DRAFT #3 Comment Responses

Upper Columbia River Basin Fish Reintroduction Project – Phase 1 Draft Project Work and Coordination Plan

The following questions and comments were submitted during public review of the Upper Columbia River Basin Fish Reintroduction Project – Phase 1 Draft Project Work and Coordination Plan.

1. The project should only address salmon reintroduction and habitat in U.S. waters only.

The Upper Columbia United Tribes (UCUT) agrees. The work plan has been changed to reflect that Phase 1 project activities, such as habitat assessments, will address U.S. waters only as specifically stated in the 2014 Fish and Wildlife Program.

2. The project conflicts with the U.S. Entity's Regional Recommendation for reconsideration of the Columbia River Treaty; the project should be considered outside of the Columbia Basin F&W Program.

Fish passage and reintroduction at Grand Coulee and Chief Joseph dams has been an element of the Council's Fish and Wildlife Program since 2000, long before regional reconsideration of the Columbia River Treaty. With adoption of its 2014 Program, the Council has refined this existing Program element based on recommendations of several fish and wildlife authorities. Since 2000, biological and technological circumstances have substantially changed, indicating that salmon reintroduction may now be viable. The Council's recent action is also consistent with its adopted Intermountain Province Sub-basin Plan that supports salmon reintroduction as a critical mitigation necessity. Salmon reintroduction at Chief Joseph and Grand Coulee dams is not the joint passage and reintroduction program pursued by the tribes and recommended in the U.S. Entity's Regional Recommendation, but a domestic action as required by the Northwest Power Act. This is not an issue for determination by the U.S. Entity whose sole responsibility is to implement the Columbia River Treaty on behalf of the U.S. government and consistent with federal laws.

Additionally, UCUT does not believe that investigation of fish reintroductions at Chief Joseph and Grand Coulee dams is inconsistent with the U.S. Entity's Regional Recommendation ("Recommendation"). The Recommendation is specifically focused on the reintroduction of salmon to main stem Columbia River habitat to the Canadian spawning grounds. The action of the Northwest Power and Conservation Council (Council) to include fish passage and reintroduction at the U.S.' Chief Joseph and Grand Coulee dams in its Columbia River Basin Fish and Wildlife Program (Program) is not "incongruent" to, or inconsistent with, the Recommendation because the Program is focused on main stem and tributary habitat within the United States only.

3. The project needs more explicit process (es) for local government, public, stakeholder and youth participation.

UCUT agrees. The draft Phase 1 Work Plan proposed a significant public and stakeholder outreach effort in the collaboration framework, however, it was not sufficiently clear. Additionally, more inclusion of local governments was requested and is appropriate given the potential effects and benefits of the project to local economies and planning responsibilities. The Work Plan has been modified to include a local government representative on the Project Management Advisory Group. UCUT also anticipates meeting regularly with local governments and stakeholder groups throughout Phase 1 as an essential element of the public outreach program. To help clarify the roles of advisory groups, UCUT will also promptly draft charters for these advisory groups to be reviewed and addressed upon their convening.

4. The Phase 1 Work Plan's objectives and tasks needs to be reordered to better reflect a logical work flow.

UCUT agrees. The Phase 1 Work Plan has been redrafted with work objectives and tasks reorganized to clarify work priorities and proper sequencing. UCUT will also encourage further review and edits to the revised draft Work Plan during its consideration by the Project Management Advisory Group and the Project Science Advisory Group.

5. The Phase 1Work Plan needs to include a funding strategy.

UCUT agrees. UCUT is currently pursuing funding of the Phase 1 Work Plan with the Bonneville Power Administration (BPA). An Objective 13, Implementation Options, has been added to this Work Plan to more specifically address options for funding the project should it proceed into Phase 2. The region needs to consider how funding will be pursued and the project managed for Phase 2 investigations and interim passage facilities that involve authorities and responsibilities of BPA, the Corps of Engineers and the Bureau of Reclamation.

6. The project's costs could be high for taxpayers and ratepayers.

The costs for pre-feasibility, Phase 1 of this project will be relatively modest. Information gathered and evaluated during Phase 1 will clarify the likely costs of Phase 2 feasibility investigations and interim passage facilities. Potential costs to regional ratepayers and national taxpayers will be estimated at that time. The Northwest Power Act anticipated passage and reintroduction costs such as these to mitigate for the construction and operations of the Federal Columbia River Power System (FCRPS). Should the project proceed to Phase 2, UCUT believes the costs can be integrated with little impact on BPA rates.

7. The project is not within the scope of BPA's obligations and is beyond the mandates of the Northwest Power Act.

The Northwest Power Act requires mitigation for the construction and operation of the Federal Columbia River Power System, including the most direct effect of denying access of the fish to habitat; in effect, zero survival. Consideration of salmon reintroduction at the two FCRPS projects pursuant to the Act is appropriate, timely and consistent with the law as the action was recommended by fish and wildlife authorities from throughout the Basin and included in the Councils' Program. See also the response to Comment #2.

8. The project is a concern as its costs would be additive to the Fish and Wildlife Accords and ongoing litigation on the FCRPS Biological Opinion (BiOP).

The costs for the Phase 1 assessment of information described in the Work Plan will be insignificant in the context of ongoing fish and wildlife annual costs, BPA's revenues or regional electricity rates. Should the Council decide on the project proceeding into Phase 2, then project costs may increase. The decision to fund Phase 2 has not yet been made, however, so it is premature to discuss those costs. Should the Project proceed to Phase 2, it will be after the expiration of the Fish and Wildlife Accords and therefore not additive to those costs.

The FCRPS Biological Opinion concerns ESA-listed species affected by the FCRPS. This Project will not involve ESA-listed species and will, therefore, have no direct impact on the FCRPS litigation. UCUT cannot speak to the potential fiscal effects of ongoing litigation on the FCRPS Biological Opinion.

9. Reintroduction of salmon above Grand Coulee Dam cannot be achieved as a U.S. domestic process; it needs to include Canada.

Salmon reintroduction above Grand Coulee Dam can be achieved as a U.S. domestic action pursuant to the Northwest Power Act and the Council's Fish and Wildlife Program. Any species' reintroductions, however, should be coordinated with Canada and British Columbia as is routinely done in the Columbia River Basin. For example, coordination occurs within the current Lake Roosevelt sturgeon program and the Okanagan sockeye salmon run.

10. The project requires Congressional action.

The Phase 1 investigation of salmon reintroduction pursuant to the Council's Fish and Wildlife Program does not require additional Congressional action. Subsequent phases of the project may require Congressional action. As stated in the response to comment #5, options for a funding strategy for phases 2 and 3 of the project will be developed as a product of Phase 1.

11. Fish passage at Chief Joseph and Grand Coulee dams is the responsibility of the Corps of Engineers and Bureau of Reclamation, respectively, not the BPA.

The Bureau of Reclamation (for Grand Coulee Dam), the Corps of Engineers (for Chief Joseph Dam) and the Bonneville Power Administration all have responsibilities associated with mitigating the impacts of the FCRPS and managing the operation of Grand Coulee and Chief Joseph dams.

Options for how these three agencies might undertake Phases 2 and 3 of this project will be considered during the Phase 1 investigation as addressed by the additional Objective 13 in the Work Plan. Often, the Bureau of Reclamation and Corps of Engineers receive congressional funding to address construction, operation and maintenance of fish passage facilities at their respective FCRPS projects; BPA then repays the U.S. Treasury for the power share of these costs. However, BPA also directly funds activities associated with power generation and fish mitigation at FCRPS projects and funds some mitigation programs such as the Corps of Engineers' Lower Snake River Fish Compensation Program. Phase 1 planning will explore how the federal agencies and the Council might fund fish reintroduction at these two dams, but will not make a decision as to specific actions to take at the dams themselves.

Of particular concern to UCUT is that successful salmon reintroduction in the upper Columbia Basin involves passage at both projects together, as one unit. Passage at one dam and not the other or unsynchronized efforts would frustrate project goals. Options for funding will reflect this reality.

12. The project is strongly supported, long overdue and needs to correct historic wrongs.

UCUT appreciates the many comments supporting reintroduction of anadromous fish above Chief Joseph and Grand Coulee dams. The decision to forego fish passage with the construction of Grand Coulee Dam was made nearly 80 years ago. Since then, the laws and values of the U.S. and the Pacific Northwest relative to ecosystem function and Native American rights have improved significantly. Salmon reintroductions back to historical habitats are now not only legally viable, but appear to be technologically and biologically viable.

13. The project's work plan is a good phased, scientific and rigorous approach.

The Work Plan reflects the elements for Phase 1 as delineated in the Council's Fish and Wildlife Program. It also includes tasks that UCUT believes will provide additional, essential information to inform the Council as it makes its decision on whether to proceed into Phase 2. UCUT is committed to a thorough scientific approach, including the use of an expert Project Science Advisory Group and timely independent review by the Independent Science Review Panel. This recent public review of the draft Phase 1 Work Plan has also provided some excellent comments that have been integrated into the Work Plan.

14. The project is an ambitious, domestic reintroduction effort.

UCUT agrees. Successful reintroduction of anadromous fish above Chief Joseph and Grand Coulee dams would be a monumental advance in the future of salmon in the Columbia River Basin. This could be viewed as ambitious. However, the opportunity for passage at the two federal projects has been made easier by similar work undertaken at a number of private hydroelectric dams in the Pacific Northwest in recent years. Pioneering work by Puget Sound Energy, Pacific Power & Light, and Portland General Electric is demonstrating that fish passage at high-head dams can be feasible, done in a manner with little impact on existing project benefits, and done in a manner that still provides economic and reliable power supplies. Similar reintroduction investigations are also now underway at many high-head dams in California.

UCUT agrees too, that this project is a domestic effort under the Northwest Power Act as compared to the more comprehensive, trans-boundary reintroduction program contemplated in the Regional Recommendation.

15. The project would be an important boost to the economy and environment.

Restoring anadromous fish above Chief Joseph and Grand Coulee dams could provide significant economic benefits associated with sport, tribal and commercial fisheries in coastal and Columbia River communities. Upper Columbia River Chinook salmon support rural fishing economies in Alaska, British Columbia, Coastal Washington and all along the Columbia River. For those Eastern Washington communities in the vicinity of the reintroduction waters, sport and tribal fisheries could be a significant boost and diversification of rural economies. For example, the recent recovery of summer Chinook and sockeye salmon runs into Eastern Washington has resulted in an annual average of 29,000 more angler trips in the mid-Columbia with direct economic impacts of over \$2.4 million a year. The quality of these fisheries also far exceeds that of other salmon fisheries, with anglers harvesting nearly 1 salmon per day compared to the Basin average of over 4 angling days for each salmon harvested.

Reintroduction of salmon would also support a number of new professional and technical jobs in the rural communities of the upper Columbia River Basin.

For the ecosystem, salmon reintroduction back into historical habitats would revive the nutrient balance of these waters and restore food chains important for many fish and wildlife species.

16. The project should consider employing vertical axis turbines and/or, vacuum lift techniques to pass adult and juvenile salmon.

A number of new fish passage concepts have been suggested through public comments. These ideas will be reviewed by the project's fisheries and engineering experts during the Phase 1 review of fish passage options. The Phase 1 Work Plan includes testing of new, emerging technologies such as Whooshh that passes adult salmon through a moist tube under negative pressures. UCUT is anxious to promptly determine if this 'vacuum' technology can be applied as an interim fish passage measure during Phase 2 investigations. If so, it could provide a highly cost-effective means of passing fish around high-head dams.

17. Will salmon reintroduction be successful with the growing population of northern pike?

Several species of non-indigenous and predatory fish species occur in Lake Roosevelt and Rufus Woods Lake. These fish will prey on juvenile salmon to various degrees. In a Phase 2 feasibility investigation, UCUT anticipates studies on survival of juvenile salmon migrating through these two reservoirs. At that time, the effects of northern pike and other predatory species on salmon survival will be assessed and considered in the overall evaluation on the feasibility of anadromous fish reintroduction.

18. Reintroduction investigations of steelhead should consider use of redband trout.

UCUT agrees. Redband trout from above Grand Coulee Dam will be considered in any donor stock assessment for steelhead reintroduction. The Work Plan has been revised at Task 6.3 to reflect this comment.

19. Completing the proposed 11 objectives in a year and a half seems overly ambitious.

Phase 1 investigations need to proceed promptly as provided in the Council's Fish and Wildlife Program which specifies an end date of December 2016. Conclusion of Phase 1 will ultimately depend on the final scope of the Phase 1 Work Plan and when Phase 1 funding is made available.

20. The objective addressing donor stock selection is too vague and needs more information

The details on the assessments needed for donor stock selection for the various fish species to be potentially reintroduced above the two dams will be developed in consultation with the Science Advisory Group. UCUT anticipates this more thorough information would then be reflected in a project proposal for independent scientific (ISRP) review prior to funding and implementation. UCUT is aware of a Chinook donor stock assessment that has already been conducted by Canadian parties addressing habitat in the transboundary reach of the Columbia River that will help inform the Science Advisory Group.

21. UCUT should consider a web page portal that provides for 2-way communications throughout the project's life.

UCUT agrees. With Phase 1 funding, UCUT will expand its web page to provide a portal for continual public comment and response on salmon reintroduction. The site will also provide a library of information relevant to fish reintroductions into the upper Columbia River Basin.

22. Objective 11 addressing species interactions is too vague.

The details on the assessments needed for species interactions will be developed in consultation with the Science Advisory Group as the Work Plan is finalized. UCUT anticipates this more thorough information would then be reflected in a project proposal for independent scientific (ISRP) review prior to funding and implementation.

23. Reintroduced salmon should be allowed a natural life cycle without hatcheries.

The role of artificial propagation in fish species reintroductions above Grand Coulee and Chief Joseph dams will be considered during Phase 1 and in much more detail in any Phase 2 feasibility investigation. A key factor in considering long-term hatchery use is how the initial project goals and objectives are ultimately defined through the project collaboration process.

24. UCUT should add Canadian representation to the management and scientific advisory groups.

UCUT and the region is awaiting notification from the U.S. Department of State on whether comprehensive salmon reintroduction will be considered in any modernization of the Columbia

River Treaty. If the U.S. and Canada decide to purse such a transboundary, comprehensive undertaking then joint participation in policy and technical forums would be anticipated. In the meantime, UCUT will continue to coordinate its fishery activities in Lake Roosevelt with Canadian First Nations and governmental agencies as is currently and routinely done on issues affecting this transboundary basin.

25. The project should consider reintroduction of sockeye salmon to Christina Lake and Chinook salmon to the lower Kettle River.

The habitat assessment work anticipated under the Work Plan's Objective 4 will address salmon habitat and potential production in the U.S. portion of the Kettle River watershed. UCUT anticipates that complementary work in the Canadian portion of the watershed (including Christina Lake) will be undertaken within the domestic purview of Canadian salmon resource managers.

26. Project goals leading to definition of reintroduction success need to be established early before other tasks are undertaken.

UCUT agrees. The Work Plan anticipates that an early activity of the advisory groups will be to seek a consensus on long-term project goals and objectives. This initial work will be important and provide an essential context for how later work elements are conducted in Phases one and two.

27. The investigation should consider ESA-listed fish for permanent reintroductions, although not in the pilot studies.

UCUT does not anticipate the reintroduction of ESA- listed species when providing salmon access to historical habitats in the upper Columbia River Basin. Critical habitat for listed salmon species, as designated by NOAA Fisheries, does not include historical habitats above Chief Joseph and Grand Coulee dams; nor has salmon reintroduction been included in recovery plans. Any successful reintroduction of salmon into the upper Columbia River can be accomplished with non-listed salmon species.

28. Given the cumulative dam passage mortality of juvenile salmon from populations below Chief Joseph Dam, hatchery facilities will be required to maintain runs above the two dams; their costs should be considered in Phase 1.

The potential use of hatchery facilities in feasibility investigations and longer term population management will be initially evaluated during proposed Phase 1 studies. UCUT anticipates that the modeling work planned in Objective 7 of the revised Work Plan will investigate the potential contribution of artificial propagation towards any successful reintroduction. Proposed work under Objective 8 to develop an initial draft research plan for Phase 2 will also consider the potential role of hatchery-origin fish in the implementation of feasibility studies.

29. Changes to harvest allocations and harvest rates may be necessary for successful reintroductions.

The modeling work proposed under Objective 7 of the revised Work Plan will assess current and future mortalities from harvest and the effects of such harvest on the potential for successful reintroductions of each donor stock.

30. The initial work during feasibility investigations should focus on estimating juvenile survival rates through the reservoirs.

UCUT agrees. Based on historical reintroduction efforts throughout the West, the likely key uncertainty in achieving successful salmon reintroductions in the upper Columbia River will be the migration and rearing survival of juvenile salmon in the two reservoirs coupled with the collection efficiency of these fish in any juvenile passage facilities.

31. While salmon reintroduction can require a very detailed scientific process, an alternative approach would be to simply release surplus adult summer/fall Chinook and sockeye salmon upstream each year and monitor resulting behavior and production. These fish could also help meet tribal harvest and cultural needs.

UCUT agrees. UCUT will seek the advice of the Scientific Advisory Group and the Independent Science Review Panel on this very strategic research issue. The planned risk assessment (Objective 5) will help determine if releases of adult salmon above the barrier is an appropriate action. Development of the initial draft research plan (Objective 8) will direct the strategy for how best to address critical uncertainties such as survival and collection of juvenile salmon in the reservoirs. Using the offspring of adult salmon released above the dams to assess juvenile survival through the two reservoirs and remaining hydrosystem will be an important consideration.

32. The tribes previously received payments for the loss of fish passage.

The passage and reintroduction program provisions outlined in the 2014 Fish and Wildlife Program are for fish and wildlife mitigation for the impacts of the FCRPS as directed by the Northwest Power Act. They are not designed nor should they be construed as a form of payment or compensation to tribes for the losses they have suffered since before treaty times. As shown throughout the administrative record for the Fish and Wildlife Program the fish passage and reintroduction provisions of the Program were advocated by many non-tribal entities, including the United States Fish and Wildlife Service, agencies within the State of Washington and several NGOs.

A number of tribes and others were greatly impacted by the construction, inundation and operation of Chief Joseph and Grand Coulee dams. While it's true some tribes received modest payments for the taking of Tribal lands and other losses, those payments did not address the Northwest Power Act's mandate to mitigate for the construction and operation of the Federal Columbia River Power System.