

Agenda Topics

Welcome, Introductions, Program Updates	Heather Bartlett	10:00 – 10:05
Permit Updates	Vince McGowan	
Preliminary Determination to develop a Puget Sound Nutrients General Permit	Rachel McCrea	10:05 – 10:25
Puget Sound Nutrient Source Reduction Project	Melissa Gildersleeve Dustin Bilhimer	10:25 – 10:35
Voluntary Clean Water Guide for Agriculture	Ben Rau	10:35 – 10:55
Water Quality Standards Lawsuit Update	Melissa Gildersleeve	10:55 – 11:15
Hazardous Waste PFAS – CAP presentation	Melissa Gildersleeve, Cheryl Niemi	11:15 - 11:45
Round Table	All	11:45 – 11:55
Closing wrap up – Future agenda topics	Heather Bartlett	11:55 – Noon





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

Rachel McCrea
Ecology Northwest Regional Office
Water Quality Section Manager

October 10, 2019



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



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

We have made a Preliminary Determination to develop a Puget Sound Nutrients General Permit for WWTPs

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



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



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



Timeline contingent on public comments and resources/capacity.



Next Steps

- “Preliminary Determination” public comment period through October 21, 2019
- Ecology reviews comments & selects permitting tool
 - If yes, Ecology develops initial permit concepts and conducts pre-draft engagement process
 - 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?A0=NUTRIENTS-PERMIT>

Focus Sheet

<https://fortress.wa.gov/ecy/publications/SummaryPages/1910033.html>

Contact us at

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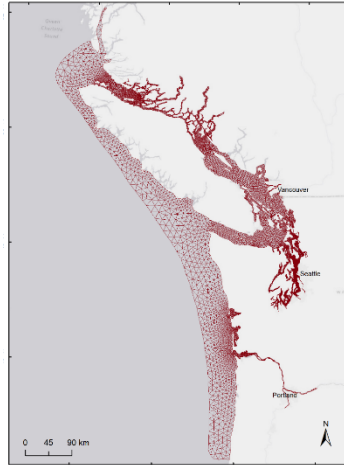
Maia Hoffman

(425) 649-7146





Puget Sound Nutrient Source Reduction Project



Project Update for WQ Partnership Meeting

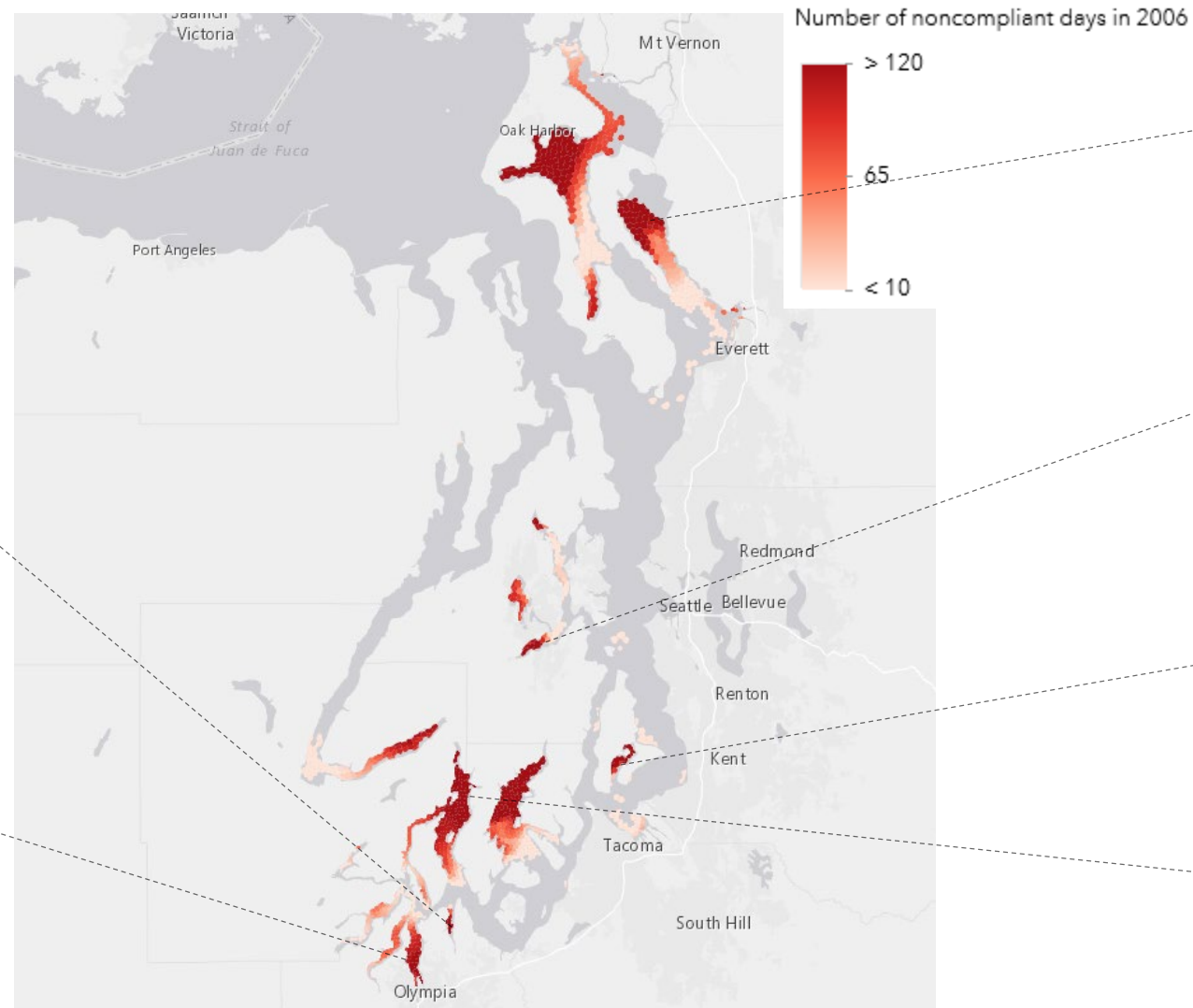
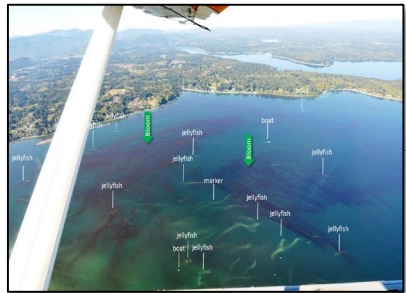
October 10, 2019

Presented by Dustin Bilhimer, Water Quality Program

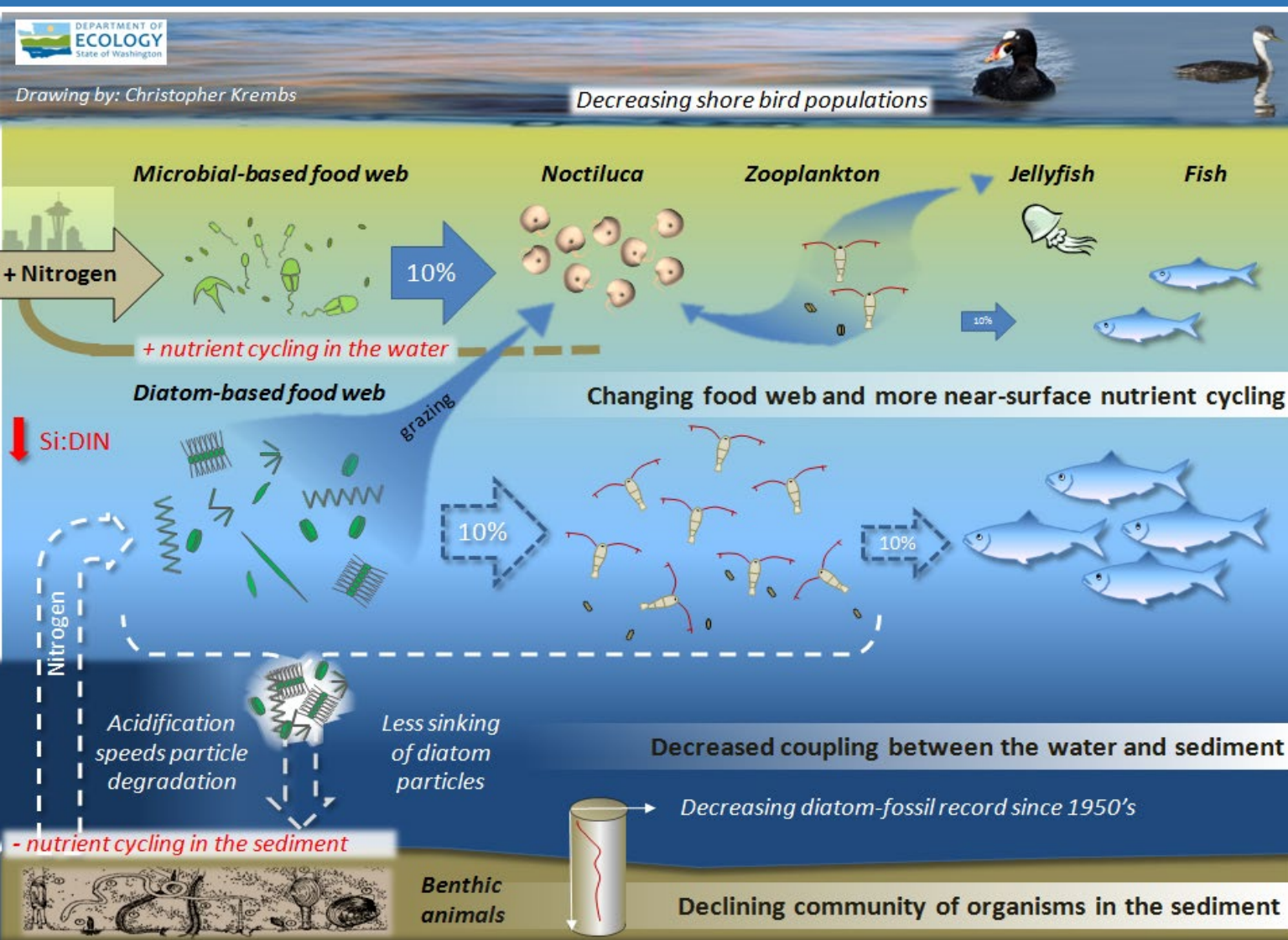
Monitoring and observations complement Salish Sea Model findings

Eutrophication Indicators

- Algae blooms
- Jellyfish Smacks



Excess human nutrients are changing the base of the marine food web



- A less favorable food web that keeps material at the surface.
- Shift to less nutritious food for fish and marine mammals.
- Climate change and regional population growth will accelerate changes.

Human nutrient sources

Humans are responsible for excess nutrients in many forms



**MUNICIPAL
WASTEWATER**



**RUNOFF AND
URBANIZATION**

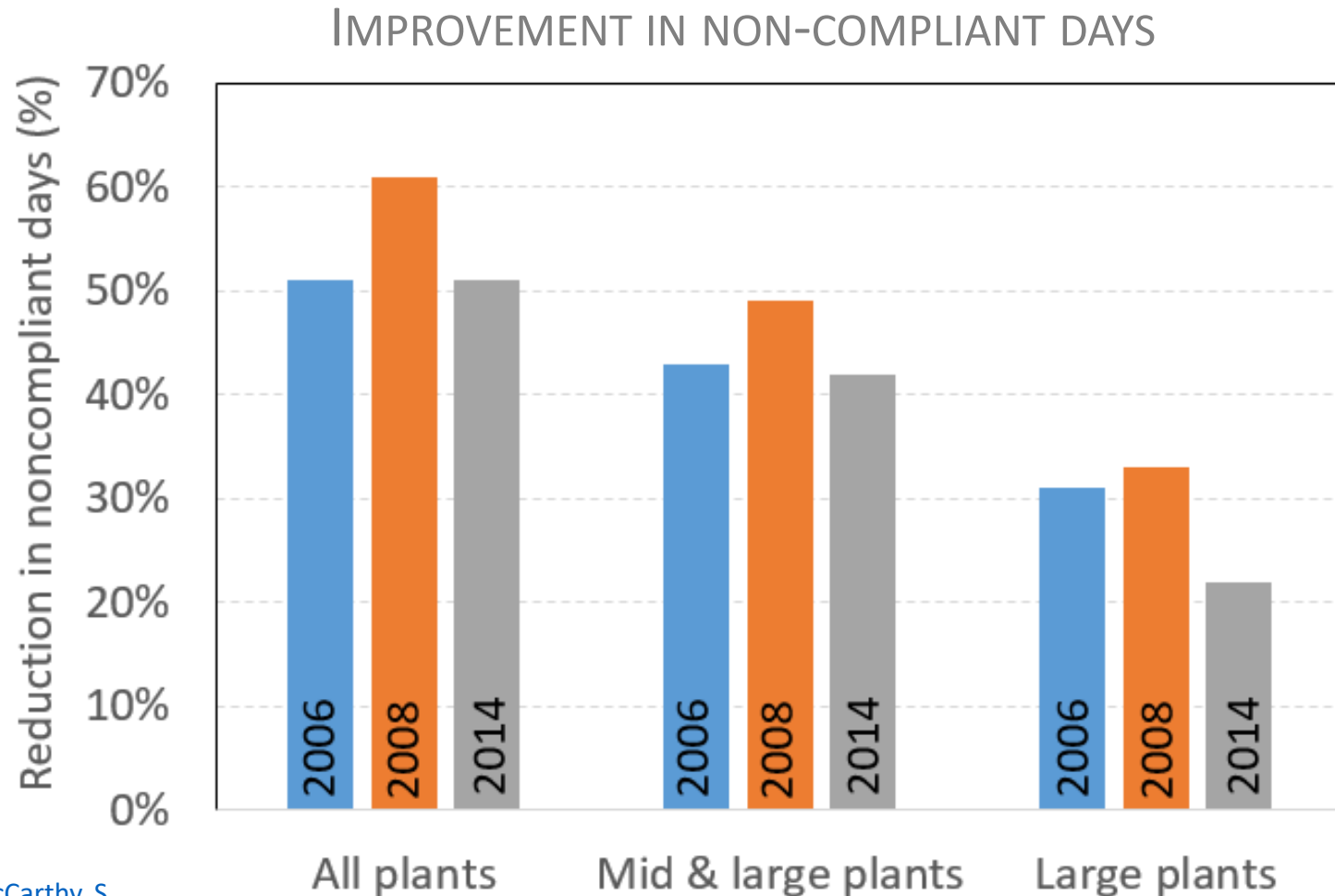


**POOR LAND
MANAGEMENT**

Reducing and better managing nutrients **now** will help build resiliency as our region's population continues to grow.

Advanced treatment reduces the duration of DO impacts

Salish Sea Model results* show we can **meet the Dissolved Oxygen standard more often** when we reduce the nutrient load coming from WWTPs.



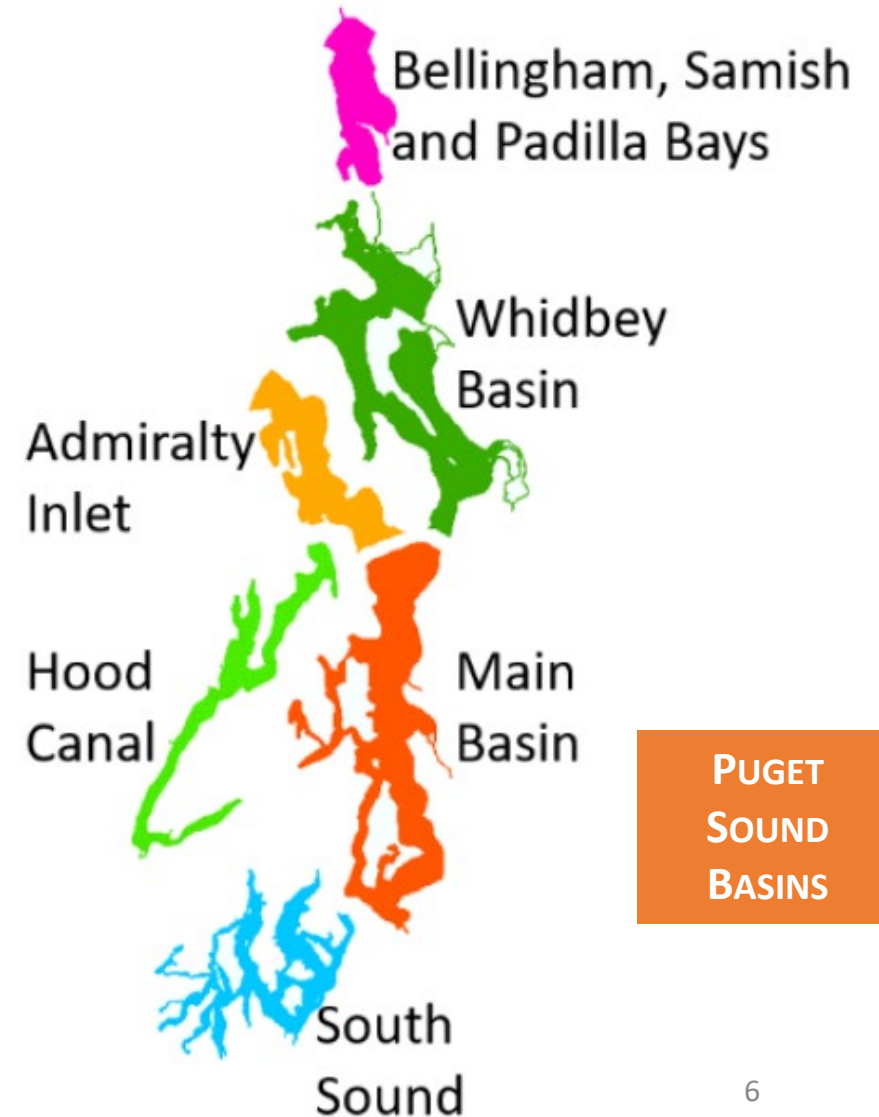
*Ahmed, A., Figueroa-Kaminsky, C. Gala, J., Mohamedali, T., Pelletier, G., and McCarthy, S. 2019. Puget Sound Nutrient Source Reduction Project. Volume 1: Model Updates and Bounding Scenarios. Washington Department of Ecology, Publication 19-03-001.

Effluent concentrations at 8mgDIN/L or better

Salish Sea Model Optimization

Modeling during 2019-2021 to better understand:

- Near-field DO impacts from watersheds and marine nutrient sources within each Puget Sound Basin
- Expected improvement from year-round vs seasonal WWTP reductions
- Future population growth impacts
- Combined watershed and marine source reductions needed to meet standards



Ecology's continuing actions to address nutrients

Between 2019 – 2021, our plans include:

- Further Salish Sea Modeling
- Begin point-source controls – Preliminary Determination to develop a Puget Sound Nutrients General Permit for POTWs
- Nonpoint Strategy development
- Continue Nutrient Forums and discussions with stakeholders and tribes



Our Goal

- Use science to inform regulatory and policy decisions to reduce excess nutrients in Puget Sound.
- Develop a Nutrient Management Plan for Puget Sound

So that we PROTECT THIS...



Primary Contact



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Find more at: ecology.wa.gov/PSNRP

Phase 1 Salish Sea Model Results webmap: bit.ly/ssmresultsmap