

**Testimony of Gregory Haller, Conservation Director, Pacific Rivers Council**  
**to**  
**The House Committee on Natural Resources Oversight Hearing**  
**on**  
**“The Future of the U.S.-Canada Columbia River Treaty - Building on 60 Years of**  
**Coordinated Power Generation and Flood Control.”**  
**December 9, 2013**

---

Chairman Hastings, Congressman DeFazio, and members of House Committee on Natural Resources, thank you for the opportunity to testify on “The Future of the U.S.-Canada Columbia River Treaty - Building on 60 Years of Coordinated Power Generation and Flood Control.” The Pacific Rivers Council (PRC) is a regional river conservation group, located in Portland, Oregon, which works throughout the Columbia Basin and northern California to protect rivers, their watersheds and the native aquatic species that depend on functioning, high quality aquatic and riparian ecosystems. Due to our focus, we have been actively involved in the Treaty review process, which we believe offers a unique opportunity to positively affect the long-term health of the Columbia River. We strongly support the U.S. Entity’s conclusion in its Regional Recommendation that modernizing the Treaty with Canada is in the best interest of the United States and the river’s ecosystem.

**Support for Modernizing the Treaty With Ecosystem Function as a Primary Purpose**

PRC commends the U.S. Entity for recommending ecosystem function as a primary purpose of a modernized Treaty, along with flood risk management and hydropower production. The elevation of ecosystem function as a primary purpose accurately reflects the high value that citizens of the Pacific Northwest place on the health of the river and is consistent with nationally held opinions about how society should manage its interaction with the environment, as evidenced by environmental laws such as the Endangered Species Act (ESA) and the Clean Water Act (CWA). It also reflects the reality in today’s Northwest that ecosystem health and economic health are inextricable.

Ecosystem function may generally be defined as the physical and chemical interaction of living components (plants, animals and microorganisms) with non-living components (air, water, rocks) which produce and sustain an environmental community rich in abundance and diversity, resilient to natural processes and disruptions so that it may persist into the future. In the context of the Columbia River, ecosystem function are those processes that create environmental conditions, i.e., natural flow patterns, good water quality, cool river temperatures, connected floodplains and a healthy estuary that support and sustain, among other species, strong populations of wild salmon for present and future generations. A vital corollary to any definition is that, in the Northwest, ecosystem function underlies economic function. The health of the river is the basis for every economic activity undertaken in the basin.

As a result of dam building throughout the Basin, the Columbia River is now a highly fragmented and mechanized system, with degraded habitat, poor water quality and numerous ESA-listed salmon and steelhead runs. Because there is still no lawful federal plan to restore endangered Columbia-Snake salmon and steelhead, and because all but one of ESA-listed stocks are still far below levels needed for recovery, there is still much work to be done, particularly regarding flow management, improving river temperatures, reconnecting floodplains and improving passage for salmon. Modernization of the Treaty will allow the region to address some of these issues by integrating strategies more consistent with regional salmon recovery and ecosystem health goals

A critical consideration for a modernized Treaty is climate change. Climate change scenarios predicted for the region do not bode well for the future of salmon and other cold-water species. Already, river temperatures in the Columbia and Snake are dangerously high for extended periods in the summer and early fall. Treaty negotiations offer the region the chance to plan for operations that will address the challenges of low flows and elevated temperature.

We believe the issue ecosystem function is particularly salient to Treaty negotiations, given recent biological opinions concerning the impact of the Federal Emergency Management Agency's (FEMA) National Flood Insurance Program on ESA-listed salmon in Oregon and Washington. As such, FEMA requirements at the local level should be integrated into the larger flood review process, described below.

Conversely, not modernizing the Treaty will increase the risk of extinction for salmon. Absent a modernized Treaty, the Army Corps of Engineers must demonstrate that it has "effectively used" all U.S. storage capacity for system flood control before it can "call upon" Canadian reservoirs for additional storage. Proceeding with this type of flood risk management may require larger and more frequent drawdowns at Lake Roosevelt and perhaps at all U.S. storage reservoirs, including non-treaty dams such as Dworshak and Brownlee. Such operations would limit system capability to provide needed spring and summer flows for salmon.

### **The Future of Hydropower in the Basin**

The region and nation have benefited from the renewable energy generated by the Columbia River. But these benefits have come at the enormous cost of salmon and the river's ecosystem. Now, the people and the courts demand a different and better future for clean water and wild salmon runs. As climate change manifests as changed precipitation and runoff patterns, the hydrosystem will be under increasing pressure to reliably meet peak power needs and provide flows for fish. Importantly, the dynamics of a changing energy portfolio, including the rapid development of wind and solar power and the increasing use of natural gas to meet peak power demands, point to a potentially different future for hydropower operations on the Columbia, one potentially much more compatible with salmon recovery. These changes necessitate a forward thinking planning process that seeks to build a future for hydropower and salmon that reflects the needs and challenges of the 21<sup>st</sup> century. Treaty negotiations offer this opportunity.

Power production under a modernized Treaty must account for and promote development of non-carbon energy sources in the Northwest, including conservation and renewable resources, consistent with the region's goals as stated in the Northwest Power and Conservation Council's *Sixth Northwest Conservation and Electric Power Plan*. Energy efficiency and new renewables are the dominant growth areas in the region's energy supplies. Based on expanded power production model, the United States and Canada should re-evaluate the division of surplus power generation between the two nations.

### **Columbia River Basin Flood Risk Policy Review – Modernizing Flood Risk Management**

Modernizing the Treaty represents an opportunity to positively affect the river ecosystem at the Basin scale through a comprehensive, public planning process that would seek to modernize flood risk management. This effort should integrate new analysis of flood risk under predicted climate change scenarios with an assessment of how renewable and conventional energy sources will affect the demand for hydropower produced in the Basin. Further, it will involve a review of the adequacy of existing flood control infrastructure and an assessment of where floodplains can safely be reconnected with the river. It should also include funding for the integration of modern precipitation and runoff forecasting techniques into seasonal planning processes. Flood risk management based on monthly forecasts has often resulted in unnecessarily large reservoir drawdowns, missed refill targets and diminished flows and higher river temperatures. With improved forecasting and modeling, reservoirs can safely be maintained at higher levels to aid both anadromous and resident fish species.

The potential benefits of modernized flood risk management extend to other Treaty purposes. Fuller reservoirs not only enhance reservoir productivity and provide flexibility to provide additional summer flows, they also enhance system hydropower capacity and recreational opportunities. These types of win-win scenarios can be fully explored in an expanded review process.

We believe the issue of flood risk review and ecosystem function is particularly salient given recent biological opinions concerning the impact of the Federal Emergency Management Agency's (FEMA) National Flood Insurance Program on ESA-listed salmon in Oregon and Washington.

Because the Army Corps' current position is that the agency will not move forward with a basin-wide flood risk management review absent congressional authorization, we strongly urge Congress, particularly Northwest members of Congress, to direct the Corps to perform this review, using the best available science in a fully transparent and public process.

## **The Canadian Entitlement**

Though we acknowledge the concern about the calculation and size of power deliveries made to Canada pursuant to the current Treaty, we strongly believe that the United States must be cautious in its approach to suggestions that reducing or eliminating the Canadian Entitlement be a primary driver in Treaty negotiations, or as a basis to terminate the Treaty to avoid power deliveries. The significance of entitlement power deliveries as an inducement to British Columbia and Canada to negotiate changes to the Treaty that the U.S. may seek should not be underestimated, particularly when Canada can point to other benefits provided to the U.S. from operations of Canadian Treaty dams, including predictability of hydropower forecasting, flood control, recreation, navigation, water supply and ecosystem benefits.

The U.S. analysis that has been done to determine what the cost of termination to the United States in reduced hydropower flexibility and in resorting to “called upon” flood control, is based upon assumptions of how Canada might operate in the absence of the Treaty. Instead, this should be a bilateral analysis. Canada estimates the benefits to the U.S. of flood control over the lifetime of the current Treaty at \$32 billion, and in 2012 alone at over \$2 billion.<sup>1</sup> Those numbers do not address the enormous economic benefit of predictable hydropower, recreation, navigation, water supply and ecosystem benefits. Some interests in the region have voiced concerns regarding the cost of doing more for salmon and the health of the river. We suggest that a cost-benefit analysis of the existing Treaty’s compared to a modernized Treaty would benefit the dialogue between both nations. Supporting the need for such an analysis are suggestions that revaluation of the Entitlement calculation include “credits” for actions currently implemented pursuant to court order or the ESA. We do not see a legal, analytic or commonsense basis for creating “credits” for compliance with the Endangered Species Act (or any law). Such one-sided analysis ignores the very large benefits accruing to Northwest communities and people from compliance with such laws. We also note that the federal dam system on the Columbia and Snake Rivers is not in compliance with the Endangered Species Act, and has not been since 2000.

### **A Representative for Ecosystem Function in the U.S. Entity**

An ecosystem-expert should be added to the U.S. Entity, to better prepare for negotiations with Canada and to better implement this 50-year Treaty for today’s Northwest. The Treaty process should include a third agency or sovereign in the U.S. Entity, co-equal to Bonneville Power and the Army Corps of Engineers, for both negotiations and implementation of the Treaty. We suggest that the 15 Columbia Basin Tribes or U.S. Fish and Wildlife Service, NOAA Fisheries or Environmental Protection Agency represent ecosystem function.

---

<sup>1</sup> Province of British Columbia, “U.S. Benefits from the Columbia River Treaty- Past, Present, and Future: A Province of British Columbia Perspective,” June 25, 2013.

## **Water Supply Allocation**

PRC is concerned about the Regional Recommendation's call for a process to allocate additional water from Canada for out-of-stream uses. Given existing streamflow deficits, allocating additional spring and summer flows for out-of-stream uses would be inconsistent with the elevation of ecosystem function as a primary purpose of a modernized Treaty. Only after instream uses are fully supported should analysis of consumptive and other uses be considered. Further, the Canadian government has already signaled that water supply is one of the many benefits it should be compensated for, and therefore, any additional out-of-stream use could be viewed as an additional benefit requiring additional compensation.

## **Conclusion**

In closing, PRC believes that modernizing the Treaty to include ecosystem function as a primary purpose is in the best interest of the United States and the Columbia River's ecosystem and the regional economy. Treaty negotiations, changes in energy demand, new sources of renewable power, and the challenges of climate change combine to create a unique opportunity to improve the health of the river and to modernize governance of the Columbia. And while some differences may remain unresolved among the region's stakeholders, states, and Native American Indian Tribes about the Recommendation, these differences should not be interpreted as reason not to proceed with negotiations with Canada. Rather, these differences merely highlight the importance and complexity of the many values the Columbia provides to society.