

CITY COUNCIL STUDY SESSION

Briefing by King County on the Washington Department of Ecology draft Puget Sound Nutrient General Permit.

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DIRECTION NEEDED FROM COUNCIL

DIRECTION

King County Wastewater Treatment Division is asking for support from local sewer agencies regarding its concerns with Ecology's new draft Puget Sound Nutrient General Permit (Permit).

Staff is seeking Council direction on whether to support King County's request by submitting a letter to Ecology outlining the City's concerns with respect to the draft Permit.

RECOMMENDATION

Move to direct staff to submit a letter to Ecology outlining the City's concerns with the draft Puget Sound Nutrient General Permit.

BACKGROUND & ANALYSIS

The federal Clean Water Act established water quality goals for surface waters located in the United States. One of the mechanisms for achieving the goals of the Clean Water Act is the National Pollutant Discharge Elimination System (NPDES) permit program, which is administered by the U.S. Environmental Protection Agency (EPA). The EPA has delegated administration of the NPDES permit program to the State of Washington Department of Ecology.

Ecology's adopted regulations include procedures for issuing general permits, water quality criteria for surface waters, and sediment management standards. Pursuant to these regulations, Ecology has released a formal draft of the "Puget Sound Nutrient General Permit" (Permit), which would limit the amount of nitrogen certain wastewater treatment plants would be allowed to discharge into Puget Sound. Ecology is accepting comments on the draft Permit through August 16 and plans to make a final decision on the Permit's issuance in Fall 2021.

Why is nitrogen problematic for water quality in Puget Sound?

Nitrogen is a nutrient that stimulates plant growth. In the marine environment, nitrogen encourages algae growth. Excessive levels of nitrogen can lead to uncontrolled algae blooms, covering extensive areas of water surfaces. When algae die, bacteria work to decompose it, consuming available oxygen in the process and depriving the water of dissolved oxygen needed by marine life.

Who must comply with the Permit?

The Permit would apply to all four wastewater treatment plants owned by King County. While Bellevue does not own a treatment plant, the City would pay a portion of WTD's Permit compliance costs through payments to King County for wastewater treatment services.

What are King County's key concerns with the draft Permit?

1. **Significant costs required to comply.** WTD is still analyzing the cost and rate impacts of the Permit. Based on King County's initial estimates, WTD may need to spend as much as \$27 billion in capital investments to construct a new treatment plant in Seattle and upgrade three of their existing treatment plants. WTD also anticipates needing to increase annual staffing costs by more than \$11 million. King County is in the process of refining these cost estimates and anticipates having updated rate impact information to share at the briefing on August 2.
2. **Thorough technical analyses needed to inform Permit requirements.** Ecology based much of the Permit requirements on the Salish Sea Model (SSM), which simulates hydrodynamic and water quality processes in the Salish Sea (including Puget Sound). WTD's concerns about this model are that Ecology has not validated its results with other similar models' outputs, and SSM results have not been field verified.
3. **More water quality and options analyses needed to prioritize effective solutions.** WTD believes that more water quality analyses should be conducted to better understand the complexities of Puget Sound. Ecology should develop a broader suite of solutions based on studies that will reduce sources of nitrogen and not just focus on regulating wastewater treatment plant discharges.
4. **Technically infeasible to meet requirements of the first Permit term.** WTD is very concerned they will not be able to meet the requirements of the first Permit term (five years) because it is common to take up to six years to do what Ecology expects to be done annually.

Bellevue staff have reviewed and share King County's concerns for the following reasons:

- **High Costs:** Payments to WTD for regional wastewater services are the single largest cost driver for Bellevue's Sewer Utility. All costs associated with wastewater treatment are paid by sewer utility customers. Bellevue's customers are already paying high wastewater treatment costs. The Permit requirements could significantly increase these costs.
- **Uncertain Benefits:** It is premature to issue the Permit now because of its uncertain water quality benefits to Puget Sound. Further water quality modeling, analyses, and consultation with third party experts should be done to ensure the Permit will result in measurable and sustainable improvements to water quality in Puget Sound.

Bellevue staff have prepared a letter (Attachment A) that may be submitted to Ecology as part of the comment process on the draft Permit, outlining staff concerns with respect to the draft Permit.

POLICY & FISCAL IMPACTS

Policy Impact

Per City financial policies, payments to King County for wastewater services are passed through to Bellevue's sewer customers via its sewer rates.

Fiscal Impact

King County is still assessing the regional sewer rate impacts of Permit compliance. King County will share the rate impact information at the briefing on August 2. Payments to King County for wastewater services are the single largest cost driver for Bellevue's Sewer Utility, accounting for approximately 56 percent of annual expenditures. In 2021, Bellevue's budgeted payments to WTD are \$36 million. WTD receives over 8 percent of its total service revenues from Bellevue. For illustrative purposes only, for every \$1.0 billion increase in WTD's annual expenditures, charges to Bellevue from King County would increase by approximately \$80 million, to a total of \$116 million annually. For illustrative purposes only, this has the potential to increase rates by approximately 160 percent for Bellevue sewer customers.

In addition to the costs to comply with the Permit, WTD estimates that its annual sewer rate increases will double from 4 percent in 2022 to 7.5 percent in 2031 just to maintain the existing regional sewer system.

OPTIONS

1. Direct staff to submit a letter to Ecology outlining the City's concerns with the draft Puget Sound Nutrient General Permit.
2. Provide alternative direction to staff.

ATTACHMENTS & AVAILABLE DOCUMENTS

A. Draft comment letter to Ecology

AVAILABLE IN COUNCIL LIBRARY

N/A