February 7, 2017

Brigadier General Scott A. Spellmon
Commander, Northwestern Division, Army Corps of Engineers

Mr. Elliott Mainzer
Administrator, Bonneville Power Administration

Ms. Lorri Lee
Northwest Regional Director, Bureau of Reclamation

U.S. Army Corps of Engineers
Attn: CRSO EIS
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Portland, OR 97208-2870
VIA EMAIL: comment@crso.info


Dear General Spellmon, Administrator Mainzer, and Regional Director Lee:

On behalf of the Fish and Wildlife Commission of the Confederated Tribes of the Umatilla Indian Reservation (“CTUIR” or “Tribe”), we write in response to the Notice of Intent to Prepare the Columbia River System Operations Environmental Impact Statement published by the Department of Defense, Department of Energy and Department of the Interior, 81 Fed. Reg. 67382 (September 30, 2016) (“NOI”). The NOI calls for “suggestions and information that may inform the scope of issues and range of alternatives” in the EIS, and requests “public input on potential effects on historic properties from system operations and configuration in accordance with Section 106 of the NHPA.” Id. at 67383.

The CTUIR, Action Agencies and other sovereigns have worked together for many years, and particularly since entering the 2008 Columbia River Fish Accords, to protect, mitigate, and enhance fish and wildlife, including related spawning grounds and habitat, affected by Columbia River System Operations (“CRSO”) projects in a manner that provides equitable treatment for such fish and wildlife with the other purposes for which such system and facilities are managed and operated. This has led to the planning and implementation of important measures to improve the operations and configuration of the dams, to the protection and restoration of fish and wildlife habitat, and to the supplementation of naturally spawning populations of fish through state of the art fish production facilities. The CTUIR’s comments on the CRSO EIS are below.
I. **The Federal Agencies Have a Fiduciary Obligation Not Only to Protect but Also to “Give Full Effect” to the CTUIR’s Constitutionally-Protected Treaty Fishing Rights**


The Treaty also creates a federal trust responsibility under which the federal government maintains an affirmative obligation to safeguard the subject matter of federal treaties. Thus, federal agencies must use their authorities in a manner that will protect and enhance-- not degrade -- the fish species that underlie treaty fishing rights. Further, “[i]n carrying out its fiduciary duty, it is the government's...responsibility to ensure that Indian treaty rights are given full effect.” *NW Seafarms v. US Army Corps*, 931 F.Supp. 1515, 1520 (W.D.Wash. 1996), citing *Seminole Nation v. United States*, 316 U.S. 286, 296-97, 62 S. Ct. 1049, 1054-55, 86 L. Ed. 1480, 86 L. Ed. 1777 (1942) (finding that the United States owes the highest fiduciary duty to protect Indian contract rights as embodied by treaties). This duty does not cease once a fish run becomes viable. Tribal members must be allowed to achieve their "moderate living," even if this living standard may only be achieved by allowing the tribes to enjoy the "same level of exclusive use and exploitation" they had at the time the treaty was signed. *United States v. Adair*, 723 F.2d 1394 (9th Cir. 1984) cert. denied, 467 U.S. 1252 (1984). In short, the Tribe has an “absolute” right to a fair share of the fish destined to pass tribal fishing places. *U.S. v. Oregon (Sohappy v. Smith)*, 302 F. Supp. 899 911 (D.Or. 1969). These fish include those artificially propagated for rebuilding, mitigation and enhancement purposes. *United States v. Washington*, 759 F.2d 1353 (9th Cir. 1985) (*en banc*) (holding that hatchery-reared fish are “fish” within meaning of treaty fishing clause and subject to allocation thereunder).

The treaty reserved right to harvest, and the federal agencies fiduciary obligations to give that right its full effect, is significant in scoping the alternatives to be studied in the CRSO EIS. The harvest rights and federal obligations properly cabin any consideration of the treaty right to harvest to the environmental baseline. All alternatives studied must include treaty harvest in the baseline, and should be analyzed for their effect on Columbia River fisheries and their ability to contribute to the recovery of stocks to harvestable levels that support tribal fisheries and communities.
Including treaty harvest in the baseline is also consistent with the purpose of the CRSO EIS, which is to examine different hydrosystem operation configurations. The Tribe’s specific comments on scoping of hydrosystem operations and related issues that should be considered are discussed below.

II. Operational and Structural Modifications to the Hydrosystem that Should be Included in the Alternatives

As stated in the NOI, the CRSO EIS “will assess and update the approach for long-term system operations and configuration.” 81 Fed.Reg. at 67383. The EIS focus is on hydro system operations, and direct, indirect and cumulative impacts of the various operational alternatives will be studied. The CTUIR believes that the EIS should consider a range of system operations and improvements with the goal of improving fish passage and whole system survival. The alternatives should include the following operational and structural changes:

- A spill program under existing water quality waivers based on individual project characteristics and designed to maximize juvenile survival. Such spill may or may not be greater than current spill at individual projects, and may not necessarily require spill to the gas caps.
- Modified reservoir operating elevations at specific projects for either permanent drawdown or seasonal drawdown.
- Altered flood control operations in low and mid-range water years.
- Replace or modify drum gates at Grand Coulee Dam, or change the way the work is done on them, to eliminate or reduce the need for maintenance and associated reservoir draw down. In dry years this work can make it very difficult to achieve refill and provide flows for the spring or summer outmigration.
- Additional surface passage devices such as those already being considered at McNary, John Day and Bonneville dams.
- Additional turbines at certain projects to increase system flexibility and ensure enhanced flow augmentation.
- Additional predation control measures such as repairing and adding bird wires and other avian deterrence measures, and adding pinniped control measures outside the Bonneville Dam tailrace, e.g. throughout the lower river, and especially in the estuary.
- Structural or operational measures at Lower Granite and Little Goose dams to address the temperature issues associated with Snake River Sockeye and other adult salmon migration. Analysis should be done to determine what additional options, either structural or operational, could be implemented to reduce thermal issues now and in the future.
- Removal or breaching of one or more Snake River dams.
- Lamprey passage measures discussed below.
Having addressed the proper role of Treaty reserved rights and operational and structural configurations that should be included in the EIS alternatives, the CTUIR believes that the issues discussed below should also be evaluated in the CRSO EIS.

A. Impacts to hatcheries must be studied and mitigated.

The Columbia River Basin production programs were originally developed to mitigate for the development of the basin and construction of the hydro system but tribal interests and treaty rights were ignored when the artificial production system began. In 1937, Congress passed the Bonneville Project Act for the purpose of marketing power from the Bonneville and Grand Coulee dams then under construction, as well as other dams proposed for the mainstem Columbia and Snake Rivers. 16 U.S.C. §§ 832 et seq. Adopted along with the Bonneville Act was the Mitchell Act, which was designed to mitigate damage to “the fishery resources of the Columbia River” caused by the effects of dams and other related activities such as irrigation and reclamation projects. 16 U.S.C. §§ 755-757, Mitchell Act Pub. L. 502 of May 11, 1938, 52 Stat. 345 as amended by Act of August 8, 1946, 60 Stat. 932. Today, hatcheries serve important supplementation, conservation and fishery roles.

The alternatives studied in the EIS should assess any direct, indirect and cumulative impacts to the operations of the hatchery programs in the Basin. If there are adverse impacts, mitigation measures should be proposed.

B. Tribal Cultural Resources must be considered under NEPA as well as NHPA, and a social impact analysis is needed.

The NOI requests “public input on potential effects on historic properties from system operations and configuration in accordance with Section 106 of the NHPA.” 81 Fed. Reg. at 67383. With respect to the NHPA, the interests of the Tribe in the protection of cultural resources along the river is not limited to the information contained in the recorded archaeological and cultural sites. Those archaeological and cultural sites are the evidence the Tribe and tribal members have to connect themselves to the Tribe’s past history and ancestors. The NHPA recognizes historic properties of religious and cultural significance to tribes. 54 U.S.C. § 302706(a). Those properties include ones that may not have an archaeological component but possess deep tribal connections through use from time immemorial. Sometimes they are called Traditional Cultural Properties (TCPs), however TCPs can be recognized for any cultural group, whereas historic properties of religious and cultural significance only relate to tribes. The Archaeological Resources Protection Act also recognizes these areas as sites that have religious or cultural importance. 16 U.S.C. § 470cc. All of these properties, areas or sites, however denominated, are often related to the gathering of the First Foods, those foods tribes have relied upon for their survival since the beginning of time and have deep cultural meanings. Fishing, hunting, gathering and other cultural sites contribute to and connect the Tribe to the Big River.

For many years, the Tribe and federal agencies such as the Corps have attempted to manage what remains of TCPs and historic properties. Unfortunately, the Tribe and the federal agencies have been unable to agree on an Area of Potential Effect (APE), a complete inventory of TCPs,
complete formal site evaluations or at identifying the resolution of adverse effects. Some TCP inventories have been completed, yet are restricted to the narrowly defined APE provided by Federal Agencies. Federal Agencies continue to evaluate archaeological sites under narrow criterion, sometimes without input, or without heeding input, from the Tribe. The federal agencies narrow APE definition, identification and evaluation efforts are not sufficient to identify and resolve adverse effects.

The focus on the NHPA requirements does not adequately serve the CRSO EIS, however. NEPA requires consideration of the Human Environment which “shall be interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment.” 40 CFR 1508.14. The NEPA requirements are more consistent with the CTUIR’s perspective on resources than the National Historic Preservation Act’s approach. Tribal elders do not distinguish between natural and cultural resources. The CRSO has had a disproportionately high and adverse effect on tribal culture (our social, economic, and cultural environment) by radically changing the natural and cultural environment, along and also at considerable distance from the rivers involved. In order to understand the context and intensity of that impact, and adequately capture that in the EIS, a social impact analysis must be done. As our tribal elders instruct, impacts should not be considered only resource by resource, but should be considered as a whole.

There are many data gaps that the agencies will need to address in order to analyze impacts on the Human Environment as it pertains to tribes. While there is considerable data on archaeological sites, there is little data on other types of historic properties, and essentially no data on the cultural resources (in the NEPA sense) valued by the tribes that are not specifically included in the NHPA definition of historic property. It is not clear what the study area for cultural resources for this project will be. Despite a programmatic agreement being in place for almost ten years, the NHPA area of potential effects remains undetermined. When reviewing the Columbia River Treaty, tribes identified the Columbia River watershed as being impacted by decisions on river management; the portion of that watershed involved in the CRSO is an appropriate study area for the NEPA process, as well as for the NHPA process.

The near-exclusive focus on the NHPA for the FCRPS in the past has put the region in the current situation in which cultural resources under NEPA have been neglected. NEPA also requires considering religious practices, not just places. Similarly, the resources necessary to engage in religious and cultural practices are critical. For this and other reasons, the Inter-Disciplinary Team analyzing the impacts must include not just an archaeologist, but a cultural anthropologist with a deep understanding of tribal cultural and an ability to understand how the project impacts tribes’ social and cultural environments.

In addition, the CRSO EIS alternatives must assess how the alternatives will impact access to natural resources and significant places on the landscape, and impacts to erosion and development. Finally, it is unknown what definition of cultural resources will be used.

The Action Agencies will need to work closely with the Tribe and its Cultural Resources Protection Program during the analysis of cultural resources.
C. Estuary and tributary mitigation actions must be included.

Inclusion of mitigation actions, such as those implemented through actions in the estuary and tributaries (as well as hatchery actions), is a requirement of the Northwest Power Act and must be included as part of the CRSO action so long as there are dams on the rivers; there is no system operation alternative that can alleviate the mitigation requirement. The alternatives in the EIS must therefore include a suite of tributary and estuary mitigation actions. The extent of such actions should be broad enough to provide a “cushion” in terms of the amount of survival benefits, as referred to by Judge Simon in his May 4, 2016 order.

Mitigation funding plays a significant role in the economics of interior basin communities. Therefore, when analyzing the effects of tributary actions, the agencies will need to include analysis of the socio-economic benefit that mitigation funded tributary actions have on local communities, both tribal and non-tribal, and how those benefits change under the various alternatives.

D. Climate change effects must be considered.

Alternatives considered must account for the future effects of climate change, both within the basin and in the ocean. Various climate change scenarios should be considered as an overlay on all alternative analyses in order to present the full range of potential impacts of various alternatives.

E. Different flood risk management regimes should be included in the alternatives.

The CRSO EIS provides an excellent opportunity to conduct a needed comprehensive flood risk management review of the Columbia River Basin. A flood risk review should be initiated and the results included in one or more of the alternatives. A relaxed level of flood risk will undeniably affect the amount of flow through the system, impacting not only fish survival but also the other authorized purposes of the projects. The study will also benefit the region as it will soon be needed for negotiations with Canada regarding the Columbia River Treaty (“CRT”).

Under the CRT with Canada, one of two principle benefits to the United States is assured flood storage and coordinated flood risk management. After 2024, unless the Treaty is modernized, the U.S. loses these benefits but retains the right to “call upon” Canada to provide flood storage once the U.S. has “effectively used” used its reservoir capacity for flood risk management. The Tribe is concerned that the default change to “called upon” and “effective use” after 2024 will adversely affect salmonid survival and could undermine any preferred alternative because it may:

- Require larger and more frequent drawdowns at Grand Coulee Dam (Lake Roosevelt) and other U.S. reservoirs in order to provide minimal flood risk prevention;
- Adversely impact resident fish, cultural resources, navigation, recreation, riverbank stability and public safety through dramatic changes in reservoir elevation; and
• Limit system capability to provide necessary spring and summer flows for salmon.

The U.S. and Canadian Entities implementing the Treaty have different perspectives on how the “called upon” operation for coordinated flood risk management should be implemented after 2024. The U.S. Entity believes it can call upon Canada to prevent river flows from exceeding 450,000 cubic feet per second (cfs) as measured at The Dalles Dam and that only eight system storage reservoirs in the U.S. need to be effectively used before this call can be made. The Canadian Entity believes that it must respond to a call from the U.S. only to prevent flows at The Dalles from exceeding 600,000 cfs and only after the U.S. has effectively used all available storage in the Basin. The U.S. Army Corps of Engineers has determined that damages begin to occur at flow levels above 450,000 cfs as measured at The Dalles and that substantial damages occur when flows exceed 600,000 cfs. Neither perspective addresses the management of an 1894-type flood event.

Because of the serious questions about reservoir drawdown (i.e., effective use) and flow limitations from post-2024 called upon operations, as well as the Basin’s capability of addressing major flood events, the federal agencies should seize this opportunity to assess potential changes to the current level of flood risk protection in the Columbia Basin. The process should include a review of infrastructure capacities and capabilities, floodplain management, Columbia Basin reservoir operations, and levees – both strategic improvements to existing levees and the potential need for additional levees.

F. Measures to improve pacific lamprey survival should be included in the CRSO EIS.

Pacific Lamprey, called “eels” by tribal members, are in a state of precarious decline. Since 2008, the Columbia Basin Fish Accords lamprey projects, with guidance from the Tribal Pacific Lamprey Restoration Plan have worked to address a variety of issues for Pacific Lamprey in the Columbia River Basin. Improving the passage environment for Pacific Lamprey, at all life history stages, remains the highest priority for restoration within the Columbia River basin. The CRSO EIS should include the following measures in one or more alternatives:

• **Improvements to mainstem passage by adult lamprey:** Increase focus on addressing known adult lamprey passage bottlenecks in fishway sections that are upstream of entrances (i.e. transition pools, serpentine weirs). Evaluation of historic telemetry data suggests this will enhance likelihood of improving overall dam passage efficiency and conversion to upriver dams (Keefer et al. 2013).

• **Development of alternative forms of passage:** Efforts to develop and improve alternative forms of passage should continue in parallel with passage improvements. This would include expansion of adult translocation efforts that aim to bypass the difficult migration corridor and release adults into high value spawning habitat in strategic locations within the Columbia River basin.
• **Implementation of RM&E plan for larval/juvenile lamprey:** Strongly consider multiple approaches (e.g. PIT and acoustic tagging) to inform management decisions regarding juvenile lamprey passage improvements, in addition to the current strategy of developing a juvenile lamprey acoustic transmitter.

G. **Certain data and metrics should be included in the CRSO EIS.**

The EIS should review and include a range of metrics and data, including project survival, reach survival and delayed mortality. Alternative development and analysis in the EIS should consider, at a minimum, reach survival, project survival and SAR survival metrics and how they inform salmonid survival and restoration, and the use of available restoration tools. In addition to these metrics, the analysis should look to using variety of models and tools and not be completely dependent on a single model such as COMPASS.

H. **Reservoir ecology should be included in the CRSO EIS.**

The EIS will need to consider the effects of the existence and operation of the federal hydropower system on reservoir ecology. Before the dams, the Columbia and Snake rivers were just that - rivers of free flowing water. The Columbia River hydropower system has turned these rivers into a system of connected reservoirs, bringing with it changes to the natural ecological river system, including invasive species, algae, seaweed, altered flood dynamics, sequestration of sediment, sand bars, water quality and changes in temperature (solar sinks), to name a few. The CRSO EIS will need to evaluate the change in reservoir ecology associated with each alternative and how these changes affect fish and wildlife resources. We encourage the agencies to consider alternative actions – including system operation and restoration actions – to address reservoir ecology and its impacts on the fishery resource.

III. **CONCLUSION**

The CTUIR appreciates the opportunity to submit these comments on the CRSO EIS. We are currently in discussions with your agencies and staff regarding participation in the NEPA process moving forward. The Tribe received the invitation to become a Cooperating Agency in the review, and it may participate as a Cooperating Agency to some extent. The Tribe also has a government-to-government relationship with the Action Agencies and therefore expects an additional layer of consultation and participation above and beyond a Cooperating Agency. The Accord agreement sets forth useful guidance for managing the relationship with the federal government on this important project.

Should you have any questions please contact me at (541) 276-3165, or Brent Hall at (541) 382-3011.
Sincerely,

[Signature]

Jeremy Wolf, Chair
Fish and Wildlife Commission