Steve Bradshaw

Please see attached file for City of Bellingham comments.

Public Works Department

City of Bellingham

August 26, 2025

William Weaver
Washington State Department of Ecology
PO Box 47696
Lacey, WA 98504-7696

RE: City of Bellingham comments on the Draft Puget Sound Nutrient General Permit

Dear Mr. Weaver,

The City of Bellingham, Washington, (City) appreciates the opportunity to comment on the Washington State Department of Ecology (Ecology) draft Puget Sound Nutrient General Permit (PSNGP). The City supports Ecology's initiative to improve water quality in the Salish Sea. Our community has a strong environmental ethic that has resulted in significant infrastructure investments at the Post Point Resource Recovery Plant (Post Point) to improve water quality, and we expect to continue making justified investments that will preserve and enhance water quality in Bellingham Bay for generations to come.

To continue providing safe and reliable service, the City is facing unprecedented increases in our utility-wide rates due to multiple drivers. ***In July 2025, the City Council adopted sewer rate increases of 18 percent*** for each of the next 2 years to address critical sewer capital improvement needs that will allow the City to continue to protect the environment. With this increase, our average single-family residential sewer bill will double in 6 years. The City's has been focusing on expanding the City's Customer Assistance Program to reduce rates for low-income, senior, and disabled ratepayers to begin addressing the disproportionate burden of these increases. Although an extraordinarily high burden, ***this rate adjustment does NOT yet include nitrogen removal project(s)*** that have been identified through the City's advancement of the PSNGP's Nutrient Reduction Evaluation (NRE).

Based on our NRE work to date, we estimate that the ***City's sewer rates will increase to almost 7 times the current rate*** to comply with the nitrogen reductions as defined in the PSNGP and address identified on-going infrastructure needs to protect the environment. Given the lack of clarity on environmental benefits of these nutrient control investments, as well as the substantial hardships for our ratepayers and negative impacts to our community to fund these upgrades, the City has opted to not include nitrogen removal related investments in the current sewer rate adjustments.

The City has a significant interest in ensuring that nutrient regulations are science-based and appropriate for the community, and that the result is the highest water quality attainable with rates that

support economic sustainability. The City also has the responsibility of articulating not only the need for investments to protect Bellingham Bay and the greater Salish Sea, but also the tangible public benefits that will result from those investments. We want to partner with Ecology to ensure that investments in nutrient removal are science-based and will result in meaningful and sustainable positive impacts to the environment.

To this end, the City offers the following comments on the draft PSNGP, organized into the following categories:

- 1.0 - Salish Sea Model Results in Northern Bays
- 2.0 - S4. Narrative Effluent Limits for WWTPs with Dominant TIN Loads
- 3.0 - "Opting in" Implications
- 4.0 - Coordination with the Nitrogen Reduction Plan

1.0 Salish Sea Model Results in Northern Bays

The City continues to be concerned that Ecology's proposed approach does not support a strong linkage between water quality investments and tangible ecological outcomes. By targeting limited departures from theoretical natural conditions, huge expenditures are likely to be driven by very small changes in dissolved oxygen that provide no meaningful shift to living resources. We urge Ecology to consider fundamentally different approaches for managing dissolved oxygen, such as those applied to Chesapeake Bay. Under that approach, EPA and individual states refined both dissolved oxygen criteria and aquatic life uses of the Bay to reflect meaningful ecological zones, considering both controllable and non-controllable factors. The resulting dissolved oxygen targets reflect actual organism needs of those zones rather than a relative difference from an uncertain natural condition. This approach provided stakeholders with much more confidence that environmental investments were tied to ecological outcomes.

Specifically related to the Salish Sea Model (SSM) in the northern bays, the City is concerned that the SSM results demonstrate dissolved oxygen (DO) "non-compliance" when only 0.025% of the water (by volume) is estimated to contribute to the non-compliance event. Even when eliminating nitrogen loads in the SSM from Post Point (i.e., total inorganic nitrogen [TIN] loadings set to zero), the number of non-DO compliant days is only reduced from 39 to 20 days per year. These results pose three concerns: 1) the conservatism of SSM assumptions that trigger non-compliant days, 2) the linkage between non-compliance and ecological impairment, and 3) the massive investments that could be triggered to "chase" model results. In other words, how do we transparently and in a scientifically defensible manner articulate to ratepayers that spending hundreds of millions of dollars to reduce the number of compliant days by some marginal amount has a tangible ecological benefit and is required for healthy marine life in the Salish Sea?

The City requests Ecology consider an approach for managing dissolved oxygen that targets actual organism needs in the Salish Sea.

2.0 Narrative Effluent Limits for WWTPs with Dominant TIN Loads

Permit Section S4.D – Action Level Exceedance Corrective Actions

Subsection 2 of S4.D, Ecology states that if the Action Level (AL) is exceeded, a revised approach for reducing the annual effluent load by at least 10% below the AL must be completed by the next annual report. The City believes that references to 10% reduction should be revised to allow attainment of the AL. It is possible that achievement of a 10% reduction could represent a significantly larger reduction than simply achieving the AL and could be significantly more costly. Given the intent of this first permit term to optimize treatment and cap nutrient loads at the AL, the permit should not require utilities to reduce TIN loads below their AL. ***The City requests references to "10% reduction" be replaced with "10% reduction OR a reduction needed to attain the action level, whichever level of reduction is less stringent".***

In addition, the City believes that the 12-month timeline (by the next Optimization Annual Report) for implementation of even an abbreviated engineering report, including procurement of a qualified engineering firm, alternatives analysis, cost-benefit analysis, and selection of the recommended alternative with stakeholder input, is inadequate to complete this task. ***The City requests the timeframe be extended to a minimum of 18 months for completion of this effort.***

Permit Section S4.E – Nutrient Reduction Evaluation

Subsections 2 and 3 of S4.E, Ecology states an all known, available, and reasonable methods of prevention, control, and treatment (AKART) analysis and analysis of treatment technologies and alternatives to meet a 3 mg/L seasonal average TIN limit must be included as part of the NRE.

AKART is a subjective analysis, dependent upon the interpretations of each individual utility completing the analysis and the Ecology permit writer approving the report. It does not define a clear goal for effluent nutrient reductions nor the metrics required for Ecology concurrence.

Further, Phase 2 SSM scenarios are based on different effluent concentration limits than that requested in the NRE and potentially different than the limits in the final Puget Sound Nutrient Reduction Plan (PSNRP) currently in development. As described further in Section 4 below, the City seeks to have Ecology provide clear and coordinated planning direction between the NRE requirements and the PSNRP to best achieve the goals of the Puget Sound Nutrient Source Reduction Project. **The City requests that the requirements of the NRE be modified to reflect coordinated water quality limits with the PSNRP within the allowable timeframe of the PSNGP.**

Subsection 4 of S4.E, the requirements for the NRE appear to be "sufficiently complete that an engineering report may be developed" for the preferred alternatives at each assessed level of removal indicate an engineering report level of effort for two different effluent criteria. This requirement presents a high level of effort; completing this level of effort will likely require specialty services for which only a limited number of consulting firms are qualified. While the City has progressed this effort based on the original deadline, the mandatory PSNGP (and associated NRE) was invalidated in February 2025. Since then, continued efforts have been intentionally slowed down as the City looked to understand the potential regulatory requirement changes.

The City's current understanding of the voluntary PSNGP timeline is that the permit language (including NRE requirements) will be finalized in late 2025, at which time municipalities may review and apply for coverage. That represents at least 9 months of the City potentially progressing without a definitive understanding of the NRE requirements and increases the potential risk of needing to adjust efforts.

Likewise, there is continued concern that there will not be enough specialist resources available for all utilities to complete this effort by the June 30, 2026 submission date. ***The City requests the timeframe be modified to allow for submission of the NRE no earlier than December 31, 2026.***

3.0 "Opting-In" Implications

Although in February 2025 the Pollution Control Hearings Board (PCHB) invalidated the PSNGP, we understand Ecology proposes that facilities "opt in" for permit coverage under the PSNGP nonetheless (vs. addressing nutrient reduction requirements as part of the facility's individual permit). Ecology described development of this voluntary PSNGP as a collaborative process where the City could have opportunities to understand the implications of "opting-in". ***The City requests that Ecology establish a more structured collaboration process for understanding these implications, including defining risks and benefits of opting in for PNSPG permit coverage vs. individual permit coverage), specifically addressing the following initial questions:***

- What is the opt-in and opt-out process and what is the anticipated timeframe the City would have to decide with Council support? If opting in, could a permittee decide later that they would prefer to be regulated for nutrient via the individual permit instead?
- How would ALs be determined and enforced in the individual permit (vs. the PSNGP)?
- How would timelines or content requirements of required reports (annual report, optimization report, NRE) and permit expiration dates differ between the voluntary PSNGP and a modified individual permit?
- As the single dominant discharge loader in the Northern Bays with a single plant, are there regional opportunities (trading, bubble, etc.) available to the City under the voluntary PSNGP that would not be available under a modified individual permit?
- Would there be benefit (i.e. allowable extension in compliance/construction timelines) regarding final permit nitrogen limit deadlines (currently year 2050 in the Nitrogen Reduction Plan) for those permittees that opt in to the voluntary PSNGP?
- What permitting fees would be incurred in operating under both an unmodified individual permit and voluntary PSNGP vs. operating under an individual permit modified to include nitrogen regulation?

4.0 Coordination with the Nitrogen Reduction Plan

Ecology stated in the July 1, 2025 meeting (draft PSNGP, online Information Presentation) that review of the PSNGP should be done without consideration to the content of the PSNRP. As discussed at the beginning of our comments, the City has many competing priorities driven by regulations, asset renewal and replacement and capacity improvement needs to support state mandated growth. Post Point is substantially footprint constrained with surrounding environmental sensitivities and urban needs. The City is concerned this significant planning effort we have been undertaking may be undermined due to shifting effluent targets and goals and could ultimately result in significant wasted resources, re-work of alternatives evaluation, and delayed timelines for decisions made as part of the NRE from the voluntary PSNGP vs. the actual requirements for limits as may be required by the PSNRP. In addition, the lack of clear regulatory requirements regarding nitrogen discharge is a significant obstacle to the City's other planning efforts for the future of Post Point.

Therefore, the City requests Ecology clarify how the conversion between the potential 3 mg/l TIN limit as defined in PSNGP be modified to a TN limit in the future. What is the methodology Ecology would propose to modify a TIN limit to a TN limit and would it include a plant-specific allowance for the organic nitrogen fraction? Given the potential significant cost and site implications of a TIN versus TN limit and the City's limited data supporting our understanding of the organic nitrogen fraction at Post Point, the City requests that Ecology clarify the future effluent limits and the timeline for implementing these limits so that the City will have sufficient time to collect the necessary data.

How the regulatory limit is ultimately set (e.g. TIN vs TN vs SSM modeled concentration/load scenarios) could have significant implications for or even change the alternatives evaluated and selected as part of the NRE. As an example, if the final permit effluent limit is set at:

- 3 mg/L TN - tertiary filtration would likely be required to reliably meet the effluent limit.
- 3 mg/L TIN - tertiary filtration is not necessarily required and can be reliably achieved with the City's existing clarifiers as the final treatment step.

Therefore, if the NRE selected option proposed conventional biological nitrogen removal basins and clarifier process without tertiary treatment, the NRE evaluation and recommendation would then not consider the additional cost, footprint, or associated non-financial impacts of additional tertiary filtration requirements. Also, if the option for future flows and loads has built out, or nearly built out, the site space, then there may not be remaining footprint available at Post Point to add tertiary filtration to the selected option from the NRE at all, forcing the decision to an alternate technology approach.

Thank you for the opportunity to comment on the draft PSNGP. The City supports the work Ecology is doing to improve water quality in our communities and in the state of Washington. We look forward to continuing our work with you to achieve affordable and ecologically meaningful outcomes.

Sincerely,

Joel Pfundt, AICP CTP
Public Works Director