



Upper Skagit Indian Tribe

25944 Community Plaza Way,

Sedro Woolley, WA 98284

Phone (360) 854-7090 Fax (360) 854-7042

August 1, 2014

Ms. Hannah Hadley
U.S. Army Corps of Engineers
CENWS-EN-ER
P.O. Box 3755
Seattle, Washington 98124-3755

RE: Upper Skagit Indian Tribe's comments / objection on the Draft Feasibility Report and Environmental impact statement ("DFREIS") the Skagit River General Investigation (the "GI").

Dear Ms. Hadley,

I write on behalf of the Upper Skagit Indian Tribe, a federally recognized Indian tribe (the "Tribe").

Facts About The Tribe And its Treaty and Federally Recognized Status:

The Tribe is a federally recognized tribe with a checkerboard Reservation in Skagit County, WA. The Tribe has seventy-five tribal member households on the Reservation and another approximately 225 households within Skagit County.

As a successor to 10 tribes and bands residing on the Skagit River and signatory to the Treaty of Point Elliott, the Tribe has been determined to be a Treaty Tribe in U.S. v. Washington with usual and accustomed grounds and stations ("U and A's) on the Skagit River, the Baker River and its tributaries. Upper Skagit is the primary tribe exercising its Treaty protected rights on the mainstem of the Skagit River above Mount Vernon, WA and the Baker River. The Tribe's current riverine fishing fleet is approximately 25 boats. These boats represent a minimum of 50 -75 households that rely for food and income on fishing on the Skagit River. For example, the Tribe's Baker River sockeye fishery produced 6,000 fish this year, which may seem small to the USACE, but is not de minimus to the Tribe's economic well-being. The sockeye fishery, which will be endangered by the GI's plans for the Skagit River and the Baker / Shannon Lake sockeye propagation, constitutes in value in even years about 1/3 of the financial support for the Tribe's fishing membership.

The Severe Impacts of the DFREIS and GI on the Tribe's Rights and Economics without USACE Consultation

USACE did not approach the Tribe for data to place in its analysis. If it had, it would have understood the extensive and potentially catastrophic economic and human cost of its proposals. As such, as discussed below, the GI dealing with the Skagit River and the Baker River (collectively the "Skagit River"), particularly as it relates to the Tribe's Treaty sockeye fishery,

will be severely impacted by the plans in the DFREIS. The Tribe is also an active participant in and intervener in the FERC relicensing for the Baker River project owned and operated by Puget Sound Energy.

Errors in the GI

First, to set the record straight, in a number of pages of the GI, e.g. pg. 2, 21, and 211, there is reference to 5 tribes with reservations or U and A's in the Skagit watershed. This is incorrect; the only tribes with Treaty protected rights in the Skagit watershed are the Swinomish, Upper Skagit and Sauk Suiattle. The GI also lists the USIT population at 230, while in reality; the Tribe has a membership of in excess of 1200 members, many of whom live in Whatcom, Skagit and Snohomish counties.

The DFREIS Does Not Adequately Evaluate the Impacts on the Skagit River to Treaty Rights and Endangered Species

The Tribe has reviewed the DFREIS for the GI and has significant concerns that the Army Corps of Engineers ("USACE") seems to have failed to consider that some of the proposed recommendations have severe impacts on Treaty Rights and on the Endangered Species Act ("ESA") challenges on the Skagit River. In fact, it seems that the USACE has ignored its fiduciary duty to the Tribe and has now described a flood reduction plan that trumps Treaty Rights and ESA in the Skagit River Watershed. Under section 2.5, the document states that the USACE is held to the Universal Constraints; "USACE shall ensure that the project would not jeopardize the continued existence of any endangered species or threatened species (including three ESA-listed species of salmonids) or result in the destruction or adverse modifications of the habitat of such species".

What is glaringly absent from the list of planning constraints is impacts to Tribal resources. As an example, in the Executive Summary, the study area does not mention the tribal, state, regional, or international importance of Skagit River fish stocks. The Skagit fishery resources are part of the management of international agreements ("PSC") and play a critical role in the rebuilding process underway for ESA listed Chinook, Steelhead and Bull Trout. The current Table 4.6 provides yet another example of the lack of consideration for listed fish species, citing outdated information about the monitoring and status of listed species. The lack of consideration of these facts, detracts from the USACE's obligation to protect the Tribe's Treaty Rights and to implement section 7(a)(1) and Section 2(c) of the ESA.

As noted above, the Tribe is also an intervener in and a signatory to the Baker River Hydropower Facility (FERC # 2150) Settlement Agreement, as approved by the Federal Energy Regulatory Commission ("FERC"). The settlement is structured around the intent to rebuild the Baker Sockeye run to sustainably harvestable numbers. In addition the license focuses on improving downstream (Skagit River) instream flows that better protect ESA listed and other treaty fishery resources. As a result, the inclusion of the Baker measure in all alternatives restricts the ability to analyze costs and benefits of such a measure. The Tribe is concerned that

the potential impacts to the Baker Sockeye rebuilding and the Treaty Fishery are not being studied nor analyzed in a manner that was committed to under the Settlement Agreement for FERC #2150, nor to the Tribe's United States protected Treaty Rights.

The Tribe believes that the current analysis in the DFREIS for the *Baker Dam Operational Modifications* is inadequate for protecting the Tribe's Treaty protected Tribal Fishery Resource. Settlement Article ("SA") 107 (b) and 107(c) were incorporated into the Baker River Settlement Agreement as a place holder for future USACE action and analysis. A USACE FERC filing on December 21, 2004 signed by Colonel Debra Lewis supports this statement. It was also clear from the December 2004 filing that the USACE did not believe the environmental analysis done for the FERC license met the requirements of NEPA and ESA with respect to additional flood control measures and that additional flood storage would require a thorough evaluation by the USACE. To date no additional studies (after the relicense period) of the environmental effects of additional flood storage have been undertaken.

The DFREIS compares the future proposed action to past conditions and fails to recognize the difference between the future proposed action and the future without project condition. The difference between the future without project condition (SA 106 Table 1) and the future with project condition (SA 106 Table 2) is that, under the without project condition, the annual drawdown (and associated reduction in euphotic zone volume) for Baker Lake occurs largely in November after the sockeye growing season. Whereas under the proposed action the flood storage is required by October, therefore the drawdown would start in September, thereby reducing the productive capacity of the reservoirs during the sockeye growing season. The proposed action would reduce the euphotic zone volume during September and October and relicense studies showed water temperatures and prey availability is likely significant during that time (Sockeye Smolt Production Capacity in Baker Lake and Shannon Lake R2 Resource Consultants 2010).

The DFREIS also states that "Peak spawning would be minimally affected by the adoption of Article 107 a and b, because of the start date of Oct. 1." Table 4-7 is currently not completed for sockeye, and without information on sockeye spawning in the upper reservoir it is erroneous to say the impact would be minimal. Please add to table 4.7 that adult sockeye migration extends into October, and spawning for Sockeye is September through middle of November. The proposed action would involve a larger and earlier drawdown than current operations. An earlier draw down would most likely prevent access of migrating adult sockeye into multiple delta tributaries. For hydropower operations to meet table 107 Aquatic Table 2 with flood control storage achieved by October, then operationally the draw down could begin as soon September which could preclude abundant water levels to support fish entering the delta tributaries that currently support spawning sockeye. Ten vertical feet of reservoir storage equates to a long horizontal distance, when the slope of the upper delta is so flat, leaving fish exposed to shallow water depth and no cover as they try to navigate through the draw down zone. This will increase both predation risk and bioenergetic costs, which would have acute impacts to these fish in the later stages of their migration when body condition has already been greatly reduced during their upriver journey. Without access into stable and hydraulically

connected waters, many fish would be forced to spawn in the Baker delta, where reservoir management would eliminate any potential productivity from these spawners (Upper Baker Delta Scour Assessment and Spawning Evaluation Study A-15; 2005). Although the majority of production comes from the hatchery operations, we cannot discount the productivity from natural spawners. Natural spawning fish provides insurances against disease and infrastructure failure, as well as ecological function and a naturally selected gene pool.

The current statements on page 131 about mitigating factors do not correctly support the claims that impacts to fish in both reservoirs will be minor. Both the 2004 and 2010 productivity reports were static measures of productivity from final reports completed in 2004 and 2010, while the Settlement Agreement defines a pathway for rebuilding Baker River sockeye using the existing productivity defined in the reports. It is imperative to look at the timing of reports and the development of the fishery resources Protection Mitigation and Enhancement (PM&E's) measures. The new hatchery facilities were completed in 2011 and the new Baker Lake Floating service collector was built in 2008, while the Lake Shannon Floating Surface collector was operational in 2013. Since both reports were completed, the fishery co-managers have been planting substantial sockeye into Lake Shannon with an understanding that this potential has been part of planning to rebuild this sockeye fishery. The Settlement Agreement outlines the critical steps and facilities for incrementally rebuilding the sockeye until the capacity of the reservoirs was realized, therefore any potential impacts and associated mitigation should use the future and yet to be determined carrying capacity of the lakes. It is erroneous to look back in the past and say that there is unused potential in the reservoirs; therefore a future action would only cause minor effects. The potential for drawdown concentrating zooplankton prey making winter foraging easier is at its best a speculative statement. What impacts could also occur due to flushing out prey items as the reservoir is drawn down, what competitive and predator relationships would be altered with the proposed draw down and what impacts would that cause for the sockeye prey base or sockeye intraspecific age competition? If there is zooplankton productivity occurring in September, whether reproduction of new individuals, body growth of already born juveniles or maintenance of fully grown adults, then the reduced euphotic zone could reduce active zooplankton production via reduced production of the phytoplankton prey base during an important feeding time for juvenile sockeye. This illustrates that production potential, not a short term increase in density, may be the appropriate metric with which to measure sockeye production potential. Moreover, if climate change warms water temperatures in the reservoirs and extends the active productivity season later in the year, there could be a longer period of lost production potential. The impacts associated with a smaller euphotic zone, on both invertebrates and fish resources needs to be evaluated and qualified with further analysis for Lake Shannon. The Settlement Agreement defined the mechanisms for rebuilding the sockeye run and had a placeholder for additional flood storage once additional studies and consultations were complete. A well-defined bioenergetics study could provide the means to quantify how the standing biomass in the lake and stock enhancement might intersect for estimating reservoir potential and to quantify the necessary mitigation for impacts to lake capacity. Such a study is needed to adequately quantify the complex interaction between water temperature, consumption rate and animal physiology, an interaction which ultimately determines the population production potential of sockeye. In

addition the Baker River supports Coho, and any reduction to the littoral zone would also impact the amount and quality of habitat available for the rebuilding of coho in the basin.

During the relicense study period a 2004 report A-25 "Evaluation of Project-Influenced Predation on Juvenile Sockeye Salmon" documented Native Char predation on sockeye. Additional monitoring work for FERC #2150 is also tracking bull trout observations in the Baker River System and through project facilities. The Settlement Article 104 Connectivity between Lake Shannon and Baker Lake suggest the bull trout population is increasing in the Baker Lake system. Given that Bull Trout have been documented as a primary predator to sockeye, and that the proposed measure could reduce sockeye capacities, the cascading effect of severe impacts on the sockeye intuitively leads to a concern that the USACE proposal will also severely impact bull trout survival. The Tribe feels, therefore, that additional analysis should examine how this measure could impact Bull Trout Recovery.

The Comprehensive Urban Levee Improvement ("CULI") alternative creates significant harm and degradation to the efforts to restore sockeye and ESA listed species on the Skagit River system. The Tribe and the other Skagit River tribes are fighting a battle to preserve or re-establish habitat which is being lost to development and / or current forest and agricultural practices. The Skagit Chinook Recovery Plan (Recommendation 15 pg. 84) states; "Construction of new dikes and levees should be prohibited unless mitigated for, resulting in no net increase in isolated floodplain area or additional loss of floodplain habitat." CULI promotes further habitat degradation by removing the alternative to include levee setbacks. In section 3.6 of the DFREIS, the USACE has committed a large oversight in its all-or-nothing approach to levee setbacks. This approach fails to evaluate the potential for flood storage and fish habitat benefits, which could be accomplished by targeting a subset of the originally planned setbacks located in geomorphically key areas along the levee system downstream of the urban core. No qualitative analysis has been completed to understand how these proposed measures would impact ESA stocks or Tribal Treaty rights.

The DFREIS utilizes a cost / benefit analysis to examine potential alternatives. However, that analysis completely ignores and fails to include any economic value for natural resources and tribal fisheries. Pursuant to the Water Resources Development Act of 2007 mandates this kind of inquiry. Section 4.2.1.2, Environmental Justice at page 174 notes "Each federal agency shall analyze effects, including human health, economic and social effects, of Federal actions, including effects on minority communities and low income communities...."

A dangerous, and perhaps catastrophic, assumption in the Corp's analysis is that of the aggradation rate and river bed elevation over the 50-year lifespan of the project. If these parameters are underestimated, the project area may be overwhelmed by flood flows in large events. The Corps made an incorrect conclusion in the DFREIS that the riverbed in the project area is currently degrading. This conclusion was based on conditions at the USGS gage in Mt. Vernon and a subsequent extrapolation from this single point to the project reach scale; however, a comparison of riverbed cross-section elevations between 1976 and 1999 in the reach indicate an opposite trend, one of aggradation, throughout nearly all of the project area.

Moreover, a recent upward shift in the discharge-stage height relationship at the USGS gage may indicate a shift toward riverbed aggradation at this location. Taken together, these patterns highlight the need for the USACE to more closely analyze past sedimentation rates throughout the project area. Such an analysis should consider temporal trends to assess the possibility that aggradation rates have increased in recent decades, whereby the Corps' estimate of 0.5 to 1.5 feet over the 50-year project period would dangerously underestimate potential increases in riverbed elevation.

In addition to analytical oversights of recent and historic depositional trends, the Corps' failure to consider future climate change scenarios will exacerbate risks to the project. Climate change is expected to increase riverbed elevation through at least two mechanisms: sediment supply to the watershed will increase through increased glacier retreat, landslides and bluff erosion. Such processes have already resulted in changes to depositional patterns and increased aggradation in downstream reaches of western Washington river systems. Furthermore, sea level rise is expected to increase the elevation of the downstream boundary of the Skagit River, causing aggradation to propagate upriver into the project area. In summary, the Corps has failed to adequately analyze the spatial and temporal trends of historic riverbed aggradation, and failed to consider a potential increasing rate of aggradation in recent years; meanwhile, the utter lack of consideration for climate change impacts will almost certainly further magnify these oversights, thus jeopardizing the long-term success of the project in reducing flood and human health risk. At minimum, the Corps should reevaluate the effectiveness and sensitivity of each alternative under realistic aggradation rates and prepare contingencies in the event that aggradation outpaces the assumed limits.

The DFREIS Fails to Adequately Assess the Climate Change Impacts on the Proposed Action

I also understand that the Skagit Climate Science Consortium has provided comments on the DFREIS. If the changes identified in the TSP ultimately prove to be inadequate in coping with future flood risks, it is unlikely the region will secure additional resources to analyze environmental climate changes, or make additions or modifications to infrastructure. Thus any proposed alternative put forward as part of the GI needs to be explicitly tested under all conditions that will likely be encountered, which includes climate change, sea level rise, sedimentation and increase river storm flows. Currently, the DFREIS falls short on completing a sound vulnerability assessment currently in use by other agencies in preparing for climate change.

The Analysis of the Economic, Cultural and Human Tolls on the Tribe and its Members is Completely Inadequate

As stated above, the Tribe's treaty protected sockeye fishery provides food for elders, cultural fishing opportunities for members in the immediate area of its aboriginal villages and food and financial assistance to the Tribe's growing number of fishers. The USACE's proposal impacting the sockeye fishery will eliminate as much as one third (1/3) of the income that the Tribe's fishers produce for better than 25% of the tribal households in the three county area

surrounding the Skagit River. Nowhere in the DFREIS are these facts produced, let alone analyzed. This deficiency is not only glaring, but produces a result which is contrary to the USACE's trust responsibility to the Tribe.

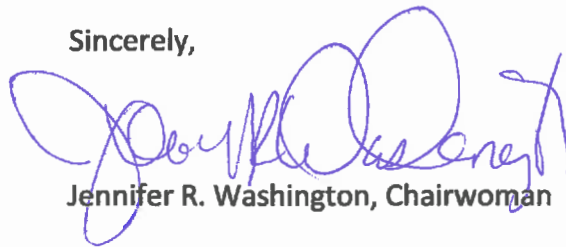
Conclusion

The DFREIS and the GI are wholly inadequate as it relates to the Skagit / Baker River sockeye fishery. Destroying a sockeye fishery and damaging the economic life of the Tribe's membership is contrary to the interests of a federally recognized Indian tribe and the Treaty of Point Elliott. For the above reasons, at a minimum, USACE must add to the GI and revise the GI in order to meet the obligations of the United States under the Treaty of Point Elliott, its trust responsibility and the obligations imposed by the ESA. Further information, study and analysis must be required and used to make the GI and the DFREIS documents factually and scientifically correct. Anything short of that goal would subject this matter to further legal scrutiny according to current standards.

Points of Contact

For further discussions and factual information, please feel free to contact Scott Schuyler or Jon Paul Shannahan at the above phone numbers or sschuyler@upperskagit.com and jonpauls@upperskagit.com.

Sincerely,



Jennifer R. Washington, Chairwoman

Cc:

Mark Celedonia USFWS

Erik Peterson Region 10 EPA

Tom Sibley NMFS

Brock Applegate WDFW

Larry Wasserman Swinomish Indian Tribal Community