

Tara Galuska

Former Governor Jay Inslee created a Southern Resident Orca Task Force by Executive Order in 2018. A Southern Resident Orca Task Force Final Report and Recommendations (<https://www.orca.wa.gov/wp-content/uploads/TaskForceFinalReport-2019.pdf>) was published in 2019 with 49 recommendations to recover the endangered Southern Resident killer whales. The Department of Ecology's 2019 Salish Sea modelling report found that human nutrient sources is contributing to low dissolved oxygen in many sensitive areas of Puget Sound resulting in low oxygen levels that prevent marine life from thriving and impacting the foundation of the marine food web. Southern Resident killer whales rely on a diet of primarily salmon, so they are impacted by disruptions in water quality and the food web in Salish sea.

The following three orca task force recommendations were derived through work at the Puget Sound Nutrient Reduction forum, and Appendix 4 of the task force report provides additional information on the impacts of human sources of nutrients to marine water quality.

Recommendation 39: Develop a National Pollutant Discharge Elimination System permit framework for advanced wastewater treatment in Puget Sound to reduce nutrients in wastewater discharges to Puget Sound by 2022.

Recommendation 40: Better align existing nonpoint programs with nutrient reduction activities and explore new ways to achieve the necessary nonpoint source nutrient reductions.

Recommendation 41: Collect high-quality nutrient data in watersheds to fill key knowledge gaps of baseline conditions.

As Orca Recovery Coordinator in the Governor's Salmon Recovery Office, I am pleased to see the nutrient general permit come to fruition. Discharges from wastewater treatment plants represent more than fifty percent of the human sources of nutrients into Puget Sound. Climate change is warming waters and reducing circulation. The addition of excess nutrients contributes to and exacerbates the problem of reduced dissolved oxygen. It is imperative that the nutrient load into Puget Sound is managed and reduced so that the marine ecosystem can thrive to a healthy condition and be resilient in the face of climate change. Ecology's response to the task force recommendations is commendable and Washingtonian's and orcas will benefit from cleaner water. The nutrient general permit will contribute to the opportunity for the Southern Resident killer whale population to be more resilient by improving water quality and the food web.