Draft West Point Nutrient Permit Requirements

June 26, 2026

West Point Nutrient Requirements

1. Regulatory status
2. Proposed West Point nutrient permit requirements
3. Long-term nutrient regulations
4. Conclusions

Nutrient Regulation – Overview

Puget Sound Nutrient General Permit (PSNGP)

- 1/1/2022 (effective date) - 2/28/2025 (invalidated)
- Requirements
  - Total Inorganic Nitrogen (TIN) Load Action Levels
  - Optimization Planning & Implementation
  - Monitoring
  - Corrective Actions
  - Nutrient Reduction Evaluation (NRE) – Nutrient upgrade planning

Nutrient requirements in NPDES Permits (Near Term)

- Timeline: expect permit modifications in 2026
- Requirements: similar to PSNGP

Anticipated Long-Term Nitrogen Permit Requirements

- Ecology is developing a long-term regulatory framework for further nutrient reduction requirements

Issuance Date: December 1, 2021
Effective Date: January 1, 2022
Expiration Date: December 31, 2026

PUGET SOUND NUTRIENT GENERAL PERMIT

A National Pollutant Discharge Elimination System and State Waste Discharge General Permit

State of Washington
Department of Ecology
Olympia, Washington

In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1251 et seq.

Until this permit expires, is modified or revoked, Permittees that have properly obtained coverage under this general permit are authorized to discharge nutrients in accordance with the conditions, which follow.

Vincent McGowan, P.E.
Water Quality Program Manager
Washington State Department of Ecology

Issuance Date: To Be Determined
Effective Date: To Be Determined
Expiration Date: December 31, 2027

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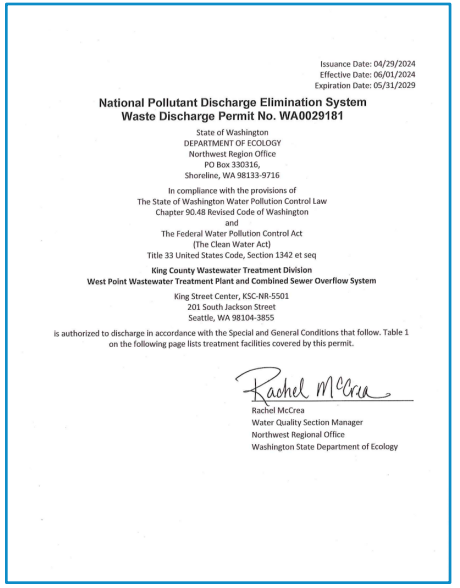
Until this Permit expires, is modified, or is revoked, Permittees that have properly obtained coverage under this Permit are authorized to discharge in accordance with the special and general conditions that follow.

David Giglio
Acting Water Quality Program Manager
Washington State Department of Ecology


Issuance Date: 04/29/2024
Effective Date: 06/01/2024
Expiration Date: 05/31/2029

National Pollutant Discharge Elimination System
Waste Discharge Permit No. WA0029181

State of Washington
DEPARTMENT OF ECOLOGY
Northwest Region Office
PO Box 330316,
Shoreline, WA 98133-9716

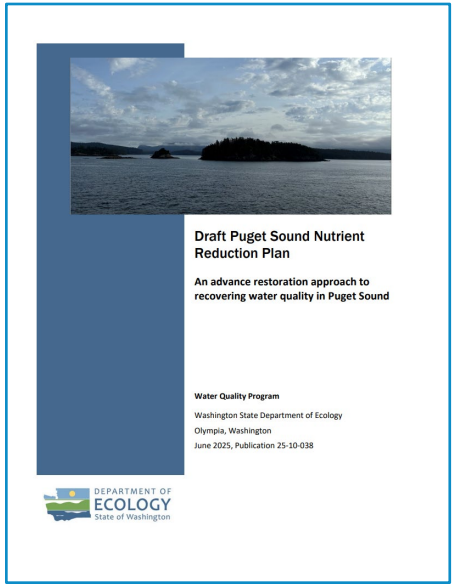
In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1342 et seq

King County Wastewater Treatment Division
West Point Wastewater Treatment Plant and Combined Sewer Overflow System

King Street Center, KSC-NR-5501
201 South Jackson Street
Seattle, WA 98104-3855

is authorized to discharge in accordance with the Special and General Conditions that follow. Table 1 on the following page lists treatment facilities covered by this permit.

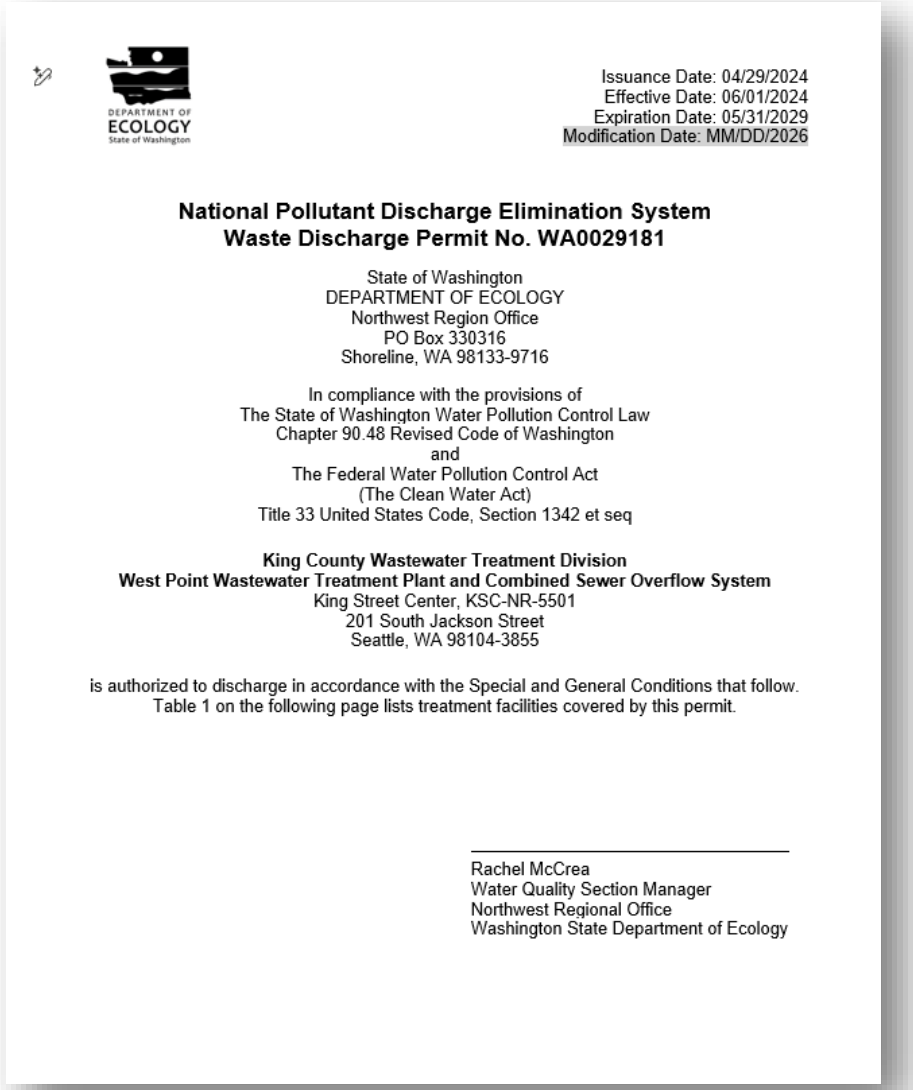
Rachel McCrea
Water Quality Section Manager
Northwest Regional Office
Washington State Department of Ecology



West Point Draft NPDES Permit Modification

- Public comment period: **June 10th – July 10th 2026**

- Similar requirements to PSNGP
  - Annual TIN load limit
  - Corrective Actions
  - Monitoring
  - Optimization planning & implementation
  - Nutrient upgrade planning



DEPARTMENT OF ECOLOGY
State of Washington

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Modification Date: MM/DD/2026

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Washington State Department of Ecology

West Point Nitrogen Permit - Nitrogen Limit

- Proposed limit: 7,295,366 lbs TIN/year
- Current loading: ~ 7,000,000 lbs TIN/year
- Calculated using West Point nitrogen monitoring data from 2021 – 2025
- Narrative limit – exceeding limit triggers Corrective Actions of additional evaluation and optimization planning
- Compliance measured on a calendar year basis

<u>Concerns</u>

- West Point nitrogen loading during the COVID years is not reflective of current and future loading
- Exceedance is highly likely
- Limited nitrogen optimization actions* that can be implemented at West Point

**Optimization = nutrient reduction actions without new infrastructure*

West Point Nitrogen Permit – Corrective Action and Optimization

- Permit continues the nitrogen optimization planning required under the PSNGP
- Exceeding the nitrogen limit triggers root cause analysis, optimization planning and implementation of BMPs

Concerns

- Limited nitrogen optimization actions that can be implemented at West Point
- Could accelerate nutrient reduction actions faster than planned timeline

West Point Nitrogen Permit – Nutrient Reduction Technology Assessment

- The proposed permit retains but changes the name of the nutrient upgrade plan from the Nutrient Reduction Evaluation (NRE) to the Nutrient Reduction Technology Assessment. The plan must be submitted by July 1, 2027 and must include:
  - *AKART Selection* – technology alternative with the greatest amount of TIN that can be reasonably removed on annual basis
  - *NRE* – what will take to achieve 3 mg/L seasonal average TIN

- AKART will influence permit requirements in the *next* permit

- Economic evaluation remains a key consideration of reasonableness with the same methodology as in the PSNGP

- Implementation timeline – requesting identification of phased implementation strategies

Long Term Nutrient Regulations

- Ecology will not finalize the draft Puget Sound Nutrient Reduction Plan
- Public comment period held June-Aug. 2025: 275+ comments from 33 entities
- Ecology has stated it is developing a regional forum to discuss and refine long-term nutrient regulations
- AKART analyses from NRE will inform the Nutrient Reduction Plan

DEPARTMENT OF ECOLOGY
State of Washington

Update on Ecology's Puget Sound nutrient work

In 2025, Ecology took public comment on two parts of our work to address excess nutrients in Puget Sound: the Puget Sound Nutrient General Permit and the Puget Sound Nutrient Reduction Plan.

Based on the feedback we received in 2025, as well as legal rulings on permit appeals, we are not reissuing the Puget Sound Nutrient General Permit. Instead, we plan to control nitrogen discharges in the individual permits for the 58 wastewater treatment plants that were formerly covered under the general permit. We will propose individual permit requirements that build on the monitoring, optimization, and planning that was required under the general permit. We anticipate releasing the first several individual permits for public comment in the coming weeks.

West Point Nitrogen Permit – Conclusions

- Near-term nutrient permit requirements should advance cost-effective nutrient actions aligned with future nutrient requirements while ensuring WTD can meet its other regulatory obligations, forecasted growth and asset renewal requirements

- The financial impact of nutrient compliance could be significant. There is limited capacity in the near term to do much for nutrients given the projected investments to meet other regulatory and system investments

- King County is coordinating with the Association of Washington Cities and other Puget Sound utilities to identify shared concerns and amplify messages

- Rate affordability is the top concern with nutrient compliance shared across Puget Sound

Questions?

King County
Department of
Natural Resources and Parks
Wastewater Treatment Division

Nitrogen Treatment Upgrade Challenges at West Point

- Site space constraints
- Ongoing asset renewal construction projects
- Maintaining treatment capacity:
  - During construction
  - To accommodate population growth
- Affordability

Site Space Constraint – Comparable Utility

East Bay Municipal Utility District – Main Treatment Plant

- Site area: ~67 acres
- Average flow: ~63 mgd
- Level of treatment:
  - Primary treatment up to 320 mgd
  - Secondary treatment up to 168 mgd
    - High purity oxygen activated sludge
- Receiving water: marine – San Francisco Bay

West Point Treatment Plant

- Site area: ~32 acres
- Average flow: ~82 mgd (2025)
- Level of treatment:
  - Primary treatment up to 440 mgd
  - Secondary treatment up to 300 mgd
    - High purity oxygen activated sludge
- Receiving water: marine – Puget Sound

Takeaways

- West Point accomplishes a lot of treatment on a small footprint
- West Point has about half the site space as East Bay's Main Treatment Plant, but has twice the secondary treatment capacity
- Site space makes adding nutrient removal treatment extremely difficult