Nooksack Tribal Council

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January 17, 2020

Hon. Laura Watson, Director
WA Department of Ecology
Water Resources Program
P.O. Box 47600
Olympia, WA 98504-7600

Re: Nooksack Indian Tribe comments on Draft Amendment to WAC Chapter 173-501

Dear Ms. Watson:

Thank you for this opportunity to provide comments on Washington Department of Ecology's (Ecology) Draft Instream Flow Rule (Draft Rule) (Draft Amendment to WAC Chapter 173-501) for Water Resources Inventory Area #1. The Nooksack Indian Tribe (Tribe) relies on salmon in the Nooksack River watershed for subsistence, cultural, heritage, and commercial uses. Salmon are a major focus of protection and management of our treaty resources. The implementation of Ecology's draft rule will have a direct result on streamflows, salmon habitat, salmon survival, and salmon recovery. Further, the Tribe has participated in WRIA 1 watershed management and salmon recovery programs since their inceptions. Tribal staff have considerable technical expertise on the Nooksack River system and have provided this expertise in the WRIA 1 programs since their inception. More recently, Tribal staff were substantially involved with the effort to update the WRIA 1 Watershed Management Plan pursuant to the 90.94 RCW. Finally, the Tribe provided substantive comment on the preliminary draft rule in our letter dated May 7, 2019. It is not clear if or how Ecology considered those in the development of the proposed draft rule.

The general and specific comments below reiterate many of those comments previously provided to Ecology:

<u>Overarching Comments</u>

- Minimum instream flows as established in WAC 173-501-030 for the Nooksack River watershed are frequently not being met, and such inadequate low flows diminish salmon habitat, challenge the survival of salmon, exacerbate salmon recovery, and jeopardize the Tribe's treaty rights. For example, low flows in the South Fork exacerbate high temperatures, reduce habitat availability and can impair passage upstream, thus reducing productivity and survival of South Fork Nooksack Early Chinook. Low flows in the Nooksack River can affect the extent and connectivity of side channels that have historically provided considerable habitat and fishing opportunity for Nooksack Chum. Low flows in larger tributaries to the Nooksack River also impair passage and reduce productivity of historically productive fishing streams, such as Fishtrap Creek.
- All surface and groundwater diversions and withdrawals must be considered cumulatively in regard to minimum instream flows not being met. In addition, current and future domestic permit-exempt wells have and will continue to contribute to minimum instream flows not being met.

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- While we strongly support the establishment of a conservation standard in Ecology's draft rule that limits indoor domestic water use, reduces allowable irrigated acreage, and provides for interruptibility upon issuance of a drought emergency order, we remain concerned with the lack of metering and enforcement, spatial distribution of offset projects, and uncertainty of mitigation or offset project funding, implementation, and effectiveness.
- We assert that a cumulative impacts analysis of past, present, **and** future permit-exempt wells should inform rule development. The existing (1985) instream flow rule contemplated limiting issuance of water rights for indoor use only, "if the cumulative impact of single domestic diversions begins to significantly affect the quantity of water available for instream uses." The same standard should be applied in developing this rule applying to new permit-exempt well uses.
- We recognize that the total magnitude of water use from new permit-exempt wells will likely represent a relatively small fraction of water use across the basin; however, RCW 90.94 effectively allowed the proliferation of new junior water rights in closed basins where the Tribe's senior water rights are already impaired. This proposed rule does not go far enough to limit and mitigate such impairment, increasing the conflict over water resources and underscoring the need for adjudication in our basin.

<u>Ecology's Draft Rule:</u>

- We strongly support the establishment of a conservation standard that limits indoor domestic water use, reduces allowable irrigated acreage, and provides for interruptibility in drought conditions.
- 500 gpd indoor plus unquantified outdoor uses is still excessively high for the following reasons:
    - The limits are less conservative than those established for three of the seven basins with post-2001 instream flow rules, as well as for the Big Lake Mitigation Program and Lummi Peninsula Groundwater Settlement Agreement.
    - The Lummi Peninsula Groundwater Settlement Agreement – 350gpd annual average (including indoor and outdoor) with required metering – presents an example of limits that are locally workable. We urge you to establish limits at least as conservative as those established elsewhere.
- Lack of accountability over exempt well use is a concern. We appreciate that the rule explicitly states that Ecology reserves the right to require metering; however, we strongly urge Ecology to go further to require that meters be installed for all new permit-exempt wells. If the outdoor limit continues to be based on irrigated area without a volume restriction, the rule should also explicitly state that irrigated acreage limits will be monitored and enforced.

<u>Draft Rule Supporting Documentation:</u>

- <u>Consumptive use impacts</u>:
    - Consumptive use must be offset and the safety factor should be applied to the theoretical maximum use to increase certainty that net ecological benefit will be met.
    - Crop irrigation requirements (CIRs) are based on estimates from an earlier, cooler climate period. A warming atmosphere with reduced soil moistures have been documented over

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the last century in WRIA 1. As such, the CIRs need to be adjusted upwards to represent a warmer and drier climate.

- We appreciate the analysis to estimate the seasonal streamflow depletion of permit-exempt well withdrawals to support the assertion that annually-averaged water use approximates their streamflow depletion effects. Given the sensitivity of streamflow depletion to well proximity to the stream, however, we would like to see regulatory mechanisms established to ensure that wells are located on a property so as to minimize streamflow depletion effects. We do note that the distance from the parcel centroid to an adjacent stream is less than 300 ft – the smallest distance employed in the STRMDEPL08 analysis - for over 20% of the parcels in the Berk 2018 growth scenario.
- We remain concerned about the cumulative streamflow depletion impact of existing **and** future permit-exempt wells, both for the next 20 years and beyond, and urge Ecology to establish limits that are informed by such a cumulative impact analysis.

- Retiming of High Flows:
  - We appreciate that Ecology recognizes the ecological importance of high flows. In addition to fish migration and channel maintenance, high flows are important for floodplain maintenance, activation, and nutrient and sediment dynamics. Discharge levels between the minimum instream flows and peak flows are also ecologically important. Since we are uncertain about the magnitude of discharge potentially diverted relative to a system's hydrology, and because the interactions between hydrologic regime and salmon population productivity are often complex, we strongly support Ecology's intent to consult with WRIA 1 Tribes on proposed retiming projects to ensure unanticipated negative impacts are minimized.
  - Projects that retime high flows should be conducted in such a way as to avoid contributing to fish stranding.
  - The identification and design of retiming projects must fully consider stream hydrograph changes forecasted for a changing climate into the future. Some current concepts that address this mitigation or offset strategy assume a historical hydrograph that likely is not adequate for future hydrographs.

- Offset projects:
  - Ecology recognizes that mitigation or offset project funding, implementation, and/or attainment of benefits are not guaranteed, undermining certainty of net ecological benefit.
  - We support the inclusion of conservation programs and also strongly urge Ecology to incorporate evaluating the feasibility of on-site mitigation of consumptive water use into the project list, particularly for watersheds where no other projects are proposed (e.g., Lake Whatcom watershed). However, it is essentially impossible to ensure effectiveness of a voluntary conservation program, particularly for impacts as high as 25 acre-feet in the Lake Whatcom watershed where no other offset projects are proposed or monitoring proposed.

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- Since RCW 90.94 passed, the Tribe has advocated for minimization of impact through limits coupled with mitigation of impacts in-time, in-kind, and in-place. The list of offset projects should include regulation and/or programs to facilitate onsite avoidance, minimization, and mitigation of impacts.
- We are concerned about the inclusion of projects that involve interbasin transfers of water due to negative impacts to streamflow of the contributing water body and the potential to interfere with natal stream imprinting and homing of salmon in the receiving water body. With regard to Project #44, the proponent seeks to move water from the Nooksack River, which provides important habitat for a number of priority salmon species, to California Creek, which is a lower priority system for Tribal treaty fisheries.
- Offset projects that restore hydrologic processes (e.g. Stewart Mountain and Skookum Creek) potentially offer the highest magnitude of benefit and both the greatest life span and greatest likelihood of benefit. However, as Ecology acknowledges, there is a time lag to the onset and realization of the benefit. For instance, such projects may not produce offset water for well after the 20-year planning horizon identified for the draft rule. It would be prudent to develop for each subbasin both in-kind, in-time offset projects with more immediate benefit and ecological restoration projects with higher magnitude and greater lifespan of benefit. We do remain concerned about the lack of rigor in estimating offset project benefits and would like to see an explicit evaluation of magnitude and seasonal timing of benefit as well as onset and lifespan of project.
- Offset projects that restore hydrologic processes (e.g. Stewart Mountain and Skookum Creek) but do not yield offsets until after the 20-year planning horizon, but well into the future, are recommended because they would provide net ecological benefit in perpetuity as specified in Ecology's draft NEB guidance.
- Offset quantities for projects that restore hydrologic processes (e.g. Stewart Mountain and Skookum Creek) should be better quantified through robust contemporary hydrologic modeling using such models as DHSVM and/or VELMA. The Tribe has initiated a pilot project to calibrate and validate DHSVM and VELMA to quantify such offset water provided by such projects.
- We are strongly opposed to accounting for benefits from projects that would be implemented without Ecology's streamflow restoration funding – flow benefits should be accounted for proportional to the contribution of ecology streamflow restoration funding to total project cost.
- As indicated above, any storage project should be conducted in such a way as to avoid stranding of fish or an altered hydrograph that adversely impacts fish.
- We understand from the City of Lynden that several of the minimum instream flow compliance gages have been discontinued. There is no feasible way to measure the contribution to flows provided by most offset projects, such as the MAR project or the

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Stewart Mountain and Skookum Creek projects, without addressing the need for compliance gages. As such, we strongly suggest that Ecology fund replacement or substitute compliance gages.

- There are several other locations that have been proposed for MAR projects than just the North Fork Nooksack River as referenced in the draft rule supporting documents and SEPA checklist. These MAR locations include sites on the Middle Fork Nooksack River, South Fork Nooksack River, and the mainstem Nooksack River near Cedarville that should be included in the final rule.

- Adaptive Management:
  - We remain concerned about the lack of monitoring of project effectiveness. Ecology acknowledges that estimating the quantity of flow benefit is challenging. We have raised concerns about the rigor associated with initial estimates of benefit, but we urge Ecology to require more rigorous modeling and/or monitoring of benefits in the Five-Year Self-Assessments.

- Funding of offset projects:
  - We remain concerned that the proposed funding mechanisms (permit fees, Streamflow Restoration Funding) are inadequate to fully fund proposed offset projects or their maintenance, monitoring, and/or deficiency rectification. Permit-exempt well withdrawals are allowed under 90.94 RCW, even though such funding for required offset projects is uncertain.

- Net Ecological Benefit:
  - While we acknowledge that offsetting projects, if fully implemented and effective, will generate substantial benefit, we do remain concerned about the spatial and temporal gaps between impacts and offset projects, and the potential for significant streamflow depletion in localized areas, especially where permit exempt well development, and associated consumptive use, is concentrated in basins with low summer base flows.
  - While it is reasonable to assume that permit-exempt well consumptive use impacts will extend beyond the 20-year planning horizon, the net ecological benefit does not account for the lifespan of benefit for offsetting projects beyond that timeframe.

- SEPA Determination of Non-Significance (DNS):

We have concerns over how Ecology applied SEPA to the draft rule and arrived at a Determination of Non-Significance:

  - As explained in our May 7, 2019 comment letter, we expected Ecology to conduct an objective and comprehensive State Environmental Policy Act (SEPA) review of the draft rule. Ecology used the SEPA process to justify their proposed actions to comply with "Hirst fix" and arrived at a DNS without adequate objective review and analysis of cumulative impacts

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of past, present, and reasonably foreseeable future actions related to water demand, use, and management in WRIA 1 and the added impacts of continued climate change.

- We have already stated our concerns about how spatial and temporal gaps in offsetting undermine NEB and what we consider to be avoidable impacts caused by those gaps. Those gaps will add to the cumulative impacts of past and present projects.
- SEPA must evaluate the financial parameters of the draft rule in regard to who owns an offset project, how is it paid for, how is it managed, how is it monitored for compliance, and the costs to rectify failed offset water.
- SEPA must also address the many uncertainties built in to the draft rule including the heavy use of assumptions in arriving at a conclusion of NEB.
- Of particular concern is the lack of a cumulative impacts analysis required by SEPA that focuses on past, present, and reasonably foreseeable future actions related to water right management and water supply and demand. The assumption is made by Ecology that the amount of consumptive use associated with DPEG wells is very small, almost too small to resolve. However, with minimum instream flows typically not being met in most streams in WRIA 1, common non-compliant water use, the effects of climate change, combined with the consumptive use associated with this draft rule, cumulative impacts are likely substantial and significant.
- Based on these comments and those presented in our May 7, 2019 letter, we had expected Ecology would arrive at a Mitigated Determination of Non-Significance (MDNS) as opposed to a Determination of Non-significance (DNS). As such we believe there is a substantive deficiency in how Ecology applied SEPA to this draft rule.
- The SEPA checklist dismisses the impacts associated with this draft rule by stating that "this is a nonproject proposal." New water withdrawal from exempt wells are approved without specific SEPA evaluation or a cumulative impacts analysis.
- Section A.8 of the SEPA checklist missed many substantive documents that relate to WRIA 1 hydrology, salmon habitat restoration, and salmon recovery. Many of the missing documents were developed in support of a WRIA 1 watershed management plan update pursuant to the 90.94 RCW. SEPA cannot be considered adequately executed without a recognition that there are many additional sources of technical information on hydrology, salmon habitat restoration, and salmon recovery in WRIA 1.
- Section B.3, Water, of the SEPA checklist does not list all of the important tributaries to the Nooksack River or marine tributaries. As such, there is an inadequate disclosure of all important tributaries that could be impacted by the adoption of this draft rule.
- Section B.4 is contradictory or is misleading as it states "the amendment will not require any surface water withdrawals or diversions, but enables the potential for diversion...." Most certainly, additional water diversions will occur as there is currently demand for rural residential development.
- Section B.5.d ignores that spatial and temporal gaps in offsets will exist in some important tributaries and as such NEB is not attained.

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- Section B.8.l lists the proposed offset projects that address the implementation impacts of this draft rule. The temporal gap between when an offset project is implemented and when the benefits of the offset projects are realized are not disclosed, again indicating an inadequate SEPA review. Similarly, there are no compliance and enforcement components of the voluntary conservation program leading to the likelihood that intended offsets in the Lake Whatcom watershed are not a certainty.

Many of the parameters of the draft rule address some of our concerns over water demand and water use associated with rural residential development. We feel that the draft rule is a step in the right direction as compared to the existing rule. However, we believe that there are still substantial deficiencies in the effectiveness of the draft rule in avoiding adverse impacts to minimum instream flows, salmon survival, salmon habitat restoration, and salmon recovery, as well as to our treaty resources. We urge Ecology to revise their draft rule taking our comments into consideration before such becomes adopted as a final rule.

We remain committed to work with Ecology in making in what we consider to be reasonable revisions to the draft rule to avoid substantive spatial and temporal gaps in offset project effectiveness and to truly attain net ecological benefit and a reduction of cumulative impacts to minimum instream flows.

Sincerely,

Ross Cline SR

Ross Cline, Sr., Chairman
Nooksack Tribal Council

Cc:

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