

January 8, 2024

VIA EMAIL

TO: Sonja Cady, Land Use Clerk, Thurston County: <u>Sonja.cady@co.thurston.wa.us</u>

RE: Permit Application: 2022103702 Taylor Shellfish / Manzanti Geoduck SSDP – Johnson Point Loop Road

Dear Clerk,

Please enter these comments into the record.

"At any point in time the world we see is somewhere in between being created and being destroyed. It is seldom static, which is why if there are things we cherish about the present, it is on us to preserve them."

- Raymond Zhong, New York Times Climate Forward, June 6, 2023

Friends of Burley Lagoon (FOBL) is writing to urge you to deny the Taylor Shellfish permit request for the Taylor Shellfish / Manzanti Geoduck SSDP application. FOBL is concerned about the rapid expansion of Puget Sound tideland use and industrialized practices implemented by private enterprise within the commercial aquaculture industry. As of 2022, within Puget Sound's 650,000 acres, "commercial shellfish growing areas in Puget Sound cover roughly 260,000 acres," which is almost 40%.(1)

The piecemeal, county by county permitting of shellfish aquaculture across the Puget Sound is allowing industrialized sites to spread like patchwork. Cumulative impact studies of the system-wide ecological impacts, along with oversight and independent monitoring of compliance of aquaculture regulations, are severely lacking.(2) Counties are working independently, not collaboratively, to the detriment of Puget Sound and the citizens that call it home. How much more Puget Sound marine land claimed suitable for aquaculture should be permitted to the industry?

Industrial aquaculture itself is destructive due to its reliance on plastics, and geoduck production also creates unique problems with its sediment disruption. The results of the methods and practices have profound consequences on wildlife, the food-web, and biodiversity, along with the loss of recreation, sense of place, and aesthetics across Puget Sound.

The geoduck seed are placed in plastic tubes for approximately 2 years and covered with plastic predator netting. There are approximately 145,000 tubes per acre and each tube has 2-3 geoducks in it. In 5-7 years, harvesting occurs utilizing a hydraulic wand (or waterjet) inserted into the substrate which liquifies the beach. This process is an ongoing cycle. Our concerns are:

- 1) This on-going, rotational process means that some portion of the tidelands is always being disrupted whether through invasive plastic, or liquefaction.
- 2) The waterjet harvesting process has the potential to release contaminants contained in the substrate. For example, we question the possibility of disrupting the toxic lead, arsenic, and other heavy metals within the sediment from 100 years of pollution from the Asarco Smelter in Pierce County.
- 3) The planting and harvesting methods also negatively impact and disrupt the benthic communities that are an integral part of the food web. "Even slight disruptions in the food web can have profound effects on the living organisms in an ecosystem, including extinction. Because each living organism's role is interconnected to the others' roles, if one species is impacted, the food web's entire system of nourishment can be affected.(3) An initial long term study completed by the University of Washington and the National Oceanic and Atmospheric Administration's Northwest Fisheries Science Center indicated the materials and practices used at industrial geoduck sites can cause change that could send 'problematic ripples throughout the entire ecosystem.'(4) The research determined the gear used to produce geoducks, not the geoducks themselves, impact the marine environment and its wildlife."(5)
- 4) Industrialized shellfish farming of any singular product has the potential to create a monoculture resulting in a lack of biodiversity.
- 5) Any methods Taylor Shellfish uses to disclose, store or monitor plastics for loss do not appear to be effective because Burley Lagoon residents (where Taylor is currently operating) have documented a constant battle with aquaculture debris, including mesh bags, nets, sleeves, crates, and zip-ties, found on the tidelands, wetlands, and in the grasses along the shoreline.
- 6) Plastic gear degrades into microplastics. The impact of plastics on human health and the environment has been downplayed and ignored. As research in plastics continues, it is questionable whether potential health effects from plastics can be mitigated.

In the past several years we've learned much about the cumulative effects of climate change. We're at a tipping point. Henderson Inlet doesn't exist in a vacuum. Changes to it affect the Puget Sound, Pacific Ocean, and beyond. We implore you to deny the Taylor Shellfish permit.

Sincerely,

Friends of Burley Lagoon Board board@friendsofburleylagoon.org

(1) Puget Sound Vital Signs: Measures of Ecosystem Health and Progress Toward Puget Sound Recovery Goals. Area of Harvestable Shellfish Beds. (2022). Washington State Department of Health.

(2) Bergstein, A. (2018, May 13). Damning emails surface showing state concerns over aquaculture methods, Olympic Peninsula Environmental News, para 2.

(3) Setala, O. (2018). Microplastics in Marine Food Webs. Science Direct.

(4) Nozowitz, D. (2015, October 30). Is This 3-Foot Long Phallic Clam Killing Puget Sound, UW News, para. 4-6.

(5) Friends of Burley Lagoon, 2018. *Read and Learn About Burley Lagoon and More, A Slight Disruption in a Food Web Can Cause Big Ripples*. January 5, 2024, < https://friendsofburleylagoon.org/read-learn.asp>