



Nez Perce

TRIBAL EXECUTIVE COMMITTEE

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28 February 2019

Maia Bellon, Director
Heather Bartlett, Water Quality Program Manager
State of Washington Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600

Re: Nez Perce Tribe's Comments on Draft EIS for Short-term Modification of Total Dissolved Gas Standards for Federal Dams on the Lower Snake and Lower Columbia Rivers and Draft Administrative Order

Dear Director Bellon and Program Manager Bartlett:

The Nez Perce Tribe (Tribe) appreciates the opportunity to comment on the Draft Environmental Impact Statement (DEIS) and Draft Administrative Order for a short-term modification of total dissolved gas (TDG) water quality standards for the lower Snake and lower Columbia rivers related to spring spill season operations of the federal dams on the lower Snake and lower Columbia rivers.

The Tribe has long supported voluntary spill of up to 125% TDG as measured at the tailrace during the spring spill season (from approximately April 1 through June 20) while salmon and steelhead are migrating downstream, based on the best available scientific information about the benefits of spill and the effects of TDG levels. Strong benefits to salmon and steelhead smolt-to-adult survival and adult abundance are anticipated from increased spill and subsequent decreased powerhouse encounter rate (PITPH). As the DEIS describes, these benefits do come with some uncertainty/risk associated with exposure of fish and other aquatic biota to elevated TDG levels. However, TDG levels of 120% to 125% are commonly experienced by aquatic biota during periods of uncontrolled spill, without apparent adverse impact to their viability; in sum, there are not significant adverse environmental impacts associated with 125% TDG levels.

The Tribe remains confident in the Fish Passage Center's Smolt Monitoring Program ongoing monitoring effort for Gas Bubble Trauma (GBT) in salmonids. This monitoring has documented that TDG levels up to 125% result in GBT symptoms well below thresholds of concern. We expect this monitoring to continue. Controlled management of TDG levels at 120% or 125% will

provide opportunity for further study of GBT in non-salmonid species; we are encouraged that Columbia River Inter-Tribal Fish Commission and others are preparing to expand GBT studies.

The Tribe supports implementation of DEIS Alternative 3 and understands that Washington will be considering implementing this alternative in advance of the 2020 spring juvenile fish passage spill season, and understands Ecology is considering Alternative 2 as an intermediate step in 2019. The Tribe believes it would be beneficial to ensure that the characterizations of the benefits and impacts of Alternative 3 are accurate and precise.


Areas that would benefit from refinement, all of which can readily be incorporated in finalizing the EIS, include:

- Clarifying that there are frequently periods of involuntary spring spill at and exceeding 125% TDG, and that data has been collected, *e.g.*, DEIS at 5, 16-17; 45-48. This clarification avoids the impression that the effects of spill above the level of the existing TDG standards in Washington are unknown or dangerous.
- Clarifying that the existing evidence and data shows that the incidence of GBT in juvenile salmon is well below existing (conservative) action levels at spill that causes TDG up to 125%, *e.g.*, DEIS at 5; 45-48.
- Clarifying that the existing evidence and data shows that above 125% TDG the incidence of GBT increases somewhat in some circumstances but usually does not reach levels of concern until TDG is at or above 130%, *e.g.*, DEIS at 5.
- Clarifying that the biological opinions referenced from 2008-2014 were held illegal by the courts. DEIS at 16-17.
- Clarifying relevance of studies on the effects of TDG on early salmonid development and on juveniles, *e.g.*, DEIS at 22-25.
- Clarifying the relationship between the actual conditions juvenile salmon are likely to experience with laboratory studies involving continuous exposure to elevated levels of TDG for three weeks to two months, *e.g.*, DEIS at 27-28, or other studies, *e.g.*, DEIS at 40.
- Clarifying that the DEIS is examining all impacts (including, for example, those to smallmouth bass) for the sake of thoroughness, and ensuing in its analysis that examining this impact is not intended to suggest a sense of equivalence between, for example, salmon and non-native fish.
- Clarifying that the adverse impacts at 120% TDG are minimal, *e.g.*, DEIS at 45.
- Clarifying statements to emphasize the relative, and limited, range of uncertainty, *e.g.*, DEIS at 45-48.

The Tribe looks forward to continuing to work with and assist Washington and Oregon as they consider modification of the current standards up to 125% TDG. The Tribe's comments are offered against this backdrop, and we invite you to contact our staff (David B. Johnson, Director, and Jay Hesse, Research Division, in the Tribe's Department of Fisheries Resources Management) as you finalize the EIS.

We hope these suggested clarifications will be helpful in refining and finalizing the EIS.

Sincerely,



Mr. Shannon F. Wheeler
Chairman