peak returns 04/22/91
 Mortality of all adult returns 11

SPAWNING RECORD

LITTLE SHEEP TRAP

<u>Date spawned</u>	<u>Egg take</u>	<u>Females</u>
04/11/91	45,500	11
04/18/91	51,000	14
04/24/91	103,500	33
05/02/91	95,000	29
05/09/91	80,000	22
05/16/91	26,600	9
05/23/91	38,800	9
05/30/91	10,668	2
06/06/91	4,224	1

TOTALS	455,292	130

REARING

Eggs transferred in	455,292	From Little Sheep Trap
Shock loss	116,548	At Wallowa
Percent eye up	74.4	
Eggs transferred out	338,744	To Irrigon
		05/10/91 To 06/21/91

STOCK SUMMER STEELHEAD Wallowa R. Lot No. 5690
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ADULT RETURNS

WALLOWA TRAP

Date of first return	3/05/90	
Date of last return	4/27/90	
No. of males, females, returning	(467) (481)	
Date of peak returns	3/28/90	
No. of males and females released to spawn naturally	(60) (0)	Wallowa Valley Ponds
No. of males females transported in	(0) (20)	From Big Canyon Trap
No. of males females transported out	(10) (20)	To Big Canyon
Mortality of all adult returns	66	

BIG CANYON TRAP

Date of first return	4/02/90	
Date of last return	5/22/90	
No. of males, females returning	(129) (205)	
Date of peak returns	4/02/90	
No. of males, females released to spawn naturally	(74) (79)	
No. of males, females, transported out	(0) (20)	To Wallowa
Mortality of all adult returns	12	
Transferred in males, females	(10) (20)	From Wallowa

SPAWNING RECORD

WALLOWA

<u>Date spawned</u>	<u>Egg take</u>	<u>Females</u>
3/29/90	455,900	68
4/03/90	503,670	84
4/10/90	822,612	168
4/19/90	365,296	68
4/24/90	238,799	55
5/01/90	50,919	10
5/08/90	18,626	4

TOTALS	2,455,822	457
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BIG CANYON TRAP

<u>Date spawned</u>	<u>Egg take</u>	<u>Females</u>	
4/12/90	150,386	26	
4/17/90	10,116	2	Dumped (excess eggs)
4/24/90	141,085	36	
5/01/90	70,812	14	
5/08/90	120,454	20	
5/15/90	60,709	12	
5/22/90	40,275	9	

TOTALS	593,837	119	

REARING

Eggs transferred in 04/12/90 to 05/22/90	593,837	From Big Canyon Trap
Eggs taken	2,455,822	At Wallowa
Destroyed green	10,116	Excess
Total green eggs	3,039,543	
Shock loss	517,816	
Percent eye-up	83.0	
Fry loss	20,265	
Destroyed	70,000	Excess
Destroyed	14,300	IHN positive parents
Eggs transferred out 5/14/90 To 5/25/90	1,706,061	To Irrigon
Eggs transferred out 5/03/90	428,000	To Lyons Ferry Hatchery WA
Eggs transferred out 6/08/90	10,125	To Oregon State University
Fry transferred out 06/13/90 to 06/20/90	287,276	To Irrigon
Smolts transferred in 01/31/91 to 04/25/91	609,332	From Irrigon to Wallowa 111,523 lbs. @ 5.5/lb.
Smolts transferred in 03/14/91 to 04/29/91	271,255	From Irrigon to Big Canyon 48,768 lbs. @ 5.6/lb.
Total transferred in	880,587	
Total release	875,649	Wallowa and Big Canyon
Total lbs. released	181,553	
Total mortality	4,938	At Big Canyon and Wallowa
Percent mortality to stocking	0.6	
Total pounds of food fed	29,600	At Wallowa and Big Canyon
Total gain	21,262	At Wallowa and Big Canyon
Conversion rate	1.39	

LIBERATION

WALLOWA

<u>Date</u>	<u>Location</u>	<u>Number</u>	<u>Pounds</u>	<u>No. / lb.</u>
04/22/91	Spring Cr.	260,633	51,205	5.1
04/22/91	Spring Cr.	90,566	23,222	3.9
04/22/91	Spring Cr.	145,949	32,433	4.5
05/02/91	Spring Cr.	109,529	21,646	5.1

Total		606,677	128,506	

BIG CANYON

<u>Date</u>	<u>Location</u>	<u>Number</u>	<u>Pounds</u>	<u>No. / lb.</u>
04/26/91	Deer Creek	221,785	44,357	5.0
05/06/91	Deer Creek	47,187	8,690	5.4

Total		268,972	53,047	

Total distribution trips 6

STOCK	SUMMER STEELHEAD	Wallowa R.
	Lot No. 5691	

ADULT RETURNS

WALLOWA/BIG CANYON TRAP

Date of first return 03/07/91
Date of last return 05/16/91
No. of males, females returning (408) (498)
Date of peak returns 04/09/91
No. of males, females released to spawn naturally (14) (7)
No. of males, females transported in (156) (335)
Mortality of all adult returns 41

From Cottonwood Trap
Washington Dept. of Wildlife

SPAWNING RECORD

WALLOWA TRAP

<u>Date spawned</u>	<u>Egg take</u>	<u>Females</u>
03/19/91	91,850	18
03/26/91	135,072	25
04/01/91	70,632	12
04/01/91	44,300	9
04/09/91	401,000	83
04/16/91	180,100	31
04/18/91	421,500	71
04/23/91	404,000	88
04/24/91	256,500	45
04/30/91	505,000	101
05/07/91	238,500	41
05/14/91	14,600	3

TOTALS	2,763,054	527

BIG CANYON TRAP

<u>Date spawned</u>	<u>Egg take</u>	<u>Females</u>
03/19/91	31,420	5
03/26/91	53,083	8
04/01/91	147,600	21
04/02/91	217,500	35
04/09/91	237,500	45
04/10/91	92,000	19
04/16/91	213,400	35
04/24/91	234,500	48
04/30/91	110,000	22
05/07/91	95,000	18
05/14/91	35,300	6

TOTALS	1,467,303	262

REARING

Eggs	1,467,303	From Big Canyon Trap fish
Eggs	2,763,054	From Wallowa Trap fish
Shock loss	473,832	
Percent eye up	87.5	
Eggs transferred out	2,072,500	To Irrigon
04/01/91 To 05/14/91		
Eggs transferred out	421,025	To Lyons Ferry Hatchery WA
04/05/91 To 05/01/91		
Eggs transferred out	812,000	Niagara Springs Washington
05/07/91 To 05/10/91		
Total eyed eggs transferred	3,305,525	
Destroyed	451,000	Excess
On Hand	0	

