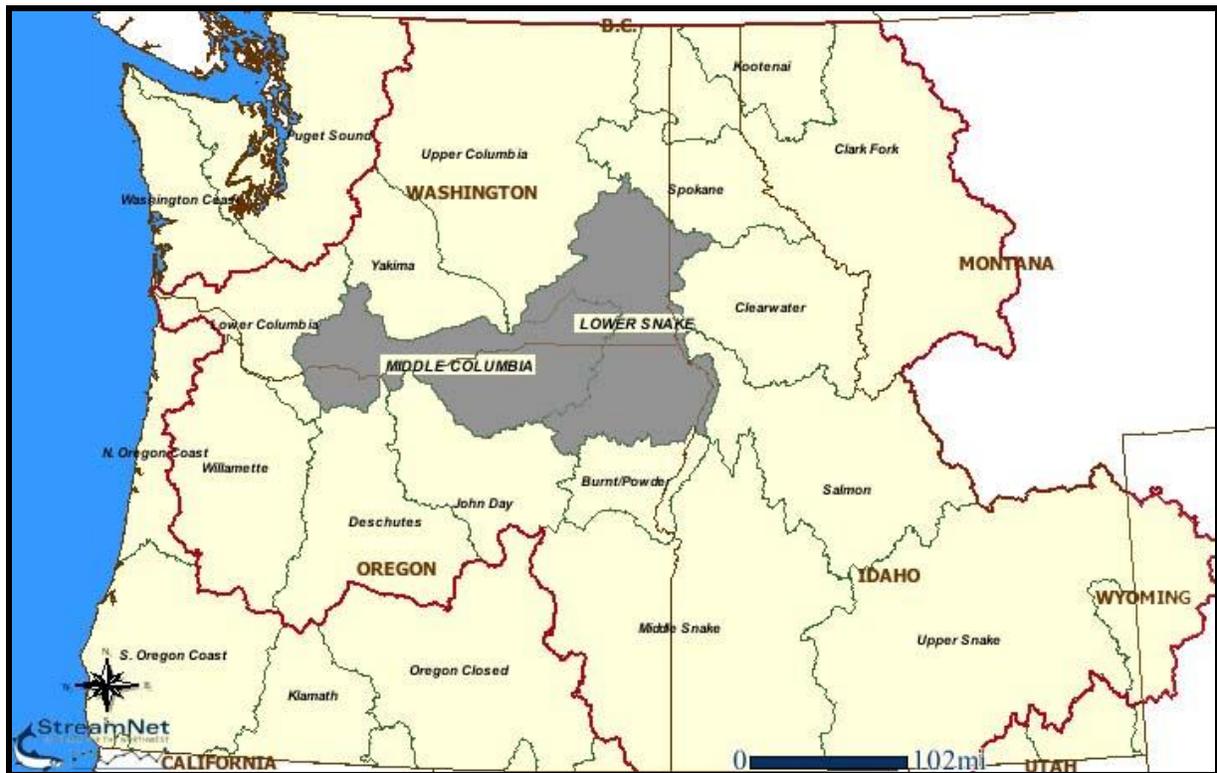




**U.S. Fish and Wildlife Service - Pacific Region
Columbia River Basin Hatchery Review Team**

Lower Snake and Middle Columbia Regions

***Lower Snake Mainstem, Grande Ronde, Tucannon, Touchet, and
Walla Walla River Watersheds***



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

Lyons Ferry and Tucannon Fish Hatcheries

**Assessments and Recommendations
Final Report, Appendix C:**

Comments on Draft Report and Review Team Responses

March 2011

USFWS Columbia Basin Hatchery Review Team

Washington LSRCP Hatcheries Assessments and Recommendations Report – March 2011

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Appendix C: Comments on Draft Report and Review Team Responses

Appendix C presents the Team’s responses to comments provided by cooperators and the general public. Only comments that required responses from the Review Team are listed in this section. Comments concurring with the Team’s recommendations and those addressing information errors in the report are not shown here. Please see Appendix D for the complete text of comments provided to the Review Team.

Co-Manager Comments and Responses

Confederated Tribes of the Umatilla Indian Reservation (CTUIR)¹

CTUIR provided informal and editorial comments to the Hatchery Review Team throughout the course of the review. The report has been edited based upon the comments received. The comments listed below are those that the Team believed required responses.

Lyons Ferry Fall Chinook

1. **Comment:** Recommendation LF-FC1 states, “Establish natural spawning escapement goals the Clearwater River and the stretch between Lewiston and Hells Canyon reach of the Snake River upstream from Lewiston, Idaho. Correlate the number of fish released from each remote acclimation facility with the natural spawning escapement goals for each of those stream reaches and/or regions. Consider establishing a sliding scale that would reduce the number of fish released at each particular release site as a function of the number of naturally spawning adults within each of those regions.”

I’m not sure I completely understand this recommendation. Establishing release numbers based on natural adult goals for specific areas within the basin is feasible and actually has been identified for some areas (such as the Clearwater through the NPTH Hatchery Master Plan). However, the sliding scale portion of the recommendation makes it sound like numbers would be adjusted annually which would be nearly impossible from a logistical/planning standpoint, especially considering the yearling portion of program. I would assume that any sliding scale would also provide for increased smolt releases as part of the same naturally spawning adult function.

Review Team Response: *The Team has edited the report to address this comment.*

¹ Written comments provided October 19, 2009 by Brian Zimmerman, O & M Project Leader, CTUIR.

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- 2. Comment:** Recommendation LF-FC4a states, “Broodstock management should focus on collecting broodstock at a rate that does not exceed 20% of the natural-origin spawning population and allow the pNOB value to vary among broodyears depending upon the abundance of natural-origin adults available for broodstock.”

This is the current management strategy for the program as you identify in the issue statement. I’m not sure I understand how the recommendation is different than what is currently occurring.

Review Team Response: *The Team has edited the report to address this comment.*

- 3. Comment:** Recommendation LF-FC4b states, “The Review Team supports comanager efforts to achieve a pNOB value = 30%, which is expected to reduce domestication risks, by trapping natural-origin fall Chinook adults at Lower Granite Dam. The likelihood of achieving this target could be increased by improving the broodstock collection and sorting capabilities at Lower Granite Dam (issue/recommendation #).”

This recommendation appears to be in direct conflict with later recommendations regarding collection of brood from localized areas and not collecting broodstock at Lower Granite.

Review Team Response: *The Team has edited the report to address this comment.*

- 4. Comment:** Recommendation LF-FC5 states, “Mark or tag all hatchery-origin fish in some manner so that they can be distinguished from natural-origin fish during broodstock collection. Consider using a marking method or methods which can be distinguished while the fish are alive to allow monitoring and sorting for passage to natural spawning areas as well as broodstock collection (see recommendation LF-FC14 regarding improvements to the Lower Granite trap).”

This recommendation appears specific to management at Lower Granite which does not match the later recommendations to collect brood from localized areas. If fish are not being managed at Lower Granite, I do not see the value in using a distinguishable mark for passage sorting. Are you suggesting that fish should be handled at Lower Granite and again at upriver stations?

Review Team Response: *Broodstock collection upstream does not preclude the identification and management of hatchery-origin fall Chinook at Lower Granite Dam. Once component of the Team’s recommended alternative is to continue a Lyons Ferry FH on-station release with broodstock collection occurring at Lower Granite Dam. Marks are also required to manage the proportion of hatchery-origin fall Chinook passed above Lower Granite, for harvest, conservation, and potential broodstock collection upstream in the Clearwater River and the Hells Canyon reach of the Snake River. The Team has edited the report to address this comment.*

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5. **Comment:** Recommendation LF-FC6 states, "... Consider chilling eggs to equal out temperature units among egg takes and ultimately reduce size variability at the time of marking and tagging."

Currently, there are propagation difficulties at Lyons Ferry with getting subyearlings to size. Chilling eggs would exaggerate this problem.

Review Team Response: *The Team has edited the report to address this comment.*

6. **Comment:** Recommendation LF-FC7 states, "Explore opportunities for recapturing adult fall Chinook at Nez Perce Tribal Hatchery and Oxbow FH for developing local broodstocks for the Clearwater River and the Hells Canyon reach of the Snake River, respectively. Continue to maintain an integrated program utilizing adult returns to Lyons Ferry Hatchery and Lower Granite Dam for release of juveniles at Lyons Ferry FH to help meet LSRCP mitigation goals and harvest goals for the lower Snake River, to serve as a genetic reserve for Snake River fall Chinook, and to provide a source of fish for developing two localized stocks for the Clearwater River and the Hells Canyon reach of the Snake River, respectively. In particular, the Nez Perce Tribal Hatchery may be the appropriate place for developing an "early-run" fall Chinook population for the Clearwater River. Developing such a population is a long-term goal of the Nez Perce Tribe.

- A. How would you suggest following your previous recommendation for inclusion of natural fish at a 30% rate from hatchery facilities where natural origin adults are unlikely to be captured?
- B. Also, are you recommending that the "early run" program being developed in the upper Clearwater be the only program for the entire subbasin and that the NPTH/mainstem program be discontinued?

Review Team Response: *A) The Team supports the inclusion of natural-origin fish at a rate of 30% for the Lyons Ferry FH on-station release portion of the proposed program. B) No. This is a decision that the comanagers should determine.*

7. **Comment:** Recommendation LF-FC8 states, "As the number of natural-origin adult recruits increases over time, the number of hatchery-origin fish spawning naturally should decrease to allow the establishment of viable, self-sustaining naturally spawning populations. Ultimately, this might require the development of a sliding scale for the number of hatchery-origin fish allowed to pass upstream of Lower Granite Dam. Modifications to the Lower Granite Dam collection and sorting facility (see recommendation LF-FC14) and/or improvements to mainstem collection sites downstream of Lower Granite (e.g. Ice Harbor) may be required to achieve this objective."

Ice Harbor was used for CHF trapping historically but was discontinued due to large numbers of out of basin CHF "nosing" into the lower Snake and being captured which artificially created the concern with Umatilla "strays". Since trapping was discontinued at Ice Harbor, straying concerns have significantly declined. While moving downstream to LoMo would

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allow for trapping the entire Snake River CHF population (including Tucannon and LFH), the further downriver you go the more logistical complexities arise with handling larger numbers of fish and additional groups.

Review Team Response: *The Team has edited the report to address this comment.*

- 8. Comment:** Recommendation LF-FC10 states, “Discontinue backfilling other fall Chinook programs. If backfilling does occur, ensure that Lyons Ferry FH fall Chinook are differentially marked so that they are not included in the backfilled program’s broodstock.”

Some clarity is needed here. What are you defining as “other” CHF programs? If you mean out of basin programs (i.e. Klickitat) then this recommendation would be more appropriate for those programs rather than Lyons Ferry. If you mean IPC or NPTH then this recommendation takes on a whole different scope/meaning.

Review Team Response: *The Team has edited the report to address this comment.*

- 9. Comment:** Regarding Recommendation LF-FC13, to “Assess the overall benefits and risks of releasing a proportion of each brood year as yearlings versus releasing all fish as subyearlings...” What are the risks you perceive with yearling releases? Why would you recommend discontinuing yearling releases if there is a perceived difference in life histories between the Clearwater and Snake? To be consistent with your recommendation of assessing life histories, I would think the recommendation would be more along the lines of prioritizing yearling releases in the Clearwater and subs in the mainstem Snake rather than just discontinuing yearlings completely.

Review Team Response: *The risks are described in the issue statement. The Team has edited the report to address this comment.*

- 10. Comment:** Regarding Issue LF-FC14, “The sorting facility at Lower Granite Dam is inadequate as a broodstock collection site for the fall Chinook program.” The issue your recommendation is based on identifies facility inadequacies for broodstock collection. Once again, this would be inconsistent with previous recommendations not to collect brood at Lower Granite. The recommendation itself appears more focused on upgrading the facilities for weir management.

Review Team Response: *The Team has edited the report to address this comment.*

In regards to the Recommended Alternative for Lyons Ferry Fall Chinook:

- 11. a. Comment:** I’m not sure the recommended alternative to develop an early stock program is any different than what is currently being implemented. In addition, I’m not sure how you

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would implement #4 above from a logistical standpoint and still follow your recommendations.

Review Team Response: *Based upon this and your previous comments, the Team clarified several of the current program issues and recommendations.*

11b. Comment: My understanding from the ICTRT is that the statement regarding the need to include one of the two extinct populations is incorrect. One highly viable population would meet recovery criteria.

Review Team Response: *According to the January 8, 2007 ICTRT memo “Role of large extirpated areas in recovery”, the Snake River fall Chinook population cannot achieve the minimum viability criteria without multiple viable populations (nufsc.noaa.gov/trt/trt_documents/).*

Tucannon River Spring Chinook

12. Comment: Regarding recommendation TR-SC3, “Historical information suggests that the natural population has been below an R/S of 1.0 for an extended period. Discontinuing HOR releases above the weir could dramatically reduce the opportunity for Tribal fisheries in the basin.”

Review Team Response: *The Team considered those issues. The Team believes that the recommendations address both conservation and harvest benefits while addressing biological risks. Please see the Review Team’s response to the recommended alternative comment below for additional detail.*

13. Comment: Issue TR-SC9 identifies Rainbow Lake as a production water source and TR-SC10 identifies it as an emergency source. Probably should clarify.

Review Team Response: *The Team has corrected the report.*

14. Comment: Issue TR-SC13a has to do with poor smolt productivity for natural-origin spring Chinook in the Tucannon River but references a WDFW size-at-release study in the issue statement. I do not understand how a hatchery size-at-release study could have any bearing on limitations for natural origin smolt productivity.

Review Team Response: *The Team has edited the report to address this comment.*

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- 15. Comment:** Recommendation TR-SC12 states, “Test for parasites, including *N. salmonis*, *C. shasta* and other myxosporideans, in Tucannon Hatchery juveniles (rainbow trout and acclimated steelhead, spring Chinook) and adults returning to the Tucannon River. Consider rearing spring Chinook from egg through smolt stage exclusively on Tucannon River water as a means to test for endemic parasites that may be infecting Tucannon River natural-origin fish. Alternatively, a net pen of Chinook salmon fry in Curl or Rainbow Lakes could serve as sentinel fish for monitoring of parasites. If fish parasites are found in the Tucannon River,, consider managing spring Chinook in the Tucannon River to enhance innate resistance to endemic parasites. This could include collecting natural-origin adults and rearing their progeny at Tucannon Hatchery on river water with some potential to significant mortality during the development of resistant offspring.

This recommendation to expose production to potentially significant health risks appears to be in direct contrast to previous recommendations to do exactly the opposite and limit health risk exposure.

Review Team Response: *The Team simplified the issue and recommendation.*

- 16. Comment:** Recommendation TR-SC13 states, “Spring Chinook observed at the Lyons Ferry outfall should be collected to determine their origin. Spring Chinook identified as Tucannon spring Chinook could be used as last-resort “backfills” to make-up for broodstock shortages resulting from the trapping of spring Chinook in the Tucannon River. However, the collection of broodstock anywhere other than the Tucannon River should be considered a “last resort” and generally discouraged.”

This recommendation needs to be clarified. First it states that fish should be collected at LFH and then later says it should only be a “last resort” and “discouraged”?

Review Team Response: *The Team clarified the recommendation.*

- 17. Comment:** Regarding recommendation TR-SC14, to “Conduct a pedigree analysis to determine and compare the reproductive success of hatchery and natural-origin Tucannon spring Chinook passed upstream of the weir.” This recommendation seems to be in direct conflict with your earlier recommendation to completely eliminate HOR releases above the weir?

Review Team Response: *Whether to pass hatchery-origin fish upstream is to be determined by the comanagers. The Team has clarified the issue and recommendation.*

- 18. Comment:** Recommendation TR-SC16, to “Continue to investigate the degree of homing and straying and the potential causes...” should include analysis of where they are straying to.

Review Team Response: *The Team agrees.*

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In regards to the Recommended Alternative for Tucannon River Spring Chinook:

19. A) Comment: The HRT seems to have discounted the fact that establishing a weir in the lower Tucannon precludes access and lowers opportunity for sport harvest and essentially eliminates Tribal harvest in the Tucannon. As a result there are limited or no harvest benefits. Your following recommendations to discontinue passage of HORs above the weir will result in limited or no conservation benefit. No harvest benefit + no conservation benefit = no “stepping stone” program.

B) Comment: As stated previously, if you are recommending not allowing passage of “conservation” group fish there is essentially no conservation benefit. Why would you mine natural adults for brood with no proposed conservation use?

Review Team Response: *A) The Team is recommending an alternative to the current program that could provide harvest and conservation benefits while reducing biological risks. This can be achieved by shifting the harvest benefits on hatchery fish downstream of the natural spawning area (below the proposed weir). The Team understands that this reduces harvest opportunity upstream of the weir. B) The integrated component serves a conservation benefit (as a genetic repository and demographic buffer) independent of natural spawning escapement. The issues and recommendations for the current program were modified and may help clarify this.*

C) Comment: The Review Team states, “...For example, if the Team’s recommended alternative was chosen, then gametes collected from the integrated component in excess to the conservation objectives in the Tucannon River (harvest component)...” This statement is unclear to me. I don’t see where the reference to the harvest component has any bearing on the rest of the statement. Is the parenthetical description a typo? Also, I’m not sure why the Astin reintroduction would have any negative effect on harvest in the Tucannon. Based on your recommendations, there would be no hatchery fish released above the weir (and no harvest above that point) so any hatchery fish arriving at the weir would theoretically be excess and available to use for Astin. Also, why not start the Astin program using surplus “harvest” group adults for brood rather than “conservation” adults.

Review Team Response: *The Team has edited the report.*

Lyons Ferry Hatchery Summer Steelhead

20. Comment: Regarding recommendation LF-SS2, to “Continue to spawn two males with every female, but subdivide the eggs of each female in approximately equal proportions and fertilize each subgroup separately with a different male...” How about spawning at a 1:1 ratio and using a second male as a “back-up”?

Review Team Response: *Your proposed method reduces the number of males spawned by 50%.*

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- 21. Comment:** I'm not sure that the statement under issue LF-SS4 about the weir being located below the spawning grounds is an accurate assessment.

Review Team Response: *The report has been edited based on this comment.*

- 22. Comment:** I'm assuming that the statement under issue LF-SS5 about being under the 5% threshold must be based solely on Nursery Bridge data. I don't think there is any data on mainstem or mainstem trib spawning composition.

Review Team Response: *Yes, this is based upon Nursery Bridge data. The issue now references this.*

- 23. Comment:** Regarding issue/recommendation LF-SS7, it doesn't appear that cold water disease has had a big enough impact on production based on release data to recommend reducing production levels.

Review Team Response: *See the description in Issue LF-SS8 regarding cold water disease. Also, the Team has suggested several options for reducing rearing densities, which is the focus of this issue and recommendation.*

- 24. Comment:** Issue and recommendation LF-SS10 state, issue "...Crowding, loading and transport is stressful to fish and may affect post-release survival.... Recommendation LF-SS10: Assess the level of stress and oxygen content in the water in the raceways and lakes during crowding and loading and assess post release survival 24 to 48 hours after release to ensure that there are no issues..." This has been the SOP at LFH for years and they keep cutting back production due to high SARs. How big a problem can it be?

Review Team Response: *This is a general issue and recommendation which the Team believe constitutes a best management practice.*

- 25. Comment:** The Tribe would like to see the potential for initiating an endemic mainstem Walla Walla summer steelhead program identified somewhere in your recommendations/alternatives especially since it is identified in the Accords project list.

Review Team Response: *This option has been added to the report in the text of Lyons Ferry Hatchery Steelhead alternative 2 as it reflects a management consideration by the comanagers.*

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In regards to the Recommended Alternative for Lyons Ferry Fall Chinook

26. Comment: Your long term recommendation does not acknowledge recent management history. This is exactly the same scenario that everyone went to court over in the 90's only with spring Chinook. In that case, Rapid River stock, an indigenous Snake River spring Chinook stock, replaced the non-endemic Carson stock at Lookingglass Hatchery. Soon after the change however, it was perceived that Rapid River stock also was unsuitable because, while indigenous to the Snake, was not endemic to the Grande Ronde Basin. This recommendation appears to be headed down that same exact path.

Review Team Response: The Team has clarified our description of alternative 3 and the recommended alternative.

Cottonwood Creek Hatchery Summer Steelhead (Wallowa Stock)

27. Comment: In recommendation WA-SS2 you appear to recommend that the broodstock for this program should not be Wallowa. Since they are both "out of basin" stocks why not recommend converting to Lyons Ferry FH steelhead and reducing the propagation impacts at Lyons Ferry FH that you've identified? Also, Lyons Ferry steelhead do not appear to have the lower river straying issues either.

Review Team Response: This was a miscommunication. The Team clarified the report based upon this comment.

28. Comment: An Alternative under consideration by the co-managers is to replace the Wallowa stock used for this program with the Lyons Ferry steelhead stock.

Review Team Response: The alternative was added to the report since it reflects a management consideration by the comanagers.

Touchet River Summer Steelhead

29. Comment: Issue TT-SS1 states, "The Review Team understands that the short-term goal of the program is to "evaluate the capability of developing an endemic Touchet River hatchery stock that can replace the Lyons Ferry stock for meeting harvest mitigation goals while, at the same time, reducing genetic and demographic risks to the natural population of steelhead in the Touchet River." The Team further understands that the purpose of the endemic broodstock program is NOT, at the present time, to restore or rebuild the naturally spawning population in the upper Touchet River via natural spawning supplementation by hatchery-origin fish. This

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latter goal could be a FUTURE purpose of the program but only if the CURRENT research goal of the program is first achieved and the capability to expand the program demonstrated.”

The CTUIR disagrees with the highlighted statement. This is the WDFW perspective. The CTUIR’s position is that it is for supplementation.

Review Team Response: *The Review Team clarified the issue and added references, including citing supplementation as an intent of the program under US v Oregon. Please also refer to the Team’s response to your comment about our recommended alternative, below.*

- 30. Comment:** Recommendation TT-SS2, states “Collect steelhead for broodstock from the entire spectrum of the run.” Why wouldn’t this recommendation be expanded to include the late portion of the spawning spectrum into a 2 year smolt program?

Review Team Response: *The Team has edited the report based upon this comment.*

- 31. Comment:** Recommendation TT-SS7 states, “Discontinue outplanting fry. If the program size is increased, consider sampling the fry for viruses and retain and rear the group to smolt-stage only if they are IHN virus negative.” I don’t understand the second part of this recommendation. If the program size is increased the fish would all be programmed as smolts and there would be no “surplus” to outplant as fry.

Review Team Response: *The Review Team has clarified the recommendation.*

- 32. Comment:** Regarding issue TT-SS9 that states, “...steelhead of smaller size at release may increase the potential for those steelhead to residualize...” I thought most current data suggested just the opposite – that large fish had a higher tendency to residualize.

Review Team Response: *Data used to develop NOAA release criteria for steelhead suggests that steelhead smaller than 180mm and larger than 250mm tend to residualize.*

- 33. Comment:** Issue TT-SS12 states, “Touchet steelhead have a high degree of straying upstream of Ice Harbor dam...Current hatchery practices may be contributing to these stray rates, including the practice of rearing the fish to smolt stage at Lyons Ferry FH, then transporting them and direct stream releasing them in the Touchet River, posing genetic and ecological risks to other steelhead stocks.” I disagree with this assessment. Almost every single west slope Blue Mountain stream has flow issues in the fall when STS first arrive in the tributary areas which does not allow for entry and leads to straying. Straying has been identified as an issue with hatchery and wild Tucannon fish, WW, Touchet, and even wild John Day fish. If wild fish are straying at similar or higher rates how can you attribute it to hatchery practices? All these types of recommendations do is provide ammunition to further advance anti-

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hatchery agendas when in all likelihood it has nothing at all to do with hatchery practices and everything to do with Mother Nature.

Review Team Response: *The Review Team has clarified the recommendation.*

In regards to the Recommended Alternative for Touchet River Summer Steelhead

- 34. Comment:** Why would you suggest implementing a “stepping stone” alternative when there is no conservation benefit? It makes no sense to implement this type of program when you are trying to manage for a PHOS of 0.0. In addition, there needs to be an acknowledgement that implementing “stepping stone” programs will increase the logistical problems/issues with rearing containers and space at the facility by increasing the # groups or programs that need to be propagated.

Review Team Response: *It was the Review Team’s understanding that the program was developed to determine the feasibility of establishing an endemic broodstock for harvest. We recognize based upon US v. Oregon that the program has evolved into a supplementation/broodstock evaluation program with hatchery-origin fish passed upstream. Based upon current abundance and productivity of the Touchet River steelhead population, the need for a supplementation program is unclear.*

The Team’s recommended alternative is consistent with the need for both developing an endemic broodstock harvest program (harvest component) and providing near-term conservation benefits (integrated component, and the removal of the non-endemic Lyons Ferry stock). The integrated component acts as a genetic repository and demographic buffer, independent of natural spawning escapement. Over the long-term, if the need for a supplementation program develops (i.e. demographic risks to the natural population outweigh the genetic risks), the integrated component could be used for such a purpose. The Review Team clarified recommendation TR-SS1 and the recommended alternative for the program.

Tucannon River Summer Steelhead

- 35. Comment:** Recommendation TR-SS4 states, “Collect steelhead for broodstock from the entire spectrum of the run.” Why wouldn’t this recommendation be expanded to include the late portion of the spawning spectrum into a 2 year smolt program?

Review Team Response: *The Review Team agrees. The report has been modified.*

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- 36. Comment:** Recommendation TR-SS5 states, discontinue passing hatchery-origin steelhead upstream to spawn naturally. Upstream of what, the hatchery weir? Most STS spawning in the Tucannon occurs below the hatchery weir.

Review Team Response: *The Team is referring to both the existing weirs and the proposed new permanent weir to be located downstream of the natural spawning area. The Team has clarified the recommendation in the report.*

- 37. Comment:** Recommendation TR-SS8 states, “Discontinue outplanting fry. If the program size is increased, consider sampling the fry for viruses and retain and rear the group to smolt-stage only if they are IHN virus negative.” I don’t understand the second part of this recommendation. If the program size is increased the fish would all be programmed as smolts and there would be no “surplus” to outplant as fry.

Review Team Response: *The Review Team has clarified the recommendation.*

In regards to the Recommended Alternative for Tucannon River Summer Steelhead

- 38. Comment:** The recommendation doesn’t accomplish either of these goals. To reiterate my spring Chinook comments, A) the HRT seems to have discounted the fact that establishing a weir in the lower Tucannon precludes access and lowers opportunity for sport harvest and essentially eliminates Tribal harvest in the Tucannon. As a result there are limited or no harvest benefits. B) Your recommendations to manage for a PHOS of 0.0 above the weir will also result in limited or no conservation benefit. No harvest benefit + no conservation benefit = no “stepping stone” program. Why would anyone suggest this type of program with all its associated logistical difficulties with no discernable benefits? Seems like the perfect location to recommend a segregated hatchery program.

Review Team Response: *The Team is recommending an alternative to the current program that could provide harvest and conservation benefits while reducing biological risks. A) This can be achieved by shifting the harvest benefits on hatchery fish downstream of the natural spawning area (below the proposed weir). The Team understands that this reduces harvest opportunity upstream of the weir. B) The integrated component serves a conservation benefit as a genetic repository and demographic buffer) independent of natural spawning escapement. The issues and recommendations for the current program were modified and may help clarify this.*

- 39. Comment:** How would implementing this strategy at the existing weir accomplish any of your goals when the existing weir is located above the majority of the primary spawning area?

Review Team Response: *The Team has clarified the report based upon this comment.*

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Washington Department of Fish and Wildlife (WDFW)²

WDFW provided informal comments to the Hatchery Review Team throughout the course of the review. The report has been edited based upon the comments received. WDFW stated that they will “...continue to review, consider, and respond to the HRT comments and recommendations regarding the hatchery programs in southeast Washington as part of development of our Hatchery Genetic Management Plans (HGMPs), Regional Steelhead Management Plan, and other planning efforts for southeast Washington (e.g. Salmon Recovery Planning and implementation).”

² *Written comments provided October 29, 2009 by Glen Mendel, WDFW Fish Management Biologist for Southeast Washington.*

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Stakeholder Comments and Responses

Asotin County PUD³

I am looking at the HRT review from the point of habitat restoration projects that have occurred within the Tucannon and Asotin Creek watersheds and recreational sport fishing opportunities. The Asotin Creek, Pataha Creek and Tucannon River were identified as “Model Watersheds” in the early 90’s by Bonneville Power Administration. With this context, there has been numerous instream, riparian and upland best management projects completed with salmonid protection and restoration being the main goal. As I stated last evening, the Tucannon River and mainstem Grande Ronde are the only tributary system that currently have sport fisheries and with that in mind please consider the following comments.

1. **Comment:** I believe the US Fish and Wildlife Service needs to include an economic analysis of reduced juvenile releases in the Grande Ronde and Snake River tributaries within Washington/Oregon. Without hatchery releases there would be no steelhead or salmonid fisheries in SE WA, OR or ID.

Review Team Response: Our reports do not include economic analyses, but they do include assessments of benefits and risks conferred by each hatchery program. Our reviews are intended to be scientific with a focus on biological requirements. Economic evaluations are beyond the mandate and primary expertise of the Team. The Team has provided baseline information on the operational costs of each National Fish Hatchery (Appendix E), including information regarding the harvest and conservation benefits of each hatchery program to allow readers to assess economic costs and benefits. The Team has repeatedly identified the significant sport and tribal fishery benefits which accrue from hatchery programs in the lower Snake River basin. We anticipate economic and socio-cultural impacts will be further considered by the Service and comanagers in the implementation phase.

2. **Comment:** Was there an attempt to look at population within this region and identify areas for wild stock protection and continue to provide sport fisheries where historic sport fishing and tribal harvest have occurred? For steelhead it seems obvious that the upper reaches of the Touchet and Tucannon could be used for wild fish and the lower reaches could maintain current or increased harvest levels. Tributaries such as Alpowa, Asotin, Tenmile and Joseph creeks to name a few could be continued to be managed for wild steelhead production with no hatchery releases of steelhead.

Review Team Response: The Review Team’s assessment was based on the population definitions identified by the TRT and our understanding of the co-managers stated conservation and harvest objectives. The Team’s recommendations were based in part on the co-managers concerns of continuing the current programs and their risks to conservation goals for natural populations in the Tucannon River, Touchet River, and mainstem Snake

³ Written comments provided September 30, 2009 by Bradley Johnson, Watershed Planning Director, Asotin County PUD.

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River tributaries in Washington. Since steelhead became listed in 1997, consultations between NMFS and fishery managers have urged containment of the impacts of hatchery programs and separation of hatchery and natural production. The Team's recommendations follow that direction.

- 3. Comment:** Why would the HRT even include an alternative to discontinue a hatchery program within this region? The Lower Snake Compensation Plan is to provide sportsman and tribal fisheries with harvestable surplus. For example; the goal of 18,300 fall Chinook is for the region above Ice Harbor, what about the 100,000 plus for recreational and tribal harvest that is above and beyond the 18,300? Has that portion of the goal been met? To have a recommendation to elimination these hatcheries and still have the four lower Snake River dams in place seems odd.

***Review Team Response:** The Review Team included an alternative to discontinue hatchery programs in every program reviewed to display the full range of alternatives considered. An alternative to discontinue each program was considered in the full context of reducing risks associated with that program along with alternatives that may better meet the intended benefits of the program.*

- 4. Comment:** In years with large returns of hatchery fish there should be a recommendations to make in-year adjustments to increase hatchery bag limits in September, October and November when the fish are in good shape and fishermen would be inclined to take the fish home instead of catching and releasing them later in the season when they are less desirable to eat.

***Review Team Response:** Fishing regulations are each State's responsibility. The states have increased bag limits frequently to take advantage of excess hatchery returns in recent years. However, when general seasons are set (as much as a year ahead of time) the limits are usually set at a moderate level due to predictive uncertainty. If dam counts and angler surveys indicate possible surpluses of fish, states may increase limits, but that is typically an in-season decision aimed at specific surpluses—like the lower Grande Ronde in the spring. There are many reasons—social, biological, and legal—that a state would not open all waters to an expanded season limit early in the season.*

- 5. Comment:** There have been numerous partnerships built at the local level and many miles of stream and riparian habitat protected and restored. It would be a disservice to the residence along the Tucannon River if there were no sport fisheries. This would be an economic impact to a rural region that could not be supported and more importantly it wouldn't help relationships with project implementers and WDFW fisheries biologists if this was to occur.

***Review Team Response:** See response to comment #1.*

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6. **Comment:** Could you please provide an example of where the stepping stone program has worked (at the meeting there was discussion of the Idaho Supplementation Study and I cannot find where it continued past 1994)? Was it successful? It doesn't appear to be a good fit for the Tucannon River based on the fact the weir/trap would be near the mouth and there would be no fisheries available if all hatchery fish were removed at the trap.

***Review Team Response:** No one has actually implemented a stepping-stone program exactly as outlined by the Team, but the South Fork Salmon River and Sawtooth Chinook programs have tested some of the elements of the stepping-stone concept as a part of the Idaho Supplementation studies. We understand the evaluation of ISS is continuing - through 2012. The Nez Perce Tribe's Johnson Creek program also embodies some of the ideas and could be a partial example of application of the concept. Some of the issues that apply to the Sawtooth and South Fork would have to be addressed on the Tucannon, such as being able to effectively control and enumerate escapement to spawning areas and improved productivity to allow the natural spawners to maintain the natural component return numbers. It is premature to presume what the fishing regulations would be if the program were implemented. A Lower Tucannon weir is a possible future action and the program is only a concept at this time.*

7. **Comment:** The DRAFT report is hard to follow and appears that recommendations seem to be inconsistent within individual programs, the Lower Snake Compensation Plan and HSRG recommendations. An example would be the Cottonwood facility. There was discussion to reduce the releases from this facility. Earlier when there was discussion about reducing hatchery releases for both the Touchet and Tucannon it was recommended to increase the Cottonwood facility. It was hard to follow recommendations and it would be easier if all recommendations were put together to ensure they were consistent with both Hatchery and Acclimation facilities. The goals of the program were mentioned and it seemed to me that discussion occurred with regards to what each facility needed for production, it didn't seem that you talked about the harvestable surplus goals. I understand they are recommendations and appreciate the opportunity to comment.

***Review Team Response:** The Team edited the draft report after receiving comments from the co-managers and public to clarify recommendations and provide consistency among program recommendations.*

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Snake River Salmon Recovery Board⁴

- 1. Comment:** It was disturbing to hear at the outreach gathering in Walla Walla on September 29 of this year that the HRT members “have heard of the federally approved Salmon Recovery Plan for Southeast Washington but have not read it”. We, along with our local, Tribal, State and Federal partners invested more than four years in developing the recovery plan and are actively implementing the habitat strategies while our co-managers are implementing the hatchery strategies and actions identified in the recovery plan. Tangible evidence that our co-managers are actively implementing these hatchery strategies includes (1) reducing the number of smolts produced from out-of-basin adults that are released into the Snake River and its tributaries identified in this report, (2) shifting the smolt release locations further downstream in some tributaries to help reduce potential impacts to natural production, (3) assessing the efficacy and risk of converting to an endemic broodstock in the Tucannon and Touchet, (4), carefully managing wild and hatchery fish disposition at weirs in the Tucannon, Asotin and Touchet systems, and (5) retaining hundreds of hatchery marked fish trapped at the Lyons Ferry Hatchery.

***Review Team Response:** The Review Team did use the recovery plan as a reference for preparing background information for the report, including the program goals sections and stock status tables. The Team used information provided by Glen Mendel, WDFW, that identified stock goals from the Snake River Salmon Recovery Plan and other sources, including the same HGMPs that the SRSRP references. Also, the hatchery strategies described above were reviewed as part of the Team’s assessment of each Washington LSRCP hatchery program.*

NOAA’s approval of the plan includes the statement, “The Southeast Washington Salmon Recovery Region does not encompass the entire range of any one of the ESUs or DPSs; therefore, ultimately this plan will be combined with other local and regional plans to construct overall plans for the affected species. NMFS expects this draft interim regional recovery plan to contribute to meeting the ESA section 4(f) recovery plan requirements as part of the ESU/DPS-level plans.” The Review Team recognizes the value of the Southeast Washington Snake River Salmon Recovery Plan. The proposed habitat actions are expected to aid recovery of the natural salmon and steelhead populations in the region.

- 2. Comment:** We are also concerned with the reliance on the results of the Ecosystem Diagnosis and Treatment results provided in the subbasin plans for what appears to be a conclusion that natural production is severely limited by habitat conditions so hatchery reform is critical at this time. The EDT assessment referenced in the Report was based on habitat conditions and data that are now close to a decade old; much has changed since the 1990’s [See letter in Appendix D for details]...The report suggests that hatchery production and management must be radically altered almost immediately for conservation (recovery) of species within our region. We disagree to a wholesale change (e.g., stop LFH smolt releases in the tributaries and convert to a stepping stone program based on the use of endemic broodstock) but do concur with some of the recommendations. We support incremental hatchery management changes (e.g., a pilot study to evaluate the success of an endemic broodstock program;

⁴ Written comments provided October 28, 2009 by Steve Martin, Director, Snake River Salmon Recovery Board.

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continued removal of hatchery marked adults at weirs; increased daily catch limits for hatchery adults, etc) only if the changes are evaluated and supported by long term data sets to support large scale changes. In a nutshell, the ecosystems are improving and we fully expect natural populations to continue improving.

Review Team Response: *The Review Team's recommendations are not based directly on habitat conditions, but rather are based upon population viability, distribution and abundance, as described by the Interior Columbia Technical Recovery Team. The recommendations that were developed by the Review Team were designed to further the goals for each program and associated stocks (harvest, conservation and research) as presented by the comanagers while reducing biological risks.*

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Stakeholder Forum⁵

- 1. Regarding the Review Team’s recommended alternative to convert the Tucannon spring Chinook program to a stepping-stone program, are there examples of existing programs that utilize the stepping-stone approach?**

Review Team Response: The stepping-stone approach is only a concept at this point. However, the Idaho Supplementation Studies on Chinook salmon have been operated in a fashion similar to this method. Also see response to Asotin County PUD comment 6, above.

Regarding Alternatives for Cottonwood Creek Steelhead Program:

- 2. Did you consider suggesting different harvest management strategies for dealing with surplus hatchery steelhead returns to the Grande Rond River? A high percentage of fishers on the Grande Ronde River are likely practicing catch and release. Education and outreach to influence fishers to keep hatchery-origin steelhead as well as adjustments to bag limits could bring the number of surplus fish down.**

Review Team Response: Making specific recommendations regarding harvest management was not in the scope of this review. The Review Team assessed the current practice of passing large numbers of surplus hatchery steelhead above the adult trap and rearing pond intake on Cottonwood Creek in the context of the risks they may pose to naturally spawning steelhead in Cottonwood Creek and disease risks they pose to the hatchery program. The Team recommended that “other beneficial uses” for surplus steelhead be identified OR reducing the program size considered if the benefits of passing the current number of steelhead up Cottonwood Creek cannot be justified. Other beneficial uses could include, as you indicate, increasing harvest retention but may also include other options such as donations to food banks or rendering for fertilizer. The Team modified the final report to include these examples in general terms.

Regarding Alternatives for Touchet River Steelhead Program:

- 3. The Review Team’s recommended alternative to convert the Touchet River steelhead program to a two-stage, stepping-stone program appears to assume that the effectiveness of the weir and adult trap would need to be improved upon.**

Review Team Response: The Team concluded that current adult return and capture rates are nearly high enough to support a stepping-stone approach. The Team did recommend the weir be improved (recommendation TT-SS10) and also recommended that all returning hatchery-origin steelhead that are captured be used for broodstock versus passing them

⁵ These are excerpts from comments provided by attendees of a Stakeholder Forum held at the Marcus Whitman Hotel in Walla Walla, WA on September 29th, 2009. Responses were provided by Review Team members who attended the meeting and were clarified in subsequent Review Team meetings.

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upstream to spawn naturally (reommendation TT-SS3). Both of these actions would help meet the needs of a stepping-stone program if the managers chose to go that route.

Public Comment: There are many fish passage barriers removal projects that have been completed and likely have improved steelhead survival in the Touchet River.

- 4. There are so many issues involved in stepping stone programs and the logistical problems of that method will likely exacerbate existing issues with this program. It seems like continuing or improving this small endemic program would help you get around the existing challenges and provide some real benefits.**

Review Team Response: The Team has presented the stepping-stone concept as one management alternative that may assist in meeting specific program goals. Ultimately, all decisions about future program goals and actions taken to meet those goals will be made by fishery managers.

Regarding Alternatives for Tucannon River Steelhead Program:

- 5. A) How low in the river are you proposing the weir be moved? B) Would this eliminate the steelhead fishery in the Tucannon River?**

Review Team Response: A) The Team recommends that a permanent weir be established below the primary spawning area (TR-SS11), likely in approximately the same location that the temporary weir is installed (rivermile 24). The temporary weir is not sufficient to keep Lyons Ferry steelhead off the spawning grounds or for collecting sufficient numbers of endemic steelhead for broodstock. B) Based upon your comment and other comments received, in the final report the Team now indicates that a con is that the Team's recommendations will eliminate harvest opportunities for hatchery-origin steelhead above the lower weir location (see Cons sections for alternatives 1-3). Harvest for hatchery-origin steelhead could still occur in the Tucannon River below the weir.

- 6. I hear that there's no way to tell the difference between a hatchery and wild fish in the Tucannon fishery. Beyond that to close the fishery would be huge blow to the local economy.**

Review Team Response: All Lyons Ferry hatchery steelhead released into the Tucannon River are identifiable because they have their adipose fin removed. The current Tucannon River steelhead endemic program is not intended to provide harvest opportunities. It is a research program to determine whether a larger-sized endemic program can be developed and used in place of the Lyons Ferry hatchery steelhead releases, to support both harvest and conservation needs. The Review Team concluded that adult return rates back to the Tucannon River from the current endemic program were sufficient to expand the program for the immediate purpose of addressing conservation needs for steelhead in the Tucannon River by

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...serving as a genetic repository and demographic buffer. A second broodstock could be developed, based largely on adult returns from the first broodstock, to support tribal and recreational fisheries in the Tucannon River below the proposed weir location.

The Team attempts to reference where impacts to existing fisheries may occur, however, this Hatchery Review is a science-based assessment. We intend that the biological needs of salmon and steelhead resources, both in the hatchery and in the natural environment be the driver for our recommendations. Decisions regarding how to utilize the Team's recommendations will occur among the fishery managers during the implementation phase, at which time the impact on the existing fishery will surely be carefully considered.

**Pacific Region Fishery Resources
911 NE 11th Avenue
Portland, OR 97232
503/872.2763
E-Mail: Don_Campton@fws.gov**

**U.S. Fish and Wildlife Service
www.fws.gov**

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

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