

February 7<sup>th</sup>, 2017

Scott A. Spellmon,  
Brigadier General, US Army, Division Commander  
U.S. Army Corps of Engineers  
Northwestern Division  
Attn: CRSO EIS  
P.O. Box 2870  
Portland, OR 97208-2870

Electronically Submitted *comment@crso.info*.

RE: Notice of Intent to Prepare an Environmental Impact Statement on Columbia River System Operations

Dear Mr. Spellmon:

American Whitewater provides these scoping comments in response to the Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS) on Columbia River System Operations.<sup>1</sup> Among the alternatives considered, we request that you include an analysis and evaluation of removal of four dams on the lower Snake River (Lower Granite, Little Goose, Lower Monumental, Ice Harbor). Removing the four lower Snake River dams will open opportunities for a 140-mile, multi-day river trip and will enhance on-river recreation opportunities in key tributaries. We specifically request that you include an analysis of the recreational benefits of a restored Snake River and associated economic impacts as part of the analysis of socio-economic effects.

American Whitewater is a national non-profit 501(c)(3) river conservation organization founded in 1954 with approximately 6000 individual members and 100 local-based affiliate clubs, representing whitewater paddlers across the nation. American Whitewater's mission is to conserve and restore America's whitewater resources and to enhance opportunities to enjoy them safely. As a conservation-oriented paddling organization, American Whitewater has a significant interest in the Columbia River watershed. American Whitewater has a significant percentage of members residing in the Pacific Northwest as well as members who travel from across the country to experience 100's of spectacular whitewater runs in the Columbia River Basin.

### **Comments on Notice of Intent and Scope of Environmental Impact Statement**

The NOI states that the EIS will evaluate a range of alternatives for future operation of the fourteen federal multiple purpose dams and related facilities within the interior Columbia River. The NOI further states that the "EIS will consider the direct, indirect, and cumulative impacts of these alternatives on affected resources, including geology,

---

<sup>1</sup> 81 FR 67382

soils, water quality and quantity, air quality, fish and wildlife (e.g., ESA-listed species and their designated critical habitat), floodplains, wetlands, climate, cultural resources, tribal resources, social and economic resources, and other resources that are identified during the scoping process.” Notably absent from this list is recreation. We formally request that the Action Agencies consider the direct, indirect, and cumulative impact of all alternatives on recreation as part of the EIS process.

The NOI states that the EIS will “likely include an array of alternatives...including breaching one or more dams.” We formally request that breaching the four lower Snake Dams (Lower Granite, Little Goose, Lower Monumental, and Ice Harbor) be included among the alternatives evaluated in the EIS.

## **Comments on Recreation**

### *Economic Valuation of a Restored Snake River*

While free-flowing rivers are necessary for healthy fish populations, they also provide opportunities for river-based recreation that includes rafting, canoeing, kayaking, tubing, fishing, and drift boating. The 140 mile stretch of the Snake River that could be restored through the removal of the dams would restore opportunities for day trips and multi-day trips along a stretch of river that historically had 63 named rapids, approximately 70 small islands, and numerous boat-accessible sites for camping and day use. The entire stretch would provide opportunities for a week-long river trip. With intermittent road access, day trips or weekend trips would also be possible. Recent research has demonstrated that rivers are resilient and most respond quickly to dam removal, particularly when dams are removed rapidly, over a period of months and not decades.<sup>2</sup> Analysis of recreational benefits from dam removal should consider contemporary research findings that demonstrate the rapid recovery expected to occur. In our view river-based recreation would be greatly enhanced if the four lower Snake River dams were removed. The result would be direct economic benefits for local communities and businesses.

The economic benefits of a restored river should be fully and quantitatively evaluated. In 2002 Loomis used a contingent-behavior travel-cost model based on intended trips if the lower Snake River dams were removed. He found that the restored river would attract 1.5 million visitor days that would grow to 2.5 million visitor days 20-100 years following river restoration.<sup>3</sup> The estimated economic benefit would be \$310 million. The basic approach was to evaluate contingent behavior by 1) describing the new recreation conditions represented by a free-flowing river, 2) surveying households and to ask if they would visit and at what frequency, and 3) asking the expected travel cost and travel time. Using this information, one can model prospective use and quantify the associated

---

<sup>2</sup> O'Connor, J.E., J.J. Duda, and G.E. Grant. 2015. 1000 dams and counting. *Science* 348 (6234) 496-497.

<sup>3</sup> Loomis, J. 2002. Quantifying recreation use values from removing dams and restoring free-flowing rivers: a contingent behavior travel cost demand model for the lower Snake River. *Water Resources Research*. 38(6):2.1-2.8.

economic benefits. We believe an updated economic analysis is necessary given changes that have occurred over the past 15 years since this analysis was conducted. In just the past 6 years, population for the states of Washington, Oregon, and Idaho has increased by 7-8%;<sup>4</sup> we now have a better understanding of the rapid pace at which rivers recover and know that new recreational opportunities on the Elwha, White Salmon, and Sandy River became immediately available following dam removal;<sup>5</sup> and demand for multi-day river trips has continued to increase in the region with most of the major rivers restricted (i.e. at capacity) by limited-entry permit systems.<sup>6</sup>

In addition to an updated analysis of the economic benefits of a restored river based on a travel cost demand model, we request that an existence value or passive-use value of a restored Snake River be evaluated. Existence value accrues to members of the public who would value a restored Snake River regardless of whether they ever paddle, camp, fish, or otherwise directly use the resources a restored Snake River would provide; individuals who might never make active use of the Snake River might derive satisfaction from its mere existence. This existence value is one component of the total value individuals place on the environmental change that would occur in a transition from a reservoir system to a free-flowing river. Evidence that existence value exists for this restoration opportunity can be found in the thousands of comments from individuals from across the country and contributions to organizations who advocate for a restored Snake River. We propose a survey to estimate the value that the American public places on a restored Snake River. We would suggest the applicability of the study design and implementation methodology used to determine the non-use values in the Klamath River Basin.<sup>7</sup>

### *Local Community Benefit*

Restoring the lower Snake River will open opportunities for communities to reconnect to their riverfronts, rather than further extending levees that wall off the river. This will provide enhanced recreational opportunities and may result in stronger economies for riverfront communities. We request that the EIS include an analysis of the recreational and economic benefits of reconnecting communities like Lewiston and Clarkston to the river under the dam removal alternative.

### *Socio-Economic Impacts to Recreation on Upstream Tributaries*

In addition to analyzing the opportunities that could be available on the mainstem Snake River, we request that the EIS evaluate the socio-economic impacts of dam removal on

---

<sup>4</sup> Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2016

Source: U.S. Census Bureau, Population Division, Release Date: December 2016.

<sup>5</sup> The Restored Lower Gorge on the White Salmon River, Sheer Madness Productions, <https://vimeo.com/52085922>.

<sup>6</sup> With increasing demand more rivers have had to go to limited-entry permit systems as evidenced. Most recently the John Day joined the list of rivers that distribute permits through reservation system. See < <https://www.americanwhitewater.org/content/Article/view/articleid/30958/display/full/>>

<sup>7</sup> See Carol Mansfield et al., "Klamath River Basin Restoration Nonuse Value Survey," January 19, 2012 (see especially, Table 2-1, Previous Valuation Studies of Dam Removal or Related Restoration Efforts).

river-based recreation on upstream tributaries like the Salmon, Lochsa and Selway Rivers. Currently, river management agencies are implementing restrictions on boating out of concern over their impact on salmon. For example, the Forest Service had a policy of reissuing river permits for the Middle Fork Salmon that came available through trip cancellations. Today, the agency no longer re-issues these permits during the salmon spawning season (August 15 to September 15) in order to reduce overall recreational use in an effort to reduce potential impact to spawning Chinook salmon. The policy is based on a concern that a large number of boats floating over spawning salmon could cause them to repetitively leave their redds. This in turn could lead to a reduction in reproductive success or complete reproductive failure through pre-spawn mortality if the salmon expend too much energy in their repetitive avoidance behaviors.

Although American Whitewater has questioned the scientific basis for this policy and equity of this mechanism to limit boating (permits for commercial trips were not similarly limited), we are concerned with the larger issues that have driven river management agencies to take such wide-reaching measures to protect salmon in the basin. Biologists involved in establishing the policy on the Middle Fork Salmon communicated to us that salmon runs are at 5% of their historical level, and that the dams on the Snake and Columbia River responsible for the 95% reduction in salmon populations.<sup>8</sup> We are concerned about the future of recreation opportunities in the Snake River basin, as river management agencies are considering additional management actions to restrict paddling if salmon runs continue to decline.

We request that the EIS analyze the socio-economic impacts on recreation in the upstream tributaries on both removing the lower Snake River dams and keeping them in place. Specifically, this analysis should consider the impacts of increased limitations on recreational activity if salmon are not recovering.

### *Summary*

We join citizens of the region who support bringing wild salmon back to the Snake River and its tributaries by restoring the river through dam removal. Communities around the nation are enjoying the benefits of river restoration; they witness firsthand the benefits of restoring rivers for the benefit of fish and local communities when unnecessary dams are removed.

We request that the EIS include a comprehensive benefit/cost analysis on recreational opportunities that would be available under a scenario where the lower Snake River dams are breached and a free-flowing river is restored. This analysis should consider new recreational opportunities that would emerge with a free-flowing river, benefits of reconnecting local communities to the waterfront, and benefits of restored salmon runs to those who enjoy existing recreational opportunities on upstream tributaries including but not limited to the Clearwater and Salmon River basins. The benefit/cost analysis

---

<sup>8</sup> See Colburn, K. 2012. Keeping the salmon in the Middle Fork Salmon. American Whitewater Journal. Jan/Feb Issue. <<https://www.americanwhitewater.org/content/Journal/show-page/issue/1/year/2012/page/16/>>

should be conducted using accepted accounting practices and standard discount rates. All data sources should be cited and made available for public review and independent analysis.<sup>9</sup> We also request that the EIS include an analysis of the impacts to recreational opportunities in the tributaries if the dams remain and salmon populations in the Snake River basin continue to decline.

Thank you for considering our comments to include lower Snake dam removal among the alternatives in the EIS. Please proceed with the best available science that should include both biological and social science for a full, honest, thorough analysis of costs and benefits of a restored river.

Sincerely,

A handwritten signature in black ink, appearing to read 'T. O'Keefe', with a stylized flourish extending to the right.

Thomas O'Keefe, PhD  
Pacific Northwest Stewardship Director

---

<sup>9</sup> Given past history on the issue of dam removal, we are concerned that results of economic analyses of recreation have been modified to underreport the benefits as described in Grunwald, Michael, Snake River Dams: A Battle Over Values; 2 Corps Analysts Say Study Results Manipulated, Washington Post, Sep 12, 2000. Page A16.