



SQUAXIN ISLAND TRIBE

July 7, 2023

Tricia Miller, Permit Administrator and Sean Wilson, Permit Manager
Department of Ecology – NWRO
PO Box 330316
Shoreline, WA 98133-9716

Dear Ms. Miller and Mr. Wilson:

The following are comments on National Pollutant Discharge Elimination System Permit No. WA0029181 for King County's West Point Wastewater Treatment Plant. The impacts of West Point reach all the way into South Puget Sound and the Usual and Accustomed Area of 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. This includes every inlet of South Puget Sound: Case Inlet, Hammersley Inlet/Oakland Bay, Totten/Little Skookum Inlet, Eld Inlet, Budd Inlet, Henderson Inlet, and Carr Inlet (Figure 1). 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 and individual NPDES permits, 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. West Point is the largest discharger of anthropogenic total inorganic nitrogen (TIN) into Puget Sound. Ecology should set TIN discharge limits for West Point at below 3 mg/L. Output from Ecology's Salish Sea Model (Figure 1) indicates that, under current conditions, elevated anthropogenic nutrients result in dissolved oxygen concentration lower than state water quality standards 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, where Tribal fishers set their nets. Low dissolved oxygen causes habitat fragmentation and reduction in habitat for some species. 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 elevated TIN and 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, intensification of fish kill events, and potential disruption of the

entire food web. Low dissolved oxygen has and greatly diminished one remaining kelp beds of the South Salish Sea at the southern tip of Squaxin Island.

We have heard of a questioning of the Salish Sea Model as a tool for determining the impact of anthropogenic nutrients on the Salish Sea. Over the past twenty years, the Salish Sea Model has been reviewed, criticized, and improved over multiple iterations. Those successive iterations have produced results that repeatedly say the same thing with more certainty: Anthropogenic nutrients are the dominant source of nutrients in Puget Sound, especially in summer, and those nutrients cause a decrease in dissolved oxygen in the heads of inlets. This is a reality right now, and so it should be reflected in the form of strict standards in the West Point NPDES permit.

As other entities Sound-wide ramp up their nutrient removal from wastewater (JBLM (brand new plant), LOTT, the City of Shelton, Mason County, and the Squaxin Island Tribe, just to name a few closer to us), why is King County lagging behind? If they list cost as the primary barrier, it is the same for all entities. Ecology, please continue to direct state and federal funds towards King County and all entities to ramp up nutrient removal from wastewater.

Finally, West Point and King County lack some of the key features of the newest wastewater treatment facilities in Puget Sound: 1) membrane bioreactors (MBR) 2)“up-watershed” land application of reclaimed water and 3) reuse of reclaimed water . As King County considers expansion of West Point, it should only be to incorporate MBR. If not MBR at West Point, then the County should establish satellite MBR facilities “up-watershed” away from shorelines. If Ecology allows West Point to expand with current nutrient discharge limits, Ecology would be permitting the further degradation of Puget Sound, at the expense of the Squaxin Island Tribe, all Tribes, and all residents of Puget Sound.

Sincerely,



Erica Marbet
Water Resources Biologist
Squaxin Island Tribe

See Figure 1 on next page.

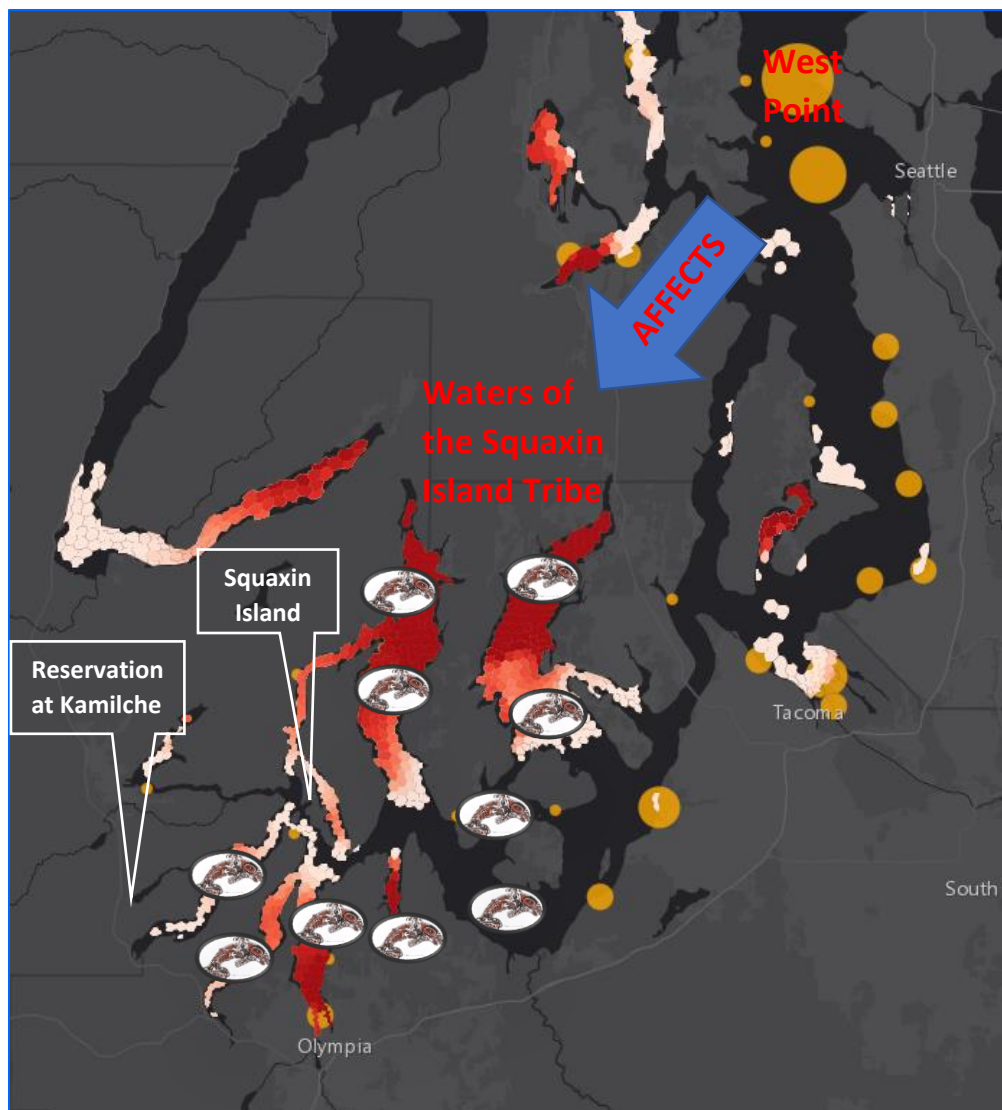


Figure 1. Output from Ecology's Salish Sea Model:

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



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