



March 15, 2021
U-115842

Eleanor Ott, P.E.
Washington State Department of Ecology
P.O. Box 47696
Olympia, WA 98504-7696

Subject: Pierce County's Comments on the Preliminary Draft Puget Sound Nutrients General Permit (PSNGP)

Dear Ms. Ott:

Thank you for the opportunity to comment on the PNSGP. Pierce County is formally submitting comments in accordance with direction provided on the PNSGP website.

Pierce County has been a collaborative partner throughout this process. This includes actively participating as a utility representative on the General Permit Advisory Committee. Pierce County worked side by side with representatives from the regulatory agencies, the environmental community, as well as our other utility colleagues to assist in the development of the draft recommendations document, which was considered during the development of this Preliminary PSNGP.

Pierce County's recommendations and comments are included in a comprehensive table (PSNGP Pierce County Sewer Division Comments) along with this transmittal letter. We would like to highlight the following key concerns that relate to both direct impacts to the Chambers Creek Regional Wastewater Treatment Plant (CCRWWTP), as well as broader regional and long-range concerns.

Pierce County has been proactive in the planning, financing, and building of capacity to treat our community's wastewater to much higher standards than has been required under NPDES Permit No. WA0039624. The County invested over \$350M, Pierce County's largest capital project, to achieve this goal. We are interested in protecting this investment, while at the same time developing a certain and reasonable path forward to accomplish our mutual goals with Ecology.

CCRWWTP Concerns

- **Timing of New Requirements:**
 - The timelines for achieving monitoring and reporting compliance, such as 30 days from permit effective date to full compliance, and timing of Notice of Intent (90 days) to submit for coverage vs. the 30 days are not reasonable or achievable.

- We request that the timing of requirements start at the beginning of a calendar year (e.g. January 1, 2022), which would provide for greater consistency with standard budget cycles and annual reporting cycles.
- **Monitoring Requirements:**
 - The monitoring requirements outlined in the draft permit would require two additional laboratory staff. This level of monitoring overburdens our already fatigued workforce with no additional measurable benefit of data collection to determine WWTP performance.
 - Reduce monitoring requirements to 3X week or less (as listed in the comment table), dependent on current individual permit requirements and/or amount of data available, as monitoring should be tied to compliance and not to build a data set.
 - Not all WWTPs are data limited for adequacy of monitoring/reporting.
- **Reporting Requirements:**
 - This new General Permit appears to duplicate reporting requirements under the individual NPDES Permit and we request non duplicative reporting. Data reporting should be streamlined into one data entry portal for both permits.
 - Annual optimization plan requirement is unreasonable and should be one per 5-year permit cycle. We will continue our current optimization efforts and provide adaptive management summaries on an annual basis.
- **Fees for New General Permit:**
 - Pierce County currently pays an annual fee for the CCRWWTP's NPDES Permit No. WA0039624 based on the number of sewer accounts. We do not believe that Ecology can charge two permit fees for the same discharge. An additional permit fee would divert money that could be directed towards optimization efforts.

Regional and Long-Range Concerns

- **Establishment of Action Levels and Consideration of Anti-Backsliding:**
 - Nutrient impacts are of a concern during the warmer season when D.O. impairment occurs. WWTPs should not be expected to operate in nutrient reduction mode during the winter months.
 - Defer additional improvements of those WWTPs achieving ALs until all WWTPs have achieved an equal standard.
 - Establish reasonable and achievable discharge limits that will measurably improve water quality in Puget Sound.
 - If higher standards are set in ALs than what eventually gets adopted under WQBELs, there is a potential to not be able to transition to the new limit given anti-backsliding provisions. Add language to ensure the PSNGP transitions seamlessly once WQBELs lay the foundation towards future water quality goals.
- **Develop a Long-Term Puget Sound Water Quality Program:**
 - This program should track the nitrogen reduction efforts and ensure the implementation strategy is working as intended to support the water quality goals of the Puget Sound. Ultimately, solutions will likely require actions outside of any one

agency's governance/authority. The new General Permit should provide a pathway towards development of collaborative partnerships to do so.

Should you have any questions about these comments please contact Patrick Kongsli, Sewer Division Maintenance and Operations Manager at (253) 798-3031 or Patrick.Kongsli@piercecountywa.gov.

Sincerely,

A handwritten signature in blue ink that reads "Jane Vandenberg". The signature is written in a cursive, flowing style.

Jane Vandenberg, P.E.
Wastewater Utility Manger

attachment: Table

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ec:
Patrick Kongsli, Sewer Maintenance & Operations Manager
Katherine Brooks, Sewer Planning Manager
Toby Rickman, P.E., Acting PPW Director
Brian Hardtke, Executive Chief of Staff

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General Comments			
General	Key performance criterion needs to be developed based on measurable water quality improvements within the Puget Sound. This should result in adaptive management strategies to ensure progress continues to be made toward improving the vital signs within this ecosystem.	Water quality decisions should be based on sound scientific data. This strategy should evolve as conditions (e.g. climate change, ocean acidification, etc.) change to ensure resources are being allocated appropriately for the actual conditions. How is success/ improvement measured in the Puget Sound?	Proper allocation of financial resources
General	Once WQBEL's are established, how often will Ecology re-run the various bounding scenarios and recalibrate the model based on changing conditions?	Treatment plant expansion projects take upwards of 10 years from plant design (second permit cycle) through completion of construction. How will Ecology utilize this 15-year timeframe to gather data and develop an overall water quality implementation strategy? Will this be done through a holistic approach to water quality or will it solely factor in treatment plant contributions?	
General	Develop a framework for partnerships/trading to share resources in the effort of improving the health of the Puget Sound.	Due to financial limitations, Ecology should consider the impacts of utilities expending their financial capacity and the implications this has on affordable housing. With concerns of aging infrastructure, many organizations need to focus resources towards preservation of existing assets. This results in economic hardships to the ratepayers within these jurisdictions.	
General	The PSNGP should be structured towards making progress today, but also lay the foundation towards the future water quality goals.	The permit structure seems to be geared toward the first permit cycle and does not transition well into the higher-level objectives and or the long-range plan. This permit iteration should not be focused on the short-term reductions but rather lay a modular framework toward the overall strategic objectives.	

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General	Non-point source dischargers are a major contributor of pollutants to the Puget Sound. This area needs to be considered in a parallel track with the POTW's.	Water quality improvements should be based on developing a monitoring framework and strategy for all forms of pollutants and balancing the economic impacts using a triple bottom line approach. How do you know the water quality improvement strategies are working if you don't measure the vital signs to see if they are improving? Are we moving the "needle" toward improving the overall health on a macro-scale?	
General	Ecology's role in improving water quality within the Puget Sound should be based on collaboration and not strictly enforcement.	Establishing action thresholds for point source dischargers that are not equipped for nutrient reduction does not improve the water quality of the Puget Sound. This ultimately placed an obstacle in the path towards a collaborative goal of water quality improvements and distracted the group from focusing on a common objective. The PSNGP development process could have been more effective by identifying the problem and utilizing a suite of solutions (based on subject matter expert input) to improve water quality for the short-term with current available resources and not implementing arbitrary "Action Threshold" values that do nothing towards improving water quality.	
General	This process could have benefited from additional time and coordination	An undertaking of this magnitude should follow an established framework for success that included establishing the following: funding, planning, collaboration, partnerships/trading opportunities, regulatory authority, effective data collection, and timeline for implementation. If this process followed a structured process, it would have alleviated much of the resistance that was encountered throughout this effort.	
General	Ecology should incentivize utilities for implementing nutrient reduction strategies and not punish them for anticipating future regulatory requirements. Pierce County is a great example of this forward thinking/strategic planning process.	The Chambers Creek Regional WWTP expansion project was the largest capital project in Pierce County history. The cost was approximately \$350 million dollars and included sidestream treatment as well as mainstream	

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		nutrient reduction capabilities. This forward thinking and insight did not result in any noticeable incentives in the Preliminary Draft PSNGP. The PSNGP should have focused more on incentivizing early adopters and less on short range "Action Level" thresholds.	
Section 2. Coverage Requirements			
Section II. Coverage Requirements, B. Coverage Proposal	The permit submittal requirements and timelines are spread throughout the text.	Provide a clear list of milestones/deliverables in sequential order to ensure clear expectations for the duration of the permit	Potential to impact timely compliance.
Section II. Coverage Requirements, B. Coverage Proposal	Tables listing both proposed and excluded facilities from permit coverage	Consolidate all tables if possible. The consolidated table could list whether a facility is proposed or excluded, action levels, as well as facilities and permit numbers	Clean up the permit and consolidate tables
Section II. Coverage Requirements, B. Coverage Proposal	Tables listing both proposed and excluded facilities from permit coverage	No need to list facilities that are not being included in final draft.	Clean up the permit and consolidate tables
Section II. Coverage Requirements, C. Facilities excluded from Permit Coverage	Table 2 Domestic Watershed Facilities Excluded from Coverage	Will waste load allocations be re-adjusted once all of the watershed contributions are quantified? And has Ecology accounted for how anti-backsliding may factor into this?	Could influence final Water Quality Based Effluent Limits
Section II. Coverage Requirements, D. Facilities with Current Limits	Second to last sentence. This paragraph includes the statement that "the results from the individual permit's monitoring requirements may be used to satisfy the general permit's monitoring schedule provided the timing and frequencies align" - is this true for all facilities?	Can the General Permit be more flexible on this point? If the data will be collected at some point during the monitoring period, does it really matter if the exact timing does not absolutely align with their NPDES permit sampling requirements? Can they not use their Individual NPDES permit as the primary guide, and simply add in the additional samples required by the General Permit?	Minimize costs, additional labor, avoid unnecessary sampling/analysis
Section II. Coverage Requirements, E.	Permittee identified in Table 1 must submit an eNOI for coverage within 90 days after the issuance date of the general permit.	Utilities are given 90 days to submit an eNOI for coverage under the general permit, but only given one month to begin the required monitoring. The monitoring schedule should be	Current language does not allow suitable timelines to obtain new staff to address the

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Coverage Mechanics		adjusted to conform with the eNOI coverage schedule.	monitoring requirements. Suggested modification would improve ability to comply.
Section II. Coverage Requirements, F. Permit Fees	Permit fees are required by state law, RCW 90.48.465. Fees collected fund the operation of Ecology's Water Quality Wastewater Permit Program. Permit fees for municipal or domestic wastewater facilities are governed by WAC 173-224.	<p>“We do not believe that Ecology can charge two permit fees for the same discharge.” “If it is found that Ecology can charge the two permit fees, explain the calculation methodology.”</p> <p>WAC 173-226-020 - No pollutants shall be discharged to waters of the state from any point source, except as authorized by an individual permit issued pursuant to chapters 173-216 and 173-220 WAC, or as authorized through coverage under a general permit issued pursuant to this chapter. Coverage under a valid general permit issued prior to the existence of this chapter will satisfy the permit requirements of this section.</p> <p>WAC 173.226.030 (13) – "General permit" means a permit that covers multiple dischargers of a point source category within a designated geographical area, in lieu of individual permits being issued to each discharger.</p> <p>Can both of these permits be applied simultaneously?</p>	Avoid double-charging for 2 discharge permits that regulate the same discharge point.
Section II. Coverage Requirements, F. Permit Fees	Permit fees are required by state law, RCW 90.48.465. Fees collected fund the operation of Ecology's Water Quality Wastewater Permit Program. Permit fees for municipal or domestic wastewater facilities are governed by WAC 173-224.	Will the fees be calculated the same way our existing permit fees are calculated?	Avoid double-charging for 2 discharge permits that regulate the same discharge point.

Section 3. Nutrient Action Levels

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Section III. Nutrient Action Levels, A. Why is a Nutrient Load Trigger Necessary?	fourth sentence - Discharges in one basin <i>can</i> affect the water...	This demonstrates the level of uncertainty present in the existing analysis. is “can affect” the same as saying “may” affect the water quality? And if so, aren't we making a leap of logic here if we can't say definitively that it does affect water quality... If we can't definitely say it does; then how do we know the steps we are taking will cause an improvement to water quality?	Making assumptions
Section III. Nutrient Action Levels, A. Why is a Nutrient Load Trigger Necessary?	About 70% of the nutrient load comes from domestic wastewater treatment plants (WWTPs, or plants, or facilities) discharging to Puget Sound and the estuarine areas during the critical warmer season when D.O. impairments occur.	If we know that the critical warmer season is when DO impairments occur from POTWs, why do we need nutrient removal all year round? Focusing on seasonal nutrient reduction, when the water temperature enhances nutrient reduction capabilities within the process, while expending far less of the utility's financial capacity, makes more sense. Year-round nutrient reduction costs will be disproportionately higher than a seasonal requirement.	Potential to over-engineer/build to meet standards that are excessively restrictive. Focus on what will truly make a difference in water quality, not just a general/blanket requirement that may not suit the need.
Section III. Nutrient Action Levels, B. How does the Nutrient Action Levels work with the Optimization Requirements?	“Any exceedance of either AL ₀ or AL ₁ will trigger further action as outlined in Sections V and VI of the preliminary draft proposal.”	Concerns regarding the word choice for the last word of this sentence – “proposal”? Do you mean permit? Is there some other document that we should be reviewing? Please change the language to state <i>‘of this preliminary draft permit’</i>	Clarification
Section III. Nutrient Action Levels, C. Nutrient Action Level Calculation Methods Pg. 9	Question #1: Do reviewers have feedback on whether the 95% UCL or 99% UCL is more appropriate for AL ₀ ? Ecology has considered both and would like additional input.	Between these two options, the 99% UCL is more appropriate for the first permit cycle as many plants have not been given adequate time to reduce nitrogen by implementing process changes/improvements. The other concern is that multiple methods of calculation are being used to determine “Action Levels” for regulatory purposes. The 99% UCL was not used across the board, this is true even for larger facilities (e.g. King County). Are these discrepancies a product of having individual permit managers calculate these values for	Standardized “Action Level” calculation method

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		their permitted facilities or was this a decision made on a case by case basis?	
Section III. Nutrient Action Levels, C. Nutrient Action Level Calculation Methods pg. 10	Question #2: Do reviewers agree with this approach proposed for plants that have existing nitrogen related effluent limits in their individual permits?	The plants with existing nutrient limits are being punished for early adoption of nutrient reduction. The facilities should not have a numerical value for AL ₀ as it has no actionable trigger. It is important to note that numbers have impacts to public perception. It is seen as a negative outcome if a facility exceeds any numerical value, even if it is considered arbitrary. For these facilities the AL ₀ value should be an N/A or left blank and the AL ₁ value should be design flow at 10 mg/L without taking it back to 85%. The final action threshold should be determined once WQBEL are established and not as part of this first permit issuance.	Fair and equitable approach for early adopting facilities, while considering anti-backsliding regulations.
Section III. Nutrient Action Levels, C. Nutrient Action Level Calculation Methods	For this metric, Ecology prefers that a single calculation method be applied to all plants.	This approach does not work for plants that are already <10 mg/L TIN. Ultimately, this results in punishing the forward-thinking facilities that implemented nutrient reduction processes proactively. These plants are already doing what is being asked of the rest of the facilities. They should be given some “grace”. If we were all starting from the same place, then yes, the same calculations should be applied. However, we are not all starting from the same place. Ecology may not appreciate the added nuance (workload) but the situation is not “one size fits all”. Exceptions are being made for those who have insufficient data, exceptions should be made for those who are leading the way in this effort.	Fairness, equity.
Section III. Nutrient Action Levels, C. Nutrient Action Level Calculation Methods, Calculating AL ₀	We can assume that there is only a 1% chance of exceeding AL ₀ by chance in any year.	This is not necessarily true. Especially, for facilities that are already < 10 mg/L TIN. Optimization efforts will not be as impactful for these facilities as this has or may have already occurred. This will result in loss of capacity (capacity is virtually capped) as growth occurs within their systems.	The likelihood of permit violations increases as limits become more stringent.

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Section III. Nutrient Action Levels, D. Facilities Discharging Less than 10 mg/L Total Inorganic Nitrogen Pg. 20	Question #3: Do reviewer agree with the approach proposed for calculating AL ₁ for facilities that have historically been able to maintain their annual average TIN effluent concentration below 10 mg/L?	The plants with existing nutrient limits are being punished for early adoption of nutrient reduction. The facilities should not have a numerical value for AL ₀ as it has no actionable trigger. It is important to note that numbers have impacts to public perception. It is seen as a negative outcome if a facility exceeds any numerical value, even if it is considered arbitrary. For these facilities the AL ₀ value should be an N/A or left blank and the AL ₁ value should be design flow at 10 mg/L without taking it back to 85%. The final action threshold should be determined once WQBEL are established and not as part of this first permit issuance.	Fairness, equity.
Section III. Nutrient Action Levels, D. Facilities Discharging Less than 10 mg/L Total Inorganic Nitrogen	AL ₀ calculation is not appropriate for plants that are currently <10 mg/L. These values are based on optimization efforts, which have been excluded from other utilities.	There should not be a number assigned to this category for facilities that are already below 10 mg/L - if they reach the numbers listed, they are violating their permit.	Fairness, equity.
Section III. Nutrient Action Levels, D. Facilities Discharging Less than 10 mg/L Total Inorganic Nitrogen	These facilities are not required to implement Tier 2 nutrient reduction actions if AL ₀ is exceeded.	This should be applied to facilities that achieve <10 mg/L seasonally, during the more relevant summer. Annual achievement of a 10 mg/L limit may not be feasible.	Fairness, equity.
Section III. Nutrient Action Levels, D. Facilities Discharging Less than 10 mg/L Total Inorganic Nitrogen	For those 13 facilities that qualify, Ecology proposes that AL ₁ be calculated as 10 mg/L concentration for 85% of the design flow, the capacity at which all plants are required to plan for maintaining capacity.	AL ₁ should not be reduced to 85% of the design flow for the first permit cycle. WQBEL's may not warrant the values for facilities already <10 mg/L TIN. So, at most, this should be based on design only until WQBEL's can be established. Until now, no plant has been required to meet a 10 mg/L requirement, so this is not a capacity driven parameter.	Fairness, equity.
Section III. Nutrient Action Levels, D. Facilities Discharging Less	These facilities are not required to implement Tier 2 nutrient reduction actions if AL ₀ is exceeded.	AL ₀ values should not be calculated for facilities already <10 mg/L TIN. These limits, in some cases, are 1/3 the design flow and may not be feasible to achieve. This may be setting up high performing utilities to fail right out of the	Fairness, equity.

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than 10 mg/L Total Inorganic Nitrogen		gate. Leave AL ₀ blank for these facilities until WQBEL's can be established.	
Section III. Nutrient Action Levels, E. Calculated Action load options by facility	Section E uses the term "action load options"	The use of the terminology of "action load options" in the heading needs to be converted to "Action level" in order to be consistent with the language used in the remainder of the permit.	Clarity
Section III. Nutrient Action Levels, E. Calculated Action load options by facility	From Section D - For those 13 facilities that qualify, Ecology proposes that AL ₁ be calculated as 10 mg/L concentration for 85% of the design flow, the capacity at which all plants are required to plan for maintaining capacity. * AL ₁ = 10 mg/L *(0.85* Maximum Month Avg Flow (MGD)) * 8.34 lbs/gal * 365 days/year ** Facility has effluent limit for total inorganic nitrogen in individual permit *** Insufficient TIN data for AL calculation	85% of design flow and 85% of maximum month average flow may not mean the same thing for all facilities. Terminology should be consistent to improve clarity.. For example, design flow can include maximum daily flow, hourly flow, monthly flow, etc.	Consistency, clarity.
Section 4. Monitoring and Reporting			
Section IV. Monitoring and Reporting, A. Monitoring Requirements P. 18, 19	Section II. Coverage Requirements, D. Facilities with Current Limits Second to last sentence. This paragraph includes the statement that "the results from the individual permit's monitoring requirements may be used to satisfy the general permit's monitoring schedule provided the timing and frequencies align" any proposed monitoring in a general permit would be in addition to the monitoring required in individual permits. Permittees may take one sample to satisfy monitoring requirements in both permits; however, reporting would need to be duplicated to meet each permit's monthly electronic WQWebDMR submittal requirement. Ecology proposes modifying, as necessary, duplicative nutrient monitoring requirements in individual permits	Third paragraph appears to be somewhat confusing/contradictory to earlier references to monitoring requirements. We understand that we may be required to run additional samples for certain parameters but would prefer not to run redundant analyses if possible. "If timing and frequencies align" leaves ambiguity. Again, can the General Permit be more flexible on this point? If the data will be collected at some point during the monitoring period, does it really matter if the exact timing does not absolutely align with their NPDES permit sampling requirements? Can they not use their Individual NPDES permit as the primary guide, and simply add in the additional samples required by the General Permit?	Clarity
Section IV. Monitoring and Reporting, A.	Permittees may take one sample to satisfy monitoring requirements in both permits; however, reporting would need to be duplicated to meet each permit's monthly electronic WQWebDMR submittal requirement. Ecology proposes modifying, as	Is there a way to combine the General Permit requirements with our existing NPDES requirements in SAW DMR reporting?	Minimize potential for data entry errors.

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Monitoring Requirements	necessary, duplicative nutrient monitoring requirements in individual permits		
Section IV. Monitoring and Reporting, A. Monitoring Requirements	Same reference as above.	Create a "Calculate GP Values" button to eliminate the likelihood of data transfer errors	Minimize potential for data entry errors.
Section IV. Monitoring and Reporting, A. Monitoring Requirements, Table 5	Ecology proposes to require the monitoring schedules shown in Table 1-3, with monitoring beginning one month after the effective date of the proposed general permit.	Lab accreditation may take more than 30 days to accomplish - even just setting up a contract to employ a commercial lab can take more than 30 days.	Ensure compliance.
Section IV. Monitoring and Reporting, A. Monitoring Requirements, Table 5	CBOD5 mg/L 4/week b 24-hour composite	4 samples per week is excessive. Maintain the current 2/week monitoring frequency for CBOD ₅ in influent and effluent, not the 4/week as proposed. Unnecessary/duplication of monitoring should be eliminated – Ecology should require either BOD or CBOD, but not both..	Minimize costs, additional labor, avoid unnecessary sampling/analysis
Section IV. Monitoring and Reporting, A. Monitoring Requirements, Table 5	Wastewater influent total ammonia, nitrate plus nitrite, total Kjeldahl Nitrogen	Nitrate or nitrite in influent is insignificant, so there is little benefit from running this analysis. Ammonia should suffice or maintain 1/month.	Minimize costs, additional labor, avoid unnecessary sampling/analysis
Section IV. Monitoring and Reporting, A. Monitoring Requirements, Table 5 – WW Influent	Total Kjeldahl Nitrogen mg/L as N 4/week b 24-hour composite	The overarching goal of the PSNGP is to regulate the discharge of TIN, not TKN. Other than imposing an unnecessary burden and cost on the treatment plant, increasing the monitoring frequency of TKN doesn't help the treatment plant to comply with the TIN requirement. TKNs are difficult to run - requiring 4 per week is excessive. Obtaining an ammonia value, a test that is faster and more economical to	Minimize costs, additional labor, avoid unnecessary sampling/analysis

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		conduct, would be sufficient for wastewater influent. Maintain current monitoring frequency of 2/week, not the 4/week as proposed.	
Section IV. Monitoring and Reporting, A. Monitoring Requirements, Table 5 – WW Influent	WW Influent Monitoring Schedule in PSNGP: <ul style="list-style-type: none"> • CBOD₅ 4/week • Total Ammonia 4/week • Nitrate plus Nitrite 4/week • Total Kjeldahl Nitrogen 4/week 	We do not believe that all influent nutrient parameters need to be monitored 4/week. This would result in unnecessary and excessive testing. Proposed Monitoring Schedule for PSNGP: <ul style="list-style-type: none"> • CBOD₅ 2/week • Total Ammonia 2/week • Nitrate plus Nitrite 1/month • Total Kjeldahl Nitrogen 2/week 	Minimize costs, additional labor, avoid unnecessary sampling/analysis
Section IV. Monitoring and Reporting, A. Monitoring Requirements, Table 5 – WW Effluent	Flow, MGD, Continuous, Metered/recorded Total Monthly Flow, MG, 1/month, Metered/recorded	We do not believe that Ecology should define the flow measurement in this permit as the method of measurement was already approved by Ecology in the plant's individual NPDES permit. Many facilities rely on one flow meter (e.g. influent) to mathematically determine effluent flow. This is the case for Chambers Creek Regional WWTP. Any modifications to this approach would require a significant capital investment.	Require capital project
Section IV. Monitoring and Reporting, A. Monitoring Requirements, Table 5 – WW Effluent	Total Organic Carbon, mg/L, 1/week, 24-hour composite	Similar to TKN, TOC may be useful for process modeling purposes but doesn't help the treatment plant to comply with the TIN requirement. Remove the monitoring requirement for TOC	Minimize costs, additional labor, avoid unnecessary sampling/analysis
Section IV. Monitoring and Reporting, A. Monitoring	TKN mg/L as N, 4/week, 24-hour composite	TKN same comment as above	Minimize costs, additional labor, avoid unnecessary sampling/analysis

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Requirements, Table 5 – WW Effluent			
Section IV. Monitoring and Reporting, A. Monitoring Requirements, Table 5 – WW Effluent	WW Effluent Monitoring Schedule in PSNGP: <ul style="list-style-type: none"> • CBOD₅ 4/week • Total Ammonia 4/week • Nitrate plus Nitrite 4/week • Total Kjeldahl Nitrogen 4/week • Total Organic Carbon 1/week 	We do not believe that all effluent nutrient parameters need to be monitored 4/week. This would result in unnecessary and excessive testing. Proposed Monitoring Schedule for PSNGP: <ul style="list-style-type: none"> • CBOD₅ 2/week • Total Ammonia 3/week • Nitrate plus Nitrite 3/week • Total Kjeldahl Nitrogen - None or 1/month • Total Organic Carbon - None or 1/month 	Minimize costs, additional labor, avoid unnecessary sampling/analysis
Section IV. Monitoring and Reporting, A. Monitoring Requirements, Table 5 – WW Effluent Footnote a	Take effluent samples for the CBOD5 analysis before or after the disinfection process. If taken after, dechlorinate and reseed the sample.	The language of footnote needs to be modified as not all disinfection is chlorine.	Improved clarity
Section IV. Monitoring and Reporting, A. Monitoring Requirements, Table 5 – WW Effluent Footnote b	4/week means four (4) times during each calendar week and on a rotational basis throughout the days of the week, except weekends and holidays.	Footnote b - This will not work for Thanksgiving because there are two holidays in the same week. In addition, some labs only work weekends which would also limit a facility's ability to comply with this item.	Modifying the requirement would improve facilities ability to comply.
Section IV. Monitoring and Reporting, B. Monitoring Requirements,	Therefore, at this time any proposed monitoring in a general permit would be in addition to the monitoring required in individual permits. Permittees may take one sample to satisfy monitoring requirements in both permits; however, reporting would need to be duplicated to meet each permit's monthly electronic WQWebDMR submittal requirement. Ecology	Clarify that IP NPDES samples may satisfy GP requirements. Facilities would also appreciate the ability to calculate GP numbers from NPDES DMRs via an automated function	Avoids duplication of efforts, additional cost, staffing, etc.

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Table 5 – WW Effluent	proposes modifying, as necessary, duplicative nutrient monitoring requirements in individual permits prior to or during normal reissuance schedules for expired permits after the proposed general permit is issued and effective.		
Section 5 Optimization and Additional Actions			
Section V. Optimization and Additional Actions, A. Optimization Framework	See the Monitoring and Reporting preliminary draft for details on proposed monitoring for the first permit cycle.	Paragraph 1 - Is there a separate Monitoring and Reporting document or is the last sentence referring to a section of the Draft PSNGP?	Clarity, consistency
Section V. Optimization and Additional Actions, A. Optimization Framework	The purpose of optimization and adaptive management is to evaluate existing treatment processes for opportunities to reduce nutrients to the greatest extent and as soon as possible without requiring capital investments	Paragraph 2 - first sentence, maybe include the word "Large" ahead of the last two words "capital investments". It is understood that some level of investment may be required to begin the optimization process.	Clarify
Section V. Optimization and Additional Actions, A. Optimization Framework	Question #4: Do reviewers have suggestions on what information permittees use to justify their decision-making process when conducting financial and technical analyses to select (or eliminate) optimization strategies?	As a permittee, here are some of the questions we ask/information we use to justify our decision-making process: <ul style="list-style-type: none"> • Does it accomplish the goal? • Is it achievable? • Is it cost prohibitive? • Does it divert funds from some other effort? • Does it strand an investment? • Does it result in a rate increase? • Is it sustainable? • What are the lifecycle costs? 	
Section V. Optimization and Additional Tiered Actions, B. Optimization Framework Page 19	Question #5: Do reviewers have suggestions for “reasonable investments” at small (<3 MGD), medium (3-10 MGD), and large (>10 MGD) that could be used to separate the two tiers of optimization actions required by this permit?	Optimization investments should meet the criteria of the utilities annual/biennial budgetary process for the operations budget. This could vary by the size of the facility or the internal accounting requirements of the organization (e.g. capital expenditure may be \$5K at one agency and \$25K at another.	Scale solution appropriately

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Section V. Optimization and Additional Actions, B. Optimization Framework Pg. 20	Question #6: Are there any additional Tier 1 optimization actions that should be included in this document?	Tier 1 optimization actions should be identified and considered based on the unique characteristics of the existing plant. These examples should not be considered an exclusive list of possibilities, but rather areas of consideration. This approach could eliminate viable options just because they are not listed.	Avoid eliminating option for optimization
Section V. Optimization and Additional Actions, B. Optimization and Additional Tiered Actions Pg. 21	Question #7: Are there any additional Tier 2 optimization actions that should be included in this document?	Again, Tier 2 optimization actions should be identified and considered based on the unique characteristics of the existing plant. These examples should not be considered an exclusive list of possibilities, but rather areas of consideration. This approach could eliminate viable options just because they are not listed.	Avoid eliminating option for optimization
Section V. Optimization and Additional Actions, B. Optimization and Additional Tiered Actions Pg. 21	Question #8: Are the tiers broken out appropriately?	It is our understanding that the intent of this first permit cycle is to rely on low cost optimization efforts. However, the Tier 2 actions as identified can have significant cost. Ecology should clarify the thinking on this.	
Section V. Optimization and Additional Actions, C. Requirements if Unable to Stay Below Action Levels	All facilities that exceed AL ₁ , regardless of maintaining a TIN effluent concentration below 10 mg/L will be required to advance planning efforts towards nutrient reduction.	Again, this is punishing plants that were forward thinking on implementing nutrient reduction. Optimization efforts should be the only requirement until WQBEL's are established.	Fairness, equity.
Section V. Optimization and Additional Actions, C. Requirements if Unable to Stay Below Action Levels Pg. 22	Question #9: Ecology is soliciting input on what types of Tier 3 actions plants must take to achieve further nutrient reduction, sooner, if they exceed their second action level trigger. Should these actions vary by facility size?	<p>This should trigger a larger planning effort, not an intermediate solution as this could result in stranded investments and divert energy away from the larger issue.</p> <p>Tier 1 and 2 should be on sliding scales based on the utility's annual operating budget.</p> <p>Larger efforts will affect the Capital budget and take much longer to develop, fund, and implement. This has to be considered as an acceptable part of the process. No one will be</p>	

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		able to accomplish a Tier 3 “Optimization” task during the first 5-year term of this permit.	
Section V. Optimization and Additional Actions, C. Requirements if Unable to Stay Below Action Levels	Tier 3 actions are triggered by a facility exceedance of AL1 which indicates that more significant near-term steps need to be taken to reduce nitrogen in the plant effluent during the first permit term. This intermediate step needs to meaningfully advance the facility toward future nutrient reduction and bridge the period between this first permit cycle and the achievement of final numeric water quality based effluent limits.	This statement implies that facilities will be required to implement Tier 3 actions in an unreasonable time frame - first permit cycle - this statement is contradictory to earlier statements that significant capital investment will not be required in the first permit cycle	
Section V. Optimization and Additional Actions, C. Requirements if Unable to Stay Below Action Levels	Same as above	Tier 3 actions should always include an engineering analysis to determine potential options - but this would not be implemented until after the first permit cycle as previously specified by Ecology.	
Section V. Optimization and Additional Actions, C. Requirements if Unable to Stay Below Action Levels Pg. 22	Ecology proposes to review and approve Tier 3 reports within 60 days of receipt.	Recommended language change: Ecology WILL review and approve Tier 3 reports within 60 days...	Improved clarity.
Section V. Optimization and Additional Actions, D. Components of an Annual Nitrogen Optimization Plan Pg.22	Question #10: Do reviewers have feedback on Ecology’s proposed use of a standardized form for the annual optimization report?	Optimization strategies should be developed for the 5-year permit cycle and not holistically change from year to year. For this reason, the optimization plan should be relevant for 5-years and an annual adaptive management summary (letter) could briefly describe any alterations/deviations that occurred.	
Section V. Optimization and Additional Actions, D. Components of an Annual Nitrogen	Familiarizing operators and staff with the facility’s processes and flow schematics. • Quantifying influent and effluent nitrogen concentrations and loads.	Utilities are continuously evaluating ways to improve their effectiveness on reducing pollutants from their discharge. These strategies are not evolving on an annual basis as plant staff continue to learn and refine the	

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Optimization Plan Pg. 22	<ul style="list-style-type: none"> • Evaluating the WWTP’s nitrogen reduction potential. • Developing facility specific nitrogen reduction goals. • Evaluating how to implement changes to meet the nitrogen reduction goals. • Evaluating nitrogen reduction potential from commercial and residential users. • Creating an implementation plan to meet the nitrogen reduction goals. 	<p>plant process and improve their overall performance.</p> <p>Again, this type of an assessment should be once per 5-year cycle. Requiring an annual submittal that includes such an extensive evaluation will result in copy and pasting statements from previous assessments. If unforeseen circumstances arise due to impacts from these areas, an in-depth analysis could be performed to determine specific mitigation strategies.</p>	
Section V. Optimization and Additional Actions, D. Components of an Annual Nitrogen Optimization Plan	Same as above	A pretreatment program could evaluate commercial nitrogen loading, but there is not a widely used mechanism to evaluate reduction of residential nutrients	
Section 6 Planning Requirements			
Section VI. Planning Requirements, B. Proposed Nutrient Reduction Evaluation Requirement Pg. 26	Question #11: Do reviewers have examples of information from an existing, unrelated planning process that could meaningfully apply to meet this nutrient reduction evaluation requirement?	This could include: Bond Ratings, recent bond issuance, applications for funding that have been denied, capital improvement plans, General sewerage plans, staffing requests that have been denied, catastrophic system or equipment failures that may divert funds, and rationale behind all of these events/decisions.	
Section VI. Planning Requirements, C. Regional Approach for Advanced and Emerging Technology Assessment Pg. 27	Question #12: Aside from treatment solutions, do reviewers have feedback on types of questions a regional study could answer? How could a regional study like this be used to develop and/or support a nutrient trading framework?	Pooling of resources for the benefit of the entire region. Evaluate where trading might be of benefit, and where it won’t. Determine whether or not the trades would accomplish overall regional water quality goals.	
Section VI. Planning Requirements, C.	Question #13: Do reviewers prefer one approach to a regional study over the other? Ecology is soliciting specific feedback on how to develop permit	It is unclear how a regional study permit requirement can achieve this. It may be more effective to solicit volunteers to participate in a	

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Regional Approach for Advanced and Emerging Technology Assessment Pg. 27	requirements for a regional study that advances understanding of treatment upgrades by building on existing bodies of knowledge related to nutrient treatment processes.	peer review or support team that could travel to different facilities and offer suggestions to assist with optimization, nutrient removal processes, process control, etc.	
Section VI. Planning Requirements, C. Regional Approach for Advanced and Emerging Technology Assessment Pg. 27	Question #14: Do reviewers have feedback on whether a regional study should be limited to WWTPs < 10 MGD so that larger facilities can conduct their own evaluation? Or, should Ecology provide minimum elements that must be satisfied leaving participation up to each discharger?	If Ecology wants consistent information in support of this study from all dischargers, then mandatory participation will be required.	
Section VI. Planning Requirements, C. Regional Approach for Advanced and Emerging Technology Assessment Pg. 28	Question #15: Do reviewers have feedback on the proposed timeframes for this evaluation?	Pierce County recommends using specific language as to what is meant by “within 18 months of exceeding the action level” does this mean when the plant is aware of the exceedance or when ecology confirms the exceedance and required forward movement? Pierce County thinks 36 months of planning at a minimum is probably the most viable. Considering contracting alone could easily take 9 months or longer.	
Section VI. Planning Requirements, D. Alternative to the Proposed Evaluation Requirement for WWTPs Discharging Less than 10 mg/L Pg. 28	Question #16: Is there interest in folding this type of treatment technology information sharing into an existing stakeholder process?	Pierce County is in support of information sharing, but an in-depth discussion of treatment technologies may require different subject matter experts (SMEs) at the table. Perhaps a technical advisory group of SMEs could be convened and share information with existing stakeholder processes.	

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Section VI. Planning Requirements, D. Alternative to the Proposed Evaluation Requirement for WWTPs Discharging Less than 10 mg/L Pg. 29	Question #17: Do reviewers have suggestions or ideas for other Tier 3 actions that Ecology should consider? Should plants be able to identify different Tier 3 actions during the permit term provided Ecology pre-approval?	As stated above, Tier 3 actions should always include an engineering analysis to determine potential options - but this would not be implemented until after the first permit cycle. The permit should provide general guidelines but have enough flexibility in the guidance to not eliminate any viable solutions. Yes. If they can come up with equally effective alternatives, then they should be considered.	