AMERICAN WHITEWATER

Thomas O'Keefe, PhD
Pacific Northwest Stewardship Director
3537 NE 87th St.
Seattle, WA 98115
okeefe@americanwhitewater.org

August 19th, 2018

Stephanie Solien, Co-Chair
Thomas (Les) Purce, Co-Chair
Southern Resident Killer Whale Recovery and Task Force
Office of the Governor
PO Box 40002
Olympia, WA 98504-0002

RE: Southern Resident Killer Whale Recovery and Task Force, Executive Order 18-02

Dear Task Force Co-Chairs Solien and Purce:

The recent Executive Order issued by Governor Inslee on Southern Resident Killer Whale Recovery and Task Force notes that the "The health of Southern Residents and Chinook salmon are tightly linked." By extension the health of our rivers directly impacts the Chinook salmon that depend on them. American Whitewater submits these comments to inform the development of the comprehensive report and recommendations for recovering Southern Resident Killer Whales through actions that benefit our rivers and the salmon who depend on them. While the Southern Resident Killer Whales represent an important indicator species that reflects the health of the Salish Sea and the rivers that flow into it, the impacts are felt well beyond our region's beloved killer whales. Actions that benefit these majestic creatures will benefit all who depend on healthy rivers and a healthy marine environment.

American Whitewater is a national non-profit 501(c)(3) river conservation organization founded in 1954. We have approximately 6000 individual members and 100 local-based affiliate clubs, representing thousands of 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 an interest in the rivers throughout the Salish Sea and Columbia River watershed that provide the spawning and rearing habitat for Chinook salmon that Southern Resident Killer Whales depend on. Conserving and restoring river habitat critical to Chinook and Southern Resident Killer Whale survival will provide significant community benefits for those who value and enjoy rivers, support restoration of healthy salmon populations, and enjoy the experience of viewing Southern Resident Killer Whales in their native habitat.

We offer the following comments on specific projects we believe will benefit Chinook salmon along with recommendations on specific actions the State of

Washington can take. The majority of these projects are summarized in an ESRI Story Map that can be viewed online <https://arcg.is/19H41K>

Salish Sea Dams Impacting Chinook

While many restoration actions are underway along the rivers that flow into the Salish Sea, addressing the impacts of dams that impact adult or juvenile passage represents one of the best ways to provide an immediate benefit for salmon. A recent paper in Science notes a "major finding that rivers are resilient, with many responding quickly to dam removal. Most river channels stabilize within months or years, not decades."[1] The authors further note that "migratory fish have also responded quickly… Within days of the blast removing the last of Glines Canyon Dam, Elwha River Chinook salmon swam upstream past its rocky abutments."[2]

A number of opportunities to address the impacts of dams exist within Washington State on tributaries that flow into the Salish Sea:

Nooksack River, Middle Fork Diversion Dam

The Middle Fork Diversion Dam Passage Project will reestablish access to as many as 16 miles of habitat that Chinook salmon will be able to utilize. This project was identified as the top near-term (10 year) priority action in the WRIA 1 Salmon Recovery Plan[3] It has also been ranked as the top project in 2018 for the Puget Sound Acquisition and Restoration Program.[4] While the project is not fully funded, it is proceeding towards dam removal. Continued support from the State of Washington is necessary to ensure that the project proceeds to completion.

Puyallup River, Electron Hydropower Project

Historically, the Puyallup River watershed supported approximately 42,000 Chinook salmon. As of 2007, escapement of Chinook in the Puyallup River watershed (including early/spring returns to the White River) was estimated to be 1,300 fish. Currently a diversion dam for hydropower at river mile 41.7 causes illegal take of Chinook salmon. When the diversion dam associated with the Electron Hydropower Project was completed in 1904, it did not include facilities to allow passage of Chinook salmon blocking access to approximately 36 miles of habitat. In 2000, a fish ladder was constructed but it fills with sediment and the intake at the diversion dam is not properly screened. Electron has caused and

---

[1] O'Connor, J. E., J. J. Duda, and G.E. Grant. 2015. 1000 dams down and counting. Science 348(6234):496-497.
[2] Id.
[3] "For North Fork/Middle Fork Nooksack early chinook, the highest priority for restoration is the Middle Fork diversion dam." At Page 74, WRIA 1 Salmonid Recovery Plan, April 30th, 2005 <http://salmonwria1.org/webfm_send/23>. See also Appendix B <http://salmonwria1.org/webfm_send/24>
[4] 2019-2021 Puget Sound Acquisition and Restoration Program large capital ranked list, 8/6/2018 <https://pspwa.app.box.com/s/hx547fnjdzm57bnk5knyswnbxmlt3aj9>

continues to cause illegal take of Chinook salmon.

Pilchuck River, Pilchuck Dam

The Pilchuck Dam is located at river mile 26.4 on the Pilchuck River. Since installation in 1912, the dam has impeded upstream migration and reduced capacity for salmon to utilize over 37 miles of high-quality habitat upstream of the dam. Although the dam has a fish ladder, it does not function properly and does not meet current passage criteria functionally serving as at least a partial barrier to upstream passage. The dam is located at the transition between the more heavily impacted lower/middle watershed and the upper watershed that is forested with better habitat. This project was ranked as the #3 project in 2018 for the Puget Sound Acquisition and Restoration Program.[5]

White River, Buckley Dam

Buckley Dam was built in 1911 to divert water toward Lake Tapps that for many years served as the forebay for a hydropower project. The Buckley Dam and the upstream Mud Mountain Dam have created numerous issues for upstream fish passage. Continued progress towards addressing the fish passage issues is critical.

Deschutes Dam

The 5th Avenue Dam was constructed in 1951 and obstructs the flow and natural tidal exchange of the Deschutes River. The dam forms a reservoir known as Capitol Lake that has documented environmental problems. An estimated 35,000 cubic yards of sediment accumulates annually within the reservoir basin that suffers from degraded water quality and ecological functions. The dam has significant effects on the viability of habitat for salmon due to the restriction of fish passage, elimination of estuarine conditions, increased levels of fine sediment, and impairments to water quality.

Dams continue to be a limiting factor for Chinook salmon production. From our experience on the Elwha and other dam removals across the state, we know that restoring access to habitat and restoring geomorphic processes (e.g. transport and distribution of spawning gravel) can have an immediate beneficial impact for Chinook salmon by expanding access to previously inaccessible habitat.[6] The State of Washington could take a more effective leadership role in addressing problems associated with dams and working with project owners to remove them where appropriate.

---

[5] 2019-2021 Puget Sound Acquisition and Restoration Program large capital ranked list, 8/6/2018 <https://pspwa.app.box.com/s/hx547fnjdzm57bnk5knyswnbxmlt3aj9>

[6] O'Connor, J. E., J. J. Duda, and G.E. Grant. 2015. 1000 dams down and counting. Science 348(6234):496-497.

Actions the State of Washington Can Take:

- The State of Washington, through the Washington Department of Fish and Wildlife and Department of Ecology, needs to exercise its regulatory authority to address issues with dams that are blocking access to salmon habitat or damaging habitat by disrupting critical geomorphic processes.
- The Washington State legislature needs to promptly fund capital budgets and provide full funding for programs that include but are not limited to the Puget Sound Acquisition and Restoration Program. While we are pleased that significant progress is now being made on the Middle Fork Diversion Dam Passage Project, we are now well past the WRIA 1 goal of completing this project as a near-term action within 10 years. The pace of project implementation needs to increase.

Columbia Basin Dams Impacting Chinook

Lower Snake River Dams

Our members spend significant time recreating in the upper Snake River watershed on tributaries that include the Lochsa, Selway, and Middle Fork Salmon. We know from first-hand experience that these upper watersheds provide millions of acres of intact habitat with exceptional water quality that holds significant recovery potential for Chinook salmon. It is an undeniable fact that no other watershed with the Pacific Northwest holds the restoration potential of the Snake River where we simply need to improve access to habitat that exists.

The State of Washington needs to take a greater leadership role in calling for increased spill at federal dams and restoring a free-flowing Snake River. Increased spill is an immediate and necessary action that will improve survival of juvenile salmon that migrate through the federal hydropower system to the Pacific Ocean. Removing the four lower Snake River Dams is the single best Chinook salmon restoration opportunity on the West Coast.

This is not a new idea but inaction continues to persist. The National Marine Fisheries Service included the following paragraph in the Recovery Plan for Southern Resident Killer Whales:

> *"Perhaps the single greatest change in food availability for resident killer whales since the late 1800s has been the decline of salmon in the Columbia River basin. Estimates of predevelopment run size vary from 10-16 million fish (Table 7; Northwest Power Planning Council 1986) and 7-30 million fish (Williams et al. 1999), with Chinook salmon being the predominant species present. Since 1938, annual runs have totaled just 750,000 to 3.2 million fish (WDFW and ODFW 2002). Returns during the 1990s averaged only 1.1 million salmon, representing a decline of 90*

percent or more from historical levels. With so many fish once present, salmon returning to the Columbia River mouth may have been an important part of the diet of Southern Resident whales."[7]

Rebuilding robust Chinook salmon populations in the Columbia Basin is a critical component of any effective, larger strategy to protect Southern Resident Killer Whales from extinction and restoring the Snake River Chinook salmon populations is central to that. Work to develop this plan should start immediately.

Enloe Dam, Similkameen River

While the Snake River Dams have received widespread public attention, other opportunities for dam removal and restoration exist that will improve access to upstream habitat. Enloe Dam on the Similkameen River has not generated hydropower in decades and despite several attempts by Okanogan PUD to reconstruct the hydropower facility, the economics of the project remain unfavorable and this outdated dam remains a primary candidate for removal. In a letter to the Federal Energy Regulatory Commission earlier this year, the Washington Department of Fish and Wildlife noted that "Chinook were recently observed at the base of the [Enloe Dam] after surmounting the falls approximately 300 feet downstream."[8] This is not new information. In 1993, Fishery Biologist Larry B. Everson reviewed evidence of fish at the base of dam.[9] The significance for Chinook salmon is an extensive habitat inventory of the basin concluded that at least 367,000 m^2 (439,000 yd^2) of Chinkook salmon spawnable area is available, currently inaccessible due to the dam, that is capable of supporting 55,000 Chinook salmon.[10]

Nelson Dam, Yakima River

Nelson Dam is a dam on the Naches River, a major tributary of the Yakima River, that was constructed in the 1920s to divert irrigation water and later municipal water. Originally the dam had no fish passage and while attempts were made to improve the situation, impacts of the dam on the geomorphology of the system continued to negatively impact fish passage and habitat quality. A project is currently underway to remove the dam to restore floodplain connectivity and

---

[7] At Page II-82, National Marine Fisheries Service. 2008. Recovery Plan for Southern Resident Killer Whales (*Orcinus orca*). National Marine Fisheries Service, Northwest Region, Seattle, Washington. <http://www.westcoast.fisheries.noaa.gov/publications/protected_species/marine_mammals/killer_whales/esa_status/srkw-recov-plan.pdf>

[8] Brown, Jim, Director Region 2, Washington Department of Fish and Wildlife. Received by Kimberly Bose, Secretary Federal Energy Regulatory Commission. January 31st, 2018.

[9] Everson, Larry B., Fishery Biologist, E.E.C. and Associates. Received by Bob Heinith, Columbia River Inter-Tribal Fish Commission. February 9th, 1993.

[10] IEC BEAK Consultants Ltd. 1983. Natural Propagation and Habitat Improvement Washington. Similkameen River Habitat Inventory Final Report. Prepared for Bonneville Power Administration, Portland, OR.

geomorphic processes and address the fish passage issue. Continued support for state programs, including but not limited to Floodplains by Design, is important for this project and others that are designed to restore geomorphic process and restore salmon habitat. Other recent projects on the Methow including the Chewuch Diversion Dam and Fulton Diversion Dam removals demonstrate success with projects that allow for continued irrigation withdrawals will providing improved fish passage. Evaluating additional opportunities for removing irrigation dams while developing alternative infrastructure should be included as a component of any strategy to improve Chinook production in the Columbia Basin.

Actions the State of Washington Can Take:

- Take a leadership role to increase spill at lower Snake and lower Columbia River dams to 125% total dissolved gas starting in 2019. Increasing spill is our best near-term action to increase salmon survival and prey availability for Southern Resident Killer Whales.
- Take an assertive leadership role to remove the Snake River Dams while providing the resources to address community needs for alternative renewable energy resources including energy conservation and transport of agricultural products.
- Support efforts of Washington Department of Fish and Wildlife to investigate and sample Chinook salmon at the base of Enloe Dam, quantify the potential for fishery restoration with the removal of Enloe Dam, and engage Federal Energy Regulatory Commission in a revaluation of the current proposal to construct a hydropower facility at this aging structure.
- Direct the Washington Washington Department of Ecology to more critically evaluate the impacts to Chinook salmon when issuing water quality certifications under Section 401 of the Clean Water Act at federally-licensed hydropower facilities (e.g. Enloe Dam).
- Support the completion of the Nelson Dam project. Inventory dams in the Yakima, Wenatchee, Methow river systems and evaluate opportunities where dams can be removed and alternative infrastructure can be constructed to address needs for agriculture.

Reevaluate Ongoing Projects That Will Negatively Impact Chinook Salmon

While the projects above represent opportunities to restore rivers, the State of Washington continues to pursue a flood control project in the Chehalis Basin that will irreparably harm Chinook salmon habitat. American Whitewater continues to strongly oppose any new dam on the Chehalis River. Both the Flood Retention Only (FRO) and Flood Retention Flow Augmentation (FRFA) run counter to the need for a comprehensive response that integrates reducing flood damage and restoring aquatic species habitat within the Chehalis Basin. We have encouraged the Governor's Chehalis Basin Workgroup to terminate planning for a new dam

on the Chehalis River and believe the Southern Resident Killer Whale Recovery and Task Force should critically evaluate this project.

The Draft Programatic Enivronmental Impact Statement for the project states that, "anticipated adverse impacts of the Flood Retention Facility on fish would be significant for fish populations in the Chehalis Basin"[11] due to loss of habitat function in the inundation zone, new passage impediments, reduction in fish survival, and changes to geomorphology that impact fish-habitat forming processes. The EIS clearly states that many species "would be adversely affected by inundation, whether temporary or permanent."[12]

Actions the State of Washington Can Take:

- Immediately cease efforts to investigate options for a new flood-control dam on the Chehalis River.
- Invest resources in the next biennium in fully developing the Restorative Flood Protection alternative for the Chehalis, begin project-level environmental analysis and investment in structural flood protection that does not include construction of a dam, and expand the scope and investment in Local-Scale Flood Reduction and Aquatic Species Habitat Actions.

Upper Watershed Protection and Restoration

Our intact and recovering upper watersheds on federal land represent important habitat and a source of cold water critical for Chinook spawning and juvenile rearing success. Successful efforts to permanently protect these upper watersheds through Wilderness and Wild and Scenic River designations should be continued. Recent designations include the Wild Sky Wilderness Act (Public Law 110-229), Alpine Lakes Wilderness Additions and Pratt and Middle Fork Snoqualmie Rivers Protection Act (Public Law 113-291), and Illabot Creek Wild and Scenic River Act (Public Law 113-291). Current legislation in Congress includes the Wild Olympics Wilderness and Wild and Scenic Rivers Act that would build on this legacy of protecting upper watersheds. With current threats to administrative protections such as the 2001 Roadless Rule,[13] the need is all the more apparent for permanent protection of backcountry landscapes on our federal lands.

---

[11] At page 281, Chehalis Basin Strategy Draft Programatic Environmental Impact Statement, Department of Ecology, September 29th, 2016.
[12] Id. at p. 283.
[13] The 2001 Roadless Rule (66 FR 3243-3273) explicitly notes at 66 FR 3247 that “Inventoried roadless areas are key to recovery of salmon and steelhead stocks in decline, providing habitat to protect species until longer-term solutions can be developed for migration, passage, hatchery, and harvest problems associated with the decline of anadromous fish.”

In addition to protecting headwater forests and rivers, critical restoration opportunities exist that will improve water quality. One of the greatest needs is for the state to work collaboratively with the Forest Service to address the water quality issues associated with a deteriorating road network. In 2005 the Washington Department of Ecology signed a Memorandum of Agreement (MOA) with the United States Forest Service to assess the effects of forest roads on water quality and bring them into compliance with the Clean Water Act. Specifically the MOA called for bringing Forest Service roads into a condition that will meet the level of protection required for state and private roads under WAC 222. Despite aggressive attempts to hold the Forest Service to this commitment and work with the federal delegation to establish the Legacy Roads and Trails Program and secure federal funding,[14] the pace of progress has slowed. In Fiscal Year 2018 Omnibus the program was eliminated as a separate line item in the federal budget. Both the House and Senate Budgets for Fiscal Year 2019 include no funding for the program. It is time for Washington State, which helped establish this program, reassert its leadership and partner with federal land managers to bring the forest road network into compliance with the Clean Water Act and the same standards required of state and private forests.

Actions the State of Washington Can Take:

- The Governor should actively support new Wilderness and Wild and Scenic River designations that will permanently protect headwater habitat and water quality including the Wild Olympics Wilderness and Wild and Scenic Rivers Act (115th Congress S. 483 and H.R. 1285).
- The Roadless Area Conservation Act of 2018 (115th Congress S. 3333)[15] was recently introduced to provide legislative protection for areas on Forest Service land that are currently administratively protected under the 2001 Roadless Rule. The Governor should actively support this bill and in the event that this bill does not move, the Governor should call for alternative forms of legislative protection for the headwaters of Puget Sound.
- Direct the Washington Department of Ecology to reassert a leadership role and make the Legacy Roads and Trails Program a priority. Work with the Congressional delegation to reestablish this highly successful program that invested millions of dollars to address the water quality impacts of unmaintained roads.

Summary

While we provide these comments in the context of benefits for Chinook salmon and the Southern Resident Killer Whales who depend on them, river conservation and restoration has a myriad of benefits for our community.

[14] <https://www.fs.fed.us/restoration/Legacy_Roads_and_Trails/>
[15] Among the benefits identified in the legislation at Section 2(a)(2)(D) is “helping maintain abundant and healthy fish and wildlife populations and habitats.”

Protecting and improving the health of our rivers benefits the outdoor recreation economy, protects our quality of life, and benefits all the species that depend on clean and healthy rivers. The Southern Resident Killer Whales are a critical and high profile indicator species for the state of the Salish Sea and the rivers that flow into it, but they are not the only ones experiencing the impact if we do not take bold decisive action. We hope you will consider our recommendations as you prepare the draft report. Please do not hesitate to contact me if you have questions or seek additional information on any of these projects.

Sincerely,

Thomas O'Keefe, PhD
Pacific Northwest Stewardship Director