



SQUAXIN ISLAND TRIBE

March 11, 2021

Eleanor Ott, PSNGP Permit Writer
Department of Ecology
Water Quality Program
PO Box 47600
Olympia, WA 98504-7600

Dear Ms. Ott,

The following are comments about the Puget Sound Nutrient General Permit, and its implications for the Squaxin Island Tribe. The Squaxin Island Tribe is descended from maritime people who have lived and prospered along the shores of the southernmost inlets of the Salish Sea for millennia. Their leaders signed the Medicine Creek Treaty with the U.S. Government in 1854, reserving the right to hunt, gather and fish at all usual and accustomed places. Tribal members continue to this day to exercise their Treaty rights for subsistence, ceremonial and commercial purposes. The original reservation was established on Squaxin Island in the center of the South Salish Sea. The island is located downstream of the seven southern inlets—Case Inlet, Hammersley Inlet/Oakland Bay, Totten/Little Skookum Inlet, Eld Inlet, Budd Inlet, Henderson Inlet, and Carr Inlet (Figure 1). In addition to the marine waters, more than twenty-two small watersheds upstream of Squaxin Island impinge upon waters of the Indian Reservation. The federal government maintains a trust responsibility for protection of Tribal interests preserved in the Medicine Creek Treaty. In the case the Puget Sound Nutrient General Permit, due to the delegation of authority for implementation of the Clean Water Act, this Treaty obligation must be fulfilled by the State of Washington.

Elevated nutrients in the South Salish Sea have a disproportionate impact on the Squaxin Island Tribe:

Output from Ecology's Salish Sea Model (Figure 1) indicates that, under current conditions, anthropogenic nutrients violate the state water quality standards for dissolved oxygen set under the federal Clean Water Act. Ecology is thus obligated to implement measures to reduce nutrient discharges. The areas of impairment overlay large parts of the Usual and Accustomed fishing area of the Squaxin Island Tribe. Low dissolved oxygen will cause habitat fragmentation and reduction in habitat for some species.¹ In other words, the red areas of impairment in Figure 1 represent fragmentation and loss of habitat for the Treaty fisheries of the Squaxin Island Tribe. Harmful effects of low marine dissolved oxygen include acidification, which can prevent shellfish and other marine organisms from forming shells; shifts in the number and types of bottom-dwelling invertebrates; increases in abundance of macroalgae, which can impair the health of eelgrass beds; seasonal reductions in fish habitat and

¹ Long, M.C., C. Deutsch, and T. Ito. 2016. Finding forced trends in oceanic oxygen. *Global Biogeochemical Cycles* 30(2): 381-397.

intensification of fish kill events; and potential disruption of the entire food web.² Impaired conditions exist at the southern tip of Squaxin Island, which has one of the few remaining kelp beds of the South Salish Sea.

Do not let the wastewater treatment plants avoid or delay necessary improvements at the cost of resources and the health of Tribes and all Washington residents.

- Wastewater treatment plants (WWTPs) deliver 81% of dissolved inorganic nitrogen loads to the Salish Sea during the summer months when river loads are low due to lower flows.³ This results in a violation of water quality standards.
- The largest estimated improvements to water quality conditions will occur with implementation of seasonal biological nitrogen removal at all WWTPs. Treatment improvements across the Salish Sea will contribute to dissolved oxygen improvements in the inlets of concern to the Squaxin Island Tribe.⁴
- For those WWTP's that have already implemented biological nitrogen removal, they are already on their way to meeting water quality standards (LOTT). For those WWTP's that have built the foundation for biological nitrogen removal (Pierce/Chambers), compel them to complete the project. They are the largest discharger by volume to the southern Salish Sea. It should be noted that these communities have already invested significant resources in meeting Clean Water Act requirements. Other community owners of WWTPs should not be allowed to defer the costs of upgrades by pleading poverty. In fact, parity should be the order of the day.
- Treaty resources and harvests have already been affected by excess nutrient loading, so the Puget Sound nutrient general permit should be implemented rapidly with load reductions from the largest dischargers addressed in the first permit cycle. The proposed extended schedule for implementation is unacceptable.
- The costs of nutrient reduction should appropriately be allocated to permittees whose discharges contribute to violations of water quality standards. Ecology should implement significant nutrient effluent limits starting with the first general permit cycle, as well as through any interim or other individual permits.
- The Tribes are not the only people impacted by dissolved oxygen impairments. Commercial, recreational and tribal fisheries experience harm as well. Tribes and these other interests should not bear the continued externalized cost of excess WWTP nutrient discharges.
- Puget Sound nutrient general permit monitoring and reporting methods must be sufficient to document discharges and reductions, inform adaptive management, and determine compliance with water quality based effluent limits.
- All Puget Sound nutrient discharge permits should require water quality based effluent limits and application of all known, available, and reasonable treatment technologies to protect and restore water quality and fishery uses.
- If permit effluent limits in the context of the Puget Sound Nutrient Reduction Plan are insufficient to promptly demonstrate compliance with water quality standards, then Ecology should consider other alternatives including an overarching Clean Water Act Total Maximum Daily Load for Puget Sound nutrients and dissolved oxygen.

² WA Dept. of Ecology, Puget Sound Nutrient Source Reduction Project Volume 1: Model Updates and Bounding Scenarios 10 (2019).

³ WA Dept. of Ecology, Puget Sound Dissolved Oxygen Model Nutrient Load Summary for 1999-2008 xvi (2011).

⁴ Id. at 80-84.

- Implementation of water quality trading should not result in unaddressed impairments to tribal treaty resources. State fulfillment of these treaty obligations can help address the state's legal responsibilities, in addition to its important environmental justice obligations.
- Effluent discharges should be calibrated to the water bodies where they occur and the impacts on water quality that may lie further afield. The southern head of the Salish Sea (Puget Sound) is already significantly impacted by diminished water quality compliance. It is already documented that northern discharges are affecting these conditions. The severity of this situation should be addressed immediately and not be constrained by ill-conceived notions of financial equity with other locations. Ecology should direct implementation to the problem. You cannot afford to pursue the typical slow and measured response where the resource is already critically endangered.

In conclusion, act now and act aggressively. The current circumstances violate the law. A slow, bureaucratic pace will fail to protect the health and well-being of the resources and the people who depend on them. The lack of direct action to achieve compliance with the law will compel more immediate responses from those that are seeing their culture slip away.

Sincerely,



Andy Whitener
Director
Squaxin Island Tribe

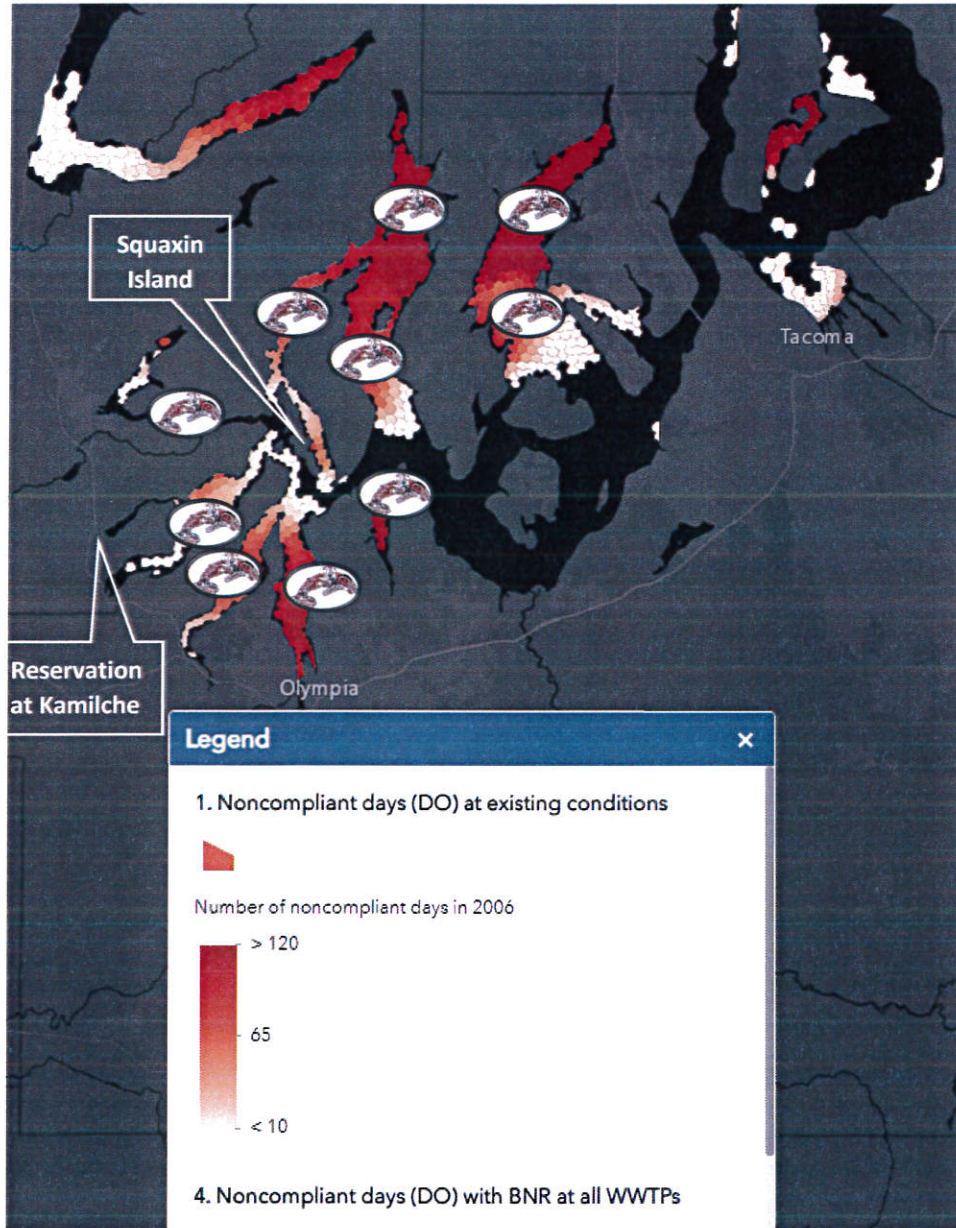


Figure 1. Output from Ecology's Salish Sea Model:

<https://www.arcgis.com/apps/webappviewer/index.html?id=2a5d5e519a9d40df8a88f6910786c51f>



= Where impairments overlap with ancestral fishing and shellfishing areas of the Squaxin Island Tribe.