



**U.S. Fish and Wildlife Service Pacific Region
Columbia River Basin Hatchery Review Team**

Columbia River Basin, Mountain Snake Province
Salmon and Clearwater River Watersheds



**Idaho Lower Snake River Compensation Plan State
Operated Hatcheries**

Clearwater, Magic Valley, McCall, and Sawtooth Fish Hatcheries
Assessments and Recommendations

Final Report, Appendix D:
Complete Text of Comment Letters Received from Stakeholders

March 2011

Please cite as:

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Appendix D: Complete Text of Comment Letters Received from Stakeholders



May 1, 2009

Hatchery Review Team,

The Shoshone-Bannock Tribes (Tribes) appreciate the opportunity to provide comments on the report, "Idaho Lower Snake River Compensation Plan State Operated Facilities, Clearwater, Magic Valley, McCall, and Sawtooth Fish Hatchery Assessments and Recommendations Draft Report, April 2009," produced by the United States Fish and Wildlife Service – Columbia Basin Hatchery Review Team (HRT). In general, the Tribes are in agreement with the purpose of the review, being the long-term conservation of salmonid populations and their inherent genetic resources, which require a reexamination of the role of hatcheries, in light of limiting factors such as habitat, hydropower, and harvest needs, to provide both conservation and harvest goals. We expect the HRT to ensure all of your alternatives are developed to realize the adult return goal as the first priority, followed by meeting the conservation objectives defined by the Interior Columbia Basin Technical Recovery Team (TRT). Our comments are as follows:

Magic Valley FH B-Run Steelhead

We are in agreement with the Lower Snake River Compensation Plan (LSRCP) adult return goal of 11,660 adult steelhead over Lower Granite Dam (LGD). We expect the HRT to ensure all of your alternatives are developed to realize the adult return goal as the first priority, followed by meeting the conservation objectives defined by the TRT. Tribal members currently harvest a small component of the B-run steelhead returning to Squaw Creek and a large component of the B-run steelhead returning to the lower East Fork Salmon River and we would not support terminating either of these programs.

The current program of releasing Dworshak B-run steelhead in the Upper Salmon River makes little biological sense considering the survival and rearing disadvantages. However, we are not supportive of eliminating this program without some other program being created. We believe the current program should be transitioned to developing a locally adapted B-run steelhead in the lower East Fork Salmon River or transitioning the B-run program to increase the A-run endemic stock of East Fork Naturals. We also recommend that a new weir be constructed in the lower East Fork Salmon River to

USFWS Columbia Basin Hatchery Review Team

Idaho LSRCP Hatcheries Assessments and Recommendations Report – March 2011

accomplish this transition. The release of smolts at Squaw Creek should be transitioned to the East Fork Salmon River.

Magic Valley FH A-Run Steelhead

We are in agreement with the LSRCP adult return goal of 11,660 adult steelhead over LGD. Tribal members currently harvest a small component of the A-run steelhead returning to Yankee Fork, Valley Creek, and Slate Creek. The Salmon River releases of A-run steelhead at Red Rock, Lemhi Hole, Colsten Corner, Tunnel Rock, McNabb Point, and Pahsimeroi River provide little to no benefit for Tribal fisherman. Continuing the Salmon River releases will only propagate an imbalance between treaty and non-treaty fisheries.

The releases of A-run steelhead in Yankee Fork, Valley Creek, and Slate Creek have been consolidated to the Yankee Fork Salmon River, where the Tribes will elect to establish a locally adapted A-run steelhead program. The release of A-run steelhead in the Yankee Fork should be increased since both treaty and non-treaty fishers will have ample opportunity to encounter these fish. The Salmon River releases should be transitioned to areas where adults can be captured by a permanent weir structures. We recommend transitioning the Salmon River releases to Sawtooth Fish Hatchery, Yankee Fork Salmon River, and/or East Fork Salmon River.

To effectively operate the Yankee Fork steelhead program, the HRT should recommend installing a permanent weir. This would allow the Tribes to capture returning adult steelhead and develop a locally adapted stock.

East Fork Salmon River “Naturals” Steelhead

We are in agreement with the LSRCP adult return goal of 11,660 adult steelhead over LGD. Tribal members currently harvest a small component of the A-run steelhead returning to the East Fork Salmon River. We want to see this program increased in the future. The productiveness of this program will be realized with the addition of a permanent weir in the lower East Fork Salmon River.

Sawtooth FH A-Run Steelhead

Our recommendation is to continue to utilize Sawtooth Fish Hatchery to provide broodstock for releases of A-run steelhead at this facility.

Sawtooth FH Spring Chinook

The adult return goal for Sawtooth FH is 19,445 adult Chinook salmon over LGD. We have serious concerns with the HRT not modeling any of the alternatives to meet the harvest or conservation goals. Rather the HRT modeled the program based upon how many smolts the facility is capable of producing. This creates a flawed assessment of the program, which by no means will ever meet the defined goal.

This program was initially developed to have three primary release locations: 1) Sawtooth FH; 2) East Fork; and 3) Valley Creek. The HRT must ensure Sawtooth FH meet its defined harvest goal and provide recommendations for meeting conservation

USFWS Columbia Basin Hatchery Review Team

Idaho LSRCP Hatcheries Assessments and Recommendations Report – March 2011

goals. The HRT should model the alternatives to meet the original LSRCP adult return goal at Sawtooth, East Fork, and Valley Creek of 11,310, 6,090, and 2,045, respectively.

As stated in the document, the East Fork program was eliminated and Valley Creek component was never implemented. Considering the current survival rates for hatchery-origin Chinook salmon released at Sawtooth FH, we believe the HRT recommendation must include expanding this facility to realize the adult return goals. We also believe the HRT should recommend initiating the East Fork program and supporting the Tribes Chinook salmon supplementation program in the Yankee Fork as a surrogate for Valley Creek. To effectively operate the Yankee Fork Chinook salmon supplementation program, the HRT should recommend installing a permanent weir. This would allow the Tribes to capture returning adult Chinook salmon and develop a locally adapted stock.

The conservation goal for the Upper Salmon River is 1,000 adults and Yankee Fork is 1,500 adults. We are in agreement with the methodology of developing broodstocks for these supplementation programs, but the HRT must model the conservation programs to meet the defined conservation goals.

The Tribes understand the conservation programs will limit the ability of the hatchery to meet the defined harvest goal, therefore, we propose the conservation goal be considered as part of the overall goal of 19,445 adults.

McCall FH Summer Chinook

The adult return goal for McCall FH is 8,000 adult Chinook salmon over LGD. We have serious concerns with the HRT not modeling the alternatives to meet the harvest or conservation goals.

The HRT recommended alternative 5 and in our opinion this is a viable option with the following consideration. As proposed in *US v Oregon*, a supplementation program will be established in the South Fork Salmon River, separate and apart from the Tribes eggbox program or the harvest mitigation program. Our conservation objective for the South Fork Salmon River is to achieve 1,000 natural-origin adults returning annually, consistent with the TRT viable population threshold. The HRT should model the conservation program to maintain a spawning component of 1,000 adults and returning 8,000 adults for harvest and broodstock needs.

The Tribes understand the conservation program will limit the ability of the hatchery to meet the defined harvest goal, therefore, we propose the conservation goal be considered as part of the overall goal of 8,000 adults.

Again, we appreciate the opportunity to provide comments on the document. If you have any questions, concerns, or comments, please do not hesitate to contact me at 208-239-4560.

USFWS Columbia Basin Hatchery Review Team

Idaho LSRCP Hatcheries Assessments and Recommendations Report – March 2011

Sincerely,

Nathan Small
vice-Chairman

Alonzo Coby, Chairman
Shoshone-Bannock Tribes

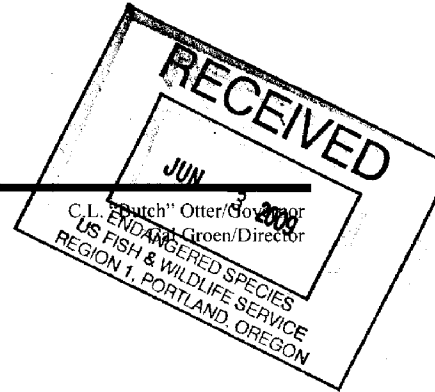
cc: C. Broncho, Fish & Wildlife Policy Representative
C. Colter, Fish & Wildlife Director
K. Tardy, Fish Biologist
S. Brandt, Fish Biologist

USFWS Columbia Basin Hatchery Review Team
Idaho LSRCP Hatcheries Assessments and Recommendations Report – March 2011



IDAHO DEPARTMENT OF FISH AND GAME
600 S. Walnut/P.O. Box 25
Boise, Idaho 83707

May 29, 2009



U.S. Fish and Wildlife Service
Attn: Doug Dehart
911 NE11th Avenue
Portland, OR 97232
Re: USFWS review of four Idaho LSRCP hatcheries.

Dear Doug,

First, let me take a moment to congratulate you on completing the review of U.S. Fish and Wildlife Service (Service) funded hatchery programs in Idaho. Considerable time and effort was devoted to that review by the Hatchery Review Team (HRT) and a great number of agency and tribal personnel in Idaho. The Idaho Department of Fish and Game is optimistic that the product of the Service's critical scientific review will assist us in developing management plans for these facilities that are grounded on sound science and allow us to meet the mandated purposes of the programs.

At the completion of the HRT review of the Dworshak, Kooskia and Hagerman National Fish Hatcheries in Idaho, the Idaho Department of Fish and Game, Nez Perce Tribe and Service provided joint comments on the HRT draft report for those facilities. In the introduction to those comments the following statement was included:

"We believe that the selection of a recommended alternative is premature until all the fish production facilities in the Clearwater Basin are reviewed and assessed comprehensively. Until then the review is basically incomplete and should not be recommending major program changes."

While that comment was specific to the Clearwater River basin the overlying reality is that the HRT review of all Service-funded programs in Idaho is now complete and a comprehensive consideration of HRT recommendations is possible. An extension of that reality is that now we enter a second phase of work for the program managers.

That second phase of work, as I'm sure you are well aware of, is the implementation of the FCRPS Biological Opinion Hatchery Strategy 1 (Ensure that hatchery programs funded by the FCRPS Action Agencies as mitigation for the FCRPS are not impeding recovery of ESUs or steelhead DPSs) and specifically RPA 39 within that strategy. That RPA pertains to linking programmatic funding decisions for FCRPS mitigation hatcheries with Best Management Practices (BMPs) as defined in Endangered Species Act consultations with NOAA-Fisheries. The Idaho Department of Fish and Game, in response to RPA 39, must now complete Hatchery and Genetic Management Plans for all artificial production programs. We

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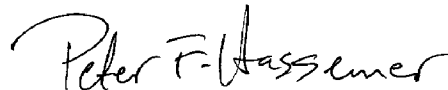
Idaho LSRCP Hatcheries Assessments and Recommendations Report – March 2011

will use the HRT reviews as guidance for BMPs that we will describe in the Hatchery and Genetic Management Plans.

Regarding the Service's request for comments on the current draft report (for four Idaho hatcheries), it should be noted that while we are not providing comments on the specific preferred alternatives or many of the individual recommendations provided by the HRT, this does not imply that the Idaho Department of Fish and Game agrees with and would implement the HRT's preferred alternatives of all of the recommendations. There exist many potential scenarios for implementing ideas and concepts of the HRT into our programs based on the comprehensive lists of recommendations and alternatives provided in the HRT report. As we develop Hatchery and Genetic Management Plans and implementation plans for our programs, we will take into consideration combinations of recommendations and alternatives provided by the HRT that we feel will help us meet our specific management objectives. We are not ignoring the recommendations of the HRT scientific review but again, we are using the recommendations as guidance for developing BMPs that satisfy the FCRPS Biological Opinion Hatchery Strategy 1 (...not impeding recovery of ESUs or steelhead DPSs), and intend to do this in a more comprehensive manner than was captured in two HRT reviews that were separated by funding pathways. It is very important to the Idaho Department of Fish and Game that Idaho's hatchery programs continue to be operated with the intent of meeting mandated mitigation obligations. We believe that operation of hatcheries to meet mitigation obligations is consistent with the FCRPS Biological Opinion RPA 39 which specifies: "The FCRPS Action Agencies will continue funding hatcheries in accordance with existing programs...". Thus the Idaho Department of Fish and Game will use the HRT reviews for guidance, in addition to other hatchery reviews, to develop Hatchery and Genetic Management Plans for achieving program objectives while meeting the intent of the FCRPS Biological Opinion hatchery strategies.

In closing, while the Idaho Department of Fish and Game is not providing comments specific to any of the HRT alternatives, we are providing some comments on HRT recommendations that we feel were developed based on misunderstandings or misinformation. Those comments are attached.

Respectfully,



Peter Hassemer

Anadromous Fish Manager

PH:db

Cc: IDFG – Ed Schriever, Paul Kline, Brian Leth, Sam Sharr
NPT – Becky Johnson, Dave Johnson
SBT – Lytle Denny, Chad Colter
LSRCP – Scott Marshall
USFWS – Dan Diggs

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USFWS Columbia Basin Hatchery Review Team
Idaho LSRCP Hatcheries Assessments and Recommendations Report – March 2011

Idaho Department of Fish and Game Comments on specific HRT recommendations:

Issue CW12: *Currently, there is no monitoring and evaluation of post-release survival for B-run steelhead reared at Clearwater FH and released into various locations in the Clearwater Basin. A PIT tag program was established in 2008 to assess outmigrant survival of Dworshak NFH B-run steelhead reared at Clearwater FH to lower Granite Dam. Portions of the broodyear 2007 steelhead from each release group are PIT tagged. The PIT tags can be used to compare post-release survival and transit time of the Clearwater FH outplants from their release site to lower Granite Dam versus the on-station releases of B-run steelhead from Dworshak NFH.*

IDFG Response- Since 1993, IDFG has been monitoring the post-release survival for B-run steelhead reared at Clearwater Hatchery with the use of PIT tags. The program established in 2008 is actually an expansion of the existing program that will allow the estimation of adult returns through a significant increase in the number of fish released with PIT tags.

Issue MV20: *The primary reason for using Dworshak B-run steelhead stock in the Salmon River is to provide large trophy steelhead to be included in the sport harvest. Estimated returns of B-run steelhead to the upper Salmon River for brood years 2002 and 2003 showed a much higher percent return of 2-Ocean fish (79%-93%) than Sawtooth A-run steelhead returns (21%-45%). However, the size distribution of Dworshak B-run steelhead returning to the Salmon River is unknown. In addition, preliminary data indicate that Dworshak B-run steelhead have a much lower return rate compared to A-run steelhead released into the Upper Salmon River basin. SAR's for BY's 1992 through 1999 Dworshak B-run steelhead reared at Magic Valley FH and released into the Little Salmon River and the upper Salmon river averaged 0.10% (range 0.00% - 0.19%) and 0.11% (range 0.02% - 0.38%), respectively. Dworshak NFH B-run steelhead reared at Magic Valley FH and released into the East Fork and upper Salmon River averaged 0.19% (range 0.06% - 0.30%) for BY's 1993- 1997 and 0.19% (BY 1999), respectively. Pahsimeroi and Sawtooth stock A-run steelhead reared at Magic Valley FH and released into the upper Salmon River averaged 1.22% (range 0.25% - 2.24%) for BY's 1992-1999. Return rates for BY 2002 and 2003 releases in the Salmon River showed similar differences between Sawtooth A-run steelhead (0.90%-0.56%) compared to Dworshak B-run steelhead (0.31%-0.16%), however return rates for upper Salmon River B-run steelhead were much higher (0.73% -0.27%) for the two brood years. Based on the available information, the benefits of the upper Salmon River B-run steelhead appear to be much greater than Dworshak B-run steelhead although returns rates are not as high as Sawtooth A-run steelhead.*

IDFG Response- There are several references from the HRT that there is a lack of information demonstrating a benefit of the B-program in the upper salmon with regards to SARs, contribution to fisheries, and length-at- age. All of this information is available in hatchery and harvest reports. In 1998 an effort to create a locally adapted B-run stock in the upper Salmon River was initiated at Squaw Creek. Below is a summary of information collected since that program was initiated.

USFWS Columbia Basin Hatchery Review Team

Idaho LSRCP Hatcheries Assessments and Recommendations Report – March 2011

Upper Salmon River B-Run Steelhead Program at Squaw Creek 1998-2008

The Idaho Department of Fish and Game has recovered large age-4 (B-run) adult steelhead at a temporary weir on Squaw Creek in an effort to develop a locally adapted B-run stock for the upper Salmon River. All smolts associated with this program have been reared at the Magic Valley Fish Hatchery. Since 1999, approximately 280,000 steelhead smolts produced from eggs collected at Dworshak National Fish Hatchery (DWORB) have been released annually into Squaw Creek or acclimation pond. Large (females ≥ 75 cm, males ≥ 79 cm) B-run adults returning from these releases, which first returned in 2002, were used as founding broodstock for the upper Salmon River B-run program. The progeny of adults collected at the Squaw Creek were classified as a locally adapted upper Salmon B-run stock (USALB), regardless of whether the adults were one (DWORB) or more (USALB) generations removed from Dworshak National Fish Hatchery. The first of the B-run USALB release returned in 2006.

Coded-wire tags (CWT) were used to evaluate the success of the program. CWT recoveries from the fall of 2004 through the spring of 2008 were used to evaluate the life history and the average length at age for USALB, DWORB, as well as A-run fish released at Sawtooth Fish Hatchery (SAWA). These tags were also expanded by the tagging rate and survey rate (harvest only) to estimate the total return for these stocks from the fall of 2004 through the spring of 2007. Harvest and weir return estimates were provided by Hansen (in review); more recent harvest information is not yet available. Total return estimates, for brood years 2002 and 2003, were used to generate smolt to adult return rates (SAR) for fish returning to Idaho. It is important to note steelheads are collected at Squaw Creek using a temporary weir which is frequently "washed out" preventing a census of the entire run. Ground surveys indicate a substantial number of fish move upstream of the weir when it fails in high flows.

Age Composition

USALB maintain a life history similar to that of DWORB and return predominantly as age-4 adults (Figure 1 and 2). These life history patterns contrast sharply with that of SAWA in which only a small proportion of fish return as age-4 fish. USALB males returned as age-3 fish more frequently than females; however, this pattern exists in the DWORB as well. Although few in number, age-5 fish were only observed in USALB and DWORB stocks.

USFWS Columbia Basin Hatchery Review Team
Idaho LSRCP Hatcheries Assessments and Recommendations Report – March 2011

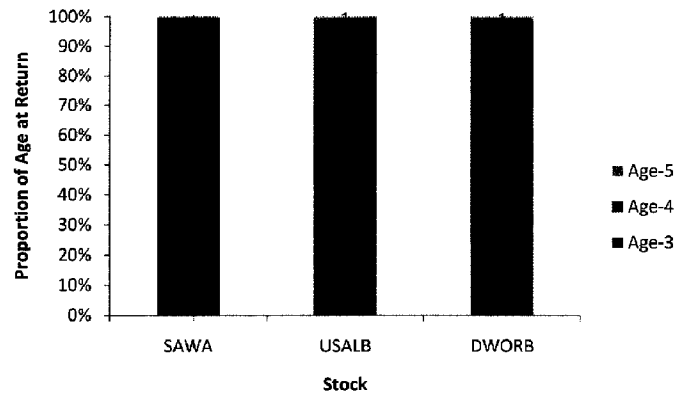


Figure 1. The proportion of age at return for male steelhead released at sites in the upper Salmon River. The results were determined using coded-wire tags recovered from fall of 2004 through the spring of 2008. SAWA released groups were released at Sawtooth Fish Hatchery, while USALB and DWORB release groups were released at Squaw Creek.

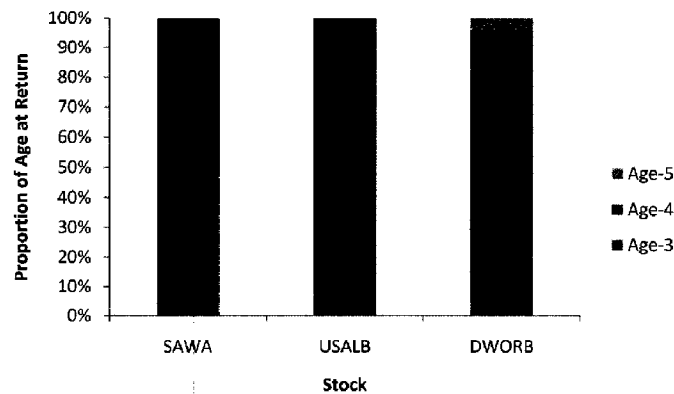


Figure 2. The proportion of age at return for female steelhead released at sites in the upper Salmon River. The results were determined using coded-wire tags recovered from fall of 2004 through the spring of 2008. SAWA released groups were released at Sawtooth Fish Hatchery, while USALB and DWORB release groups were released at Squaw Creek.

USFWS Columbia Basin Hatchery Review Team

Idaho LSRCP Hatcheries Assessments and Recommendations Report – March 2011

Length at Age

USALB returns are larger at age than SAWA (Table 1). For example, female age-4 USALB average 76.5 cm, which is substantially larger than female age-4 SAWA (67.5 cm) and only slightly smaller than female age-4 DWORB (78.3 cm). A similar contrast exists for males.

Table 1. Age and average length at return for steelhead released at sites in the upper Salmon River. The results were determined using coded-wire tags recovered from fall of 2004 through the spring of 2008. SAWA released groups were released at Sawtooth Fish Hatchery, while USALB and DWORB release groups were released at Squaw Creek.

Sex	Stock	Age	n	Average FL (cm)	SD
Female	SAWA	3	512	58.3	2.9
		4	127	67.5	3.5
		5	-	-	-
	USALB	3	19	61.6	3.3
		4	111	76.5	4.2
		5	-	-	-
	DWORB	3	5	65.8	8.2
		4	65	78.3	4.3
		5	3	79.3	5.0
Male	SAWA	3	687	59.5	3.1
		4	65	69.8	4.5
		5	-	-	-
	USALB	3	47	63.1	3.0
		4	58	79.8	4.8
		5	1	95.0	-
	DWORB	3	17	64.9	3.8
		4	52	81.5	4.5
		5	1	90.0	-

USFWS Columbia Basin Hatchery Review Team

Idaho LSRCP Hatcheries Assessments and Recommendations Report – March 2011

Contribution to Fisheries

USALB contributed substantially more age-4 steelhead to Idaho fisheries than SAWA relative to release group size (Table 2). For example, an average of 3.3 age-4 USALB adults were harvested for every 1,000 smolts released, while an average of 1.5 age-4 SAWA adults were harvested for every 1,000 smolts released for brood years 2002 and 2003.

Table 2. Total return and SAR estimates for steelhead released at sites in the upper Salmon River. The results were determined using coded-wire tags recovered from fall of 2004 through the spring of 2007. SAWA release groups were released at Sawtooth Fish Hatchery, while USALB and DWORB release groups were released at Squaw Creek and Lower East Fork Salmon River. Harvest results and weir return estimates were provided by Hansen (in review).

Brood Year	Stock	Release	Age-3			Age-4			Release Group	
			Harvest	Weir	Total	Harvest	Weir	Total	Total	SAR (%)
2002	USALB	58,140	68	20	88	277	45	322	410	0.705
	DWORB	265,009	56	1	57	677	31	708	765	0.289
	SAWA	748,027	2,312	1,305	3,617	1,816	451	2,267	5,884	0.787
2003	USALB	58,377	29	2	31	110	24	134	165	0.283
	DWORB	263,576	97	0	97	356	58	414	511	0.194
	SAWA	756,720	1,758	1,469	3,227	459	433	892	4,119	0.544

SAR estimates indicate USALB return at higher rates than the DWORB (Table 2). This suggests the benefits of a locally adapted stock become apparent in the first generation removed from Dworshak National Fish Hatchery. The SAR of USALB is lower than that of SAWA; however, this is expected given that the majority of USALB remain in the ocean for an addition year and are therefore more susceptible to natural mortality. It is also possible that after subsequent years of localization we could see additional increases in survival of the USALB stock.

The USALB stock would produce substantially more of these large B-run sized fish than that of SAWA with similar release numbers. The average SAR for Age-4 USALB is 0.392 while the average SAR for Age-4 SAWA is 0.210 (Table 3). Based on these estimates, you would need to release almost twice as many SAWA as USALB to achieve similar adult returns for age-4 fish. It is important to note the SAR of the USALB is likely biased low because the temporary weir is not capable of consistently collecting the entire run; therefore, the return estimates for USALB are likely conservative.

Literature Cited

Hansen, J. in review. Evaluation of Idaho Steelhead Harvest for Lower Snake River Compensation Plan Hatchery Programs. Project progress report August 2004 to April 2007.

USFWS Columbia Basin Hatchery Review Team

Idaho LSRCP Hatcheries Assessments and Recommendations Report – March 2011

Issue MV22: *Currently, monitoring and evaluation of the physiological effects of transport and post-release survival of steelhead in the Salmon River do not occur. Transport over a high elevation pass (>8,000 feet) and water temperature differences between the tanker truck and Salmon River release sites creates uncertainties regarding the physiological ability of released fish to survive the first 24-48 hours after release. A PIT tag program was established in 2008 to assess outmigrant survival of Magic Valley FH A and B-run steelhead to lower Granite Dam, but those studies are not designed to evaluate physiological stress and immediate post-release survival at the release sites. Also see issue and recommendation MV14.*

IDFG Response- Similar response to CW12. We have been monitoring post release survivals since 1992 via PIT tags. Over that time period, estimated survival of fish released from Magic Valley have been similar to groups released directly from the rearing facilities even though migration distance is significantly greater for the Magic Valley releases relative to the Clearwater and Dworshak releases.

The program established in 2008 is actually an expansion of the existing program that will allow the estimation of adult returns through a significant increase in the number of fish released with PIT tags.

Issue MV28: *Available data for Dworshak NFH B-run steelhead released into the Salmon River, but reared at Magic Valley FH, suggest that smolt-to-adult return rates are only 10-15% of those for "A-run" steelhead released into the Salmon River.*

IDFG Response- As outlined in the response for MV20 above, SARs for locally adapted upper Salmon River B-run releases are more comparable to those of the A-run fish. We are aware that first generation Dwor-B releases do not perform nearly as well as the upper Salmon River A-run releases. That is one of the main reasons we set out in 1998 to establish a locally adapted upper Salmon River B-run of steelhead.

Issue MV47: *The tagging of A-run steelhead reared at Magic Valley FH does not appear to be consistent among brood years. In some years, A-run steelhead are given coded wire tags (coded-wire tags) with unique codes according to release sites. In other years, they are not.*

Recommendation MV47: Assess tagging practices to assure all releases are marked to adequately assess releases to meet all management objectives. For example, apply coded-wire tags with different tag codes according to broodstock origin (e.g., Sawtooth vs. Pahsimeroi Fish Hatcheries), rearing location (e.g., Hagerman NFH vs. Magic Valley FH), and release location (e.g., Sawtooth FH weir vs. Yankee Fork). Alternatively, PIT tags would accomplish the same task if sufficient numbers of PIT tags were applied to assess adult returns, contributions to harvest, and return rates to release locations.

IDFG Response- Release of fish with CWTs are always given unique codes relative to release sites. It is true that not all release sites have fish with CWTs. Wired fish at one release site may be used to represent un-wired fish at another release site to estimate harvest contribution and survival. These represented fish will have come from the same stock and rearing facility and will be released in geographically similar locations.

USFWS Columbia Basin Hatchery Review Team

Idaho LSRCP Hatcheries Assessments and Recommendations Report – March 2011

Clearwater Fish Hatchery Staff, Idaho Department of Fish and Game¹

Summer Steelhead (B-run)

1. **Comment:** Risks paragraph states that IDFG management plan creates a conflict between harvest and recovery of natural populations. Are they sure natural spawning is not currently occurring at maximum levels.
2. **Comment:** Recommendations for current program paragraph states we should develop one or more localized broodstock in the South Fork of Clearwater. How soon do they expect this to be implemented and who will fund the operations. Currently adult returns to our adult weirs are so low that this idea is not practical. Alternative locations for this project will be cost prohibitive.
3. **Comment:** Alternative to current program paragraph states that we should rear B-run steelhead for the Little Salmon River instead of Magic Valley and Hagerman National hatcheries. What difference would this make it would still be transporting out of basin stock raised out of the basin hatchery to the same plant site. This appears to be a plain action of shuffling the buck to someone else. If it is a bad idea for Hagerman valley hatcheries to rear and plant these steelhead wouldn't to be the same bad idea for CFH to raise the fish and transport them to the same plant site?
4. **Comment:** The last statement in this paragraph again addresses the localized broodstock idea. It now specifically identifies the Red River and Crooked River facilities. We have stocked steelhead at these sites since 2001. The adult returns have been minimal and not at a level that could be reasonably used to start a localized broodstock.

Spring Chinook

5. **Comment:** Recommendations for the current program [CW35] states that we should construct shade covers for the adult ponds to provide temperature relief from warm water temperatures during the summer. This will not solve the problem. The temperature of the water coming into the intake at times exceeds 70 degrees Fahrenheit. Introducing well water is the only way to address this problem.
6. **Comment:** Alternatives to the current program paragraph states HRT recommends abandoning the harvest goal of a sport and tribal fishery and concentrate all effort on reestablishing naturally spawning Spring Chinook in the Lochsa, Selway and South Fork Clearwater Rivers. This is absolutely unreasonable and is in direct opposition to our LSRCP mitigation goals.

¹ Written comments provided in May 28, 2009 by Tom Rogers, Anadromous Fish Manager for IDFG. Note, comments were provided using track changes in the draft report. Those comments that were editorial in nature or comments that did not warrant a response were not extracted and included here.

USFWS Columbia Basin Hatchery Review Team

Idaho LSRCP Hatcheries Assessments and Recommendations Report – March 2011

McCall Fish Hatchery Staff, Idaho Department of Fish and Game²

Summer Chinook

Assessments

1. **Comment:** The 10th Bullet is not properly characterized. During the period of 1997-2004 there were no hatchery (AD-Clip) intentionally passed over the weir; only natural and supplementation. The percentages used are terming the supplementation fish as hatchery-origin and makes this confusing/ inaccurate.
2. **Comment:** The 14th Bullet is another confusing statistic used and is likely improperly characterizing the data. Is the 47% of known natural carcasses recovered based on total natural passed or is this based on all carcasses recovered that may have included natural, supplementation, and unintentionally passed reserve?
3. **Comment:** The 15th Bullet has inaccurate information in it. It lists: “An average of 31% of the fish recycled (range 25%-38%) were harvested in the fishery and an average of <1.7% (range 3% - <1%) were recaptured at the South Fork Salmon River Weir.” During this time period recaptured recycled fish have returned as high as 38%. It also does not appear that tribal harvest was included in calculations.
4. **Comment:** The 22nd and 23rd bullets are no longer current. Natural fish passed upstream of the weir will not be injected with erythromycin and only ½ of the reserve fish retained as broodstock will be injected.
5. **Comment:** The 25th Bullet continues to be inaccurate. No MS-222 is used at the SFSR Trap at any stage (trapping, holding or spawning) or at any time.

Recommendations

6. **Comment:** Regarding Recommendation ML7b: “Discontinue the recycling of McCall FH summer Chinook to control the magnitude of hatchery-origin Chinook spawning naturally (pHOS) below the weir. These fish should be removed at the weir and provided directly to the tribes or other potential user groups (e.g. food banks, community).” - The explanation forming the basis for the HRT recommendation contains inaccurate information. During the period cited, recaptured recycled Chinook at the SFSR weir has been as high as 38%. It also appears that Tribal harvest has not been included in calculations.
7. **Comment:** Regarding Recommendation ML8: “Modify spawning protocol to better describe how the males are spawned and managed and improve record keeping so that it describes the number of males used more than once, how many times the males are used and what is done with males after they are used more than twice.” - The spawning protocol at the SFSR trap has been amended (beginning with BY09) to incorporate a 1-Male to 1-Female spawning ratio in which the male will be killed following milt collection.

² Written comments provided in May 28, 2009 by Tom Rogers, Anadromous Fish Manager for IDFG. Note, comments were provided using track changes in the draft report. Those comments that were editorial in nature or comments that did not warrant a response were not extracted and included here.

USFWS Columbia Basin Hatchery Review Team

Idaho LSRCP Hatcheries Assessments and Recommendations Report – March 2011

8. **Comment:** Regarding Recommendation ML9 to terminate the erythromycin injections of adult summer Chinook passed upstream of the weir on the S.F. Salmon River. - Trapping protocols have been amended (starting with the 2009 return year) to eliminate the erythromycin injection of any natural-origin adult passed from the South Fork Salmon River Trap above the weir to spawn naturally.
9. **Comment:** Regarding Recommendation ML11: “Incubate eggs one female per tray or utilize some method of separating eggs from each female in a single tray. If BKD levels remain consistently low in the adults, reduce the number of females spawned.” - Given the limitations of incubation capacity at MCFH (maximum of 334 trays if top trays were used which isn’t a good idea; 308 trays is a more realistic maximum) and current production goals makes it impossible to incubate eggs as 1-female per tray. This could only be done by eliminating the incubation of eggs for the Shoshone-Bannock Tribe egg box program. If isolation dividers were added to incubation trays to reduce the number of BKD culls the IHOT standard of 8,000 eggs per tray would still be exceeded as the SFSR summer Chinook fecundity average is greater than 4,000 eggs/ female. Also, the example used for 2006 included both BKD high culls (71,500 eggs; 9 high BKD paired with 9 other females) and BKD Low culls (168,200 eggs from 46 females). The BKD low culls were done to reduce hatchery inventory levels to a “full production capacity” level. Due to holding space limitations and spawn timing concerns at the SFSR trap the hatchery staff does not anticipate the need for this level of BKD low culls in the future.
10. **Comment:** Regarding Recommendation ML13: “Since transportation of eggs or fish is a critical component of the program, standard operating procedures and contingency plans for transportation should be established and documented. The contingency plans should be reviewed annually with hatchery and transport staff.” - With the exception of routine smolt release, or a possible need for a fall release of marked parr, hatchery staff doesn’t anticipate any transportation of fish from station to station or transportation and release of fish off station. Routine smolt releases and potential parr release are addressed in the internal hatchery annual operation plan and the LSRCP annual operation plan for both SFSR SU and Johnson Creek SU. Routine transportation of eggs back to MCFH does not require any contingency plan. It is assumed that the Review Team must be describing the need for some fish movement plan in the event of some catastrophic failure. If so, no plan is in place and realistically would not be meaningful as such a catastrophic failure would not allow time to gather sufficient resources to provide for the large-scale transportation of fish or eggs off-station. If such a plan is deemed necessary it would be beyond the scope of the MCFH staff to develop.
11. **Comment:** Regarding Recommendation ML15: “Discontinue unguided visitor access through the nursery building and improve security in the building so that the risk of loss due to negligence, curiosity, vandalism, or disease transmission is reduced.” - It is beyond the scope of hatchery personnel to determine what level of risk should be considered acceptable. Currently, the facility is rather open to individuals but if directed the indoor rearing space could be locked down to prevent any unescorted visitor access. This action would eliminate all early rearing portions of the current self-guided tour. Design of the facility is such that no viewing windows looking into the early rearing space could be installed to allow visitors to observe fish rearing from a controlled location.
12. **Comment:** Regarding Recommendation ML18: “Repair the roof. During the winter and early spring, large accumulations of snow and ice hang through the openings in the metal roof

USFWS Columbia Basin Hatchery Review Team

Idaho LSRCP Hatcheries Assessments and Recommendations Report – March 2011

of the rearing ponds. This has the potential to breakaway without warning which could injure employees working within the pond below.” - MCFH staff does not concur with the HRT recommendation. Typically hatchery staff would not be in the ponds when ice/ snow chunks may break off and fall into the ponds during the spring snow melt. However, if it did become necessary operations could minimize any risk by only working in the ponds in the morning prior to thawing conditions when ice chunks would fall into the ponds below. Compared to inherent risks of personnel working in a climate, that lends itself to icy conditions on hatchery grounds, throughout the winter months this issue is of lesser significance. Fish health is not the issue for the hatcheries desire to maintain openings in the roof over the ponds. Salmon being reared in the outdoor ponds benefit by the current configuration of having some of the overhead panels being removed. This provides needed shade (primarily due to the use of concrete pond bottoms) while still allowing for more natural light (photoperiod) to penetrate into the rearing containers than would occur if the openings were covered back up. This extra light benefits the development of the fish.

- 13. Comment:** Regarding Recommendation ML20: “Ensure that the tagging strategy accurately represents the entire population of progeny from all spawn groups for a particular brood year. All spawn groups should be proportionately represented among tag groups and raceways. Coded-wire and PIT tagged fish may not accurately represent each release group from McCall FH at the present time. Currently, 250,000 fish in 1 of 2 raceways of summer Chinook are coded-wire tagged and 52,000 fish in one of 2 raceways are PIT tagged.” - Although it may be possible to develop a strategy for “proportionate Lot representation” for the AD/CWT it would create additional fish rearing issues that likely would offset any advantaged gained. Specifically it would require mixing multiple Lots beyond what is currently done which will lead to greater size variation among the fish that will likely be carried over through the smolt stage. Also it is likely that either an extra mark event would have to be created for these fish or marking at the second event (going into Pond 2) would have to be delayed for a greater period of time which is also going to be impacting final fish size at release (fish grow better in the ponds as compared to indoor raceways). -- Given the current hatchery configuration it would be impossible to provide actual proportionate Lot representation for PIT fish. It would be possible to allow for the opportunity for selection based on proportionality of Lots, but would also create additional rearing issues such as described above. Also, the representation of fish once reared in the ponds could not be totally achieved without exposing significant numbers of fish to additional stress and handling (i.e.; taking fish from both Ponds for PIT tagging) for sorting out which mark types to be tagged. It may be possible to PIT tag some of the fish from Pond 1 into Pond 2 without creating additional sorting/ handling issues but in reality would only reflect rearing conditions for the last 2-months of final rearing and does not seem to be meaningful. -- The current mark program at MCFH was developed, and has been in place for many years, to reduce handling of salmon parr (i.e.; not having to sort out salmon parr containing a coded-wire-tag from pond populations during PIT tagging operations). -- Procedurally, all but the last 1 or 2 “Lot(s)” of a given brood year are represented with coded-wire-tags; end Lot(s) are not of sufficient size to allow for CWT insertion but rearing space constraints necessitate the timing of mark application. -- Indoor rearing space availability and critical fish marking size limitations are such to preclude marking all of the summer Chinook juveniles at one time; but rather two marking events are scheduled to fill the outdoor ponds. -- Prior to ponding, for initial indoor rearing, individual trays of fry are identified as to what mark they will receive (AD-only or AD/ CWT) and which pond they will be marked into (Pond 1 or Pond 2). This is done to determine loading rates of each indoor rearing vat as well as to ensure as many “Lots”, as feasible, are divided between both rearing ponds. Pond 1 is initially marked with AD-clip only parr and are at a size that disallows the use of MATS

USFWS Columbia Basin Hatchery Review Team

Idaho LSRCP Hatcheries Assessments and Recommendations Report – March 2011

trailers (i.e. fish are hand-clipped). In doing so, indoor rearing space becomes available and the remaining fish indoors are “split” into the newly emptied early rearing vats to reduce rearing densities and to allow for continued growth. A second marking event is scheduled approximately 1 to 1 ½ months later during which parr are marked using the MATS trailer as either AD/CWT or AD only into Pond 2. Several months later marking personnel return to MCFH to insert PIT tags into a portion of the parr being reared. Salmon reared in Pond 1 are used for this as it is an AD-only sub-population and does not require additional sorting/handling of fish that may contain a CWT. -- This methodology has proven to be an effective way of utilizing rearing space at MCFH in an efficient manner and does reasonably divide fry from spawn takes between the two final rearing ponds. Some variation in mean final release size between ponds may periodical occur, brood year to brood year, but hatchery feeding protocols (rates fed) are adjusted to lessen the variation between ponds.

- 14. Comment:** Regarding Recommendation ML24: “Properly disinfect the traps and other equipment prior to using them in other river systems. Rotary smolt traps are transferred among different river systems without disinfection. This could lead to disease or aquatic nuisance species transfer among river systems.” -- The HRT is inaccurate and this issue should be deleted. MCFH does not store, maintain or operate any rotary smolt traps making the HRT Issue and Recommendation moot.

Native Fish Society

Memorandum

10-26-09

TO: Don Campton, USFWS

FR: Bill Bakke

RE: Comments on draft LSRCP Idaho Hatchery Review

Clearwater R. B-Run Steelhead

The Native Fish Society supports the recommendation of alternatives 1 and 4 which would terminate outplanting of Dworshak Hatchery steelhead stock (B-run) into Lolo Creek and the upper South Fork Clearwater River. This would also terminate the transfer of eggs to southern Idaho hatcheries for inter-basin stock transfers into the upper Salmon River.

Since Lolo Creek and the Lochsa River steelhead are non-viable populations of wild native steelhead determined by the Interior Columbia Technical Review Team, terminating these hatchery stock transfers is biologically sound and necessary in order to recover ESA-listed steelhead. It is disappointing that Idaho Fish and Game has not come to this conclusion long ago, given what is known about the impact of hatchery fish on locally adapted native, wild steelhead. This information has been available since Willis Rich's work in 1938 and confirmed by Reisenbichler and McIntyre 1978, Araki 2007, 2008 and comments from Dr. Blouin regarding the native broodstock work on Hood River steelhead.

We support termination rather than some form of stock transfer reduction into these streams. A reduction is not an adequate protective measure for these steelhead populations and does not support recovery of what are now non-viable populations protected under the federal Endangered Species Act.

We disagree with the decision to continue transfers of Dworshak Hatchery steelhead into the Little Salmon River regardless of the conditions stated by the team that there would be limited impact on wild steelhead. This overlooks the potential for straying into other natural production areas and it perpetuates the continuation of inter-basin stock transfers.

We support the development of a local hatchery broodstock for the SF Clearwater River, Crooked River and Red River facilities because it would be a major improvement over transferring hatchery steelhead into these areas. It would potentially improve survival, performance and contribution of these steelhead over what exists today. It would also potentially contribute to improved natural spawning success. The goal of this program should be to re-establish a viable naturally produced population of steelhead. The development of a

USFWS Columbia Basin Hatchery Review Team

Idaho LSRCP Hatcheries Assessments and Recommendations Report – March 2011

local hatchery stock may help in achieving this goal. Our concern with this recommendation is that it requires a date certain for making this shift in artificial production. At this time the team has not supplied a time line and process for making this change happen in a timely manner.

Magic Valley Fish Hatchery B-Run Steelhead:

The Native Fish Society agrees with the recommendations for terminating the Upper Salmon River B-Run steelhead program.

We also agree with termination of Dworshak Hatchery B-run steelhead releases into the EF Salmon River. Your reasoning for terminating this program is scientifically sound and would contribute to the recovery of the local steelhead population.

We also agree with termination of the Upper Salmon River B-run hatchery program as well as the EF Salmon River and Squaw Creek releases for the reasons provided.

We do not support continued release of Dworshak Hatchery B-run steelhead into the Little Salmon River. It is not enough to allow this program to continue without specific scientific evaluation of its impact on wild steelhead. It is unacceptable for the team to say it “accepts the current management rationale that this release does not pose a risk to natural steelhead populations.” Straying of non-native hatchery fish is a potential problem and natural spawning may take place in the Little Salmon River and other streams. The only way to determine these potential impacts is to conduct the appropriate studies to evaluate the risk of this program. A risk assessment based on an inventory of stray steelhead is required before approving continued release of Dworshak B-run hatchery steelhead into the Little Salmon River.

Magic Valley Fish Hatchery A-Run Steelhead:

The Native Fish Society supports Alternative 2 that would establish a native broodstock hatchery program in the Salmon River. An integrated hatchery program may improve survival and contribution to the fishery as well as mitigate impacts of hatchery fish in the Salmon basin as well as in other streams where these fish stray such as the Deschutes River. This should be the preferred alternative that moves this program in the short term rather than the long term.

East Fork Salmon River “Natural” Steelhead:

We support implementation of Alternative 3 that would expand the EF Salmon so-called “naturals” program. This would replace the inappropriate release of non native Dworshak B-run steelhead and improve the hatchery program for all the reasons noted in your recommendation. Implementation of Alternative 3 should be moved from the “go slow” track to the “get it done now” track.

USFWS Columbia Basin Hatchery Review Team

Idaho LSRCP Hatcheries Assessments and Recommendations Report – March 2011

Conclusions:

By focusing on hatchery impacts to wild salmonids, the team of scientists have made an important contribution for the improvement of existing hatchery programs. Even though there is unfortunate “go slow” slippage in some recommendations, the overall direction appears to be sound.

Since none of the wild steelhead populations in the Clearwater and Salmon basins are viable based on work done by the ICRTTRT, and these populations are listed as protected species under the ESA, there should be some urgency created to reform hatcheries so they have less impact on wild populations. It is our recommendation that these programs be re-evaluated in the next five years to determine whether the recommendations were actually implemented. In the meantime a hatchery risk assessment, built upon your review, should be completed for each hatchery program.

At some point an evaluation of wild native steelhead in the Clearwater and Salmon basins should be completed to fully describe the management situation in these basins and the best way to resolve problems that may be impeding recovery of viable wild steelhead. We spend a lot of time and money looking at the hatchery programs, and many have been done, but wild salmonids have not received the same attention. Each wild population should be evaluated and recommendations for their recovery agreed to by the management parties. Of course the work already completed on the hatchery programs and the work of the ICRTTRT would make a large and important contribution to such a wild salmonid evaluation. For each population there needs to be a management plan with biological objectives. These would be evaluated and updated on a regular basis.

In addition to the hatchery reform, the review should capture the larger picture of these hatcheries and their role in harvest, cost of production, stray rates, marking for identification, etc. so that the impact of these hatcheries throughout the Columbia Basin is understood better than it is now. Releasing unmarked steelhead is difficult to justify, but heroic efforts have been made even though they are contributing to management problems on a broader scale than just the Snake Basin streams. It is not enough to confine the review of these hatcheries to a particular stream because not all of the issues related to a hatchery program can be identified and solved.

Hatchery production is mitigation for dams. An important part of their evaluation includes the cost to produce a fish that is caught in the fisheries being mitigated. Since these hatchery fish are paid for with public funds, a cost effectiveness assessment is an integral part of any evaluation. The U.S. Fish and Wildlife Service and its partners in this hatchery review should either fund an economic study of the mitigation hatchery program or request that the Independent Economic Advisory Board complete its proposed economic evaluation of all Columbia River hatchery programs.

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For Columbia River Basin Hatchery Review Information
www.fws.gov/pacific/Fisheries/Hatcheryreview/

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March 2011

