



OREGON DEPARTMENT OF FISH AND WILDLIFE

ANNUAL REPORT WALLOWA HATCHERY

October 1, 2014 through September 30, 2015



WALLOWA HATCHERY ANNUAL REPORT FY2015

INTRODUCTION

Location

Wallowa Hatchery is located in northeast Oregon, two miles west of Enterprise. The hatchery is adjacent to Spring Creek, one mile upstream from the confluence of Spring Creek and the Wallowa River. Five rivers comprise the 613 river miles to the ocean: Spring Creek, Wallowa, Grande Ronde, Snake and Columbia Rivers. Two satellite stations, Big Canyon (Wallowa system) 30 miles west of the hatchery and Little Sheep (Imnaha system) 30 miles east of the hatchery, are used for adult trapping, spawning and smolt acclimation.

OBJECTIVES

Mitigation Goals

Wallowa Hatchery is operated as part of the Lower Snake River Compensation Program. Mitigation goals include, collecting **1,111,100** (green) Wallowa stock (56) summer steelhead eggs and **317,000** (green) Little Sheep Creek stock (29) summer steelhead eggs. The smolt release goal for the Wallowa stock is 800,000 smolts. The Little Sheep Creek stock goal is 215,000 smolts. The adult return goal is 9,184 for the Wallowa stock and 2,000 for the Little Sheep stock into their respective mitigation areas.

SUMMER STEELHEAD

Adult Returns

Return numbers at Wallowa and Little Sheep were higher than the previous return year. Big Canyon return numbers were less than previous return year. The stock designations for adults collected during the 2015 season were Wallowa and Big Canyon (5615) and Little Sheep/Imnaha (2915).

Wallowa Hatchery collected 2,227 hatchery origin steelhead. Of those, 1,281 were male and 946 were female. This was 325 more than the 2014 season.

Big Canyon satellite facility had a return of 1,108 adult hatchery origin steelhead consisting of 516 males and 592 females. This was 423 less adults than the number returning in 2014. We had 58 (28 males, 30 females) natural origin steelhead return,

all of which were passed above the weir in Deer Creek to spawn naturally. The natural origin steelhead returns in 2015 were 48 adults.

Little Sheep facility had 1,080 hatchery adults return (572 males, 508 females), which was 319 more than the 2014 return of 761. Natural origin returns were 93 adults (41 male, 52 female), compared to 131 in 2014. Of the adults collected, 71 hatchery and 76 natural origin steelhead were passed above the weir in Little Sheep Creek. Additional releases include 362 hatchery adults transferred to Big Sheep Creek to spawn naturally.

Egg Production - Wallowa Stock (5615) Summer Steelhead

There were a total of 1,274,100 Wallowa stock eggs taken during the season, 647,400 production and 626,700 FB (Fall Brood) eggs. We transferred 1,056,300 eyed eggs to Irrigon Hatchery. 1,600 eggs were transferred to local school education programs (STEP). The green to eyed egg loss was 8.9% for the Wallowa stock as a whole. The FB segregated eggs had a slightly higher percent loss of 11.2%.

Egg Production - Imnaha Stock (2915) Summer Steelhead

A total of 333,600 green eggs were taken in the 2015 season. We transferred 265,100 eyed eggs to Irrigon Hatchery. Egg loss was 8.7%, comparable to the 7.7% loss in 2014.

Smolt Acclimation Summer Steelhead

There were 512,785 Wallowa stock (5614) smolts acclimated and released from Wallowa Hatchery. Big Canyon acclimated and released 348,210 Wallowa stock (5614) smolts.

Little Sheep satellite facility acclimated and released 247,642 Imnaha stock (2914) smolts.

Irrigon Hatchery reared the above stocks of smolts acclimated and release at our facilities.

CAPITAL CONSTRUCTION AND MAINTENANCE

Bird netting around Wallowa acclimation ponds was completed. Asphalt coating and crack sealing maintenance was also completed around Wallowa acclimation ponds.

MAJOR PROJECTS ACCOMPLISHED BY ODFW PERSONNEL

Wallowa Facility

We collected and distributed approximately 1,447 adult Steelhead to local food banks.

Tore off old shingles on residence #1.

Constructed new fence for residence #2.

We bucked up 12 trees around facility that were blown down during major wind storm.

Constructed new flush gates for Wallowa acclimation ponds.

Installed hydraulic rams on our fish pump.

Hosted annual free fishing event for kids at Marr Pond.

Repaired aging concrete areas on lower trout ponds.

Big Canyon Facility

Resided front entrance to bunkhouse.

Painted all of the interior of bunkhouse with new paint.

Replaced oven, water heater and washer/dryer in the bunkhouse.

Constructed new screens for acclimation ponds.

Little Sheep Facility

No major projects were completed.

MAINTENANCE PROJECTS ACCOMPLISHED BY CONTRACTORS

Wallowa Hatchery

New roof was installed on residence # 1.

New windows were installed in hatchery building.

Problem trees that posed a threat to hatchery buildings were cut down.

Big Canyon Facility

No projects by contractors.

Little Sheep Facility

No projects by contractors.

MAJOR PURCHASES

Fish Food	\$25,219
DEQ water analysis	\$1,537
Propane	\$3,238
Steel/aluminum	\$1,637
Fuel	\$6,216
Lumber	\$4,290
Utilities	\$30,544

MAJOR REPAIRS and MAINTENANCE

Mt. View Glass- Windows	\$4,620
Tri-County Equipment	\$3,306
Wellens Farwell – Roof	\$9,994

Bird Netting and Asphalt repair directly paid for by LSRCP.

Adult Returns to Hatchery

Steelhead Wallowa Stock 56 BY15

Big Canyon Facility

Date of first return:	February 20, 2015
Date of last return:	May 8, 2015
Number of adults returning:	544 males, 621 females
Date of peak returns:	April 3, 2015
Number of fish released to spawn naturally:	28 males, 30 females
Number of fish planted for angling opportunity: <i>Roulet Pond</i>	30 males, 30 females
Number of fish donated to food bank:	123 males, 120 females
Number of fish donated for education:	55 males, 63 females
Mortality of all adult returns:	0 males; 0 females

Wallowa Fish Hatchery

Date of first return:	January 27, 2015
Date of last return:	May 4, 2015
Number of adults returning:	1,281 males, 946 females
Date of peak returns:	February 18, 2015
Number of fish released to spawn naturally:	7 males, 10 females
Number of fish planted for angling opportunity: <i>Marr Pond</i>	92 males, 7 females
<i>Wallowa Wildlife Pond</i>	68 males, 20 females
Number of fish donated to food bank:	591 males, 361 females
Number of fish donated for education:	13 males, 25 females
Mortality of all adult returns:	12 males, 2 females

Steelhead Imnaha Stock 29 BY15

Little Sheep Creek Facility

Date of first return:	February 26, 2015
Date of last return:	May 20, 2015
Number of adults returning:	613 males, 560 females
Date of peak returns:	March 30, 2015
Number of fish released to spawn naturally:	54 males, 74 females
Number of fish outplanted to Big Sheep Creek:	186 males, 163 females

Number of fish donated to food bank:	161 males, 100 females
Number of fish used for stream enrichment:	176 males, 210 females
Mortality of all adult returns:	0 males; 0 females

Spawning Record

Steelhead

Wallowa Stock 56 BY15 (includes Fall Caught Brood fish)

Wallowa Fish Hatchery

Date Spawned	Number of Eggs Taken	Females Spawned	Males Spawned
3/04/15	405,500	80	80
3/11/15	301,000	60	60
3/18/15	57,700	46	46
3/25/15	125,700	22	22
4/01/15	144,000	24	24
4/08/15	57,700	10	10
5/4/15	15,000	3	2

Total number of females spawned:	245
Total number of males spawned:	244
Total number of green eggs:	1,289,100
Total number of eyed eggs:	1,160,900
Number of eggs retained for rearing:	53,900
Number of green eggs shipped:	15,000*
Number of eyed eggs shipped:	1,002,400**
Excess to program:	104,600
Date of last spawning:	5/4/15

*15,000 green eggs were shipped to Lyons Ferry Hatchery.

**1,600 eyed eggs were transferred to STEP and 1,000,800 were shipped to Irrigon Fish Hatchery for incubation and rearing.

Spawning Record

Steelhead Imnaha Stock 29 BY15

Little Sheep Creek Facility

Date Spawned	Number of Eggs Taken	Females Spawned	Males Spawned
3/24/15	43,700	8	6
3/31/15	44,100	8	6
4/07/15	17,200	3	2
4/14/15	74,500	14	10
4/21/15	75,800	16	9
4/28/15	78,300	17	14

Total number of females spawned:	66
Total number of males spawned:	47
Total number of green eggs:	333,600
Total number of eyed eggs:	304,600
Number of eggs retained for rearing:	0*
Number of eggs shipped:	265,100
Excess to program:	39,500
Date of last spawning:	4/28/15

**Unfertilized eggs and milt were transported to Wallowa Fish Hatchery for fertilization.
All eyed eggs were shipped to Irrigon Fish Hatchery for incubation and rearing.*

Fingerling Trout Reared

Rainbow Trout
Cape Cod Stock 72 BY14

Number fingerlings produced:	23,326
Weight of fingerlings produced (lbs.):	106
Percent mortality to release:	5.08
Average number/pound of fingerlings produced:	221
Conversion rate:	0.64

Legal Trout Reared

Rainbow Trout
Cape Cod Triploid Stock 72T BY13

Number legals produced:	49,478
Weight of legals produced (lbs.):	19,706
Percent mortality to release:	4.55
Average number/pound of legals produced:	2.51
Conversion rate:	1.12

Trophy Trout Reared

Rainbow Trout
Cape Cod Triploid Stock 72T BY12

Number trophies produced:	3,487
Weight of trophies produced (lbs.):	4,598
Percent mortality to release:	2.76
Average number/pound of trophies produced:	0.76
Conversion rate:	1.09

Rainbow Trout
Cape Cod Triploid Stock 72T BY13

Number trophies produced:	391
Weight of trophies produced (lbs.):	391
Percent mortality to release:	4.60
Average number/pound of trophies produced:	0.92
Conversion rate:	1.12

Smolts Reared

Steelhead

Wallowa Stock 56 BY14

Number of smolts produced:	860,995*
Weight of smolts produced (lbs.):	200,311
Percent mortality to stocking:	6.62%
Average number/pound of smolts produced:	4.30
Conversion rate:	0.76 at Irrigon Fish Hatchery

**Irrigon Fish Hatchery reared 824,836 smolts weighing 172,565 pounds for this program. A total of 348,210 smolts survived to release from Big Canyon Acclimation Facility. A total of 512,785 smolts survived to release from Wallowa Acclimation Facility. Pounds produced at Wallowa Fish Hatchery facilities totaled 21,698. Conversion rates at Big Canyon and Wallowa Acclimation facilities were 1.29 and 1.17, respectively.*

Steelhead

Imnaha Stock 29 BY14

Number smolts produced:	247,642*
Weight of smolts produced (lbs.):	53,835
Percent mortality to stocking:	7.28%
Average number/pound of smolts produced:	4.60
Conversion rate:	0.79 at Irrigon Fish Hatchery

**Irrigon Fish Hatchery reared 249,648 smolts weighing 48,675 pounds for this program. A total of 239,614 smolts survived to release from Little Sheep Creek Facility, where they were acclimated prior to release. Pounds produced at Little Sheep Creek Facility totaled 5,160, and the conversion rate was 1.08.*

Food Fed and Weight Gain

Steelhead Wallowa Stock 56 BY14

Big Canyon Facility	
Total pounds of food fed	5,072
Conversion rate	1.29
Total pounds weight gained - all sizes produced	3,936

Steelhead Wallowa Stock 56 BY14

Wallowa Acclimation Pond	
Total pounds of food fed	20,724
Conversion rate	1.17
Total pounds weight gained - all sizes produced	17,762

Steelhead Imnaha Stock BY14

Little Sheep Creek Facility	
Total pounds of food fed	5,588
Conversion rate	1.08
Total pounds weight gained - all sizes produced	5,160

Rainbow Trout Cape Cod Stock 72 BY14

Wallowa Hatchery	
Total pounds of food fed	96.1
Conversion rate	0.69
Total pounds weight gained - all sizes produced	138.7

Food Fed and Weight Gain

Rainbow Trout
Cape Cod Stock 72T BY13

Wallowa Hatchery	
Total pounds of food fed	15,723
Conversion rate	1.12
Total pounds weight gained - all sizes produced	14,079

Rainbow Trout
Cape Cod Triploid Stock 72T BY12

Wallowa Hatchery	
Total pounds of food fed	2,977
Conversion rate	1.34
Total pounds weight gained - all sizes produced	2,226

**On Hand at Wallowa Fish Hatchery
September 30, 2015**

Fish on Hand – BY13

Species	Stock	Number
Rainbow Trout	Cape Cod Triploid	3,455

FY15 Stocking

Total number of distribution trips:	24
Number of fry stocked	0
Weight of fry stocked:	0 lbs.
Number of fingerlings stocked:	23,326
Weight of fingerlings stocked:	106 lbs.
Number of smolts stocked:	1,108,637
Weight of smolts stocked:	254,146 lbs.
Number of legals stocked:	49,478
Weight of legals stocked:	19,706 lbs.
Number of trophies stocked:	3,878
Weight of trophies stocked:	4,989 lbs.
Date, location, number and weight at each stocking:	See Attached

Wallowa Fish Hatchery and Associated Facility Stocking Records - October 1, 2014 through September 30, 2015

HATCHERY	SPECIES	STOCK	TYPE	DATE	FROM/TO	NO/LB	MORTS	NUMBER STOCKED	POUNDS STOCKED	
BIG CANYON	SUMMER STEELHEAD	56H14	LIBERATION	4/15/15	DEER CR	4.10	0	83,239	20,302	
				4/16/15	DEER CR	4.20	0	88,360	21,038	
				Total			0	171,599	41,340	
			LIBERATION	5/1/15	DEER CR	4.50	0	86,636	19,252	
				5/2/15	DEER CR	4.50	0	89,975	19,994	
				Total			0	176,611	39,247	
LITTLE SHEEP	SUMMER STEELHEAD	29.14	LIBERATION	4/1/15	SHEEP CR, L	4.60	0	247,642	53,835	
				Total			0	247,642	53,835	
WALLOWA	RAINBOW TROUT	72H14	LIBERATION	7/28/15	MELLARD RES	220.00		1,056	5	
					HEART LK	220.00		2,090	10	
					CRATER LK	220.00		3,146	14	
					PROSPECT LK	220.00		1,562	7	
					UNIT LK	220.00		1,562	7	
					HOBO LK	220.00		2,640	12	
					SWAMP LK	220.00		2,090	10	
					HAWK LK	220.00		2,090	10	
					LEGORE LK	220.00		2,090	10	
				Total				18,326	83	
				LIBERATION	8/4/15	VAN PATTEN LK	220.00		3,000	14
		8/10/15	NOREGAARD		228.00		2,000	9		
		Total				5,000	22			
		72T12	LIBERATION	4/23/15	MARR PD	0.85	0	75	88	
					WALLOWA WLDLIFE PD	0.85	0	75	88	
					Total		0	150	176	
				LIBERATION	5/6/15	MARR PD	0.85	0	75	88
					5/14/15	WALLOWA LK	0.89	0	100	112
					5/19/15	MARR PD	0.89		75	84
						VICTOR PD	0.89		50	56
						WALLOWA WLDLIFE PD (WEAVRS PD)	0.89		50	56
						KINNEY LK	0.89		200	225
5/20/15	HONEYMOON POND				0.89		50	56		

			TEEPEE PD	0.89		50	56
		5/27/15	SALT CREEK SUMMIT POND	0.80		25	31
		Total			0	675	766
	LIBERATION	6/5/15	MARR PD	0.78		190	244
		6/9/15	SALT CREEK SUMMIT POND	0.78		25	32
			MCGRAW POND	0.78		50	64
		6/10/15	KINNEY LK	0.78	0	200	256
			WALLOWA LK	0.78	0	150	192
		6/18/15	WALLOWA LK	0.80		150	188
			TEEPEE PD	0.80		50	63
			HONEYMOON POND	0.80		50	63
		6/23/15	SALT CREEK SUMMIT POND	0.70		25	36
		6/25/15	MARR PD	0.70		25	36
		6/30/15	WALLOWA LK	0.75		425	567
		Total			0	1,340	1,739
	LIBERATION	7/6/15	WALLOWA LK	0.75		100	133
			WALLOWA WLDLIFE PD (WEAVRS PD)	0.75		25	33
			MARR PD	0.75		75	100
		7/27/15	WALLOWA LK	0.68		1,122	1,650
		Total				1,322	1,917
72T13	LIBERATION	4/23/15	MARR PD	2.90	0	250	86
			WALLOWA WLDLIFE PD	2.90	0	250	86
		Total			0	500	172
	LIBERATION	5/6/15	MARR PD	2.90	0	400	138
		5/14/15	WALLOWA LK	2.85	0	6,000	2,105
		5/19/15	MARR PD	2.85		400	140
			VICTOR PD	2.50		500	200
			WALLOWA WLDLIFE PD (WEAVRS PD)	2.50		700	280
			KINNEY LK	2.85		1,500	526
		5/20/15	HONEYMOON POND	2.50		500	200
			TEEPEE PD	2.50		600	240
		5/27/15	SALT CREEK SUMMIT POND	2.50		500	200
		Total			0	11,100	4,030

			LIBERATION	6/5/15	MARR PD	2.40		1,080	450
				6/9/15	SALT CREEK SUMMIT POND	2.40		500	208
					MCGRAW POND	2.40		500	208
				6/10/15	KINNEY LK	2.40	0	2,520	1,050
					WALLOWA LK	2.40	3	1,437	599
					WALLOWA LK	2.50	5	4,558	1,823
				6/17/15	WALLOWA LK	2.10		4,830	2,300
				6/18/15	TEEPEE PD	2.80		500	179
					WALLOWA LK	2.80		1,170	418
					HONEYMOON POND	2.80		500	179
				6/23/15	SALT CREEK SUMMIT POND	2.80		500	179
				6/25/15	MARR PD	2.70		500	185
				6/30/15	WALLOWA LK	2.60		5,500	2,115
					WALLOWA LK	2.60		4,500	1,731
					Total		8	28,595	11,624
			OTHER	6/26/15	Watershed Festival	2.70		200	74
					Total			200	74
			LIBERATION	7/6/15	WALLOWA LK	2.60		1,001	385
					WALLOWA WLDLIFE PD (WEAVRS PD)	2.60		250	96
					MARR PD	2.60		200	77
				7/8/15	WALLOWA LK	2.50		2,350	940
				7/27/15	WALLOWA LK	2.30		5,474	2,380
					Total			9,275	3,878
			LIBERATION	9/28/15	MCGRAW POND	0.92		138	150
					HONEYMOON POND	0.92		115	125
					SALT CREEK SUMMIT POND	0.92		138	150
					Total			391	425
WALLOWA ACCLIMATION	SUMMER STEELHEAD	56H14	LIBERATION	4/4/15	SPRING CR	4.20	0	163,393	38,903
				4/5/15	SPRING CR	4.20	0	176,891	42,117
				4/20/15	SPRING CR	4.46	0	172,501	38,677
					Total		0	512,785	119,697