

**Matt Baerwalde**

Please find PDF comments attached.



June 7<sup>th</sup>, 2019

Annie Sawabini  
Department of Ecology  
Water Resources Program  
PO Box 47600  
Olympia WA 98504-7600

Re: Comments on Draft Final Net Ecological Benefit (NEB) Guidance

Dear Annie Sawabini,

Please accept the following comments from the Snoqualmie Indian Tribe on Ecology's Draft Final Net Ecological Benefit (NEB) Guidance. The Snoqualmie Tribe—sduk<sup>w</sup>albix<sup>w</sup> in our Native language—consists of a group of Coast Salish Native American peoples from the Puget Sound region of Washington State. We have been in the Puget Sound region and the Snoqualmie Valley since time immemorial. sq<sup>w</sup>ed (Snoqualmie Falls) is the birthplace of the sduk<sup>w</sup>albix<sup>w</sup>. We had more than 90 long houses along the Snoqualmie River and its tributaries. These rivers and streams were the highways used to travel from village to village and connected all the ʔacit<sup>w</sup>albix<sup>w</sup> (Natives).

Our Tribe was a signatory of the Treaty of Point Elliott with the United States and Territory of Washington in 1855. At that time, our people composed one of the largest tribes in the Puget Sound region totaling around 4,000. We lost federal recognition in 1953, but after much battle, we regained federal recognition in October of 1999. Today, the Snoqualmie Tribe is made up of approximately 650 members and occupies a sovereign homeland in the Snoqualmie Valley. The Snoqualmie Tribe (Tribe) is governed by an elected Council and our Tribal Constitution.

General Comments on Draft Final Net Ecological Benefit Guidance

- An argument is made in this document that consumptive use from the pumping of exempt wells is "steady state," even though pumping for outdoor consumptive use is acknowledged to be much higher during the summer months. However, "steady state" impacts should *not* be generally assumed, despite the attractive simplicity of such an approach. Assumption of "steady state" impacts is too likely to result in offsets that do not adequately address the actual impacts of exempt wells on streams. Stream dewatering as a result of increased pumping during warm months is quite likely to be at its greatest magnitude at the very time that our regional streams are typically at their lowest natural flows, compounding its cumulative effects, and this "non-steady state" impact must be acknowledged and addressed in order to achieve NEB.



- The surest way to restore water loss from future exempt wells is to reduce consumptive use by an equal or greater amount. Other than that, realistically, the best that can be done is to use storage to shift volumes and flow of water from wetter seasons to low flow periods, but this is contrary to the “steady state” impact concept promoted within the Draft Final NEB Guidance.
- Ecology’s management and oversight of the current ongoing Streamflow Planning processes reflects an opportunity for action—now—in terms of new efforts targeting state and/or local enforcement, monitoring, and public education on statutory limits to daily and annual flow volumes, and the acreages that may be irrigated by PEWs. We request that Ecology begin addressing this critical need concurrently with the watershed streamflow planning processes, so that when the plans are due, work can also begin to make these volumetric and acreage provisions in the statute meaningful in reality.
- Similar to the request immediately above, but perhaps not directly related to the NEB document, the Tribe has observed during the planning efforts that have so far occurred that Ecology’s well log database is completely unreliable in terms of satisfactorily tracking wells and their potential impacts. As steward of the State’s water resources, Ecology should not rely on local governments alone to undertake this work. Ecology should develop and implement new standards for well drillers and/or permittees to provide accurate and relevant information on well locations, depths, and other characteristics and specifications such that the state has a centralized and useful well tracking database.

#### Page 9; Examples of Projects; Water Rights Acquisitions

- Water Rights Acquisitions will not increase existing streamflow, and will not offset future impacts of Permit Exempt Wells (PEW) unless water associated with acquired rights is actively being pumped or diverted and consumed, and only if acquisition results in cessation of current pumping. Acquisition of rights that are aimed at prevention of future consumption prevent only future degradation of flow, and should not be counted as NEB compared to present conditions.
- In order to count as NEB, a water right acquisition must result in a reduction or elimination of an existing proven consumptive use.

#### Page 10; Other Water Offset Projects

- *Re. Managed aquifer recharge projects:* The benefits of this action depend on the timing and location of where the recharged water returns to the stream system. A credible benefit can only be claimed based on evidence and analysis that shows that the recharged water is derived from a wet season when water supporting ecological processes is not limited, and that said recharged water benefits a stream system during a dry period, when water supporting ecological processes is limited.



- Re. *Projects that switch the source of withdrawal from surface to groundwater, or other source exchanges*: The potential benefit of a project employing source shifting from surface to groundwater needs to be modeled and analyzed to demonstrate where and when a given stream system's flow regime would be improved.
- Re. *Streamflow augmentation projects that involve pumping groundwater and discharging it into a stream*: Similar to the prior comment, any benefit cannot be simply assumed but needs to be credibly quantified and/or estimated.
- Re. *Off-channel storage projects that capture and store water for release back into the channel at other times, such as during low flow periods*: To the extent that such projects capture winter flood flows and can be controlled to release water during low flows, these projects are potentially the most transparent in the sense that their benefits are more easily assessed and understood compared to the other projects involving groundwater. Regardless, any claimed benefit must be credibly demonstrated based on existing data showing how ecological lift affects a flow-limited period and/or stream reach.

#### Pages 10-11; Individual Project Evaluation

- Re. *"Projects included by planning groups in watershed plan must offset impacts by: 1) replacing water lost due to new consumptive water use during the same time and in the same subbasin as the impacts occur..."*: What is meant by the "the same time," which is not explicit. Does this reference when pumping occurs, or when impacts to instream flow from pumping occurs – or are these assumed to be concurrent for purposes of the watershed planning effort? We suggest that the more ecologically relevant standard would be when the impacts to instream flow occur.
- Re. *Household Consumptive Outdoor Water Use (HCOWU)*: The approach seems plausible but the area under irrigation per household is uncertain since there is generally no monitoring or enforcement of irrigated area, water volumes pumped by PEWs, or other enforcement mechanisms to limit the amount of land under irrigation, or to prevent over-irrigation and additional evaporative loss. Ecology's management and oversight of the current ongoing Streamflow Planning processes reflects an opportunity for action in terms of new efforts targeting state and/or local enforcement, monitoring, and public education on statutory limits to daily and annual flow volumes and acreages that may be irrigated by PEWs.

#### Pages 21-22; Appendix B

- Re. *"So theoretically in order for projects to provide benefits that are in-time, these must provide year-round replacement of water at variable rates equal to the variable, year-round, consumptive use rates of houses. Offset projects involving such things as retiring seasonal surface water irrigation rights improve flows only during the months when the water was historically used, and thus do not provide*



*year-round benefits*": As commented above, retiring water rights is of no use to the degree that the retired rights are "paper" rights that do not reflect actual historical use, or use during the current planning period. However, reduction in actual surface diversion of water for purposes of irrigation addresses the most common ecological deficiency in stream flow regimes: dry season low flows. Stating that the retirement of proven seasonal water rights does not "provide year-round benefits" obscures the basic fact that in reality, these withdrawals do significantly affect stream flows during streams' most flow-limited periods. For NEB, retiring water rights that reflect actual losses of stream flow during the low-flow season should rank high in most cases.

- Re. *"In most instances, a reasonable assumption will be that the effects of pumping on streamflow depletion will essentially be steady state"*: Adoption of this assumption too broadly ignores the seasonal impact of pumping PWEs for outdoor water use, especially for those PWEs in proximity to small, low order streams. The statement is not supported by the discussion.
- Re. *Figure B1* on Page 23: The text's explanation of this figure taken from the 2012 Barlow and Leake paper's Figure 21 would be greatly improved by using the full caption from the cited publication.

Thank you for the opportunity to comment.

Sincerely,

A handwritten signature in black ink, appearing to read "Matt Baerwalde", followed by a long horizontal line.

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