



Puget Sound Nutrient General Permit

ACWA Nutrients Permitting Workshop

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Water Quality Program

October 27, 2020

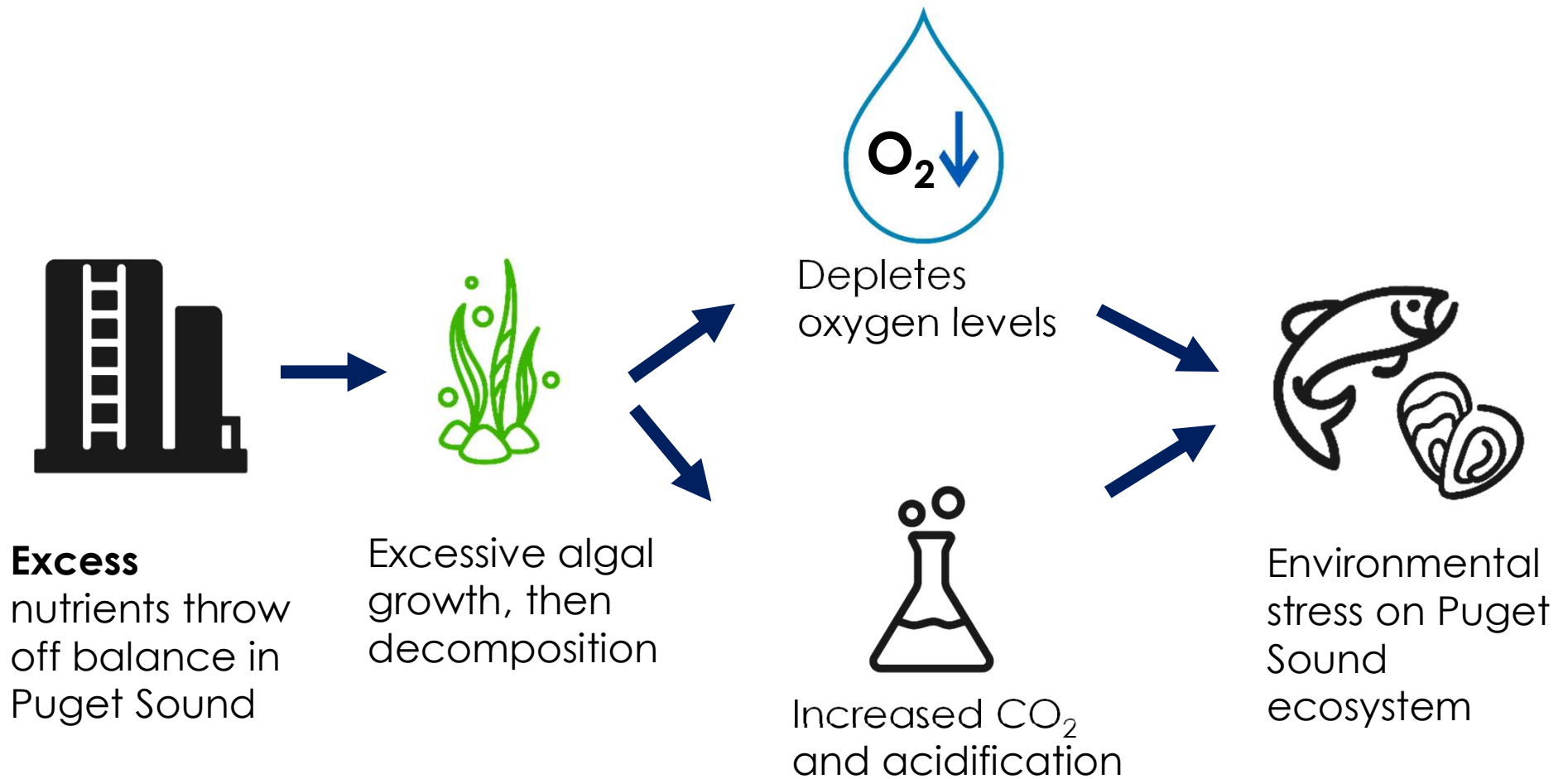


Today's Agenda

- Background on Puget Sound DO Impairment
- Nutrient Reduction Plan Overview
- General Permit Development
- Approach for 1st Permit
- Future Permit cycles
- PSNGP Schedule Update
- Q&A



Nutrient Imbalance Impacts Puget Sound



Visible Indicators

Overabundance of jellyfish



Algal blooms



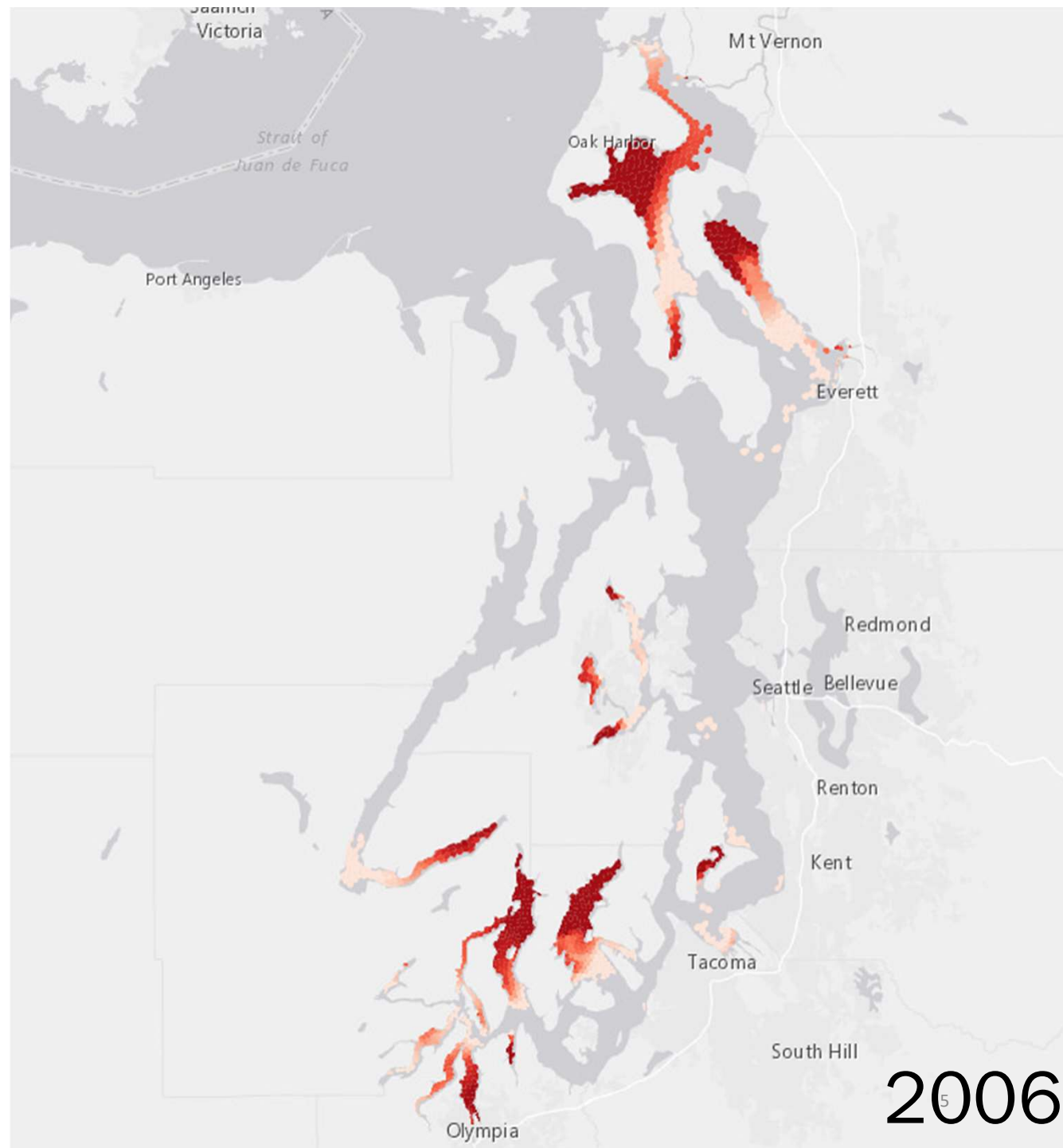
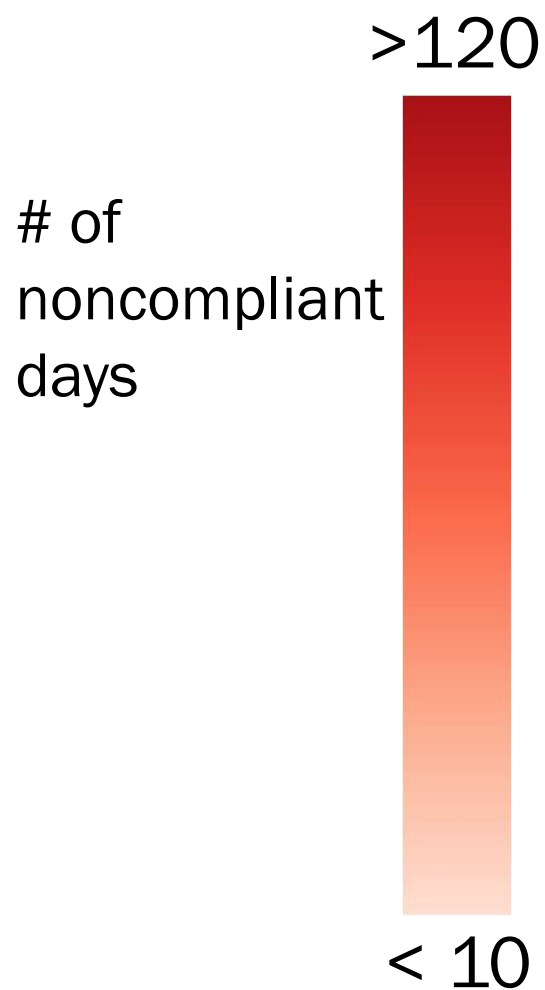
Nuisance macroalgae



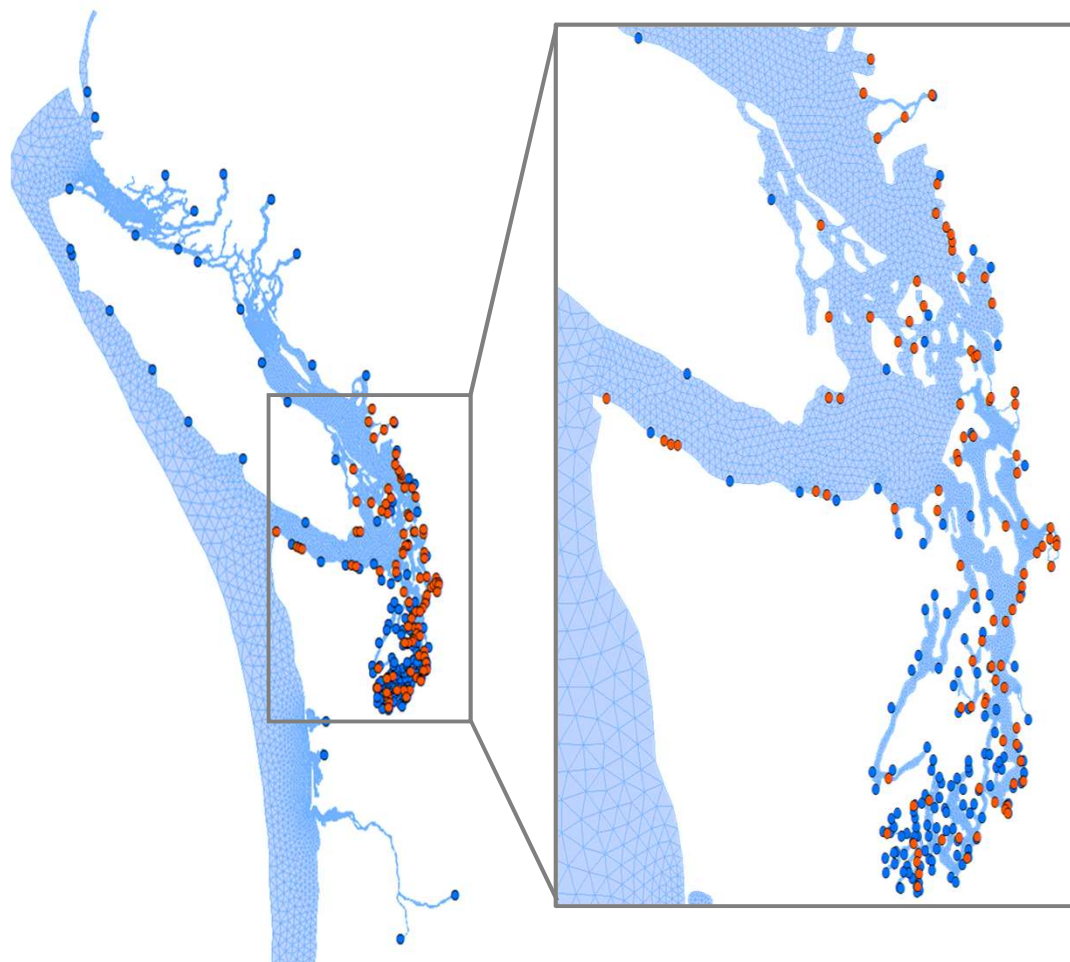
Algal blooms



Salish Sea Model

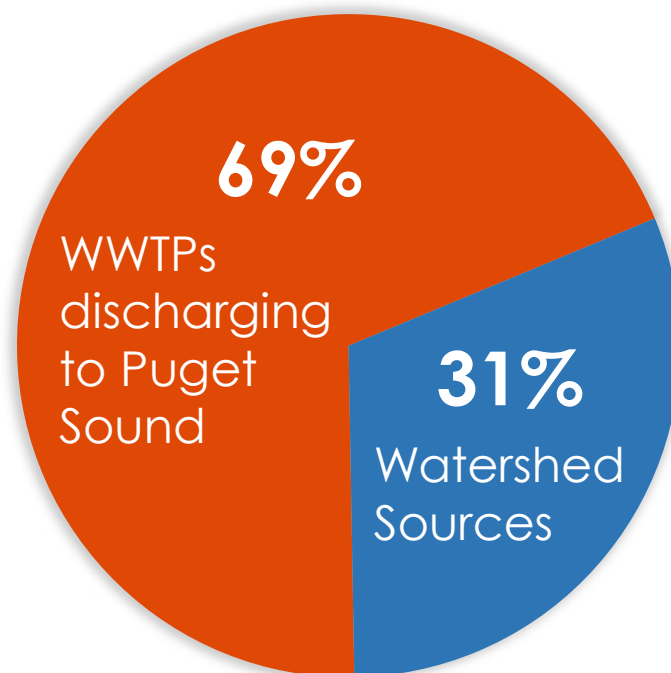


Human Nitrogen Sources



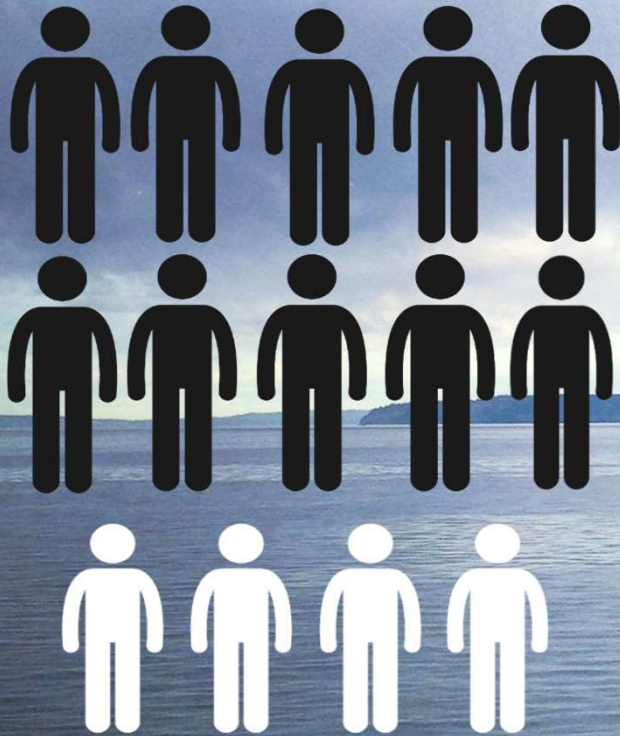
● **Point-Sources
(incl. WWTPs)**

● **Rivers
(Watersheds)**



January 2019 Bounding Scenarios Report
(Publication No. 19-03-001)

Accommodating Regional Growth



Current population of Puget Sound is over 4.5 million

1.8 million more people will move to Puget Sound region by 2050

40% increase in excess nutrients

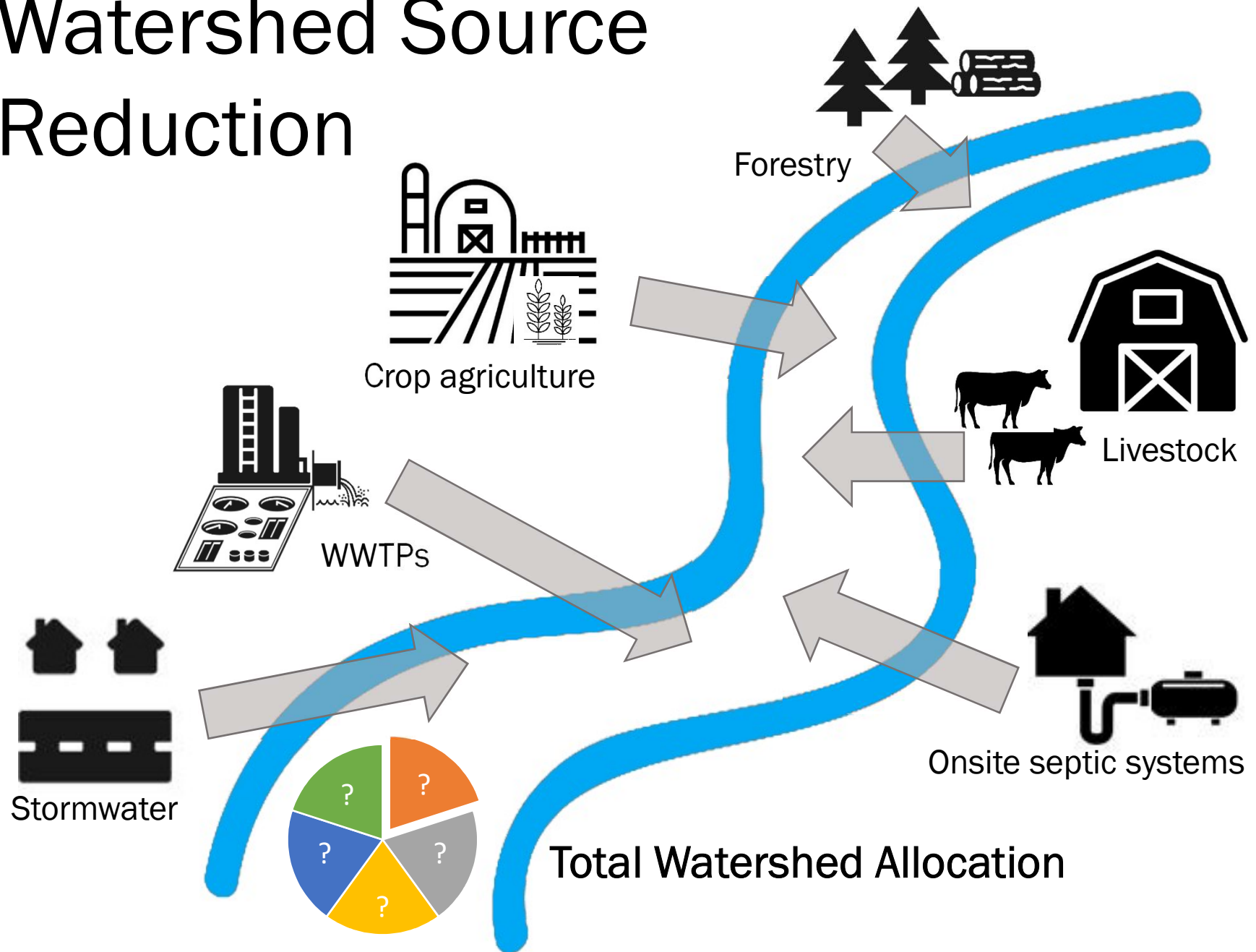
Puget Sound Nutrient Source Reduction Plan



- Strategize actions necessary to achieve dissolved oxygen criteria
- Establish nutrient load allocations for both marine point sources and watershed inflows
- Monitor for effectiveness and adaptively manage the plan



Watershed Source Reduction



Approach to Marine Point Sources

- Nutrients General Permit & Advisory Committee
- Future load reduction targets and nutrient effluent limits
- Exploring water quality trading

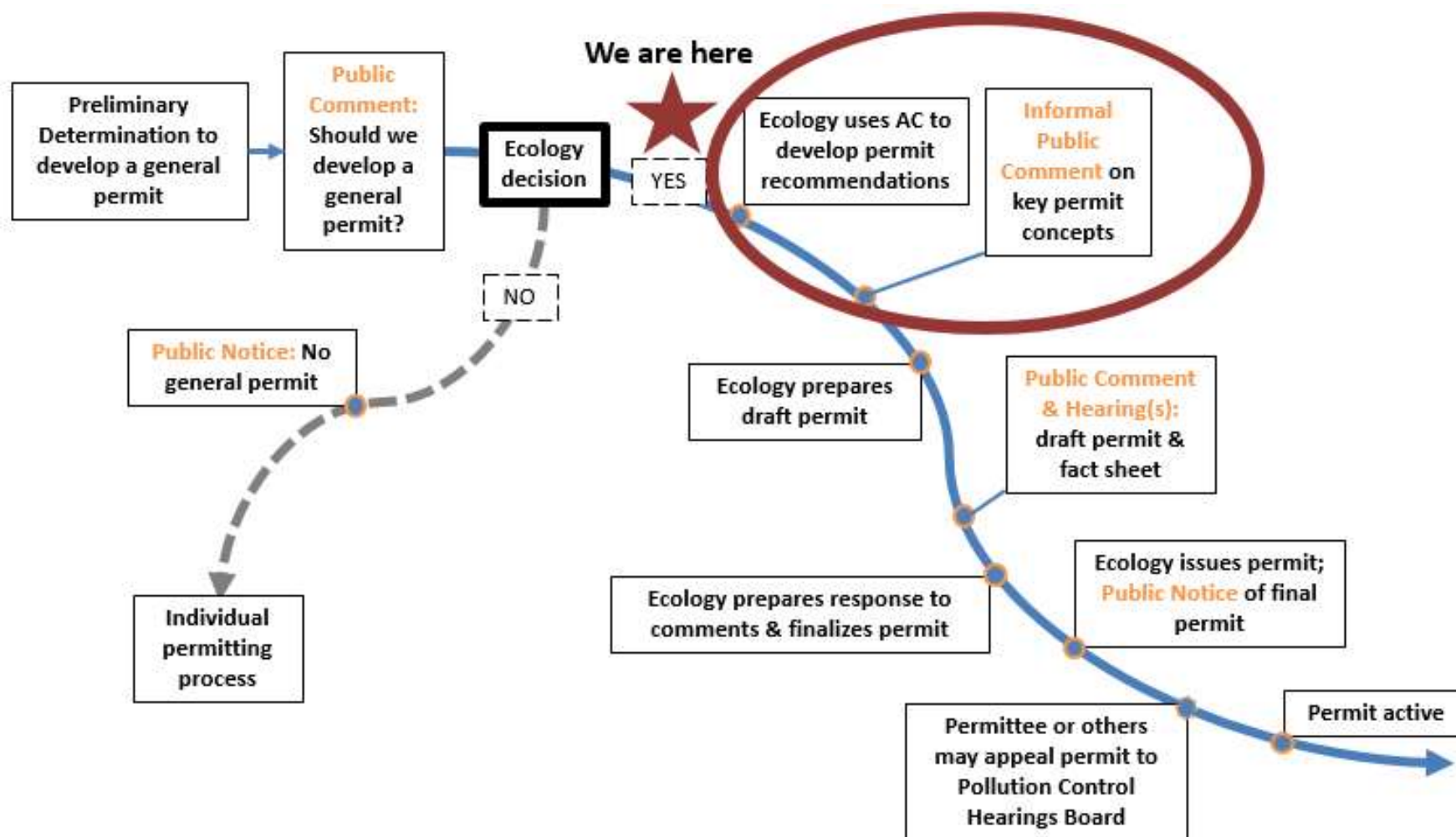


How will a General Permit Work?

- Applies to wastewater treatment plants discharging to Puget Sound
- Only focus on controlling nutrients
- In conjunction with individual permits
- Future versions will reflect modeling results



General Permitting Process



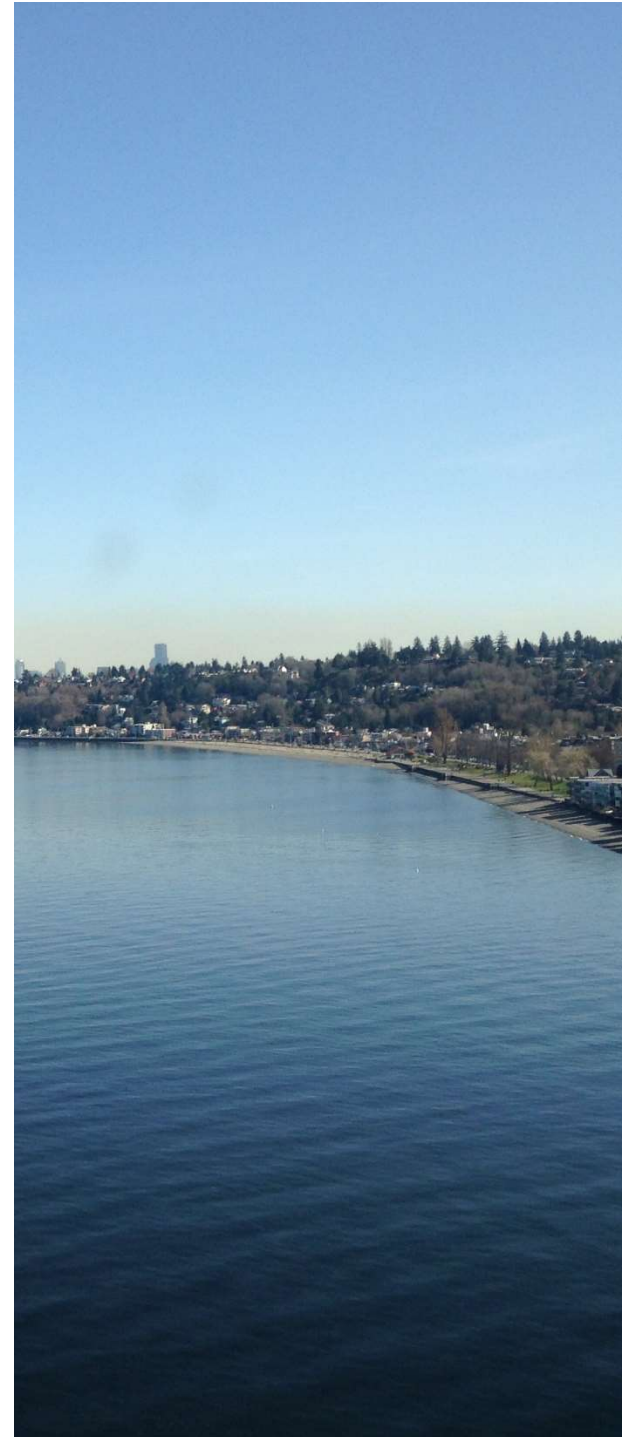
PSNGP Advisory Committee

- Monthly meetings
- Discussing framework for permit conditions
- Working on developing a set of recommendations
- Report out to PSNF on 11/3



1st Permit Term

- Creates a foundation for future nutrient reductions
- Implements AC recommendations
- Focus on progress through adaptive management



PSNGP AC Recommendation Summary

Agreements

- Consistent data collection
- Conduct a regional nutrient reduction study
- All plants must optimize

Disagreements

- Setting a target load to trigger additional actions (narrative limit)
 - 40 CFR 122.44(k)
- How to accommodate growth
- Early planning using “bookends”

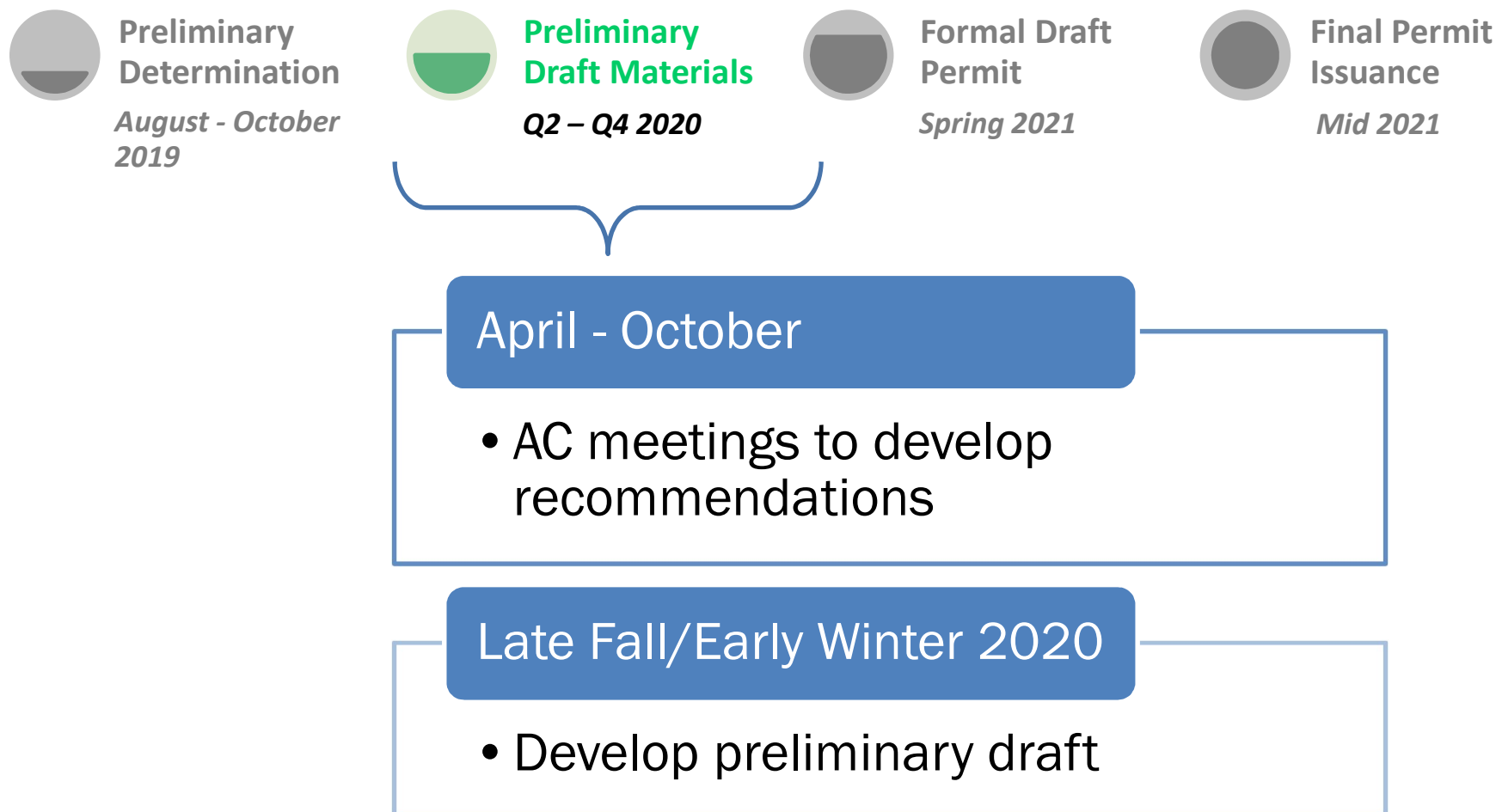




Future Permit Goals

- Continued reduction in nutrients
- Compliance schedules with achievable milestones
- Achievement of WQBELs

General Permit Schedule



Costs and Financial Assistance



Estimated
funding
needs



Federal and
State grant and
loan programs



Other funding
opportunities

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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A scenic landscape photograph. The top third shows a range of jagged, snow-capped mountains under a blue sky with wispy clouds. The middle third shows a city skyline, likely Vancouver, seen from across a body of water. The bottom third shows a dense forest of green trees in the foreground, with some houses visible. The word "Questions?" is centered in the middle section.

Questions?