To: Thurston County Hearings Examiner

 RE: Project #: 2022103702 Taylor Shellfish/Manzanita Geoduck SSDP Applicant: Taylor Shellfish, Erin Ewald Request: Shoreline Substantial Development Permit for a commercial intertidal geoduck farming operation within a 3.6-acres area of tidelands.
Location: unaddressed tidelands
Legal Descriptions: OL 5-19-1W COM N MC S 22DEG W 9.17 CH SLY ALG ML 11.75 CH W .75CH W Known as Tax Parcel No. 93000100000.

The following are my comments related to the pending permit for Taylor Shellfish Farms (Mazanti) Ref # NWS -2019-0872-AQ. I would like to go on record as saying I am against issuing any permit for the harvesting of geoducks in Henderson Inlet at this time and I am requesting the Washington State Department of Ecology (DOE) issue a SEPA Determination of Significance on the Taylor shellfish project, Aquatics ID: 142540

My concerns are based mostly on lack of any definitive scientific studies supporting geoduck aquaculture in Puget Sound. Most existing studies that I have researched have been labeled as "first looks" requiring "more study". Geoduck aquaculture is not yet proven to be environmentally safe and the existing studies are limited and outdated, requiring further research.

#### **Plastics Contamination**

The addition of large quantities of plastic tubing and plastic mesh to Henderson inlet combined with UV exposure and abrasion from wind and wave action raises serious concerns about microplastic contamination. This needs more study before approval.

#### **Decline of Water Quality**

Henderson Inlet does not have a high level of tidal flushing. The use of plastic tubing and plastic mesh can disturb the existing water flushing properties of the bay. The mesh traps large quantities of seaweed which then decomposes and can affect oxygen content and chemical composition of the bay.

The water quality of Henderson inlet has been marginal in the past with low oxygen levels and high fecal coliform counts leading to frequent shellfish closures, red tides and the die-off of sand dollar populations. The homeowners along Henderson inlet voted to approve an additional property tax to support county and state efforts to monitor the inlet and mitigate pollution sources. This effort has led to significant improvements in water quality. It would be a shame to take a step backwards. As far as I know, Taylor Shellfish Farms has not contributed any monetary or other support to this effort.

The maintenance and harvesting methods Taylor Shellfish Farms uses for Geoducks aquaculture involve liquifying the sand and mud layers on the floor of the bay with water sluices. Disturbing this layer down several feet can release previously trapped contaminants and pollutants back into the bay leading to degraded water quality. Also, the silt and cloudiness reintroduced into the bay can block sunlight affecting eel grass growth and reduce oxygen levels in the water which can be harmful to other sea life including forage fish which in turn can affect bird populations.

### Land Use

The planned location of this geoduck farm is in the middle of a landscape zoned as rural conservation is not consistent with current land use laws. It is tantamount to placing a manufacturing facility in a residential neighborhood.

# **Genetics**

Hatchery geoducks are being used which are fertile before harvest and do interbreed with wild stocks. The impact of interbreeding of hatchery geoducks and wild geoducks is unknown and needs more study. We don't allow farm-raised salmon to interbreed with wild salmon. In fact, Washington has banned fish-farming with net pens in state waters, citing danger to struggling native salmon.

# **Aesthetics**

The methods and materials used in geoduck aquaculture significantly impact the aesthetic value of property. Not only does the homeowner have an impaired scenic view but they also have to endure the noise associated with the harvesting and maintenance of the tract. These activities can sometimes occur at night to accommodate tidal conditions.



# **Recreation and Access**

The proposed acreage for this geoduck aquaculture site limits recreational activity including access to moored boats, inshore kayaking and canoeing, beach walking and nature studies in the intertidal area. For example, many property owners moor their boats just offshore and at low tides have to drag their dingiest across the mudflats to reach the water to row out to their boats. On many occasions we have had our grandchildren use our kayaks to explore low-tide sea life. These activities would no longer be possible with geoduck farming in the area.

Just the other day a neighbor had a huge fire on the bank overlooking the inlet. This fire was out of control and required the use of fire crews from several districts as well as fire fighting helicopters. These were largely ineffective and eventually required the use of two large fireboats to come in close to shore to control the fire. This might not have been possible if they had to come in over tubes and mesh that could have fouled their propellers.

## **Economics**

It seems that the only parties that win here are the commercial concerns. The state might collect some taxes from the aquaculture firms, but this could easily be offset by reduced valuation of the properties affected and lower property tax revenues. Geoducks are a luxury item largely exported to Asian markets and add very little to the local or state infrastructure or economy. The number of jobs created are expected to be few and low-paying.

## **SUMMARY**

- 1. Possible microplastics contamination
- 2. Degraded water quality
- 3. Possible contamination of native species due to cross breeding
- 4. Land use inconsistent with adjacent properties
- 5. Degraded aesthetics for property owners, boaters, and tourists
- 6. Restricted access and use of public waters by property owners and other stakeholders
- 7. Little if any economic benefit to the state or to the public

There is still too little known about the downsides and risks of this type of aquaculture. I urge you to further study the long and short-term effects that this type of aquaculture might have on Puget Sound. We are already spending millions of dollars to clean up the sound. Let's not accidentally take a step backwards.

Thank you.

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