



Update: Puget Sound Nutrient General Permit



Harnessing valuable resources that would otherwise be lost.



King County

Department of Natural Resources and Parks
Wastewater Treatment Division

Puget Sound Nutrient General Permit (PSNGP)

- Effective January 1, 2022
- Applies to 58 wastewater treatment facilities
- Places Action Levels for Nitrogen discharges on dominant and moderate dischargers/facilities
- Requires additional planning, monitoring, and reporting
- Currently, on a three-cycle phase
- King County has filed an Appeal to ensure the regulatory approach achieves the best water quality outcome
- Appeal decision will not likely be made until 2023

Permit Cycles

Permit Cycle 1 2022-2026

- Optimization planning and implementation
- Adaptive Management
- Annual reporting due each March
- Nitrogen Reduction Evaluation due December 2025

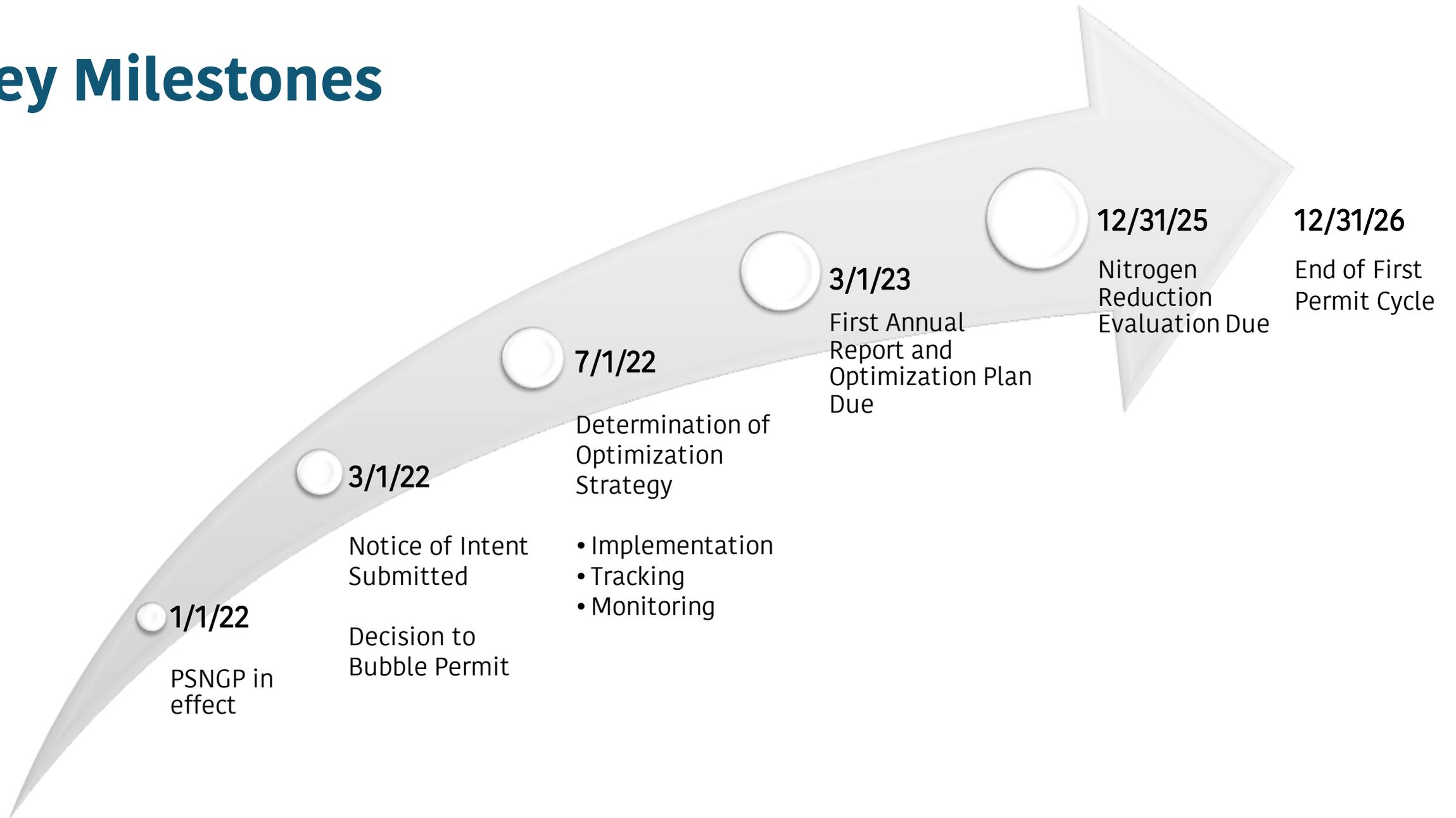
Permit Cycle 2 2027-2031

- Continue adaptive management
- Set nutrient limits
- Start compliance schedules to achieve limits
- Finalize plans and designs, possibly start construction
- Continue to provide and find additional funds for infrastructure upgrades

Permit Cycle 3 2032-2037

- Upgrades are happening
- Use adaptive management and feedback to refine the permit every 5 years
- Possible Nutrient Trading Framework
- Continue to provide and find additional funds for infrastructure upgrades

Key Milestones



Wastewater Treatment Division (WTD) Actions

- Working across division to ensure compliance to new permit requirement.
- Bubble permit: all three WTD main facilities under one nitrogen limit.
- Current focus: optimize treatment plants, additional monitoring, and developing new reporting requirements.
- Next four years: meet deadlines for long-term planning required by new permit.



WTD Goals for this Permit Cycle

- Flexibility – managing systemwide rather than plant by plant
- Manage variability in nitrogen loading



Optimization Planning and Implementation

- Nitrogen optimization plan and report will be required for WTD's three (3) regional facilities on an annual basis.
- This report will include:
 - Treatment process performance assessment
 - Optimization implementation
 - Monitoring

Questions?



3-Plant "Bubble" Effluent TIN

Permit Limit vs Actual 12-month running

