

Our Lasting Commitment to Protecting Clean Water



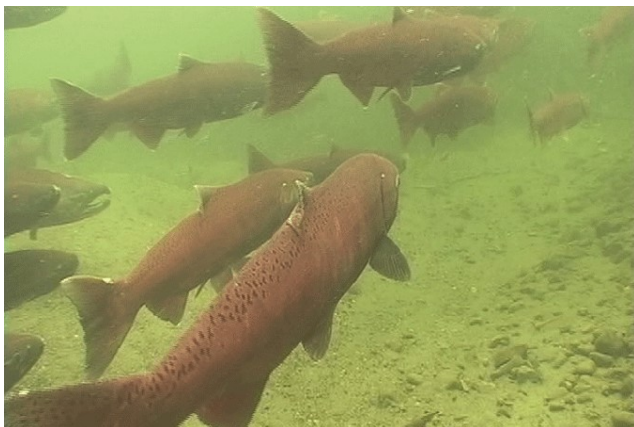
King County

PROPOSED REGULATIONS FOR NUTRIENTS

King County will invest more than **\$9 billion** over the next decade to protect water quality and habitat, affirming our strong commitment to environmental stewardship. We want to ensure that those public dollars will produce the **best possible outcomes** for the benefit of people, salmon, and orcas.



The decisions we make over the next few years will guide our capital investments and operations for decades, so we want to base them on the latest science and produce measurable results at a watershed level.



The state Department of Ecology is considering new regulations that would limit the amount of nutrients – including nitrogen – discharged at wastewater treatment plants at dozens of municipal wastewater treatment plants throughout Puget Sound, believing that this will increase the amount of dissolved oxygen in shallow bays.

POTENTIALLY LESS FUNDING FOR MORE EFFECTIVE APPROACHES

We share Ecology's goal of protecting Puget Sound, though the proposal is based on inclusive science. And even if all wastewater treatment facilities discharging to Puget Sound removed nitrogen from wastewater treatments, it would only remove an estimated **10 percent** of the total nitrogen load in Puget Sound since about **88 percent** comes from the Pacific Ocean.



Upgrading each of our treatment plants and possibly building a fourth wastewater treatment plant in Seattle is one option for managing nitrogen. However, at a potential cost of more than **\$6 billion**, it would significantly raise utility bills, making housing less affordable for lower income residents and **limit our ability to invest in other actions** – such as removing barriers to salmon habitat, permanently protecting natural lands that filter pollutants, reducing stormwater pollution, and repairing failing septic systems – **that would achieve better outcomes sooner.**

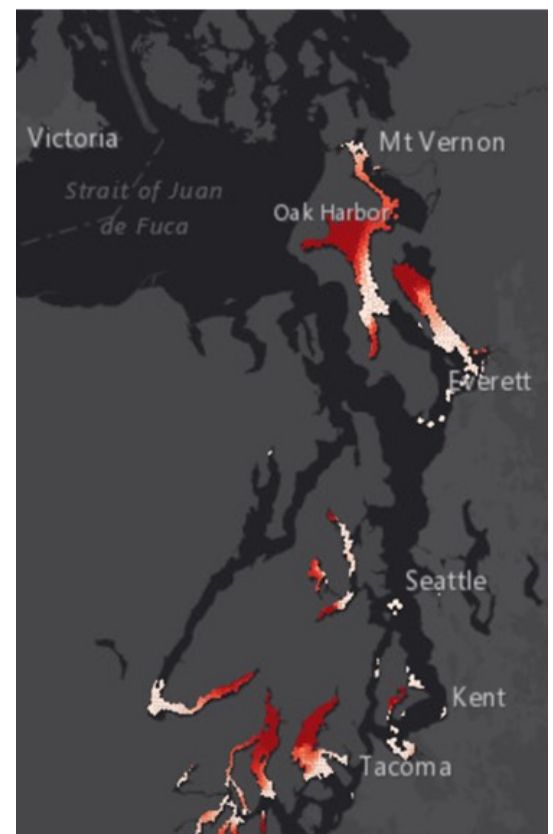
NEW MODELING AND RESEARCH IN DEVELOPMENT NOW

The basic theory is that increases in nitrogen will increase algal blooms and when those algal blooms die off it will deplete dissolved oxygen in the water and harm wildlife. **Puget Sound naturally has low dissolved oxygen levels** and large nitrogen inputs from the ocean, which are expected to increase over time.

More work is needed to reduce the uncertainty before new regulations are imposed. The Puget Sound Institute and Salish Sea Modeling center are currently working on modeling and research to target scientific uncertainties, including historic conditions, impacts to phytoplankton, climate change and natural influxes from oceanic and circulatory impacts. The map on the right shows low dissolved oxygen in red where water is shallower, temperatures warmer, and circulation is low.

OPPORTUNITIES TO LEARN MORE

[Learn more](#) about Ecology's Puget Sound Nutrient General Permit process, the timeline, and how to provide a comment by March 15.



Red indicates areas with low dissolved oxygen