

Puget Sound Nutrient General Permit Advisory
Committee Report Out
&
Emerging Nutrient Technologies

Puget Sound Nutrient Forum Meeting
November 3, 2020

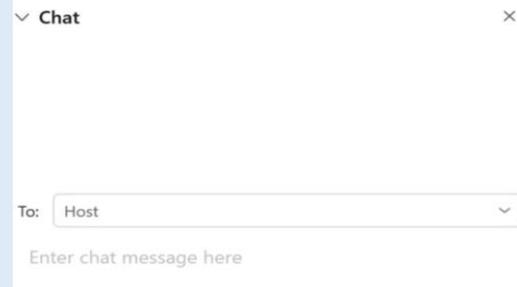


DEPARTMENT OF
ECOLOGY
State of Washington

How to Participate



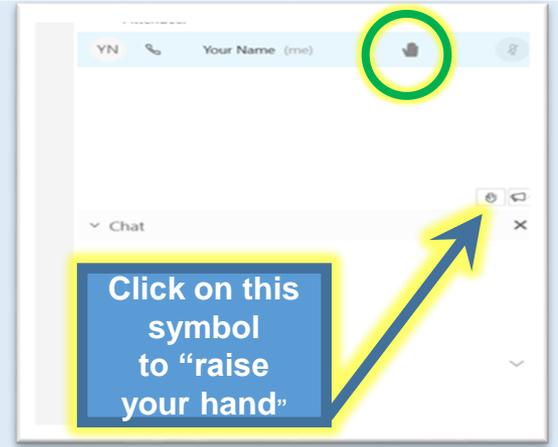
You can ask questions via the chat function



You can also ask questions by raising your hand so we can unmute you to participate

We ask that you:

1. **State your name** first before speaking.
2. **Mute your audio** unless speaking.
3. **Lower your hand** when you are done speaking



Today's Agenda

Part 1:

Nutrient General Permit Advisory
Committee Report-Out

Part 2:

Emerging Nutrient Technologies



Puget Sound Nutrient Forum

- Started in 2017 – Advisory to the Department of Ecology in the development of the **Puget Sound Nutrient Reduction Plan**.
 - Identify nutrient reduction targets
 - Identify actions to meet those targets
- Other Groups
 - Puget Sound Partnership Marine Water Quality Implementation Strategy
 - Puget Sound Nutrient General Permit Advisory Committee



Puget Sound Nutrient General Permit Process Overview

Rian Sallee
Vancouver Field Office Manager

Nutrient Forum
November 3, 2020



Advisory Committee Members

Name	Affiliation	Role	Geography
Mark Sadler	City of Everett, Public Works	Large Treatment Plants	North Central
Joe Grogan	Town of Coupeville	Small Treatment Plants	North Central
Dan Thompson	City of Tacoma	Large Treatment Plants	South Central
Rebecca Singer	King County DNRP, Wastewater Treatment Division	Large Treatment Plants, Advisory Committee Chair	South Central
Patrick Kongslie	Pierce County Planning and Public Works - Sewer Division/PNCWA Olympic Section	All Treatment Plant Sizes	South Central
Wendy Steffensen	LOTT Clean Water Alliance (wastewater utility)	Treatment Plant with Nutrient Removal	South Sound
Pete Tjemsland	City of Sequim	Small Treatment Plants	Strait of Juan de Fuca
Jeff Clarke	Washington Association of Sewer & Water Districts	Small-Medium Treatment Plants	Puget Sound Wide
Bruce Wishart	Puget Soundkeeper	Environmental Groups	Puget Sound Wide
Mindy Roberts	Washington Environmental Council	Environmental Groups Caucus Lead	Puget Sound Wide
Jenny Wu	EPA	Federal Agencies Caucus Lead	Puget Sound Wide
Valerie Smith	Dept of Commerce	State Agencies Caucus Lead	Puget Sound Wide
Chip Anderson	Lummi Tribal Water and Sewer District	Tribal Facilities	North Sound
Tribe			
Eleanor Ott	Dept of Ecology	Permit Writer	Puget Sound Wide

Topics Discussed

Cap/Target

Calculation

Expression

Compliance

Planning

Optimization

Short Term

Long Term

Monitoring

Parameters

Frequency

Permit Overlay

Managing duplicate requirements

Implementation and Management

Nutrients General Permit Advisory Committee Report Out

Rebecca Singer, AC Chair and Utility Caucus lead

Mindy Roberts, Environmental Caucus lead

Valerie Smith, State Caucus lead

Jenny Wu, Federal Caucus lead



PSNGP Advisory Committee Recommendations

- I. Overall considerations for the first PSNGP (#1-4)
- II. Conduct a regional study to support optimization and long-term planning (#5)
- III. Collect the high quality data needed for multiple purposes (#6-10)
- IV. A target load for each plant will trigger additional actions if exceeded (#11-12)
- V. Require optimization at all plants (#13-17)
- VI. Require additional actions if the trigger is reached (#18-20)
- VII. Pursue these actions in parallel with PSNGP issuance and implementation (#21-30)



Nutrients General Permit

Eleanor Ott

General Permit Writer

Department of Ecology



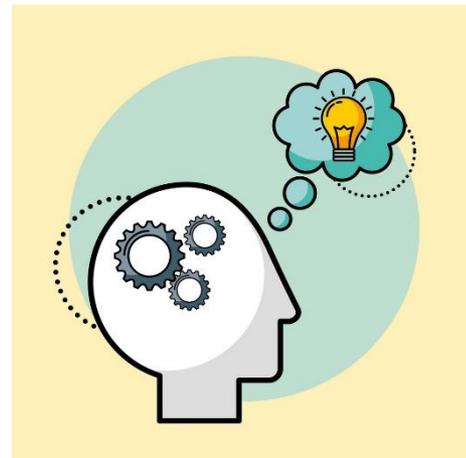
General Permit Schedule



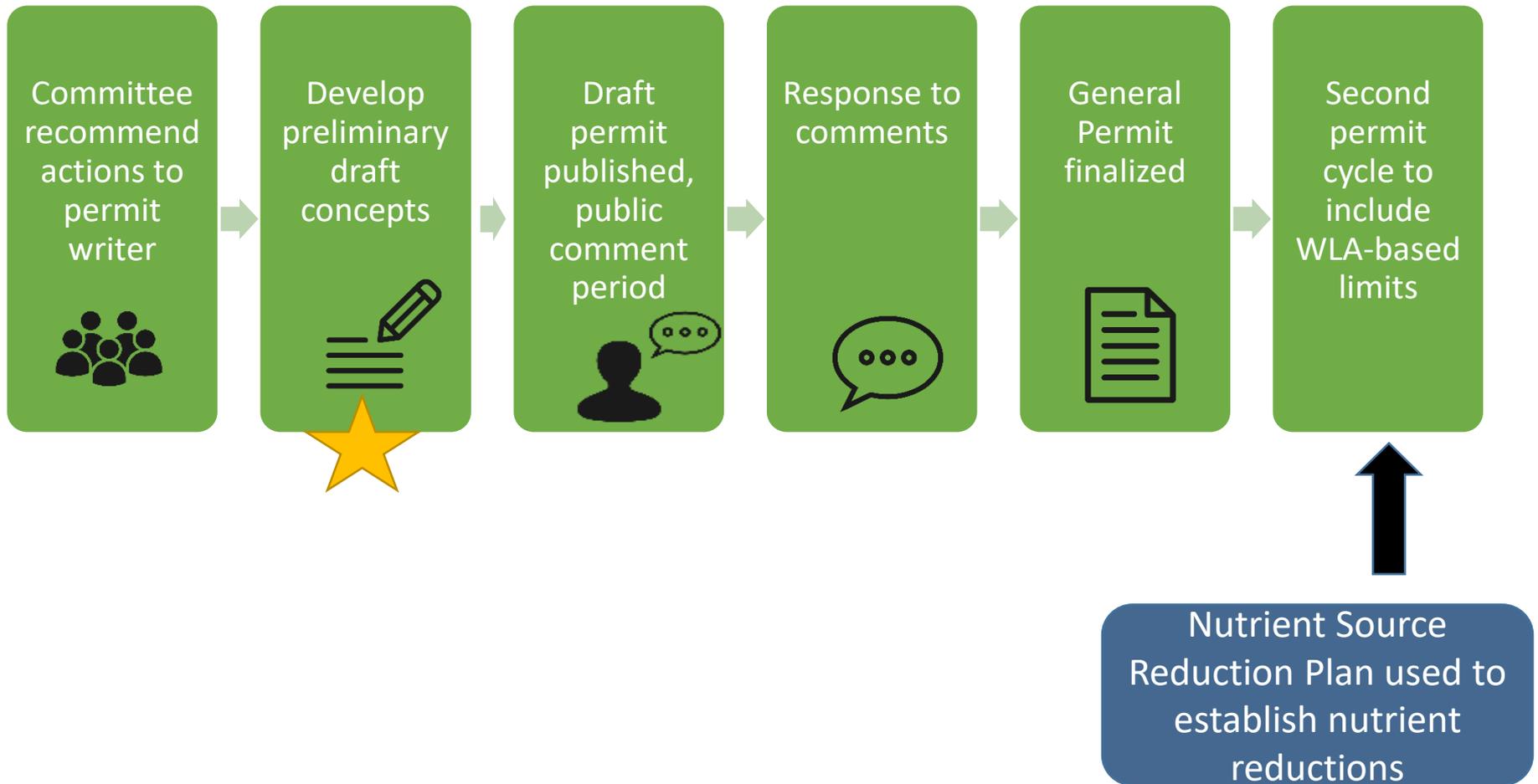
Preliminary Draft Document Topics

Individual Documents for:

- Facility Coverage
- Monitoring and Reporting
- Nitrogen Load Trigger
- Optimization Requirements
- Planning Requirements



Moving towards first Nutrients General Permit



How to stay informed...

Subscribe to Puget Sound
Nutrients General Permit
Listserv:

<http://listserv.ecology.wa.gov/scripts/wa-ECOLOGY.exe?A0=NUTRIENTS-PERMIT>

Contact me at:

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(360) 280-5624 (cell)
Eleanor.Ott@ecy.wa.gov



Questions?

Please type your questions
into the chat box.



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State of Washington

Thank you!



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State of Washington

Emerging Nutrient Technologies

Tom Coleman
RH2 Engineering

Dave Stensel
University of Washington

April Gu
Cornell University



Project timeline

Moved from studying the problem, building modeling tools and monitoring datasets to evaluation of Ecology's regulatory question and initiation of the TMDL alternative

2010-
2017

South Puget Sound DO Study

Led to Salish Sea Model Development
Sediment Diagenesis & OA Module
Puget Sound Nutrient Dialogue

2018

Nutrient Forum Begins

Kick-off of PSNSRP
Science: monitoring and modeling
Implementation examples

2019

Nutrient Forum Continued

Bounding Scenarios Report
Another year of modeling started
More implementation examples

In the middle

Completing the modeling, the plan, and the permit

2020

Nutrient Forum and Nutrient General Permit

- Formal decision to develop the NGP
- NGP Advisory Committee
- Draft Outline of Puget Sound Nutrient Reduction Plan

2021

Continued Forum and NGP

- Year 1 scenario model results and Year 2 scenario input
- Draft Nutrient Reduction Plan Chapters
- NGP- First permit issuance
- Watershed implementation strategy discussions

2022-
2023

Modeling and the Plan

- Year 2 results
- Draft Nutrient Reduction Plan public review

2026

Nutrient General Permit & Plan Implementation

- Second permit issuance with WQBELs
- Draft Nutrient Reduction Plan public review

Next 3 Nutrient Forums

Jan-Feb:

- Ecology's regulatory modeling and policy approaches
- NRP Draft Chapter 3: Water Quality Standards and Clean Water Act (defining the TMDL alternative)
- NRP Draft Chapter 6: Salish Sea Model (how we use it to answer regulatory questions)

Feb-March:

- Results of the Year 1 Optimization Scenarios

March-April:

- Input on Year 2 Optimization Scenarios

Thank you!

