

Puget Sound Nutrient Reduction Update

King County Regional Water Quality Committee

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Water Quality Program

October 7, 2020

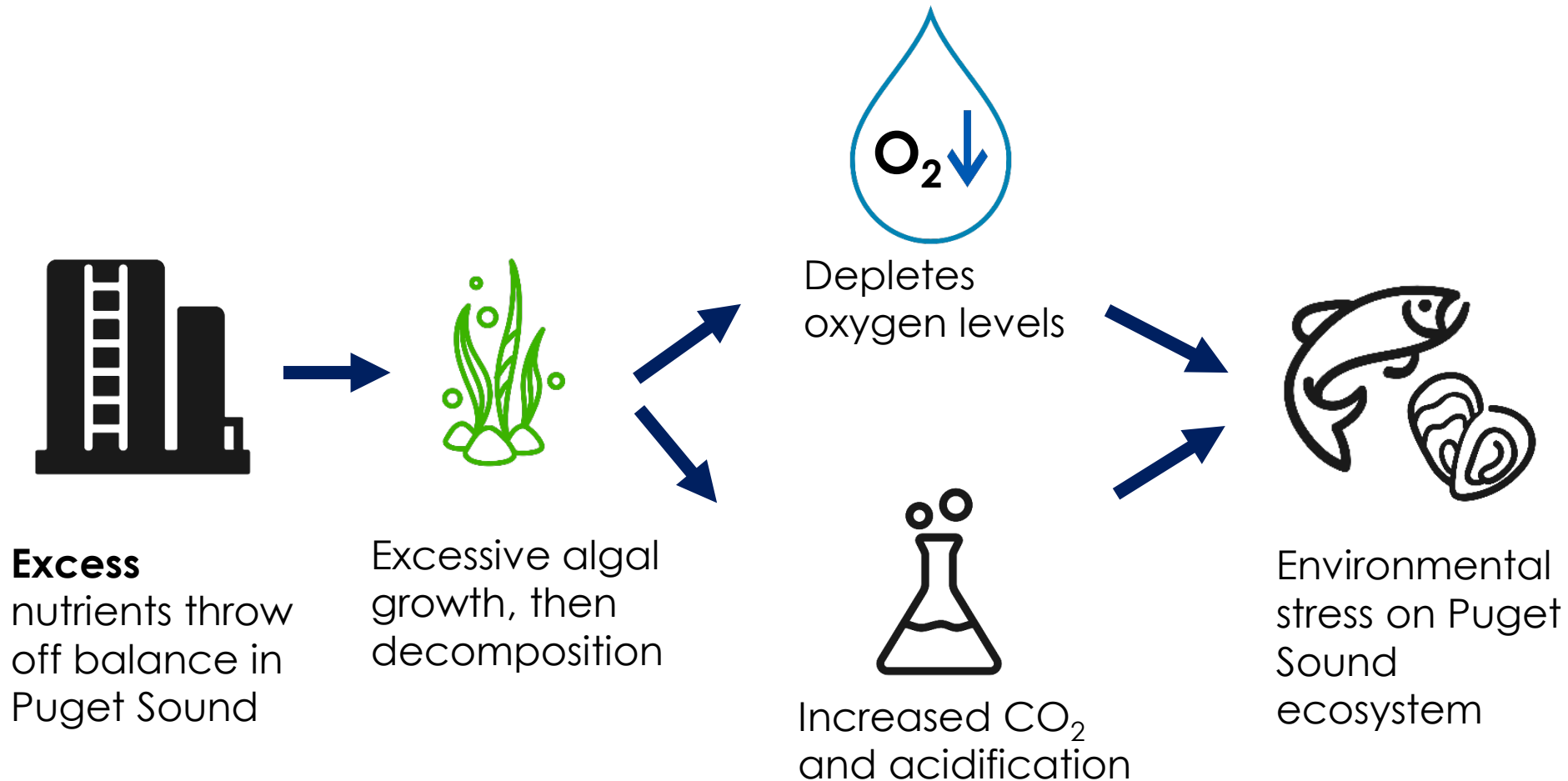


Today's Agenda

- Background
 - Why now?
- Nutrient Reduction Plan Overview
- General permit process update
- Impacts to King County
- Q&A



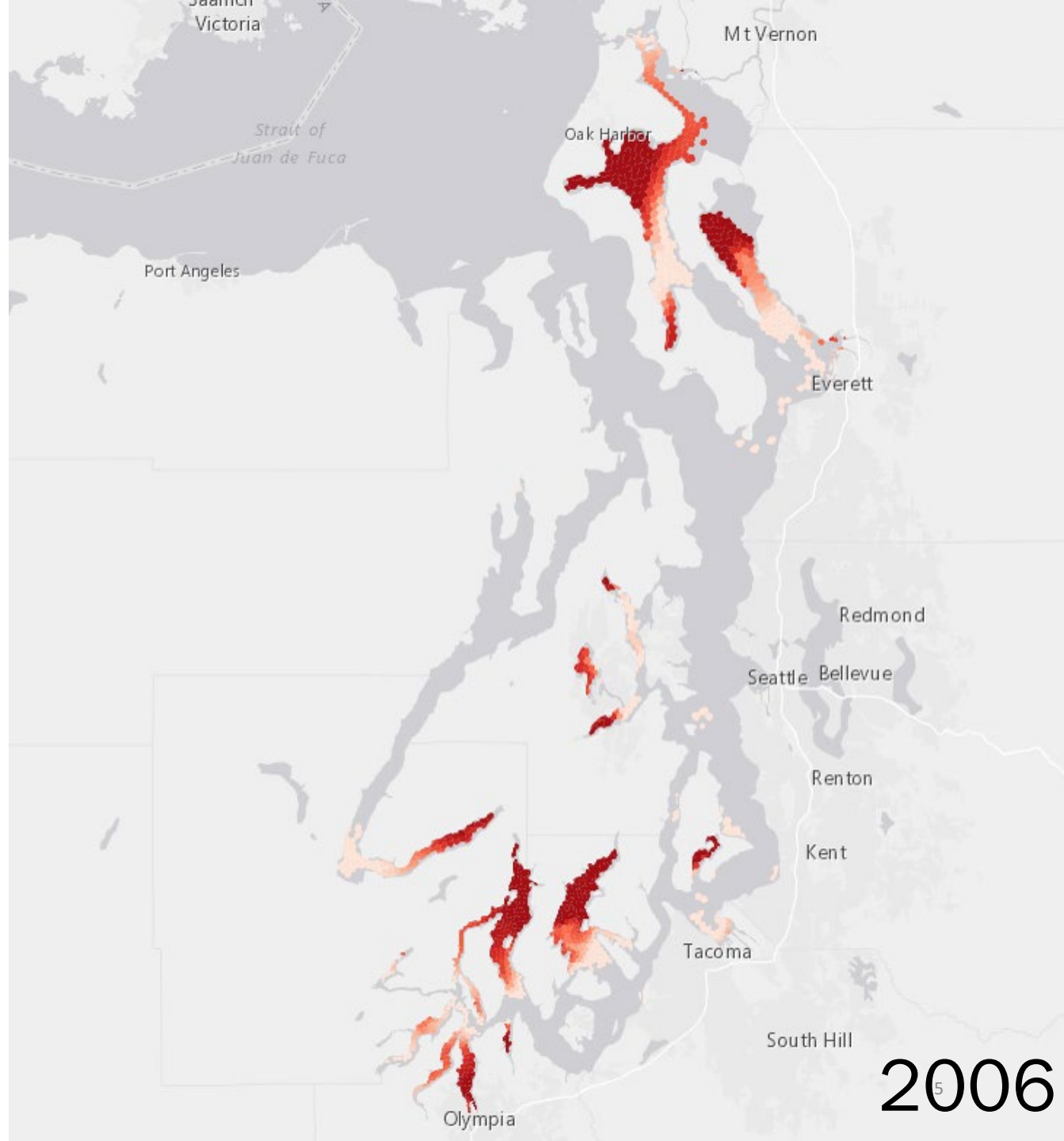
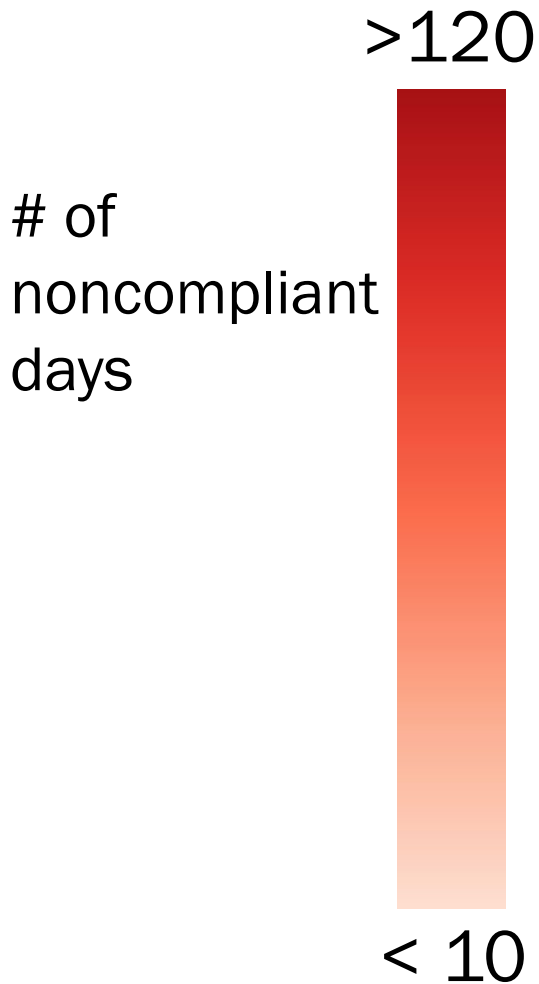
Nutrient Imbalance Impacts Puget Sound



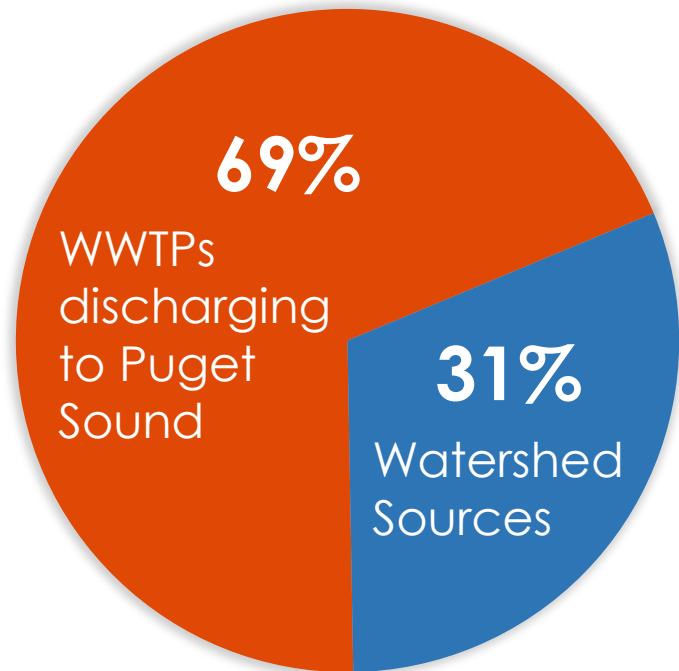
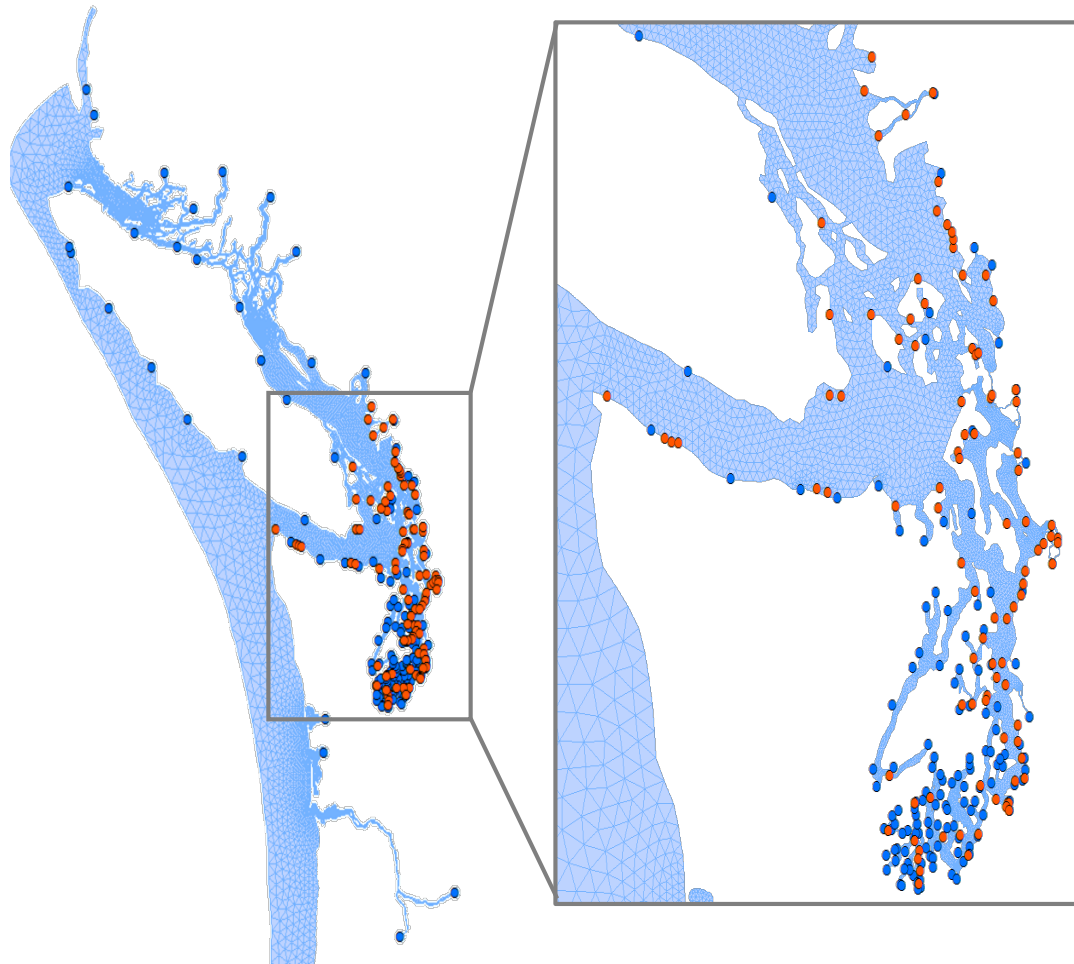
Visible Indicators



Salish Sea Model



Human Nitrogen Sources

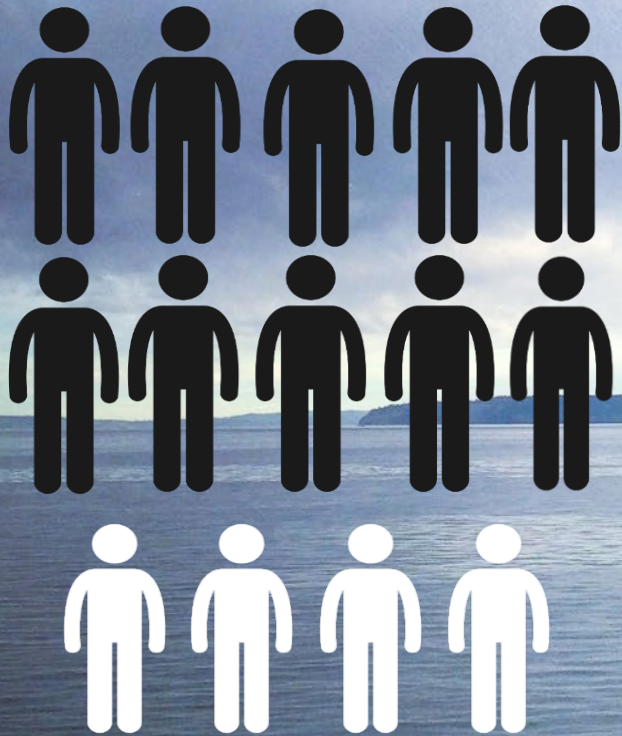


● **Point-Sources**
(incl. WWTPs)

● **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

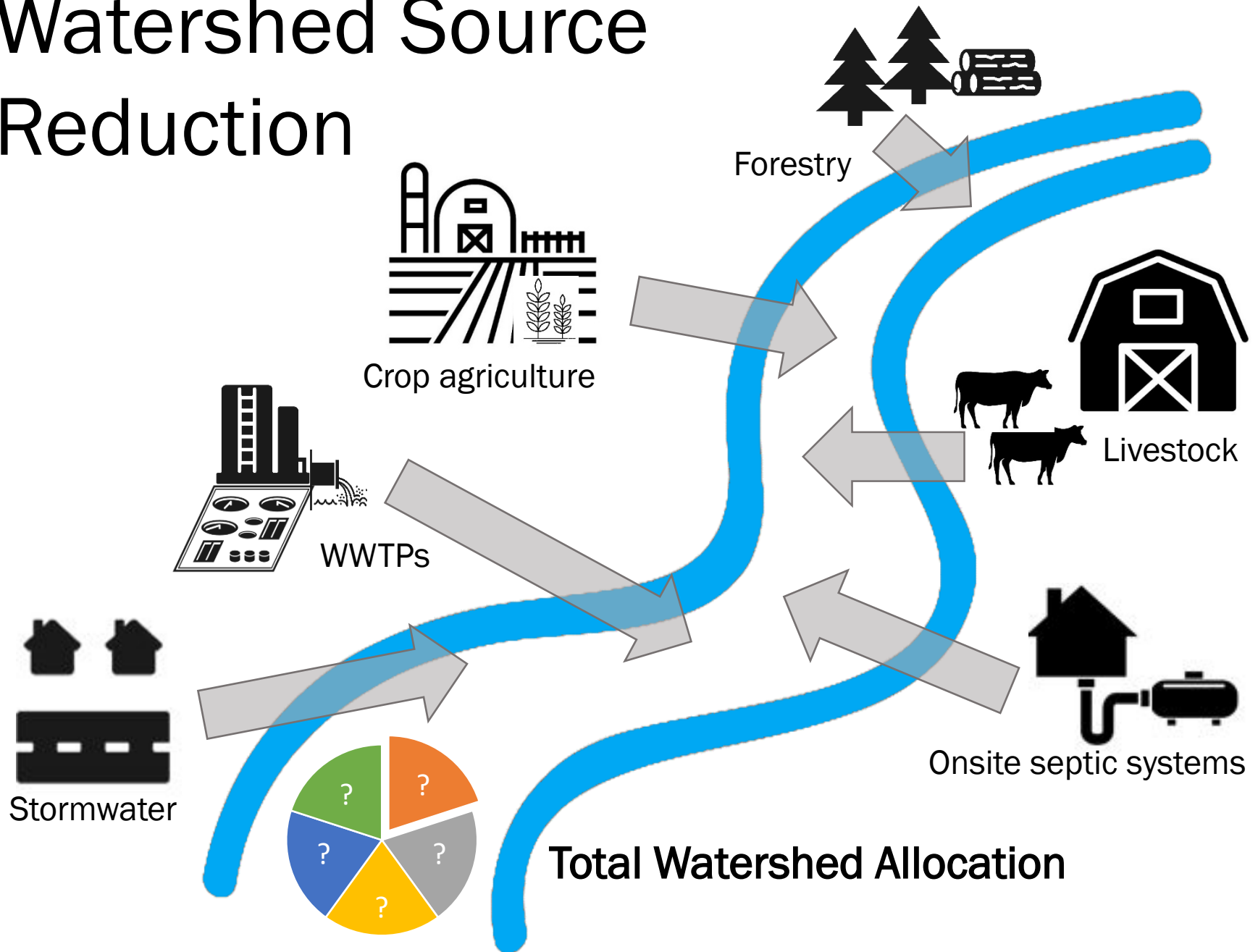
40% increase in excess nutrients

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

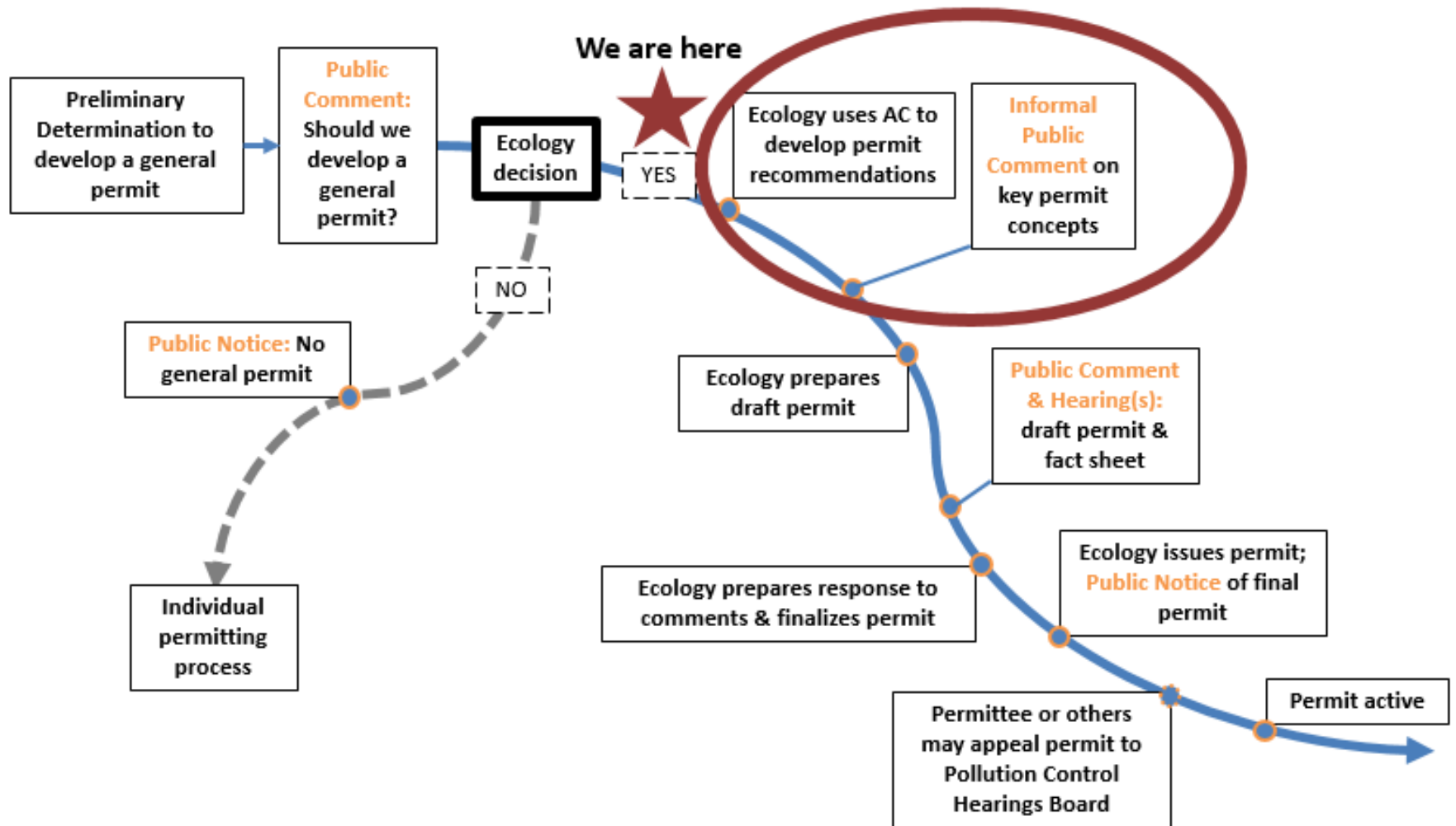


How will a General Permit Work?

- 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



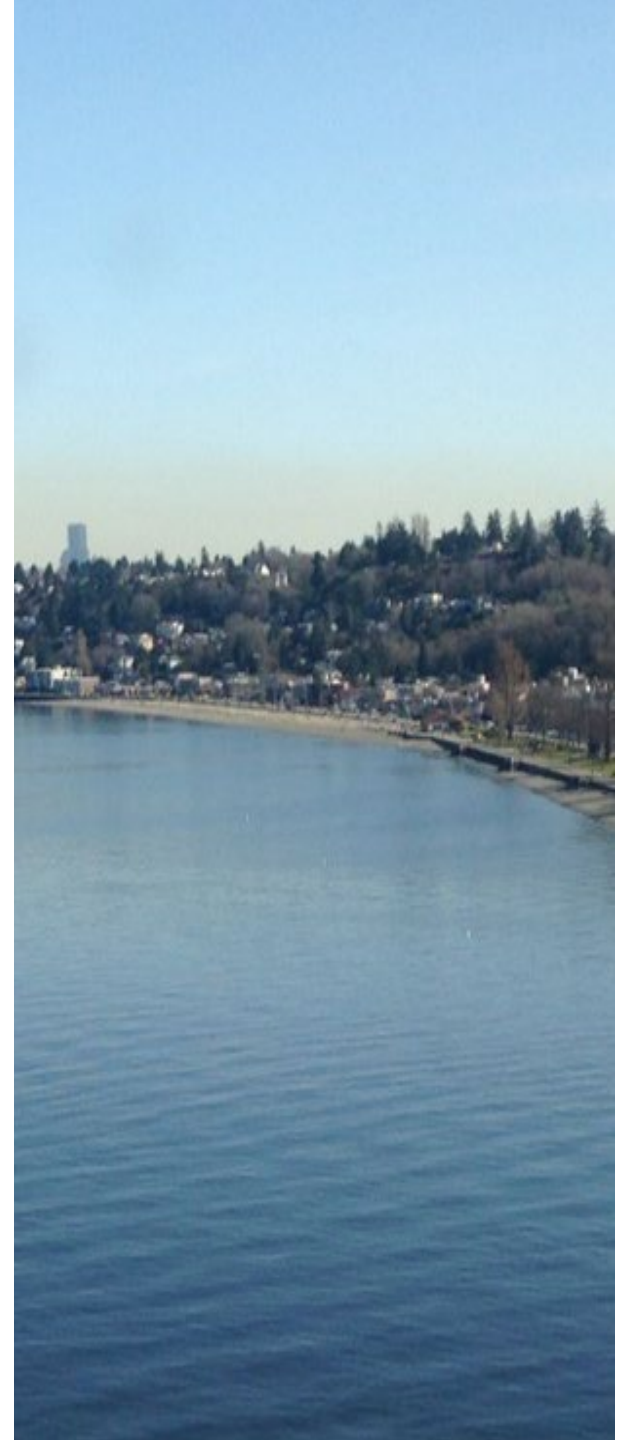
PSNGP Advisory Committee

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



1st Permit Term

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

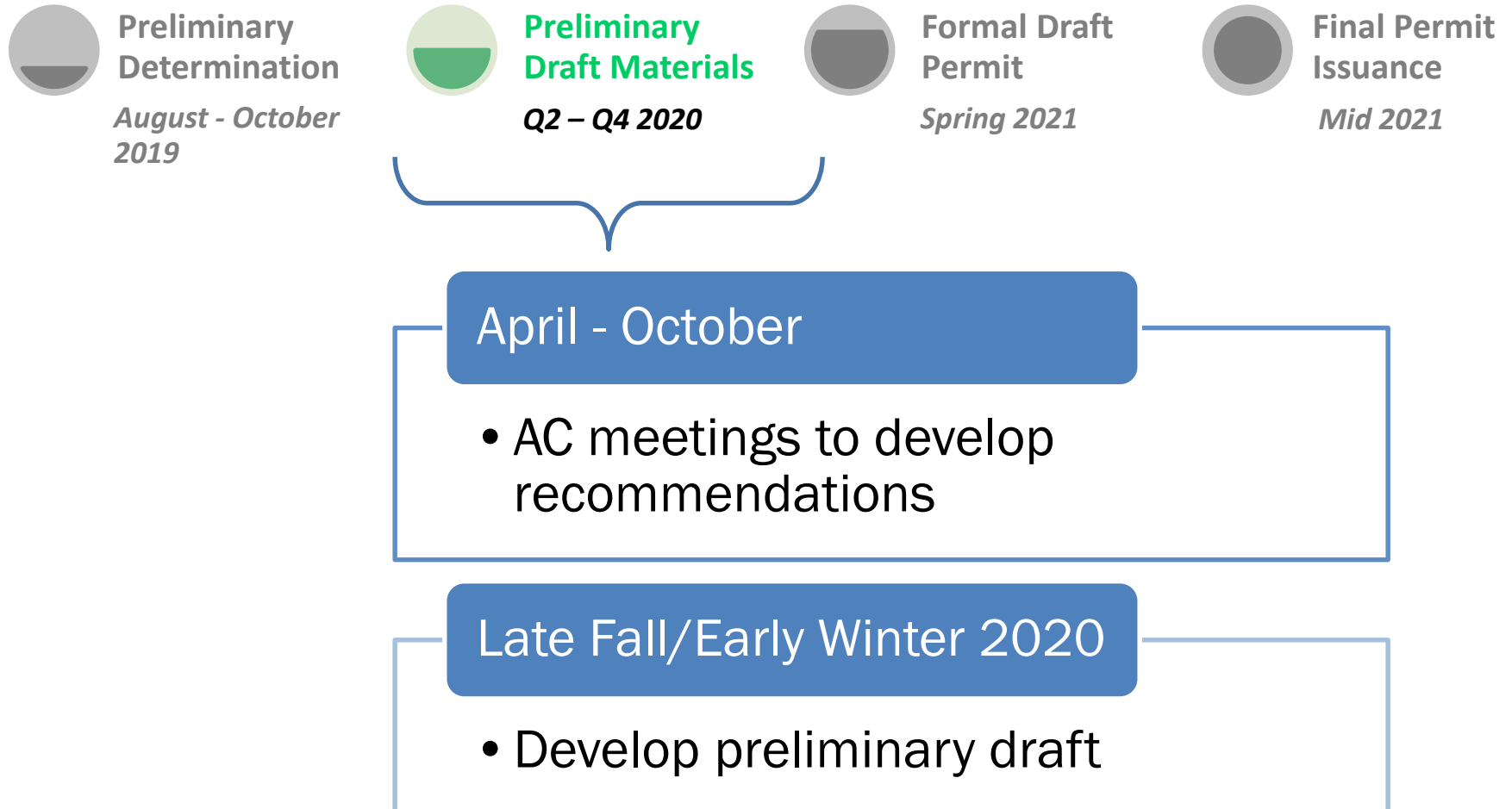




Future Permit Goals

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

General Permit Schedule

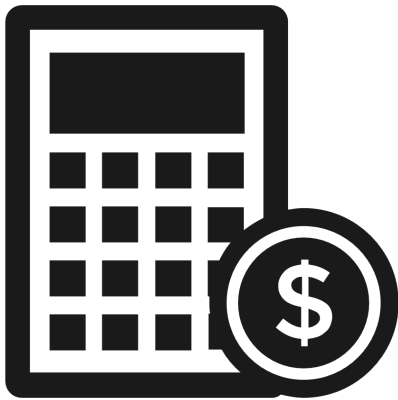


What does this mean for King County?

- Nutrient reduction requirements are coming
- Regional efforts may be part of the solution
- Other water quality regulations/responsibilities must still be met



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>

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A scenic landscape photograph. The top third shows a range of blue mountains with snow-capped peaks under a blue sky with white clouds. The middle third shows a hazy cityscape. The bottom third shows a calm lake reflecting the sky, with a dense forest of green trees in the foreground.

Questions?