

**MAGIC VALLEY HATCHERY**  
**LOWER SNAKE RIVER COMPENSATION PLAN**  
**2009 OPERATIONS REPORT**

**By**

**Rick Lowell, Fish Hatchery Manager II**  
**Tom Tighe, Assistant Fish Hatchery Manager**  
**Wade Symons, Fish Culturist**  
**Brandon Filloon, Fish Culturist**

## MAGIC VALLEY STEELHEAD HATCHERY

Magic Valley Steelhead Hatchery has been a part of the Lower Snake River Compensation Plan since the completion of construction in 1987. The hatchery's annual production goal for the 2008 brood year was 1.6 million "A" and "B" strain steelhead smolts for release into the Salmon River and tributaries. Information for 2008 brood year is found in Table 1. Table 2 shows current information for brood year 2009.

Brood year 2008 production was completed in April 2009 with the stocking of steelhead smolts (Table 3). The five steelhead stocks released as smolts were 714,349 "B" strain from Dworshak, in addition to 57,464 Upper Salmon "B" strain from the Squaw Creek Acclimation Pond; 67,821 East Fork Natural "B" from the East Fork of the Salmon River; 375,682 "A" strain Pahsimeroi stock; and 436,881 Sawtooth "A" strain stock. Additionally, 19,995 Dworshak B and 32,508 Sawtooth A surplus fry/fingerlings were stocked into Salmon Falls Creek Reservoir in early September 2008.

With the exception of 223,967 (13.56%) smolts released for Shoshone-Bannock Tribal programs, all smolts released were adipose fin clipped. In addition, 517,455 fish were coded wire tagged with 497,030 being released. An additional 37,680 were tagged with passive integrated transponders (PIT Tags) in February; of which 37,590 were released at ten different locations.

In May and June 2009 the hatchery received a total of 1,927,303 eyed eggs to begin the 2009 brood year. Of those eggs 423,881 were "A" strain from Pahsimeroi, 511,923 "A" strain from Sawtooth stock; 834,242 "B" strain from Dworshak; 92,086 "B" strain from the East Fork Salmon River a.k.a. East Fork Natural stock, and 65,171 USB (Upper Salmon B). Our current inventory consists of five stocks: 734,268 Dworshak "B" strain fish weighing 45,035 pounds, 58,904 USB strain steelhead weighing 1,882 pounds, 384,510 Pahsimeroi "A" strain steelhead weighing 17,320 pounds, 447,950 Sawtooth "A" fish weighing 17,928 pounds, and 70,090 East Fork Naturals weighing 2,195 pounds.

Although water rights during the current phase of production allow for 125.59 cfs, maximum raceway flows have been measured at approximately 87.2 cfs. (89.7 cfs. November, 08)

### PERSONNEL

Personnel presently consist of Rick Lowell, Hatchery Manager II; Tom Tighe, Assistant Fish Hatchery Manager; Wade Symons, Fish Culturist; and Brandon Filloon, Fish Culturist.

## MAINTENANCE PROJECTS

During the year, the following projects were completed:

1. Received large order of incubation supplies from Eagar.
2. Purchased 8 new batteries for the electric Cushman.
3. Had our electronic hanging scale repaired and serviced.
4. Received a new Walker Riding Lawn Mower purchased by LSRCP.
5. A local contractor completed modifying residence A, B, & D basements to enable the installation of downstairs toilets and sinks.
6. Purchased and installed new range for residence "C".
7. All residence carpets and the hatchery dorm furniture were cleaned.
8. Completed installation of New Toilets and Sinks in Residences A, B, and D basements.
9. A local contractor excavated and repaired the two inch high pressure line servicing residence A.
10. Repainted walls and installed vent fan in guest bathroom of residence C.
11. Repaired three intake raceway valves.
12. A local contractor pumped all four residences septic tanks.
13. Completed installing topsoil and grass seeding in front of residence "C" driveway.
14. Removed over-grown shrubs from in front of the Hatchery Dormitory.
15. Hauled off miscellaneous junk to the recyclers.
16. Received new Pressure Washer from LSRCP.
17. Removed over-grown sagebrush from the hatchery perimeter fence.
18. Received an Environmental Compliance inspection from the USFWS. Our facility was in complete compliance.
19. Received new Oxygen meter from LSRCP.
20. Replaced Residence "A" front door threshold.
21. LSRCP replaced the hatchery heat pump/irrigation system pumps.
22. Replaced screen material in residence windows.
23. Began installing smaller mesh chicken wire to the hatchery perimeter chain link fence to prevent smaller predators from entering the raceways.
24. A paving contractor from Boise continued crack repair on the hatchery parking lot.
25. Worked on remodeling Residences A and D basements.
26. A local metal fabricator completed new aluminum screens for our four fiberglass rearing troughs.



TABLE 1. BROOD YEAR 2008 STEELHEAD SURVIVAL RATES.

	DWORSHAK "B"	UPPER SALMON "B"	EAST FORK NATURAL	PAHSIMEROI "A"	SAWTOOTH "A"	GRAND TOTAL
TOTAL EGGS RECEIVED	834,242	65,171	92,086	423,881	511,923	1,927,303
SMOLTS STOCKED	714,349	57,464	67,821	375,682	436,881	1,652,197
WEIGHT SMOLTS NO./LB.	147,174 4.85	12,000 4.79	14,600 4.65	76,350 4.92	94,950 4.6	345,074 4.79
FALL FRY RELEASES	19,995	0	0	0	32,508	52,503
WEIGHT FRY	481	0	0	0	450	931
TOTAL NUMBER	734,344	57,464	67,821	375,682	469,389	1,704,700
TOTAL WEIGHT	147,655	12,000	14,600	76,350	95,400	346,005
% SURVIVAL						
EGG/RELEASE	88.0%	88.2%	73.6%	88.6%	91.7%	88.5%
POUNDS OF FOOD CONVERSION	140,028.7 0.95	11,477.8 0.96	14,101.2 0.97	75,425.3 0.99	86,903.0 0.92	327,936.0 0.95

TABLE 2. BROOD YEAR 2009 (11/09)

Magic Valley Hatchery Summary

November 1, 2008

Broodyear 2008

<b>Stock</b>	<b>DWOR</b>	<b>USB</b>	<b>EFK/NAT</b>	<b>PAH</b>	<b>SAW</b>	<b>TOTAL</b>
Total Eggs Received	834,242	65,171	92,086	423,881	511,923	1,927,303
Inventory/Start Outside	742,559	59,055	70,525	385,616	449,196	1,706,951
Weight/Start Outside	6,187	601	639	3,505	2,967	13,899
Inventory/Beginning	735,043	59,001	70,298	384,882	448,386	1,697,610
Inventory/Ending	734,268	58,904	70,090	384,510	447,950	1,695,722
Weight/Total 1st	26,252	894	1,098	9,164	10,115	47,523
Weight/Total Last	45,035	1,882	2,195	17,320	17,928	84,360
No. Shipped to date	19,995				32,508	52,503
Wt. Shipped to date	481				450	931
No./lb(Avg.)1st	28.0	66.0	64.0	42.0	44.3	38.8
No./lb(Avg.)Last	16.3	31.3	31.9	22.2	25.0	21.3
Length(Avg.)1st	4.53	3.40	3.44	3.95	3.88	4.06
Length(Avg.)Last	5.42	4.36	4.33	4.89	4.70	4.96
Length Increase	0.89	0.96	0.90	0.94	0.82	0.90
Mortality/Month **	775	97	208	372	436	1,888
Percent Mortality	0.11%	0.16%	0.30%	0.10%	0.10%	0.11%
Survival To Date	90.4%	90.4%	76.1%	90.7%	93.9%	90.7%
Monthly Feed	13,752.0	761.2	916.2	6,059.0	6,958.0	28,446.4
Monthly Conversion	0.73	0.77	0.84	0.74	0.89	0.77
Conversion to date	0.79	0.81	0.78	0.74	0.80	0.78
Feed to date	30,549.4	1,043.8	1,212.1	10,228.2	11,985.7	55,019.2

TABLE 3. BROODYEAR 2008 STEELHEAD SMOLT DISTRIBUTION

<u>Facility/Date</u>	<u>Site</u>	<u>Number Released</u>	<u>Stock</u>	<u>Fish/lb</u>	<u>Pounds</u>	<u>Marks</u>
<b>Magic Valley</b>						
<b>BY 08</b>						
*4/6-4/8/2009	Little Salmon R (Stinky Springs)	218,101	Dwor B	4.98	43,824	100% AD, 62,153 CWT, 4,200 PIT
*4/17-4/21/2009	East Fork Salmon River (lower)	217,458	Dwor B	4.65	46,800	100% AD, 62,090 CWT, 4,167 PIT
*4/24-4/27/2009	East Fork Salmon River (above E. Fk. Weir)	67,821	E.F. Nat	4.65	14,600	No Clip, All CWT, 1,301 PIT
*4/21-24/2009	Squaw Creek	278,790	Dwor B	4.93	56,550	100% AD, 59,716 CWT, 5,385 PIT
*4/23-24/2009	Squaw Creek	57,464	USB	4.79	12,000	100% AD, All CWT, 6,976 PIT
*4/9/09	Pahsimeroi River (below weir)	31,221	Pah A	4.66	6,700	100% AD, All CWT, 598 PIT
	Salmon River (Section 16) Includes:			4.50		
*4/8-4/9/2009	(Red Rock)	126,091	Pah A	5.21	24,200	100% AD, 31,196 CWT, 2,395 PIT
	Salmon R. (Section 17) Includes:			4.50		
*4/13-4/14/09	(Colston Corner)	124,885	Pah A	4.97	25,150	100% AD, 31,307 CWT, 2,394 PIT
*4/10/2009	(Shoup Bridge)	93,485	Pah A	4.61	20,300	100% AD, 1,802 PIT
	Salmon R. (Section 18) Includes:			4.50		
*4/14-4/16/09	(McNabb Point)	125,167	Saw A	4.74	26,400	100% AD, 62,912 CWT, 2402 PIT
*4/16-4/17/09	(Tunnel Rock)	62,192	Saw A	4.26	14,600	100% AD, 1,200 PIT
*4/28/2009	(Valley Creek)	62,336	Saw A	4.11	15,150	No Clip, 1196 PIT
*4/30/2009	Yankee Fork	31,222	Saw A	4.88	6,400	No Clip, 598 PIT
*4/30-5/1/2009	Yankee Fork	61,994	Saw A	4.96	12,500	100% AD, 30,949 CWT, 1184 PIT
*5/1/2009	Slate Creek	31,382	Saw A	4.90	6,400	100% AD, All CWT, 597 PIT
*4/27-4/28/2009	Slate Creek	<u>62,588</u>	Saw A	4.64	13,500	No Clip, 1,195 PIT
	<b>Totals</b>	<b>1,652,197</b>		<b>4.79</b>	<b>345,074</b>	