



OREGON DEPARTMENT OF FISH AND WILDLIFE

ANNUAL REPORT WALLOWA HATCHERY

October 1, 2013 through September 30, 2014



WALLOWA HATCHERY ANNUAL REPORT FY2014

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 1,165,500 (green) Wallowa stock (56) summer steelhead eggs and 315,960 (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, Big Canyon and Little Sheep were all higher than the previous return year. The stock designations for adults collected during the 2014 season were Wallowa and Big Canyon (5614) and Little Sheep/Imnaha (2914).

Wallowa Hatchery collected 1,902 hatchery origin steelhead. Of those, 1,167 were male and 735 were female. This number includes the FB(Fall Brood) adults (317 males and 217 females) that were RV clipped and returned to the Wallowa Hatchery trap. This was 677 more than the 2013 season.

Big Canyon satellite facility had a return of 1,531 adult hatchery origin steelhead consisting of 774 males and 757 females. This was 260 more adults than the

number returning in 2013. We had 48 (29 males, 19 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 2013 were 63 adults.

Little Sheep facility had 761 hatchery adults return (417 males, 344 females), which was 404 more than the 2013 return of 357. Natural origin returns were 131 adults (53 male, 78 female), compared to 99 in 2013. Of the adults collected, 150 hatchery and 120 natural origin steelhead were passed above the weir in Little Sheep Creek. Additional releases include 232 hatchery adults transferred to Big Sheep Creek to spawn naturally.

Egg Production - Wallowa Stock (5613) Summer Steelhead

There were a total of 1,128,500 Wallowa stock eggs taken during the season, 574,600 production and 553,900 FB (Fall Brood) eggs. We transferred 1,250,600 eyed eggs to Irrigon Hatchery. 1,400 eggs were transferred to local school education programs (STEP). The green to eyed egg loss was 7.5% for the Wallowa stock as a whole. The FB segregated eggs had a slightly higher percent loss of 8.6%.

Egg Production - Imnaha Stock (2913) Summer Steelhead

A total of 310,900 green eggs were taken in the 2014 season. We transferred 286,900 eyed eggs to Irrigon Hatchery. Egg loss was 7.7%, comparable to the 15% loss in 2013.

Smolt Acclimation Summer Steelhead

There were 502,462 Wallowa stock (5613) smolts acclimated and released from Wallowa Hatchery. Big Canyon acclimated and released 329,516 Wallowa stock (5613) smolts.

Little Sheep satellite facility acclimated and released 239,614 Imnaha stock (2913) smolts.

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

CAPITAL CONSTRUCTION AND MAINTENANCE

There were no capital construction projects at Wallowa Hatchery or its satellite facilities during the report period. Bird netting project at Wallowa Hatchery was started.

MAJOR PROJECTS ACCOMPLISHED BY ODFW PERSONNEL

Wallowa Facility

We collected and distributed approximately 2,140 adult Steelhead to local food banks.

Replaced intake screen motors at Wallowa Hatchery.

New fuel tank was purchased by LSRCP and installed.

Installed a new door going into feed room.

Constructed new aluminum spawning racks.

Remodeled house #2 master bathroom.

Hosted annual free fishing event for kids at Marr Pond.

Big Canyon Facility

Fabricated a new fish weir barrier frame. Old frame was bent from flooding events.

New motor was installed on intake rotatory screen.

Started repairs on water damaged area located in front of the apartment building.

Little Sheep Facility

Installed steep pass ladder in fish way to allow for better adult passage.

MAINTENANCE PROJECTS ACCOMPLISHED BY CONTRACTORS

Wallowa Hatchery

New lighting and electrical upgrades to visitor center in Wallowa Hatchery by Banes Electrical.

Big Canyon Facility

No projects by contractors.

Little Sheep Facility

No projects by contractors.

MAJOR PURCHASES

Fish Food	\$16,328
DEQ water analysis	\$1,496
Propane	\$3,772
Steel/aluminum	\$1,561
Fuel	\$7,341
Air compressor	\$846
Chemicals/formalin	\$1,635
Utilities	\$25,222

LSRCP office directly purchased a R9500 tag detector and combination egg
Jensorter/counter.

MAJOR REPAIRS and MAINTENANCE

JB Bane Electrical	\$1,364
Milligan Motors –Vehicle Maintenance	\$1,213
New Feed Room Door	\$661
Intake Motor	\$611

Adult Returns to Hatchery

Steelhead Wallowa Stock 56 BY14

Big Canyon Facility

Date of first return:	February 28, 2014
Date of last return:	May 16, 2014
Number of adults returning:	803 males, 776 females
Date of peak returns:	March 7, 2014
Number of fish released to spawn naturally:	29 males, 19 females
Number of fish planted for angling opportunity:	
<i>Wallowa River</i>	59 males, 36 females
<i>Wallowa Wildlife Pond</i>	47 males, 23 females
<i>Roulet Pond</i>	23 males, 17 females
Mortality of all adult returns:	0 males; 0 females

590 males and 603 females in excess of program needs were given away to food banks and educational use.

Wallowa Fish Hatchery

Date of first return:	October 21, 2013
Date of last return:	June 25, 2014
Number of adults returning:	1,174 males, 736 females
Date of peak returns:	March 12, 2014
Number of fish released to spawn naturally:	0 males, 0 females
Number of fish planted for angling opportunity:	
<i>Marr Pond</i>	8 males, 2 females
<i>Wallowa River</i>	7 males, 1 females
Mortality of all adult returns:	6 male; 1 females

693 males and 257 females in excess of program needs were given away to food banks and educational use.

Steelhead Imnaha Stock 29 BY14

Little Sheep Creek Facility

Date of first return:	March 3, 2014
Date of last return:	May 22, 2014
Number of adults returning:	470 males, 422 females
Date of peak returns:	May 1, 2014
Number of fish released to spawn naturally:	114 males, 156 females
Number of fish outplanted to Big Sheep Creek:	143 males, 89 females
Mortality of all adult returns:	0 males; 0 females

103 males and 58 females in excess of program needs were given away to food banks.

Spawning Record

Steelhead

Wallowa Stock 56 BY14 (*includes Fall Caught Brood fish*)

Wallowa Fish Hatchery

Date Spawned	Number of Eggs Taken	Females Spawned	Males Spawned
3/12/14	137,200	29	29
3/19/14	226,000	49	49
3/26/14	309,600	67	67
4/02/14	250,800	56	56
4/09/14	143,000	30	30
4/16/14	61,900	13	13

Total number of females spawned:	244
Total number of males spawned:	244
Total number of green eggs:	1,128,500
Total number of eyed eggs:	1,044,400
Number of eggs retained for rearing:	0
Number of eyed eggs shipped:	1,027,000*
Excess to program:	1,200
Date of last spawning:	4/16/14

**1,400 eyed eggs were transferred to STEP and 1,025,600 were shipped to Irrigon Fish Hatchery for incubation and rearing.*

Spawning Record

Steelhead Imnaha Stock 29 BY14

Little Sheep Creek Facility

Date Spawned	Number of Eggs Taken	Females Spawned	Males Spawned
3/18/14	19,300	4	4
4/01/14	38,800	6	6
4/08/14	44,300	10	10
4/15/14	46,900	9	9
4/22/14	65,400	14	14
4/29/14	27,600	7	7
5/06/14	68,600	15	15

Total number of females spawned:	66
Total number of males spawned:	66
Total number of green eggs:	310,900
Total number of eyed eggs:	286,900
Number of eggs retained for rearing:	0*
Number of eggs shipped:	286,900
Date of last spawning:	5/06/14

**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 BY13

Number fingerlings produced:	1,495
Weight of fingerlings produced (lbs.):	47
Percent mortality to release:	13.9
Average number/pound of fingerlings produced:	32.0
Conversion rate:	1.10

Legal Trout Reared

Rainbow Trout
Cape Cod Triploid Stock 72T BY12

Number legals produced:	52,840
Weight of legals produced (lbs.):	21,873
Percent mortality to release:	2.64
Average number/pound of legals produced:	2.42
Conversion rate:	1.06

Trophy Trout Reared

Rainbow Trout
Cape Cod Triploid Stock 72T BY11

Number trophies produced:	3,416
Weight of trophies produced (lbs.):	4,575
Percent mortality to release:	2.65
Average number/pound of trophies produced:	0.75
Conversion rate:	1.28

Smolts Reared

Steelhead
Wallowa Stock 56 BY13

Number of smolts produced:	831,978*
Weight of smolts produced (lbs.):	192,000
Percent mortality to stocking:	3.82%
Average number/pound of smolts produced:	4.33
Conversion rate:	0.83 at Irrigon Fish Hatchery

**Irrigon Fish Hatchery reared 839,092 smolts weighing 172,610 pounds for this program. A total of 329,516 smolts survived to release from Big Canyon Acclimation Facility. A total of 502,462 smolts survived to release from Wallowa Acclimation Facility. Pounds produced at Wallowa Fish Hatchery facilities totaled 19,730. Conversion rates at Big Canyon and Wallowa Acclimation facilities were 1.08 and 1.12, respectively.*

Steelhead
Imnaha Stock 29 BY13

Number smolts produced:	239,614*
Weight of smolts produced (lbs.):	51,529
Percent mortality to stocking:	6.67%
Average number/pound of smolts produced:	4.65
Conversion rate:	0.86 at Irrigon Fish Hatchery

**Irrigon Fish Hatchery reared 240,608 smolts weighing 49,515 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 3,014, and the conversion rate was 1.50.*

Food Fed and Weight Gain

Steelhead Wallowa Stock 56 BY13

Big Canyon Facility	
Total pounds of food fed	3,628
Conversion rate	1.08
Total pounds weight gained - all sizes produced	3,368

Steelhead Wallowa Stock 56 BY12

Wallowa Acclimation Pond	
Total pounds of food fed	18,348
Conversion rate	1.12
Total pounds weight gained - all sizes produced	16,362

Steelhead Imnaha Stock BY12

Little Sheep Creek Facility	
Total pounds of food fed	3,014
Conversion rate	1.50
Total pounds weight gained - all sizes produced	2,014

Rainbow Trout Cape Cod Stock 72 BY13

Wallowa Hatchery	
Total pounds of food fed	50.6
Conversion rate	1.10
Total pounds weight gained - all sizes produced	50.0

Food Fed and Weight Gain**Rainbow Trout
Cape Cod Stock 72T BY12**

Wallowa Hatchery

Total pounds of food fed	18,702
Conversion rate	1.06
Total pounds weight gained - all sizes produced	17,581

**Rainbow Trout
Cape Cod Triploid Stock 72T BY11**

Wallowa Hatchery

Total pounds of food fed	3,770
Conversion rate	1.53
Total pounds weight gained - all sizes produced	2,459

**On Hand at Wallowa Fish Hatchery
September 30, 2013**

Fish on Hand – BY12

Species	Stock	Number
Rainbow Trout	Cape Cod Triploid	3,462

FY14 Stocking

Total number of distribution trips:	13
Number of fry stocked	0
Weight of fry stocked:	0 lbs.
Number of fingerlings stocked:	1,495
Weight of fingerlings stocked:	47 lbs.
Number of smolts stocked:	1,073,871
Weight of smolts stocked:	243,869 lbs
Number of legals stocked:	52,390
Weight of legals stocked:	21,498 lbs.
Number of trophies stocked:	3,416
Weight of trophies stocked:	4,575 lbs.
Date, location, number and weight at each stocking:	See Attached

**Wallowa Fish Hatchery and Associated Facility Stocking Records
October 1, 2013 through September 30, 2014**

HATCHERY	SPECIES	STOCK	TYPE	DATE	FROM/TO	NO/LB	MORTS	NUMBER STOCKED	POUNDS STOCKED
BIG CANYON	SUMMER STEELHEAD	056 13	LIBERATION	04-15-14	DEER CR	4.00	0	80,539	20,135
BIG CANYON	SUMMER STEELHEAD	056 13	LIBERATION	04-16-14	DEER CR	4.10	0	84,709	20,661
BIG CANYON	SUMMER STEELHEAD	056 13	LIBERATION	04-24-14	DEER CR	4.54	0	79,822	17,582
BIG CANYON	SUMMER STEELHEAD	056 13	LIBERATION	04-25-14	DEER CR	4.64	0	84,446	18,200
BIG CANYON	SUMMER STEELHEAD	056 13	LIBERATION	05-07-14	WALLOWA WLDLIFE PD (WEAVRS PD)	6.71	0	2,000	298
BIG CANYON	SUMMER STEELHEAD	056 13	LIBERATION	05-07-14	VICTOR PD	6.64	0	279	42
WALLOWA ACC	SUMMER STEELHEAD	056 13	LIBERATION	04-06-14	SPRING CR	4.30	0	163,708	38,072
WALLOWA ACC	SUMMER STEELHEAD	056 13	LIBERATION	04-07-14	SPRING CR	4.30	0	171,722	39,935
WALLOWA ACC	SUMMER STEELHEAD	056 13	LIBERATION	04-20-14	SPRING CR	4.46	0	167,032	37,415
LITTLE SHEEP	SUMMER STEELHEAD	029 13	LIBERATION	03-26-14	SHEEP CR, L	4.65	0	239,614	51,529
WALLOWA	RAINBOW TROUT	072T11	LIBERATION	04-24-14	MARR PD	0.86	0	75	87
WALLOWA	RAINBOW TROUT	072T11	LIBERATION	04-24-14	WALLOWA WILDLIFE PD	0.86	0	75	87
WALLOWA	RAINBOW TROUT	072T11	LIBERATION	05-15-14	WALLOWA WLDLIFE PD (WEAVRS PD)	0.80	0	50	63
WALLOWA	RAINBOW TROUT	072T11	LIBERATION	05-15-14	VICTOR PD	0.80	0	50	63
WALLOWA	RAINBOW TROUT	072T11	LIBERATION	05-15-14	MARR PD	0.80	0	75	94
WALLOWA	RAINBOW TROUT	072T11	LIBERATION	05-19-14	HONEYMOON POND	0.80	0	50	63
WALLOWA	RAINBOW TROUT	072T11	LIBERATION	05-19-14	TEEPEE PD	0.80	0	50	63
WALLOWA	RAINBOW TROUT	072T11	LIBERATION	05-22-14	WALLOWA LK	0.80	0	300	375
WALLOWA	RAINBOW TROUT	072T11	LIBERATION	05-22-14	KINNEY LK	0.80	0	250	313
WALLOWA	RAINBOW TROUT	072T11	LIBERATION	06-06-14	MARR PD	0.79	0	250	317
WALLOWA	RAINBOW TROUT	072T11	LIBERATION	06-12-14	WALLOWA LK	0.79	0	300	380
WALLOWA	RAINBOW TROUT	072T11	LIBERATION	06-12-14	WALLOWA WLDLIFE PD (WEAVRS PD)	0.79	0	50	63
WALLOWA	RAINBOW TROUT	072T11	LIBERATION	06-12-14	VICTOR PD	0.79	0	50	63
WALLOWA	RAINBOW TROUT	072T11	LIBERATION	06-18-14	TEEPEE PD	0.75	0	50	67
WALLOWA	RAINBOW TROUT	072T11	LIBERATION	06-18-14	HONEYMOON POND	0.75	0	50	67

WALLOWA	RAINBOW TROUT	072T11	LIBERATION	06-26-14	WALLOWA LK	0.72	0	300	417
WALLOWA	RAINBOW TROUT	072T11	LIBERATION	06-26-14	KINNEY LK	0.72	0	200	278
WALLOWA	RAINBOW TROUT	072T11	LIBERATION	06-26-14	SALT CREEK SUMMIT POND	0.72	0	50	69
WALLOWA	RAINBOW TROUT	072T11	LIBERATION	06-26-14	MCGRRAW POND	0.72	0	50	69
WALLOWA	RAINBOW TROUT	072T11	LIBERATION	07-02-14	WALLOWA LK	0.73	0	305	417
WALLOWA	RAINBOW TROUT	072T11	LIBERATION	07-02-14	MARR PD	0.72	0	50	69
WALLOWA	RAINBOW TROUT	072T11	LIBERATION	07-02-14	WALLOWA WLDLIFE PD (WEAVRS PD)	0.72	0	50	69
WALLOWA	RAINBOW TROUT	072T11	LIBERATION	07-16-14	WALLOWA LK	0.69	0	300	435
WALLOWA	RAINBOW TROUT	072T11	LIBERATION	07-17-14	KINNEY LK	0.69	0	100	145
WALLOWA	RAINBOW TROUT	072T11	LIBERATION	07-17-14	SALT CREEK SUMMIT POND	0.69	0	50	72
WALLOWA	RAINBOW TROUT	072T11	LIBERATION	07-17-14	MCGRRAW POND	0.69	0	50	72
WALLOWA	RAINBOW TROUT	072T11	LIBERATION	08-05-14	WALLOWA LK	0.62	0	186	300
WALLOWA	RAINBOW TROUT	072T12	LIBERATION	04-24-14	MARR PD	3.00	0	250	83
WALLOWA	RAINBOW TROUT	072T12	LIBERATION	04-24-14	WALLOWA WILDLIFE PD	3.00	0	250	83
WALLOWA	RAINBOW TROUT	072T12	LIBERATION	05-15-14	WALLOWA WLDLIFE PD (WEAVRS PD)	2.50	0	500	200
WALLOWA	RAINBOW TROUT	072T12	LIBERATION	05-15-14	VICTOR PD	2.50	0	500	200
WALLOWA	RAINBOW TROUT	072T12	LIBERATION	05-15-14	MARR PD	2.50	0	400	160
WALLOWA	RAINBOW TROUT	072T12	LIBERATION	05-19-14	HONEYMOON POND	2.50	0	500	200
WALLOWA	RAINBOW TROUT	072T12	LIBERATION	05-19-14	TEEPEE PD	2.50	0	500	200
WALLOWA	RAINBOW TROUT	072T12	LIBERATION	05-22-14	WALLOWA LK	2.50	0	6,000	2,400
WALLOWA	RAINBOW TROUT	072T12	LIBERATION	05-22-14	KINNEY LK	2.44	0	2,500	1,025
WALLOWA	RAINBOW TROUT	072T12	LIBERATION	06-06-14	MARR PD	2.40	0	1,000	417
WALLOWA	RAINBOW TROUT	072T12	LIBERATION	06-12-14	WALLOWA LK	2.40	0	6,000	2,500
WALLOWA	RAINBOW TROUT	072T12	LIBERATION	06-12-14	WALLOWA WLDLIFE PD (WEAVRS PD)	2.55	0	1,000	392
WALLOWA	RAINBOW TROUT	072T12	LIBERATION	06-12-14	VICTOR PD	2.55	0	500	196
WALLOWA	RAINBOW TROUT	072T12	LIBERATION	06-18-14	TEEPEE PD	2.55	0	500	196
WALLOWA	RAINBOW TROUT	072T12	LIBERATION	06-18-14	HONEYMOON POND	2.55	0	500	196
WALLOWA	RAINBOW TROUT	072T12	LIBERATION	06-26-14	WALLOWA LK	2.37	0	6,000	2,532
WALLOWA	RAINBOW TROUT	072T12	LIBERATION	06-26-14	KINNEY LK	2.80	0	2,500	893
WALLOWA	RAINBOW TROUT	072T12	LIBERATION	06-26-14	SALT CREEK SUMMIT POND	2.80	0	500	179
WALLOWA	RAINBOW TROUT	072T12	LIBERATION	06-26-14	MCGRRAW POND	2.80	0	500	179

WALLOWA	RAINBOW TROUT	072T12	LIBERATION	07-02-14	WALLOWA LK	2.60	0	7,000	2,692
WALLOWA	RAINBOW TROUT	072T12	LIBERATION	07-02-14	MARR PD	2.60	0	500	192
WALLOWA	RAINBOW TROUT	072T12	LIBERATION	07-02-14	WALLOWA WLDLIFE PD (WEAVRS PD)	2.60	0	500	192
WALLOWA	RAINBOW TROUT	072T12	LIBERATION	07-16-14	WALLOWA LK	2.33	0	6,000	2,575
WALLOWA	RAINBOW TROUT	072T12	LIBERATION	07-17-14	KINNEY LK	2.23	0	1,200	538
WALLOWA	RAINBOW TROUT	072T12	LIBERATION	07-17-14	SALT CREEK SUMMIT POND	2.23	0	700	314
WALLOWA	RAINBOW TROUT	072T12	LIBERATION	07-17-14	MCGRAW POND	2.23	0	700	314
WALLOWA	RAINBOW TROUT	072T12	LIBERATION	08-05-14	WALLOWA LK	2.20	0	5,390	2,450