



# Permitting Options for Controlling Nutrients into Puget Sound From Domestic Wastewater Treatment Plants

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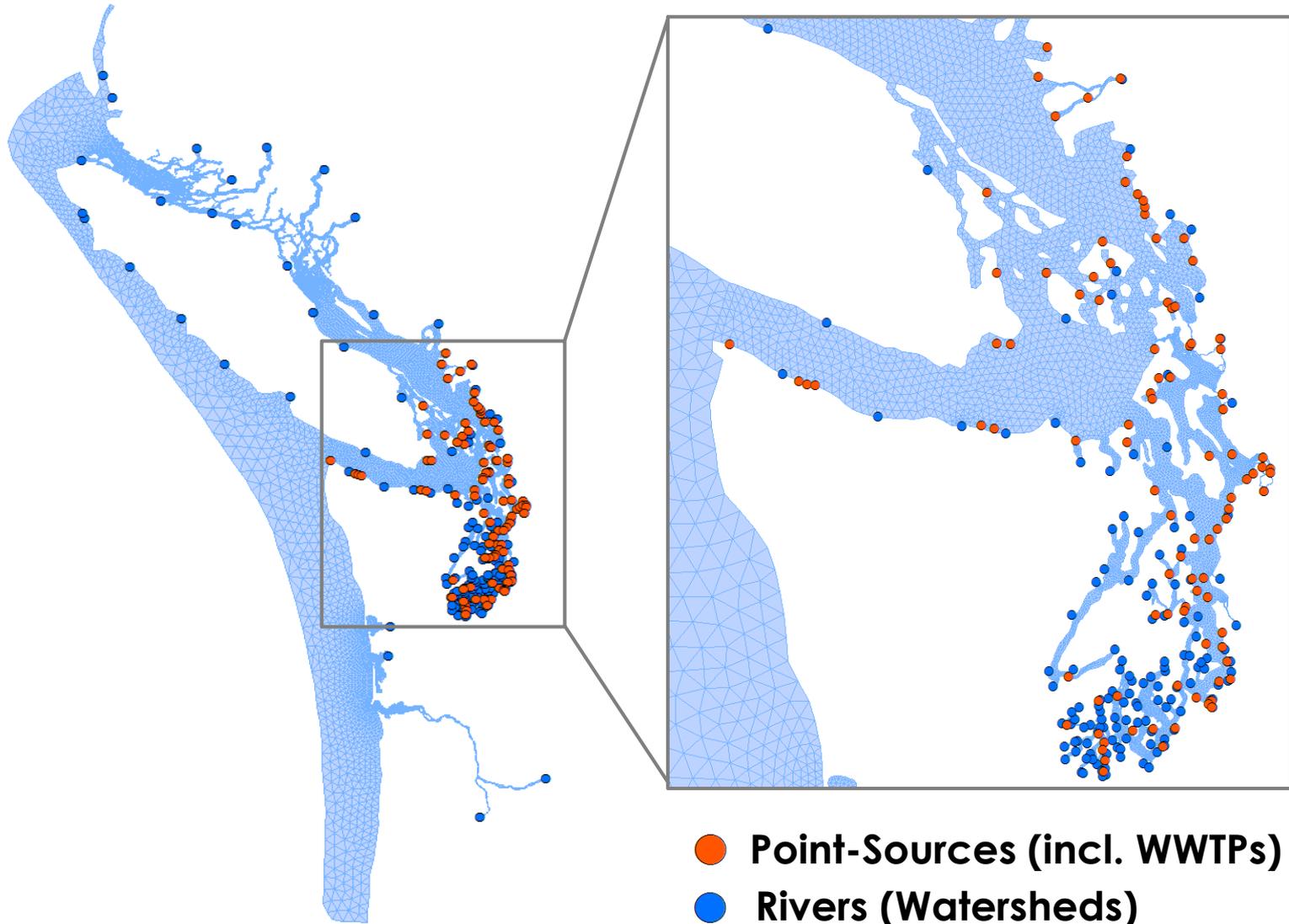
August 7, 2019



# CONTROLLING NUTRIENTS FROM WASTEWATER TREATMENT PLANTS...

- Importance
- Permitting Options
- Explore a General Permit
- Process Overview
- Next Steps

# Salish Sea Model Inputs



# Importance of WWTP Nutrient Controls

- Science
  - Excess nutrients = low dissolved oxygen
  - WWTPs = approximately half the problem
- Society
  - WWTPs treat community sewage
  - Communities pay for WWTPs
- Sequencing
  - Long-term investments
  - Regulatory steps



# NPDES Permits are the Regulatory Tool

NPDES Permits include a range of requirements

- Discharge prohibitions
- Numeric effluent limits, flow rates, indicators
- Narrative limits and outcomes
- Sampling & monitoring
- Operations & maintenance
- Source control & pretreatment programs
- Best management practices
- Capital facility planning
- Reporting & recordkeeping



# Permitting Options

## Individual Permit

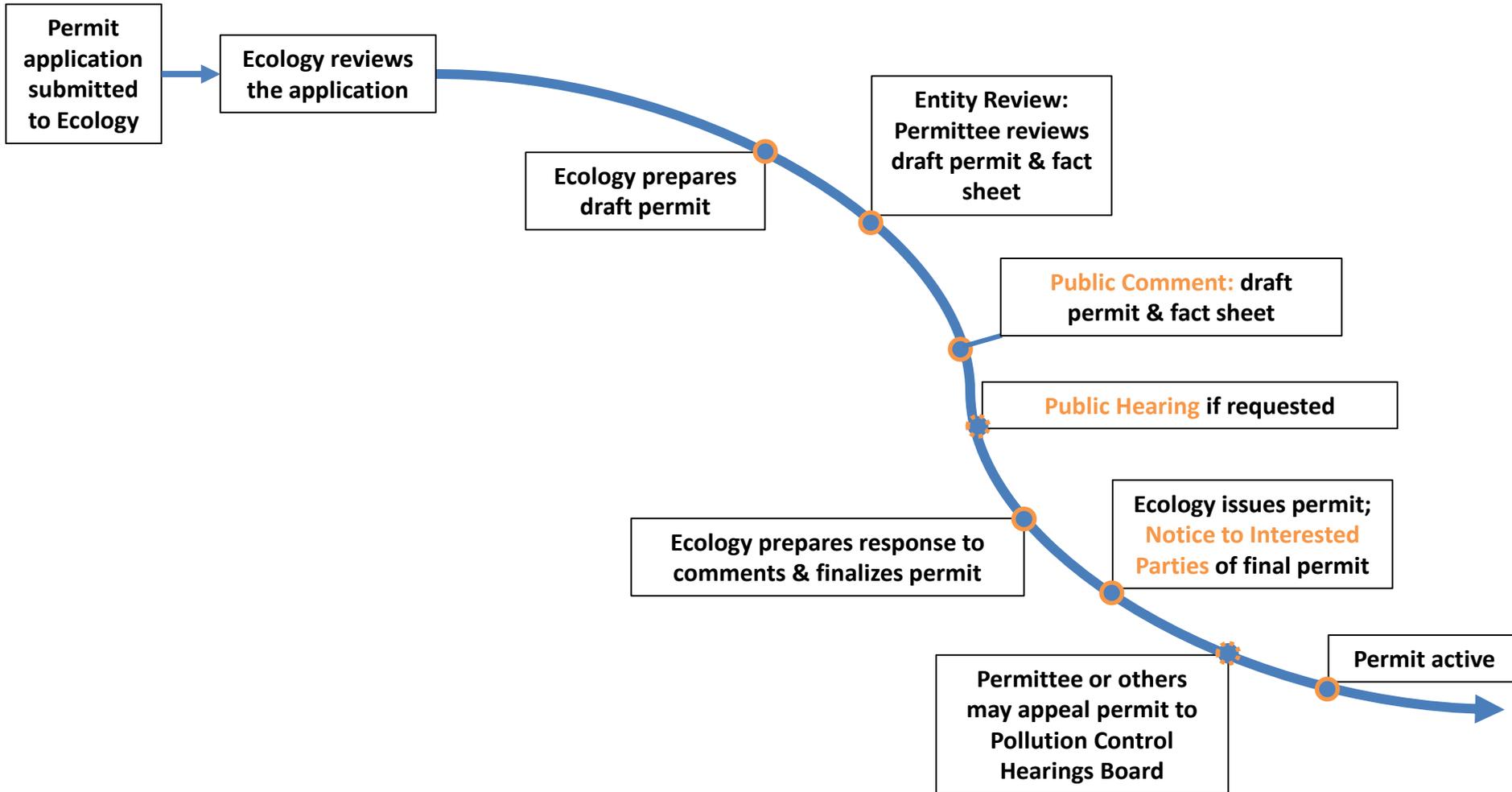
- Chapter 173-220 WAC
- Apply to a single permittee
- Specific to one treatment facility or integrated collection and treatment system
- Independent timelines
- Independent permittee engagement & public processes

## General Permit

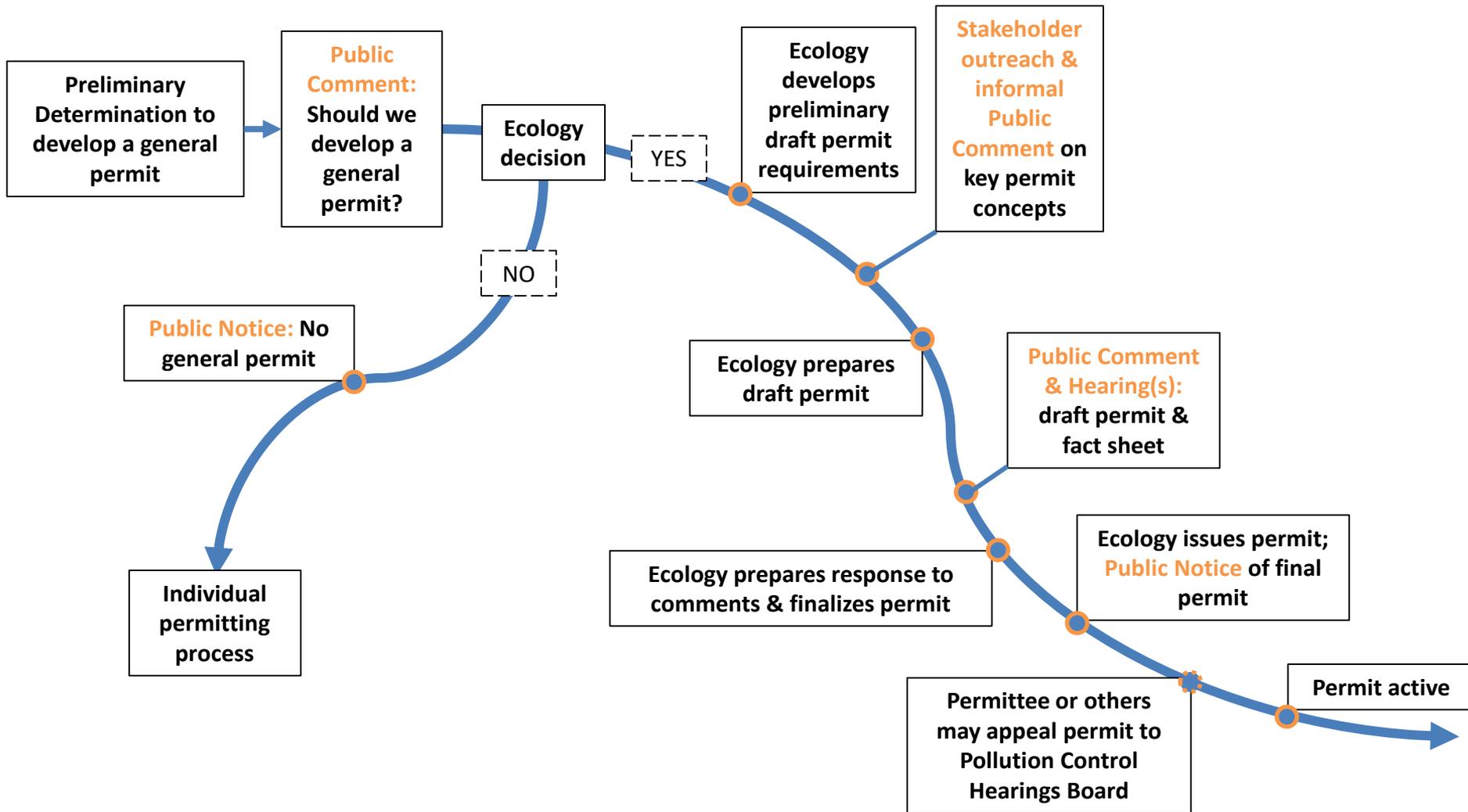
- Chapter 173-226 WAC
- Applies to multiple permittees
- Specific to a geographic area
- Substantially similar aspects
- Satisfy any or all state/federal requirements
- Single permittee engagement & public process



# Individual Permitting Process



# General Permitting Process



# CONTROLLING NUTRIENTS FROM WASTEWATER TREATMENT PLANTS...

- ✓ Importance
- ✓ Permitting Options
- **Explore a General Permit**
- Process
- Next Steps

# Reasons to use a Nutrients General Permit

- Consolidated and enhanced stakeholder involvement
- Consistent requirements for numerous WWTPs
- Shared foundation for WWTP communities to work together to achieve nutrient reduction
- Timely initiation of nutrient controls Sound-wide
- Less disruption to ongoing individual permit reissuance schedules



# How would a Nutrients General Permit work?

- Focus on controlling nutrients
- In conjunction with individual permits
  - Permittees would have 2 permits
  - Existing permits proceed independently
- Apply to WWTPs discharging to Puget Sound
  - Approximately 70 WWTPs in the Salish Sea Model
- Future versions would reflect research and modeling results



# What could a Nutrients General Permit require?

Examples of potential types of requirements:

- Data collection
- Nutrient loading caps
- Treatment process optimization
- Long-term planning for major upgrades
- Technology feasibility assessments
- Facility-specific design-based treatment outcomes
- Collaboration for water quality trading program development
- Numeric effluent limits



# Ecology believes a general permit is the right tool to implement nutrient control requirements at domestic WWTPs

We will announce a Preliminary Determination to develop a Puget Sound Nutrients General Permit for WWTPs.

We ask for your feedback & input about using this tool.



# Process:

## Preliminary Determination Public Comment Period

August 21 - October 21, 2019

Primary purpose is to obtain feedback

- Whether or not a general permit is the appropriate tool to control and reduce nutrients in discharges from WWTPs to Puget Sound.

Also an opportunity to obtain

- Additional information about WWTPs.
- Additional information about Puget Sound water quality.



# Process: Potential General Permit Timeline



**Preliminary  
Determination**

*August - October  
2019*



**Preliminary  
Draft Materials**

*Winter 2020*



**Formal Draft  
Permit**

*Fall 2020*



**Final Permit  
Issuance**

*Spring/Summer  
2021*



# Process: Ecology's Team

Puget Sound Nutrient Reduction Project:

*Dustin Bilhimer*

General Permit Lead:

*Maia Hoffman*

Watersheds

Administration &  
Financial  
Assistance

Individual Permit  
Writers

Nonpoint &  
Stormwater



# Next Steps

- August 21, 2019 – Announcement: Preliminary Determination to develop a Puget Sound Nutrients General Permit
- 60-day public comment period (August 21 - October 21, 2019)
- Ecology reviews comments & selects permitting tool
  - If yes, Ecology develops initial permit concepts
  - If no, Ecology builds nutrient control requirements into individual permits



# How to stay informed...

Subscribe to the new Puget Sound Nutrients  
General Permit Listserv

<http://listserv.ecology.wa.gov/scripts/wa-ECOLOGY.exe?SUBED1=NUTRIENTS-PERMIT&A=1>

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# Questions?

Please type your questions  
into the Webex chat box.