Staff Report

Shoreline Substantial Development Permit / Shoreline Conditional Use Permit: Case Number: SD/CP15-14
Burley Lagoon Geoduck Farm (Taylor Shellfish Farms)

Application Numbers: 778791 – Shoreline Substantial Development Permit
778792 – Shoreline Conditional Use Permit
778793 – Environmental Checklist
778794 – Critical Fish and Wildlife Habitat Area Review
823304 – Environmental Impact Statement
1004944 – Appeal of Final Environmental Impact Statement

Tax Parcel Numbers: 0122133078, 0122231065, 0122231067, 0122231071

Examiner’s Hearings: March 20, 21, 22, 25, 26, 27, 28, and 29, 2024, at 9:00 a.m.
These hearings are being held remotely, via Zoom, and at the Pierce County Public Services Building (Annex), public meeting room, 2401 South 35th Street, Tacoma, WA. To participate in the virtual hearings, visit www.Zoom.com and click “Join A Meeting” or call 253-215-8782, then enter the Meeting ID: 955 1213 2885, and Passcode: 183209, or follow this link: https://piercecountywa.zoom.us/j/95512132885?pwd=ejBhYkk1OS9KcEttRIBURFFvcUdpQT09
For additional questions regarding the virtual meeting process, please contact Amalia Lehmann at amalia.lehmann@piercecountywa.gov or at (253) 798-3292, for instructions.

Proposal: Convert existing shellfish beds from the cultivation of Manila clams and Pacific oysters to geoduck clams planted in rigid polyvinyl chloride (PVC) nursery tubes and/or HDPE flexible mesh nursery tubes throughout a 25.5-acre project area. Predator exclusion netting may also be utilized during some portion of the generalized 6-year grow-out cycle. Planting would be done in phases.

Proposal Location: Burley Lagoon. It is a saltwater body within south Puget Sound and located immediately north of and connecting (under the Purdy bridge) with Henderson Bay. The two waterbodies are divided by the Purdy sandspit and State Route 302. The proposal would be located within the southern half of the lagoon within the Key Peninsula and Gig Harbor Peninsula Community Plan areas. At the time of application, the shoreline environment designations for this portion of the lagoon were Urban, Rural Residential, and Natural. The northern third of the lagoon is located within unincorporated Kitsap County. The proposal would be located approximately ¾ mile from Kitsap County, within Sections 13, 14, and 23, Township 22 North, Range 1 East, in Pierce County Council District #7.
Staff Recommendation: This report addresses the two requested shoreline permits. Section 1.22.100 A. of the Pierce County Hearing Examiner Code (Chapter 1.22, Pierce County Code) states, in part, that the Planning Department “shall prepare a report to include a summary of the facts involved and the Planning Department's findings and recommendations.” It further states that “The Planning Department shall also make a specific recommendation to approve, deny, modify, or conditionally approve the subject application”.

For this proposal, Staff finds that the main issue is one of “scale”. Specifically, would the proposal, in conjunction with the existing farm, monopolize the lagoon to the detriment of everything else (fish/wildlife species/habitat, recreation, health/welfare of abutting residents, etc.). The County acknowledges that there is a point where aquaculture activity can effectively exclude other uses within a particular body of water. However, Staff finds that this proposal does not serve to exclude these other uses. Further, aquaculture has occurred in the lagoon for over 100 years, there are codes (plans, policies, and regulations) that encourage aquaculture, and the EIS determined that the proposal would not result in any probable significant adverse environmental impacts.

Therefore, Staff recommends approval of both shoreline permits subject to the mitigation contained in the Environmental Impact Statement (EIS) prepared for this proposal, and other conditions, listed at the end of this report. They are intended, in part, to minimize the impacts of the proposal.

The EIS has been appealed. The appeal is addressed in a separate companion report.

County Contacts: Ty Booth, Planner, ty.booth@piercecountywa.gov
Jake Layman, Environmental Biologist, jacob.layman@piercecountywa.gov

Note: Dave Risvold was the assigned Environmental Biologist since the proposal was submitted. On December 29, 2023, he retired, and Mr. Layman assumed his responsibilities for this proposal.

Pierce County Online Permit Information:
https://pals.piercecountywa.gov/palsonline/#/permitSearch/permit/departmentStatus?applPermitId=778791

Application Data

Application Complete: May 28, 2014
Report Mailed: February 21, 2024
Property Owners:
Western Oyster Properties LLC
3229 Selwyn Farms Lane
Charlotte, NC 28209

Stout Property Investments LLC
117 East Louisa Street, PMB 735
Seattle, WA 98102
Applicant: Taylor Shellfish Farms
Attn: Erin Ewald
SE 130 Lynch Road
Shelton, Washington 98584
erine@taylorshellfish.com

Applicant’s Agent: Plauché & Carr, LLP
Attn: Jesse DeNike
1218 3rd Avenue, Suite 2000
Seattle, Washington 98101-3235
jesse@plauchecarr.com

Notice

As of the issuance date of this report, the County has not yet provided public notice of the upcoming hearings. This will occur, in accordance with applicable County regulations, prior to the hearings. However, the hearing dates have been posted for some time under the applicable application numbers (in the County permit system) and on the webpage created for this proposal (on the Planning and Public Works Department website). County notice requirements are primarily located in Pierce County Code, Chapter 18.80. In the meantime, the following summarizes the notice that has occurred up to this point regarding the proposal:

1. Dates notice provided: Up to this point, the County has provided notice of this proposal during the following key stages of the review process:
   A. 2014: Notice of Application (NOA);
   B. 2016: SEPA Determination of Significance (DS) and public open house;
   C. 2021: SEPA Draft Environmental Impact Statement (DEIS) issuance;
   D. 2023: SEPA Final Environmental Impact Statement (FEIS) issuance; and
   E. 2023: Land Use Advisory Commission public meetings.

2. Notice contents: Each provided notice of the proposal, opportunity to provide written comments or, where appropriate, public testimony:
   A. The above notices were mailed and/or emailed to the following:
      (1) Applicant;
      (2) Appellant (after EIS was appealed in 2023);
      (3) Property owners within a radius of 300 feet, but not less than two parcels deep, around the exterior boundaries of the proposal location. This list has been updated each year;
      (4) Those who have previously submitted written comments;
      (5) Local, State, Tribal, and Federal governments;
      (6) Organizations; media, etc.; and
      (7) Those on a shellfish interested parties list that the County started and then discontinued years ago regarding all aquaculture proposals in unincorporated areas.
   B. Posting of public notice sign(s); and
   C. Legal notice publications in the official County newspaper (The News Tribune) and/or Peninsula Gateway.
3. Planning and Public Works Department website: The website has provided the following additional ways to obtain information:

A. On-line permit system: The application materials, comments, notices, etc. are visible through this system; and
B. Proposal specific webpage: In 2021, the County started a webpage for this proposal. It is found at the following link: www.piercecountywa.gov/burleylagoonfarm

An opportunity for additional public testimony, regarding the shoreline permits, will be available at the Examiner’s public hearing. Until then, written comments regarding the shoreline permit(s) are still being accepted.

**Comments Received**

Throughout the review process, the County has received a voluminous number of comments addressing a voluminous number of topics.

*Staff Comment:* Most comments oppose the proposal and/or find that additional studies should be required. A summary of the comments received, during the EIS process specifically, may be found in the FEIS.

**County Roles**

**PIERCE COUNTY HEARING EXAMINER (EXAMINER)**

Pierce County Code, Title 1, Chapter 1.22

The Examiner is selected by the County Council and serves at the pleasure of the Council. The Examiner and Deputy Examiners are to have training or experience that will qualify them to conduct administrative or quasi-judicial hearings utilizing land use and other regulatory codes. Once selected, no Councilmember, County official, or any other person shall interfere or attempt to interfere with the Examiner or Deputy Examiner in the performance of their duties.

*Staff Comment:* The Examiner has appointed a Deputy Examiner to hear this proposal. They will be the final County decision maker for the shoreline permits and EIS appeal.

**LAND USE ADVISORY COMMISSIONS (LUACs):**

Pierce County Code, Title 2, Chapter 2.45

LUACs have been created within defined geographic areas, primarily those areas for which a community plan has been adopted. One of their functions is to review applications for proposed developments within their represented community and convey such recommendations to the County and Examiner. LUACs consists of members broadly representative of the community. Members must reside in, own a business, own property, or work within their respective community plan. Members are appointed by the County Executive (elected) and confirmed by the County Council (also elected). Note, the appointment process is slightly different for the Key Peninsula Land Use Advisory Commission. All are volunteers and serve without compensation.
PIERCE COUNTY PLANNING AND PUBLIC WORKS DEPARTMENT (PPW):

PPW is where development applications are submitted. PPW facilitates applications through the review process including sending out notices, receiving/reviewing comments, conducting reviews, etc. PPW also serves as staff to LUACs and Examiner.

Site Description

Burley Lagoon is a shallow barrier estuary approximately 2 miles long and 0.7 mile wide at its widest point (south end). The total area of the lagoon is 410 acres, of which 300 acres are within unincorporated Pierce County. The southern half of the lagoon is primarily surrounded by residential uses, commercial uses in Purdy, State Route 302, Purdy bridge, Purdy sandspit park, and power transmission tower/lines. To the north of the proposal, there is an undeveloped island. A variety of recreational uses occur in the lagoon. Two creeks flow into the lagoon (Purdy Creek and, in Kitsap County, Burley Creek). The lagoon supports a variety of fish/wildlife and/or their habitats.

*Staff Comment:* Staff are familiar with the Lagoon, having walked it at low tide and navigated it by boat at high tide. County staff have additional familiarity with the Lagoon by virtue of their involvement with a variety of development projects within and adjacent to the Lagoon.

Existing Clam/Oyster Farm

The Applicant operates an existing clam/oyster farm in the lagoon. It is located entirely within Pierce County. The Applicant leases 300 acres of the lagoon from the property owners. The farm has been in existence for more than 100 years. In 2012, the Applicant took over operations.

*Staff Comment:* In 2015, in response to a formal complaint(s), the County investigated claims that the existing farming activity was not legal, and that Taylor Shellfish had expanded existing farming activities. The County issued two letters stating, in part, that the existing farm is legal, and the Applicant’s activities did not result in an expansion of farm activities. The determination was not appealed.

The County (and other governmental agencies) routinely receive complaints regarding a variety of farm activities (wildlife impacts/harassment, navigation concerns, debris, noise, lights, odors, etc.). It is difficult for the County to address the concerns as the farm was established, for the most part, decades before there were requirements for County shoreline permits. As such, there are no permit conditions for the County to enforce. The existing farm is not before the Examiner, only the proposed conversion of a portion of the farm.

Area Aquaculture Activity

In the Key Peninsula and Gig Harbor Peninsula areas, County known shellfish aquaculture activity is summarized as follows:

1. Pending applications: Other than this proposal, the County has no other pending applications for shellfish farms within the community plan areas.
2. Approved applications: Since the mid-1990s, the County has approved approximately a dozen farms. Most have been in Case Inlet (west shoreline of the Key Peninsula) and primarily consist of geoduck farms. Those in Carr Inlet (between the Key Peninsula and Gig Harbor Peninsula) are located near the tip of the Key Peninsula (Devil’s Head). The closest farm, to Burley Lagoon, consisted of a 10-acre manila and littleneck clam farm within Henderson Bay (near the mouth of McCormick Creek) on the Gig Harbor Peninsula.

   One such geoduck proposal was a 5-acre geoduck farm known as the deTienne farm. It was primarily subtidal. It was located just west of the Purdy sandspit on the Henderson Bay side. It received approval by the Examiner but was subsequently appealed to the Washington State Shorelines Hearings Board and denied. It should be noted that a contributing factor in the denial was unpermitted aquaculture activity, completed by a prior leaseholder, on the tideland parcel, within eelgrass beds (see discussion, below).

3. Historical oyster growing areas: These exist in Burley Lagoon, Minter Bay, and Rocky Bay.

4. Washington State Wildstock Geoduck Fishery: This fishery occurs on publicly owned subtidal tracts. The fishery involves the harvest of wild geoducks (with harvest jets) but does not involve planting/use of gear. The fishery is managed by the State and Indian Tribes. It is not regulated by the County.

5. Tribal Treaty Rights: Tribes harvest wild (not farmed) shellfish (potentially including geoducks) in other locations throughout Puget Sound based on their treaty rights. It is not regulated by the County.

6. Illegal farming and poaching: These activities occur but to what extent is unclear.

   On the Purdy sandspit, years ago an unpermitted geoduck farm, involving tubes, was established (Washington Shellfish/McRae). It occurred on the sandspit itself (Henderson Bay side) on tidelands leased from the County and on other privately owned tidelands to the west (including deTienne). Enforcement action ensued and much of the farm (tubes) was later removed by volunteers (on at least the County site).

Proposal Summary

According to the Applicant, it is not yet known with certainty whether they would relocate existing clam and oyster culture currently occurring within the 25.5-acre project area. However, this was conservatively assumed for the analysis in the EIS.

Geoducks are planted between subtidal habitat (down to approximately -10 feet mean lower low water (MLLW) and intertidal habitat (up to +3 feet MLLW). Planting may occur in a series of 1.5- to 2.0-acre plots within the 25.5-acre area, depending on site conditions. Planting in smaller plots allows spatial separation between the various plots. Gear placement and planting may also occur over multiple years to allow temporal separation between culture activities. Geoduck grow-out typically requires a period of 5 to 7 years but can vary depending on specific site and seasonal growing conditions. A generalized 6-year geoduck culture cycle is assumed. Either gear type used for predator exclusion (i.e., PVC nursery tubes or flexible mesh nursery tubes) would be positioned 1.0 to 1.5 square feet apart (i.e., 12 to 18 inches on-center between nursery tubes). If PVC nursery tubes are used, the entire plot would be covered with predator exclusion netting. After PVC or
flexible mesh nursery tubes are removed, netting would be placed on the sediment surface for a period of time. Overall, predator exclusion gear (nursery tubes and/or netting) would be present for 3 years or more. Thereafter, no other predator exclusion gear would be used for the remainder of the culture cycle (2 to 4 years) through harvest. PVC nursery tubes with predator exclusion netting are most commonly used. As an option, flexible mesh nursery tubes made from high-density polyethylene (HDPE) may be used. Geoduck aquaculture is a cyclical activity, rather than an ongoing daily operation. The four activities associated with the geoduck culture cycle include: (1) gear placement and planting, (2) maintenance and grow-out, (3) gear removal, and (4) harvesting:

1. Gear Placement and Planting: Gear placement and planting activities include the installation of geoduck nursery tubes and predator exclusion netting (if utilized), and planting geoduck seed in nursery tubes. Three or four geoduck seed would be planted in each nursery tube. Sandflat substrate is selected for geoduck aquaculture and little bed preparation is typically required. If any larger features are present (e.g., woody debris), this material would typically be moved by hand to a new location or left in-place and planted around. Within the area proposed for conversion to geoduck aquaculture, clam and oyster harvesting would need to occur on the 25.5-acre project site prior to planting Sites A and B with geoduck. PVC nursery tubes are installed manually by pushing them into the substrate. Flexible mesh (HDPE) nursery tubes may be installed hydraulically, using low-pressure water pumped through a hose. The amount of physical disturbance that would be caused by installing nursery tubes would be similar for either PVC tubes or mesh HDPE tubes. The dense sandy substrate settles around the tubes quickly. The tubes extend a few inches above the tidelands. Predator exclusion nets would be installed in the same approximate timeframe, and within the same area as that disturbed during the installation of PVC nursery tubes. Planting would include the operation of boats and/or barges to transport the crew and gear, workers on-site installing nursery tubes and/or predator exclusion nets, and motors to operate low-pressure hoses for hydraulic gear placement (when this method is used). The number of workers would depend on the amount of area where gear placement and planting were to occur.

2. Maintenance and Grow-Out: Maintenance involves visiting the geoduck culture area when gear is present to survey for damaged gear or debris, checking the growth of geoducks, and surveying for debris when predator exclusion gear is not present. Nursery gear would be present for 3 years or more of the generalized 6-year geoduck culture cycle. PVC nursery tubes with predator exclusion netting would be used for approximately 2 years of growth during this time, after which the netting would be placed directly on the substrate of the geoduck bed following removal of the tubes. Similarly, flexible mesh nursery tubes would be used for approximately 3 years of growth. Predator exclusion netting would not typically be used while HDPE flexible mesh tubes are present; however, similar to geoduck beds with PVC nursery tubes, predator exclusion netting would be placed directly on the substrate for a period of time following the removal of either type of nursery tubes so that juvenile geoducks could adjust to the lack of protection from predators. Netting at this stage of the grow-out cycle would be removed after approximately 6 months.
Gear would be added over approximately a 3-year period within the 25.5-acre proposed geoduck culture area, and gear would be present for approximately 3 years within each culture plot under a generalized 6-year culture cycle during grow-out. Based on this 3-year development schedule, there would be 1 year out of every 6 years when there would be no gear present on any of the culture plots, and 1 year when the entire 25.5-acre culture area would have predator exclusion gear. The remaining years in a generalized 6-year cycle would have some variation of these book-end conditions. Geoduck nursery gear may include a combination of PVC nursery tubes, predator exclusion nets, and HDPE flexible mesh nursery tubes. When predator exclusion gear is removed, the geoduck growing area would have a visual appearance comparable to other intertidal areas for the last half of the grow-out period.

Maintenance activities would be performed a minimum of once per month and directly following storm events. When gear is present, the project site would be visited more frequently.

Boats or barges utilized to transport crew and gear would be utilized. These trips would likely often be combined with crew transport to clam and oyster beds (existing operation) within the lagoon.

3. Gear Removal: Predator exclusion netting would be removed after the geoducks are of a size and depth in the sediment where additional protection from predators would not be necessary. Young clams usually bury themselves to a depth of about 14 inches for predator evasion. Geoduck gear removal would consist of removing nursery tubes and predator exclusion netting (if present). This activity would follow a similar pattern and level of disturbance to that described for gear placement and planting, with slightly more sediment disturbed during removal of nursery tubes compared to installation. Nursery tubes stabilize the sediment, which can make them more difficult to remove compared to initial installation.

The general rate of gear removal would be similar to the estimated rate of gear placement. Gear removal may occur in phases over the grow-out period.

Gear removal would involve the use of boats to transport the crew and gear, and operation of a pump and crane to remove the predator exclusion net (if used). For the most part, geoduck culture gear removal would be done by hand and with the aid of hand tools. Crew size would depend on the amount of area covered.

4. Harvesting: Harvesting would entail removing geoducks from the sediment using hand-operated water jet probes. The probe is a pipe about 18 to 24 inches long with a nozzle on the end that releases surface-supplied seawater from a one-inch diameter hose at a pressure approximately equivalent to that of a standard garden hose (e.g., 20 gallons per minute). Harvesting either “in the dry” (i.e., beach harvest during a low tide) or “in the wet” (i.e., dive harvest when the area is inundated) would be accomplished by 2- to 4-person teams. Harvesting in the dry would occur during a minus tide series (typically lasting 3 to 4 hours). Harvesting in the wet would occur during a high tide series, also lasting up to 4 hours. The time associated with harvesting on a daily basis would typically be shorter than geoduck gear placement and planting for technical and safety reasons, especially for harvesting in the wet.
Geoduck harvesting occurs year-around and is not limited by tidal height. Dive harvesting tends to be the dominant method during winter months (November through February) due to the prevalence of high daytime tides, the absence of suitable low tides for daytime beach harvest, and generally favorable market conditions during that period. Geoduck growth rates differ with the result that culture plots have a mix of harvest-sized and under-sized geoduck clams. Harvesters remove harvestable-sized geoduck, typically one per hole, and leave the under-sized clams for a later harvest. One or two harvest crews may work on a harvest plot at the same time.

Geoducks are harvested after 5 to 7 years of growth. For the purpose of this analysis, a generalized 6-year cultivation cycle was assumed, with the result that harvest would occur approximately once every 6 years within a culture plot. The overall area disturbed during harvest would be smaller on a daily basis compared to gear placement and planting; however, it would take longer, and the effort would be spread over a longer portion of a year. Harvesting would occur in the same basic pattern in which gear placement and planting occurred.

Small diesel- or gasoline-powered water pumps with hoses would be used in the geoduck harvest process, similar to the equipment described above for hydraulic gear placement activities. The pumps would be operated by small engines located on a barge offshore near the harvest plot. Based on the location of the proposed geoduck culture area, the pump barge would be anchored offshore a minimum of 375 feet from the nearest residential properties.

In Purdy, the Applicant has an existing upland facility utilized for the existing farm as a storage/transport facility. This upland facility would also be utilized for the current proposal. However, processing of the harvested aquacultural products (existing and proposed) is, and would continue to be, handled off-site.

**Staff Comment:** The proposal would constitute cultivating geoduck with predator exclusion gear not previously done in the lagoon. Therefore, the proposal requires shoreline permits.

Some parties allege that it is not accurate to call this a conversion as, they claim, aquaculture has never occurred in the deeper parts of the lagoon as is proposed. This concern was raised prior to the January 2023, issuance of the FEIS. FEIS section 2.2.2. speaks to this:

“A Taylor Shellfish representative responded to Pierce County that conversion in the context of this application is a change in culture type from an area currently approved for and used as clam and oyster culture to geoduck culture using predator exclusion gear for a portion of the grow-out period. The entire 300-acre clam and oyster farm within Burley Lagoon, including the subtidal area, is approved for continuing shellfish aquaculture activities. For this reason, the portion proposed for geoduck culture, whether currently active or not, is a conversion area. Farming activities have occurred throughout the 300-acre farm for almost 100 years. According to Taylor Shellfish, there is no area within the Burley Lagoon farm footprint that has not had some type of farming activity over the years. The previous owner indicated that his farming practices included dredging for oysters in the deeper areas of the project site. Designating fallow ground within an active farm footprint is a viable farming practice, and still part of the authorized farm.”
Proposal Site Plans: The proposal consists of sites A and B:
Land Use Advisory Commissions

The Key Peninsula Advisory Commission (KPAC) and Gig Harbor Peninsula Advisory Commission (PAC) considered the proposal at the following public meetings:

1. Monday, May 22, 2023, 6:00 p.m. – 9:00 p.m., Key Peninsula Civic Center: This was a joint meeting before the KPAC and PAC. The meeting consisted of KPAC, PAC and staff introductions, 10-minute overview presentations by the County and Applicant, ground rules, and thereafter public testimony. Of the three meetings, this was the only one where the public could testify. Testimony was allowed in-person and virtually.

2. Wednesday, May 24, 2023, 6:30 p.m. - 8:30 p.m., Gig Harbor Civic Center: This meeting was only before the PAC. The public could attend but there was no additional public testimony. The primary purpose was for the PAC to ask questions of the County and Applicant, to deliberate, and make a recommendation on the proposal. There was not a virtual option for this meeting.

3. Thursday, May 25, 2023, 6:00 p.m. - 8:00 p.m., Key Peninsula Civic Center: This meeting was only before the KPAC. The public could attend but there was no additional public testimony. The primary purpose was for the KPAC to ask questions of the County and Applicant, to deliberate, and make a recommendation on the proposal. This meeting was not held remotely.

For the shoreline permits, the PAC voted to recommend denial and the KPAC voted to recommend approval. The County report made no recommendation. For the EIS appeal, neither made a recommendation as appeals are outside their scope of authority. However, the County report did discuss that an appeal had been filed and they were notified when the DEIS and FEIS were issued.

PPW Staff Review for Consistency with Plans, Policies, and Regulations

Staff Comment: This report lists (primarily) County codes (consisting of plans, policies, and/or regulations) that Staff finds are most pertinent to the review of this proposal. DEIS Section 3.4 (Regulatory Status, Regulatory Control, and Policy Background) contains some preliminary discussion regarding most of the codes listed below.

PIERCE COUNTY COMPREHENSIVE PLAN

Pierce County Code, Title 19A
In 1994, this plan was adopted. It is a policy document that guides growth and future land use decisions within all unincorporated Pierce County.

Staff Comment: The plan is broadly written. The lagoon is also subject to the Key Peninsula Community Plan, Gig Harbor Peninsula Community Plan, and Pierce County Shoreline Master Program. All are subsets of the Comprehensive Plan and more directly pertinent to the proposal. However, one big takeaway from the Comprehensive Plan is that it has designated the unincorporated areas as being rural or urban. The lagoon is abutted by both.
PIERCE COUNTY COMMUNITY PLANS

Pierce County Code, Title 19A Chapter 14
Many parts of unincorporated Pierce County have community plans. These plans provide a more detailed sense of how a particular community wants to develop. These plans are created through a partnership between community members and the County.

**Staff Comment:** The lagoon is abutted by two community plans. It is unclear where the boundary between the two plans is located with regards to the lagoon as it is not shown as being within the boundary maps of either. With that said, no Puget Sound shorelines abutting these two plans are shown as being within their boundaries. However, the intent of the plans is to apply to Puget Sound.

KEY PENINSULA COMMUNITY PLAN
Appendix G
In 2008, the plan went into effect. This plan applies to the area west of the Purdy bridge. The Comprehensive Plan has designated the area as rural. The most sizeable reference to aquaculture is on Pages 29-30 and states the following:

“The Key Peninsula has extensive marine shorelines containing high bluffs, bays and lagoons, sand spits, mud flats, sandy beaches, and many other features. These shoreline areas have historically offered locations for aquaculture, primarily the cultivation of oysters. Recently geoduck farmers have discovered that certain tidelands provide prime habitat for the cultivation of their product. This new aquaculture industry has the potential to create land use conflicts with upland homeowners as the beaches used for geoduck farming are altered during the initial state of the young geoducks lifecycle. Hundreds of tubes that are used to protect the geoduck protrude out of the sand and create a visual impact at low tide as well as inhibit the ability of people to walk on the beach through the farm. The community planning board chose to encourage aquaculture activities throughout the Key Peninsula provided that farmers utilize best management practices and mitigate impacts to the environment and upland property owners.”

**Staff Comment:** This is a good summary of the issues at hand. However, the proposal would not involve hundreds of tubes but, many tens of thousands (37,026 tubes per acre). Topics related to best management practices and impacts to the environment/upland property owners are addressed later in this report.

GIG HARBOR PENINSULA COMMUNITY PLAN
Appendix E
In 2002, the plan went into effect. This plan applies to the area east of the Purdy bridge. The Comprehensive Plan has designated this area as having both rural and urban areas. Where abutting the lagoon, the east shoreline is primarily rural except for Purdy which is urban. Purdy is within the City of Gig Harbor’s urban growth area and therefore could potentially be annexed in the future.
There are references to aquaculture in multiple pages. However, the vast majority are brief references and not all are actual policies but instead background information. The most sizeable references are as follows:

A. Page 15: “The area was named Purdy in the 1880s when Joseph Purdy, a grocery store owner from Tacoma, offered to provide lumber for a school if the area were named after him. Four men, including Joseph Purdy, constructed a mill in the area in 1885. The mill complex also included a post office, grocery store, and workers’ housing. Mr. Ouelette, “the Frenchman,” opened the first Oyster Company in the area around 1900 processing and canning the oysters from the land on the spit he owned. In the 1890s, a drawbridge was constructed across Henderson Bay at Purdy. In 1919, another bridge was provided. The present bridge was constructed in 1938. In the early 1900s, most settlers in the area were in diversified farming, including fruit, dairy, and poultry farming. Oysters and clams were also important products from Purdy from the early settlement period.”

B. Page 102:

GOAL GH EC-2 Encourage, when and where economically and ecologically feasible, the retention and development of locally-oriented marine industry, aquaculture, local agriculture, and local forest products management.

GH EC-2.1 Recognize the importance of the natural resource industries of aquaculture, forestry, and marine resources.

GH EC-2.2 Encourage well-balanced and varied economic development which is clean, pollution free, and provides for employment opportunities.

Staff Comment: The plan acknowledges the historical use of the lagoon for aquaculture and has policies that conditionally support aquaculture.

The position of the Applicant is that a wide range of aquacultural practices (species and operations) have historically occurred in the lagoon. Therefore, they contend, the existing farm operations and proposed conversion are within this range. While the practices may have evolved over time, the Applicant contends they have not expanded and are operated in a cleaner/more ecologically friendly manner. For example, they cite the tons of debris that they removed from the farm after taking over from the prior operator.

While the aquacultural practices in the lagoon have evolved over time, so have abutting upland land uses. Single-family residences are the main land use abutting the existing/proposed farm. Residences were located along the lagoon prior to the existing farm. However, their number has expanded/intensified.

The lagoon has experienced water quality issues over the years. Development/land uses abutting the lagoon and/or within the watersheds of the two creeks that feed into the lagoon, have resulted in adverse water quality impacts that have fluctuated over time. In addition, abutting upland property owners’ express concerns that the farm itself has worsened water quality issues, pointing to periodic algae blooms/crashes as a sign that the lagoon has too much aquaculture as is. The Applicant and upland property owners have been working for years to address the water quality concerns.
The position of many opposed to the proposal is that the existing farm operations have expanded/intensified over the years (since the Applicant assumed operations) to the detriment of everything else in the lagoon (fish/wildlife, fish/wildlife habitat, recreation, abutting residences/residents, etc.). The proposed conversion of a portion of the farm to geoducks would make a bad situation worse, they argue.

**PIERCE COUNTY CRITICAL AREAS CODE**

**Pierce County Code, Title 18E:**

Chapter 18E.40 of this Title regulates fish and wildlife species and habitats and establish habitat protection procedures and mitigation measures that are designed to achieve no "net loss" of species and habitat due to new development or regulated activities.

*Staff Comment:* The Applicant submitted a Critical Fish and Wildlife Habitat Area Review application (778794). This review has been substantially expanded upon by the various documents prepared through the course of the EIS. The following information is with regards to regulated features:

1. Estuarine wetland areas are present in scattered locations along the lagoon but, these wetlands are confined to the upper shoreline area, and they are not within, or close enough to be impacted by, the proposal footprint.

2. The lagoon is regulated for a variety of reasons by Chapter 18E.40 - Regulated Fish and Wildlife Species and Habitat Conservation Areas:
   
   A. The lagoon is a regulated estuary;
   
   B. The lagoon provides habitat, or potential habitat, for a number of species regulated by PCC18E.40, including: Bull trout, Chinook/Coho/Chum/Pink salmon, forage fish, coastal cutthroat trout, and marbled murrelet (nesting sites are approximately 2 ½ miles inland from the lagoon); and
   
   C. There is a heron rookery within several hundred feet of the proposal.

3. The lagoon contains floating aquatic vegetation, such as Ulva but, submerged, rooted, vegetation such as eelgrass and kelp is lacking in the proposal area. Isolated occurrences of single turions of eelgrass (i.e., an individual blade of grass) have been identified approximately 150 feet south of the proposed farm site but, eelgrass *beds* (i.e., areas large enough to be accurately defined as a “habitat” area) have been found only as close as the power transmission lines, several hundred feet to the south of the proposed farm. *Guidance from the Washington State Department of Natural Resources and United States Army Corps of Engineers explains that a “bed” of eelgrass consists of 3 turions within 1 meter of another turion.

**PIERCE COUNTY ENVIRONMENTAL CODE (TITLE 18D, PIERCE COUNTY CODE)**

The proposal has undergone review pursuant to the State Environmental Policy Act (SEPA). See the separate staff report, prepared for the environmental appeal, for additional information.
PIERCE COUNTY ZONING CODE (TITLE 18A, PIERCE COUNTY CODE)

The Comprehensive Plan has zoned the parcels abutting the lagoon as follows:

1. West shoreline: Rural 10 (R10) and, where some drainages are located, Rural Sensitive Resource (RSR).
2. South shoreline: Park and Recreation (PR) for publicly owned parcels and, where privately owned, R10.
3. East shoreline: R10. However, Community Center (CC) in Purdy. In addition, an Urban Sensitive Resource Overlay applies to the CC zone where Purdy Creek connects with the lagoon.

**Staff Comment:** This Code does not apply in the water or to water dependent uses.

WASHINGTON STATE SHORELINE MANAGEMENT ACT

**Revised Code of Washington (RCW), Chapter 90.58**
**Washington Administrative Code (WAC), Chapter 173-27**

In 1971, the State Shoreline Management was passed by the Legislature. In 1972, it was affirmed by voters. RCW Section 90.58.020 states, in part, the following:

“It is the policy of the state to provide for the management of the shorelines of the state by planning for and fostering all reasonable and appropriate uses. This policy is designed to insure the development of these shorelines in a manner which, while allowing for limited reduction of rights of the public in the navigable waters, will promote and enhance the public interest. This policy contemplates protecting against adverse effects to the public health, the land and its vegetation and wildlife, and the waters of the state and their aquatic life, while protecting generally public rights of navigation and corollary rights incidental thereto.

The legislature declares that the interest of all of the people shall be paramount in the management of shorelines of statewide significance. The department, in adopting guidelines for shorelines of statewide significance, and local government, in developing master programs for shorelines of statewide significance, shall give preference to uses in the following order of preference which:

1. Recognize and protect the statewide interest over local interest;
2. Preserve the natural character of the shoreline;
3. Result in long term over short term benefit;
4. Protect the resources and ecology of the shoreline;
5. Increase public access to publicly owned areas of the shorelines;
6. Increase recreational opportunities for the public in the shoreline;
7. Provide for any other element as defined in RCW 90.58.100 deemed appropriate or necessary.
In the implementation of this policy the public's opportunity to enjoy the physical and aesthetic qualities of natural shorelines of the state shall be preserved to the greatest extent feasible consistent with the overall best interest of the state and the people generally. To this end uses shall be preferred which are consistent with control of pollution and prevention of damage to the natural environment, or are unique to or dependent upon use of the state's shoreline. Alterations of the natural condition of the shorelines of the state, in those limited instances when authorized, shall be given priority for single family residences and their appurtenant structures, ports, shoreline recreational uses including but not limited to parks, marinas, piers, and other improvements facilitating public access to shorelines of the state, industrial and commercial developments which are particularly dependent on their location on or use of the shorelines of the state and other development that will provide an opportunity for substantial numbers of the people to enjoy the shorelines of the state”.

Staff Comment: The Act acknowledges that there are competing uses within shorelines. The Act gives aquaculture preferential treatment as it is water dependent use but, also gives other uses preferential treatment. Such uses include, but are not limited to, single-family residences, recreation, and public access. At the same time, the lagoon is environmentally sensitive, and its protection is paramount. This raises the potential for conflict.

Tidal elevations in the lagoon below extreme low tide, subtidal areas deeper than approximately -4.5 feet Mean Lower Low Water (MLLW), meet the definition of a Shoreline of Statewide Significance. Approximately 6 to 7 acres of Site A proposed for conversion to geoduck culture have subtidal elevations that range from approximately -4.5 feet MLLW to approximately -23.1 feet MLLW). This area is a pool-like feature within Burley Lagoon, surrounded on all sides by more shallow intertidal areas.

PIERCE COUNTY SHORELINE CODES (SHORELINE MASTER PROGRAM)

Pierce County Code, Title 19D, Chapter 19D.190 (Policies)

Pierce County Code, Title 20 (Regulations)

In the 1970s, in response to the State Shoreline Management Act, the County adopted its own Shoreline Codes (known as the Shoreline Master Program). The code applies to the lagoon itself and the uplands within 200 feet of the lagoon.

Staff Comment: In 2014, when the proposal was submitted and deemed complete by the County, the Codes listed above were in effect. In 2018, the County adopted a new Shoreline Code (Title 18S). However, this proposal is vested to the prior Codes.

SHORELINE ENVIRONMENT DESIGNATIONS:

Policies (pages 14-20) / Regulations (Chapter 20.06)

In order to more effectively plan and manage shoreline resources through the development of a Shoreline Master Program, a system of categorizing shoreline areas through a classification called "Environments" has been utilized. This system is utilized as a mechanism for applying appropriate land and water use policies and regulations to distinctively different shoreline areas. The placement of an environment designation on a specific area or site was based on the existing development pattern, the biophysical limitations and capabilities of the shoreline area, and the goals and aspirations of the citizens.
A. RURAL RESIDENTIAL: The west shoreline of the lagoon has this designation:

(1) Definition and Purpose: The Rural-Residential Environment is an area of medium intensity land use: that is, having use types and densities which do not imply large-scale alterations to the natural environment. It is an area that will serve as a buffer between the highly intensive development of the urban environment and the non-intensive development of rural environment. It is an Environment Designation that will allow medium intensity residential, commercial and agriculture development. The purpose of assigning an area to a Rural-Residential Environment is to allow for a natural transitional area between the sometimes incompatible intensive land uses of urban areas and the agricultural uses, recreational uses, and open space found in the rural environment.

(2) General Regulations and Policies: The following general regulations and policies should apply to all shoreline areas classified in a Rural-Residential Environment:

(a) Existing land use patterns that reflect a suburban environment and also by virtue of existing development do not have the potential for supporting intensive agricultural or recreational activities should be designated as a Rural-Residential Environment if urban expansion is not anticipated;

(b) Medium intensity residential uses should be encouraged in the Rural-Residential Environment in order to relieve pressure from urbanized areas and provide living area for those wishing to enjoy a less densely developed shoreline.

(3) Preferred Uses.

(a) Single family residence.

(b) Neighborhood commercial uses such as small service establishments

B. URBAN: The east shoreline of the lagoon has this designation:

(1) Definition and Purpose: The Urban Environment is an area of high intensity land use including residential, commercial and industrial development. It is an environment designation that is particularly suitable for those areas which are presently subjected to intensive use pressure as well as those areas planned to accommodate urban expansion. The objective of assigning an area to an Urban Environment is to ensure optimum utilization of shorelines occurring within areas which are either presently urbanized or projected to be urbanized. This should be done by identifying areas physically suited to intensive use providing for intensive public use and by managing development so that it enhances and maintains the shorelines for a variety of urban uses.

(2) General Regulations and Policies: The following general regulations and policies should apply to all shoreline areas classified as belonging in an Urban Environment:

(a) Shorelines planned for future urban expansion should present few biophysical limitations for urban activities.

(b) Because shorelines suitable for urban uses are a limited resource, emphasis should be given to development within already developed areas and particularly to water dependent industrial and commercial uses requiring frontage on navigable waters.

(c) Priority should be given to urban developments for public visual and physical access to water in the urban environment.

(d) Planning for the acquisition of urban land for permanent public access to the water in the urban environment should be encouraged.

(e) To enhance waterfront and ensure maximum public use, industrial and commercial facilities should be designed to permit pedestrian waterfront activities. When practical, access points should be linked to non-motorized transportation routes.

(f) Designation for future urban expansion should include provisions for maintaining those features unique to urban shoreline areas.
C. NATURAL: The south shoreline (Purdy sandspit) of the lagoon has this designation.  
(1) Definition and Purpose: The Natural Environment classification is intended to preserve those dynamic natural systems in a manner relatively free of human influence and to discourage or prohibit those activities which might alter the natural characteristics which make these shoreline areas unique and valuable. The designation of an area as a Natural Environment should be based on one or more of the following criteria:
(a) There should be present some unique natural or cultural feature considered valuable in its natural or original condition.
(b) The natural shoreline is relatively intolerant of intensive human use.
(c) The shoreline is valuable as a historical, cultural, scientific or educational site by virtue of its natural unaltered original condition.
(d) The site is unaltered and graphically depicts prevailing local physical systems such as feeder cliffs and spits.
(e) The shoreline area, which by virtue of strongly expressed local and/or statewide need, should be preserved in its original condition.

(2) General Regulations and Policies: The following general regulations and policies should apply to all shoreline areas classified as Natural Environments:
(a) All developments which would potentially degrade or significantly alter the natural character should be regulated.
(b) The main emphasis of regulation in these areas should be on the preservation of natural systems and resources which will not allow man to consider any type of development which will effect the natural condition of the area.
(c) Physical alterations should only be considered when they serve to protect a significant, unique or highly valued feature which might otherwise be destroyed.

(3) Natural Resource Systems to be Considered: The following is a partial list of natural or cultural features which might be preserved through inclusion in a Natural Environment: Spits, Bars, Lagoons, Typical river segments, High bank shorelines, Low bank shorelines, Sandy beaches, Wildlife habitats, Coves, Lakes, Marshlands, Swamps, Estuaries, Educational features, Scientific features, Historical features.

Staff Comment: Five designations were created. The designations apply to both the water and the uplands within 200 feet. From least to most restrictive they are Urban, Rural-Residential, Rural, Conservancy and Natural. The lagoon is surrounded by three different designations: Urban (east), Rural Residential (west), and Natural (south). For the island (north), the code is silent.

The proposal would be significantly closer to the east and west shorelines than the south shoreline. The proposal would be approximately 1,200 feet (at its closest point) from the Natural designation (sandspit).

The policies listed above for all three designations do not address aquaculture. For these reasons, Staff finds that the proposal is not inconsistent with those designations, especially given the distance from the Natural designation.

SHORELINE OF STATEWIDE SIGNIFICANCE:

Policies (pages 2-3)

In addition to the Shoreline Environment Designations listed above, certain shorelines also have been designated Shorelines of Statewide Significance.
**Staff Comment:** This was addressed previously in this report under the Washington State Shoreline Management Act section.

**AQUACULTURAL PRACTICES:** The following regulations and policies exist specific to aquaculture:

A. Definitions (20.24.010)
   1. Aquaculture: The commercial culture and farming of food fish, shellfish, and other aquatic plants and animals in lakes, streams, inlets, estuaries, and other natural or artificial water bodies.
   2. Aquacultural Practices: The hatching, cultivating, planting, feeding, raising, harvesting, and processing of aquatic plants and animals, and the maintenance and construction of necessary equipment, buildings, and growing areas. Methods of aquaculture include but are not limited to fish pens, shellfish rafts, racks and longlines, seaweed floats and the culture of clams and oysters in tidal and other shoreline areas.
   3. Water Dependent Aquaculture Uses: All uses that cannot exist in any other location and are dependent on the water by reason of the intrinsic nature of the operation. Examples of water dependent uses include but are not limited to the following: 1. Boat launch facilities. 2. Fish pens. 3. Shellfish and seaweed rafts and floats. 4. Racks and longlines.
   4. Water Related Aquaculture Uses: Those uses which are not intrinsically dependent on a waterfront location to continue their operation, but whose operation in Pierce County cannot occur economically at this time without a shoreline location. Examples of water related uses include but are not limited to the following: 1. Aquaculture commodities processing plants. 2. Culturing facilities. 3. Boat storage facilities.
   5. Nonwater Related Aquaculture Uses. Those uses which do not need a waterfront location to operate though easements or utility corridors for access to the water may be desired. Examples of nonwater related uses include but are not limited to the following: 1. Warehouses and storage areas. 2. Office buildings. 3. Parking lots.

**Staff Comment:** The proposal meets the definitions of aquaculture, aquacultural practices, and water dependent aquacultural uses.

B. Policies (Pages 22-23)
   1. The use of shoreline areas for aquaculture should be encouraged for the production of commodities for human consumption and utilization.
   2. Shoreline areas having the extremely high prerequisite qualities for aquacultural uses should be preserved in order to protect Pierce County’s aquacultural potential.
   3. Aquacultural operations should be encouraged to locate at the above-mentioned sites in order to effectively maximize our use of the shoreline resource.
   4. Aquacultural operations should be encouraged to locate and operate in a manner which will preclude damage to specific fragile areas and existing aquatic resources. These operations should generally maintain the highest possible levels of environmental quality.
   5. The processing of aquacultural products should not have significant detrimental effects on adjacent water areas and wetlands.
   6. Aquacultural enterprises should be located in areas where the navigational access of upland owners and commercial traffic are not significantly restricted.
(7) Recognition should be given to the possible detrimental impact aquacultural development might have on the visual access of upland owners and on the general aesthetic quality of the shoreline area.

(8) As aquaculture technology expands with increasing knowledge and experience, preference should be placed on underwater structures which do not interfere with navigation or impair the aesthetic quality of Washington shorelines.

C. Regulations/Guidelines for Reviewing Shoreline Substantial Development Permits (Chapter 20.24). In lieu of specific standards relating to design, bulk, and use, the following guidelines shall be applied to the County's reviewing authority to a site specific project application for a substantial development permit in arriving at a satisfactory degree of consistency with the policies and criteria set forth in this Chapter and Chapter 20.30. To this end, the County may extend, restrict, or deny an application to achieve said purpose.

(1) The use of shoreline areas for aquaculture shall be encouraged for the production of commodities for human consumption and utilization.

(2) Aquaculture development shall not cause extensive erosion or accretion along adjacent shorelands.

(3) Aquacultural operations shall be conducted in a manner which precludes damage to specific fragile areas and existing aquatic resources. These operations shall maintain the highest possible levels of environmental quality and compatibility with native flora and fauna.

(4) Aquaculture operations shall be in conformance with the most current applicable local, state and federal regulations for water quality, noise, odor, and waste management. Where water withdrawal is required, a water registration permit must be obtained.

(5) Conflicts between the aquaculture use and the navigational access of current upland residents, and intense recreational boating, commercial fishing, and other commercial traffic can be minimized.

(6) Conflicts between the aquaculture use and the visual access of current upland residents or the general aesthetic quality of the shoreline can be minimized.

(7) As technology expands with increasing knowledge and experience, preference shall be placed on feasible structures which minimize interference with navigation or the impairment of the aesthetic quality of the shoreline.

(8) A baseline study at or near the proposed aquaculture site may be required only when the permit reviewing authority deems necessary.

(9) Where an aquaculture operation is proposed for a constricted body of water, a flushing study may be required when the permit reviewing authority deems necessary.

(10) Shoreline areas having the prerequisite qualities for aquacultural uses shall have priority in order to protect Pierce County's aquacultural potential.

(11) Prior to beginning aquaculture operations, aquaculture permits must be obtained from the State Department of Fisheries.

(12) The scale of aquaculture operations shall be in proportion with the surface area and configuration of the affected water body.

(13) All water related and non-water related aquaculture structures may be required to be landscaped to screen them from adjacent uses to the shoreline.

(14) Joint use of facilities such as boat launches and storage buildings is encouraged.

(15) Aquaculture developments are to be maintained in a safe and sound condition.
Staff Comment: It appears that the proposal meets all the policies (1-8 and regulations 1-15) provided the Applicant operates the farm in an environmentally responsible manner based on the EIS conclusions (that the proposal would not result in any significant unavoidable adverse environmental impacts).

However, others assert that the proposal will result in significant impacts, the Applicant does not operate in a responsible manner, and/or the proposal/operations would impact other uses.

From the perspective of Staff, regulation 12 (above), is the main issue at hand. Specifically, would the proposal, in conjunction with the existing farm, monopolize the lagoon to the detriment of everything else (fish/wildlife species/habitat, recreation, health/welfare of abutting residents, etc.). In other words, is there a point when there is too much aquaculture within a particular body of water? The County acknowledges that there is a point where aquaculture activity can effectively exclude other uses within a particular body of water. However, Staff finds that this proposal does not serve to exclude these other uses. Further, aquaculture has occurred in the lagoon for over 100 years, there are codes (plans, policies, and regulations) that encourage aquaculture, and the EIS determined that the proposal would not result in any probable significant adverse environmental impacts.

Note, the preface to the regulations above also references Chapter 20.30 (Commercial and Light Industrial Development). Staff has not included any policies and regulations related to that chapter because it does not appear applicable as this proposal does not involve the construction of a building, parking lot, etc. (that is more what that chapter is focused on). Further, Staff has also not included such criteria in past geoduck farm applications it has processed.

D. Uses Permitted (20.24.030):

(1) Rural Residential and Urban designations: Aquaculture operations are permitted subject to approval of a Shoreline Substantial Development Permit. Section 20.76.030 A.1. states that “A substantial development permit shall be obtained for any development or use consisting of the construction or exterior alteration of structures, dredging, drilling, dumping, filling, removal of any sand, gravel, or mineral, bulkheading, driving of piling, placing of obstructions, or any project of a permanent or temporary nature which interferes with the normal public use of the surface of waters overlying lands subject to the Shoreline Management Act at any state of water level, and which development or use exceeds a cost or fair market value of $2,500.00.” (Note, the fair market value amount has increased since the code was written).

(2) Natural designation: Aquaculture operations are limited to fishing and the harvesting of wild and planted stocks for recreation and commercial purposes. Operations which do not involve the placement of structures or fill in the aquatic or terrestrial environment will be allowed as a Shoreline Conditional Use Permit, upon showing the activity will not substantially change the character of the site or adversely affect natural populations. Operations involving structural developments are prohibited. Note, a Shoreline Substantial Development Permit is also required.

Staff Comment: Both permit applications have been submitted and are addressed in the next section of this report.
SHORELINE PERMITS

A. Shoreline Substantial Development Permit:

Staff Comment: This report has previously addressed the codes that Staff finds are applicable to the review of this permit application. In addition, Staff provided comments regarding the proposal’s level of applicability and/or consistency with them.

Of note, under the Shoreline Code (Title 20) in effect at the time of application, the Examiner makes the final County decision on Shoreline Substantial Development Permits (unlike the current Shoreline Code).

B. Shoreline Conditional Use Permit (20.72.030): The following additional criteria apply to this permit application:

(1) County Criteria (Section 20.72.030): The objective of a Conditional Use provision is to provide more control and flexibility for implementing the regulations of the Master Program. With provisions to control undesirable effects, the scope of uses within each of the five environments can be expanded to include many uses. Uses considered to be Conditional Uses are those which may be permitted provided all of the following criteria are met:
   (a) That there is some necessity for a shoreline site for the proposed use or that the particular site applied for is essential for this use.
   (b) The use will cause no unreasonably adverse effects on the environment or other uses.
   (c) That water, air, noise and other classes of pollution will not exceed the level customarily found in that particular environment.
   (d) Design of the site will be compatible with the Master Program.
   (e) The use will not interfere with public use or public shorelines.

(2) Additional State Criteria (WAC, Chapter 173-27, Section 173-27-160)
   (a) That the proposed use is consistent with the policies of RCW 90.58.020 and the policies of the master program.
   (b) That the proposed use will not interfere with normal public use of the shorelines.
   (c) That the proposed use of the site and design of the project is compatible with other permitted uses within the area.
   (d) The use will cause no unreasonable adverse effects on the environment in which it is located.
   (e) That the public interest suffers no substantial detrimental effect.
   (f) In the granting of all conditional use permits, consideration shall be given to the cumulative impact of additional requests for like actions in the area. For example, if conditional use permits were granted for other developments in the area where similar circumstances exist, the total of the conditional uses shall also remain consistent with the policies of RCW 90.58.020 and shall not produce substantial adverse effects to the shoreline environment.
**Staff Comments:** The Shoreline Conditional Use Permit application is only required in the Natural designation. This designation does not allow aquacultural practices involving the placement of structures, fill, or structural developments. There has been debate over the years (in various jurisdictions and/or agencies) as to if tubes/nets are structures and/or fill. However, the proposal would be approximately 1,200 feet to the north of the sandspit and, as addressed previously in this report, the codes do not address how to handle a situation where a lagoon, and a proposal in the middle, are abutted by three designations.

The County concludes the proposal meets both the County and State Shoreline Conditional Use Permit criteria provided the Applicant operates the farm in an environmentally responsible manner and/or based on the EIS conclusions (that the proposal would not result in any significant unavoidable adverse environmental impacts).

In response to State criteria (f), regarding cumulative impacts, FEIS Pages 3-4 to 3-5, Correction to DEIS Page 3.5-1, states, in part, that: “Taylor Shellfish has indicated to Pierce County that the tideland parcels comprising the 25.5-acre site proposed for conversion to geoduck aquaculture currently constitute the only area within Burley Lagoon that has suitable substrate, water quality, and biophysical parameters for geoduck. All Burley Lagoon commercial shellfish tidelands are under the ownership of Yamashita family-held companies (Western Oyster Properties and Stout Property Investment), and Taylor Shellfish is the sole lessee responsible for shellfish aquaculture on these tidelands. Taylor Shellfish has confirmed to Pierce County that future applications for additional geoduck culture within Burley Lagoon are not foreseeable.” Further, other area aquaculture activity was addressed previously in this report.

Unlike a Shoreline Substantial Development Permit, a Shoreline Conditional Use Permit also requires approval by the Washington State Department of Ecology after issuance of the County decision.

**Recommended Conditions of Approval**

Staff recommends approval of the proposal subject to the following recommended conditions of approval:

1. The decision set forth herein is based upon representations made and exhibits, including plans and proposals submitted by the proponent. Pursuant to WAC 173-27-100, any substantial change to the design, terms, or conditions of the project shall be subject to approval of the Hearing Examiner and may require further and additional hearings.

2. The authorization granted herein is subject to all applicable federal, state, and local laws, regulations, and ordinances. Compliance with such laws, regulations, and ordinances is a condition precedent to the approvals granted and is a continuing requirement of such approvals. By accepting this/these approvals, the farm operator represents that the development and activities allowed will comply with such laws, regulations, and ordinances. If, during the term of the approval granted, the development and activities permitted do not comply with such laws, regulations, or ordinances, the farm operator agrees to promptly bring such development or activities into compliance.
3. The two-year time period for starting planting does not include the time during which the activity was not actually pursued due to the pendency of administrative appeals or legal actions or due to the need to obtain any other government permits and approvals for the development that authorize the development to proceed, including all reasonably related administrative or legal actions on any such permits or approvals.

4. Provided planting is started within two years of the effective date of the permit there shall be no expiration date for this permit. However, the Examiner has the authority to revoke or modify the permit pursuant to PCC, Title 18.

5. The proponent shall notify the Planning Department in advance of the need to deviate from any condition of approval. Staff must agree with any proposed change and substantive changes may require a public hearing.

6. Should archaeological materials or human remains be observed during farming, all work on the beach shall stop. The State Department of Archaeology and Historic Preservation, Planning Department, affected Tribe(s), and County Coroner (if applicable), shall be contacted immediately to assess the situation. If Federal permits are involved, notification to the appropriate federal agency shall also occur.

7. The existing clam and oyster culture currently occurring within the 25.5-acre project area shall be relocated (not occur simultaneously with geoduck culture). However, it does not need to be relocated when geoduck culture is not occurring within this area.

8. The proposal shall be subject to the checkerboard cultivation layout addressed in the EIS (for example, as depicted in Figure 1-5).

9. Tube placement and farming activities are to be done in a manner that precludes alteration of the shoreline’s natural features. Relocation of beach features (such as, but not limited to, logs and rocks) and wildlife (such as, but not limited to, sand dollars and sea stars) shall occur only where it is not feasible to work around them. Where the relocation of such features is unavoidable, they are to be relocated as minimally as possible. Where the applicant determines that relocation at other than minor, incidental levels is needed, the County shall first be contacted.

10. PVC tubes are no longer proposed and therefore shall not be utilized.

11. All gear shall be a neutral color (white, beige, gray, or black) to the extent practical.

12. The farm operator shall post with the County a financial guarantee in the amount of $1.00 per planted tube. The amount shall be based upon the maximum number of tubes that are planted at any one time. In the event that it becomes necessary for the County to remove the tubes, the financial guarantee shall be forfeited.

13. The farm shall be subject to the most current version of the Pacific Coast Shellfish Growers Association Environmental Codes of Practice as well as the Washington State Geoduck Growers Environmental Codes of Practice.
14. Prior to the start of any activities for the proposal, the operator shall obtain final Critical Fish
and Wildlife Habitat Area Review Approval from Pierce County (application 778794). The
approval shall be subject to the conditions and mitigation listed in this report and title
notification shall be recorded.

15. The mitigation measures set forth in the Environmental Impact Statement (FEIS, DEIS, and
Technical Appendixes) issued by Pierce County are hereby made conditions of approval as set
forth hereinafter. Provided, however, that said mitigation measures are not subject to change
by the shoreline revision process but must be changed by the Responsible Official through the
SEPA process. The mitigation measures are as follows including the location(s) it is found
(note: mitigation EE is redundant as no application of gravel, shells, etc. is proposed for the
geoduck farm):

A. Activities that are directly associated with shellfish activities (e.g., access roads, wet
storage) shall not result in removal of native riparian vegetation extending landward
150 feet horizontally from MHHW (includes both wetland and upland vegetation)
and disturbance shall be limited to the minimum necessary to access or engage in
shellfish activities. DEIS Page 3.3-4

B. Land vehicles shall be stored, fueled, and maintained in a vehicle staging area located
150 feet or more from any stream, waterbody, or wetland. Where this is not possible,
documentation must be provided to the Corps as to why compliance is not possible,
written approval from the Corps must be obtained, and the operators shall have a spill
prevention plan and maintain a readily available spill prevention and clean-up kit.
DEIS Pages 1-7, 1-9 to 1-15, 1-18 to 1-20, 3.2.2-7, 3.2.3-12, 3.2.4-11, 3.2.5-34, 3.3-
2 / FEIS Pages 1-13 to 1-14, 1-16 to 1-21, 1-24 to 1-26

C. Land vehicles (e.g., all-terrain, trucks) shall be washed in an upland area such that
wash water is not allowed to enter any stream, waterbody, or wetland. Wash water
shall be disposed of upland in a location where all water is infiltrated into the ground
(i.e., no flow into a waterbody or wetland). DEIS Page 3.3-2

D. For boats and other gas-powered vehicles or power equipment that cannot be fueled
in a staging area 150 feet away from a waterbody or at a fuel dock, fuels shall be
transferred in Environmental Protection Agency (EPA)-compliant portable fuel
containers during refilling. A polypropylene pad or other appropriate spill protection
and a funnel or spill-proof spout shall be used when refueling to prevent possible
contamination of waters. A spill kit shall be available and used in the event of a spill.
All spills shall be reported to the Washington Emergency Management Office at
(800) 258- 5990. All waste oil or other clean-up materials contaminated with
petroleum products will be properly disposed of off-site. DEIS Page 3.3-2

E. Use hydraulic vegetable oils in marine equipment when appropriate. DEIS: Pages 1-
7, 3.2.2-7, 3.3-4 / FEIS: Pages 1-13 to 1-14

F. All vehicles operated within 150 feet of any stream, waterbody, or wetland shall be
inspected daily for fluid leaks before leaving the vehicle staging area. Any leaks
detected shall be repaired in the vehicle staging area before the vehicle resumes
operation and the leak and repair documented in a record that is available for review
on request by the Corps and Services. DEIS Page 3.3-2
G. The direct or indirect contact of toxic compounds including creosote, wood preservatives, paint, etc. within the marine environment shall be prevented. This does not apply to boats. DEIS Pages 1-7, 1-9 to 1-11, 3.2.2-7, 3.2.3-12, 3.3-2 / FEIS Pages 1-13 to 1-14, 1-16 to 1-17

H. Tires shall not be used as part of above and below structures or where tires could potentially come in contact with the water (e.g., floatation, fenders, hinges). Tires used for floatation currently shall be replaced with inert or encapsulated materials, such as plastic or encased foam, during maintenance or repair of the structure. DEIS Pages 3.2.8-16, 3.3-3

I. All foam material (whether used for floatation of for any other purpose) must be encapsulated within a shell that prevents breakup or loss of foam material into the water and is not readily subject to damage by ultraviolet radiation or abrasion. Un-encapsulated foam material used for current on-going activities shall be removed or replaced with the encapsulated type. DEIS: Pages 1-23 to 1-24, 3.2.8-16, 3.3-3 / FEIS Pages 1-30 to 1-31

J. Biologists employed by the farm operator shall be trained in the most current protocols and methods required by State and Federal regulatory agencies to avoid interactions with sensitive biological resources in the estuary. DEIS Pages 3.2.5-34 to 3.2.5-35

K. Employees shall be trained in planting and harvesting techniques, and in the use of equipment to minimize disturbance of the natural environment. DEIS Pages 1-5 to 1-7, 1-9 to 1-11, 3.2.1-18, 3.2.2-7, 3.2.3-13, 3.2.4-12, 3.3-4 / FEIS Pages 1-11 to 1-13, 1-16 to 1-17

L. Activities shall be limited to daytime hours when feasible. DEIS Pages 1-20 to 1-21, 3.2.6-10 / FEIS: Pages 1-26 to 1-28

M. The boat schedule shall be adjusted to earlier in the evening or later in the morning to reduce noise and light disruptions during night tides. DEIS Page 3.3-5

N. Geoduck farm boat schedules shall be coordinated with existing clam and oyster schedules to minimize nighttime vessel activity. DEIS Page 3.2.8-10

O. Nighttime operations shall be conducted in a manner that is respectful of adjacent homeowners. DEIS Pages 1-23, 3.2.8-10 / FEIS Pages 1-29, 1-30

P. Activity schedules shall be temporarily adjusted in response to specific requests when feasible. DEIS Pages 1-20 to 1-21, 3.2.6-10 / FEIS Pages 1-26 to 1-28

Q. Lighting shall be kept to the minimum amount necessary to safely work. DEIS Page 1-23 / FEIS Pages 1-29, 1-30

R. Glare or light pollution shall be reduced through the use of different head lamp styles. DEIS Pages 3.2.8-10, 3.3-4

S. Rubber mats shall be utilized on harvest boats and barge decks to reduce the noise of operations. DEIS Pages 1-20 to 1-21, 3.2.6-9, 3.3-4 / FEIS: Pages 1-26 to 1-28

T. Dive boats shall be retrofitted to place pump housings in the wheelhouse instead of on the deck or install an insulated box or acoustic blankets around pump housings on the barge. DEIS Pages 1-20, 1-21, 3.2.6-9, 3.2.6-10, 3.3-4 / FEIS: Pages 1-26 to 1-28
U. Communication systems shall be routinely maintained to confirm proper working order prior to initiating farm operations. DEIS Pages 1-15 to 1-17, 3.2.5-35, 3.2.6-10, 3.3-5 / FEIS Pages 1-21 to 1-23

V. Wireless communication systems shall be utilized, when possible, for geoduck dive operations. / DEIS Pages 1-15 to 1-17, 3.2.5-35, 3.2.6-10, 3.3-5 / FEIS Pages 1-21 to 1-23

W. The use of external speaker systems shall be limited during dive operations to daytime hours only to minimize nighttime noise. DEIS Pages 1-15 to 1-17, 3.2.5-35, 3.2.6-10, 3.3-5 / FEIS Pages 1-21 to 1-23

X. Crews shall be required to use external speaker communications for safety purposes only during geoduck dive operations. DEIS Pages 1-15 to 1-17, 3.2.5-35, 3.2.6-10, 3.3-5 / FEIS: Pages 1-21 to 1-23

Y. The volume of communication systems shall be monitored and maintained at the lowest possible setting, while ensuring safe communications between divers and boat operators. DEIS Pages 1-15 to 1-17, 3.2.5-35, 3.2.6-10, 3.3-5 / FEIS Pages 1-21 to 1-23

Z. The near edge of the geoduck planting area shall be 160 feet or more from the nearest shoreline. Distance would attenuate the noise level at residential receptors. DEIS Pages 1-20 to 1-21, 3.2.6-10 / FEIS Pages 1-26 to 1-28

AA. The pump barge shall be anchored offshore on the far side of the geoduck planting area, a minimum of 375 feet from the nearest residential properties. Distance would attenuate the sound level at residential receptors. DEIS Pages 1-20 to 1-21, 3.2.6-10 / FEIS Pages 1-26 to 1-28

BB. Unless prohibited by substrate or other specific site conditions, floats and rafts shall use embedded anchors and midline floats to prevent dragging of anchors or lines. Floats and rafts that are not in compliance with this standard shall be updated to meet this standard during scheduled maintenance, repair, or replacement. [Any alternative to using an embedded anchor must be approved by the NMFS.] DEIS Page 3.3-4

CC. Vessels shall not ground or anchor in native eelgrass (Z. marina) or kelp (attached brown algae in the order Laminariales) and paths through native eelgrass or kelp shall not be established. If there is no other access to the site or the special condition cannot be met due to human safety considerations, a site-specific plan shall be developed describing specific measures and/or best management practices that will be undertaken to minimize negative effects to eelgrass and kelp from vessel operation and accessing the shellfish areas. The access plan shall include the following components: (a) frequency of access at each location, (b) use of only the minimum number of boats and/or crew members needed to conduct the work and a description of the minimum number of boats and crewmembers needed at each visit, and (c) consistency in anchoring/grounding in the same location and/or walking on the same path to restrict eelgrass disturbance to a very small footprint. DEIS Page 3.3-3
DD. If conducting activities that would disturb an area within a documented or potential spawning area for Pacific herring outside the approved work window, the work area shall be surveyed for the presence of herring spawn prior to the activity occurring. Vegetation, substrate, and materials (nets, tubes, etc.) shall be inspected. If herring eggs/spawn are present, operations are suspended in the area until the eggs have hatched, and herring spawn is no longer present. A record shall be maintained of spawn surveys including the date and time of surveys; the area, materials, and equipment surveyed; results of the survey, etc. The County, US Army Corps of Engineers, United States Fish and Wildlife Service, and National Marine Fisheries Service shall be notified if spawn is detected during a survey. The record of spawn surveys shall be made available upon request to the County, Corps and the Services.

EE. Gravel and shell shall be washed prior to use for substrate enhancement (e.g., frosting, shellfish bed restoration) and applied in minimal amounts using methods which result in less than 1 inch depth on the substrate annually. Shell material shall be procured from clean sources that do not deplete the exiting supply of shell bottom. Shells shall be cleaned or left on dry land for a minimum of one month, or both, before placement in the marine environment. Shells from the local area shall be used whenever possible. Shell or gravel material shall not be placed so that it creates piles on the substrate. Use of a split-hull (e.g., hopper-type) barge to place material is prohibited.

FF. Native salt marsh vegetation shall not be removed and disturbance shall be limited to the minimum necessary to access or engage in shellfish activities.

GG. All pump intakes (e.g., for washing down gear) that use seawater shall be screened in accordance with NMFS and WDFW criteria. Note: This does not apply to work boat motor intakes (jet pumps) or through-hull intakes.

HH. Ball valves shall be utilized on hoses to prevent free-flow of pumped water onto tideland surfaces when not directly planting or harvesting.

II. Water hoses shall be managed to prevent them from dragging across the substrate in a manner that would disturb sediments.

JJ. Hydraulic activities shall be conducted in a manner that minimizes off-site sedimentation; e.g., during low tidal cycles when culture plots are exposed.

KK. The visual effects of geoduck nursery gear shall be minimized by using predator exclusion netting with coloration similar to natural intertidal habitats (if such netting is commercially available).
LL. All tubes, mesh bags and area nets shall be clearly, indelibly, and permanently marked to identify the farm operator name and contact information (e.g., telephone number, email address, mailing address). On the nets, identification markers shall be placed with a minimum of one identification marker for each 50 feet of net. DEIS Pages 1-23 to 1-24, 3.2.8-15, 3.3-2 to 3.3-3 / FEIS Pages 1-30 to 1-31

MM. All equipment and gear including anti-predator nets, stakes, and tubes shall be tightly secured to prevent them from breaking free. DEIS Pages 1-9 to 1-11, 1-13 to 1-15, 1-18 to 1-20, 1-23 to 1-24, 3.2.1-18, 3.2.3-12, 3.2.4-12, 3.2.5-34, 3.2.8-16, 3.3-3 / FEIS Pages 1-16 to 1-17, 1-19 to 1-21, 1-30 to 1-31

NN. The operator shall recycle gear when they show wear (for example, when labeling wears off). DEIS Page 3.2.8-16

OO. All shellfish gear (e.g., socks, bags, racks, marker stakes, rebar, nets, and tubes) that is not immediately needed or is not firmly secured to the substrate will be moved to a storage area landward of MHHW prior to the next high tide. Gear that is firmly secured to the substrate may remain on the tidelands for a consecutive period of time up to 7 days. Note: This is not meant to apply to the wet storage of harvested shellfish. DEIS Pages 1-7, 1-9 to 1-15, 1-18 to 1-20, 3.2.1-18, 3.2.2-7, 3.2.3-12, 3.2.4-11, 3.2.5-34, 3.3-2 / FEIS Pages 1-13 to 1-14, 1-16 to 1-21, 1-24 to 1-26

PP. Unsuitable material (e.g., trash, debris, car bodies, asphalt, tires) shall not be discharged or used as fill (e.g., used to secure nets, create nurseries, etc.). DEIS Page 1-7, 1-9 to 1-11, 3.2.2-7, 3.2.3-12, 3.3-1 / FEIS Pages 1-13 to 1-14, 1-16 to 1-17

QQ. The operator shall experiment with different types of bed delineation markers to help recreational users avoid interactions with shellfish culture gear. DEIS Pages 1-21 to 1-22, 3.2.7-3 / FEIS Pages 1-28

RR. Delineation markers (like stakes), harvest gear (like floating tubs), and workers shall be scheduled to be off the water on the date of local annual recreational events so the estuary is available for increased use by private vessels. DEIS Pages 1-21 to 1-22, 3.2.7-3 / FEIS Pages 1-28

SS. Clam and other shellfish cover nets shall be secured to the extent practicable. If fish are entangled, record and report species, time, and location of entanglement. Collected specimens of fish entangled shall be preserved in a freezer, and reporting shall be to the NMFS' Lacey Office in order to determine appropriate steps to ascertain the entangled species. Contact the NMFS Central Puget Sound Branch Chief by telephone or email. DEIS Page 3.3-4

TT. When performing other activities on-site, the grower shall routinely inspect for and document any fish or wildlife found entangled in nets or other shellfish equipment. In the event that fish, bird, or mammal is found entangled, the grower shall: 1) provide immediate notice (within 24 hours) to WDFW (all species), Services (ESA listed species) or Marine Mammal Stranding Network (marine mammals), 2) attempt to release the individual(s) without harm, and 3) provide a written and photographic record of the event, including dates, species identification, number of individuals, and final disposition, to the Corps and Services. Contact the U.S. Fish and Wildlife Service Law Enforcement Office at (425) 883-8122 with any questions about the preservation of specimens. DEIS Pages 1-13 to 1-15, 1-18 to 1-20, 3.2.5-34, 3.3-3, 3.3-4 / FEIS Pages 1-19 to 1-21, 1-24 to 1-26
UU. Beach cleanups of Burley Lagoon shorelines shall be conducted on a regular basis once per month, following storm events, and after high-use times like the Fourth of July holiday. Crews shall retrieve debris regardless of their source. A record shall be maintained with the following information and the record will be made available upon request to regulatory agencies: date of patrol, location of areas patrolled, description of the type and amount of retrieved debris, other pertinent information. DEIS Pages 1-23, 1-24, 3.2.8-16, 3.3-3, 3.3-5 / FEIS: Pages 1-30,1-31

VV. The farm operator shall participate in voluntary bi-annual beach clean-ups organized for multiple locations around Puget Sound to remove all forms of marine debris from the environment, including materials that originate from non-aquaculture land-based sources. DEIS Page 3.2.8-16

WW. The operator shall arrange for portable toilets to be placed on Purdy Sand Spit for the influx of visitors that come by boat or car to watch the Fourth of July fireworks display. DEIS Pages 1-21 to 1-22, 3.2.7-4 / FEIS Pages 1-28

XX. The operator shall provide access to their boat ramp for law enforcement and rescue workers to launch their vessels in the event of an emergency response needed within Burley Lagoon, and for emergency rescue training operations. DEIS Pages 1-21 to 1-22, 3.2.7-4 / FEIS Pages 1-28

List of Exhibits Provided to Pierce County Hearing Examiner:

Please note: the Staff Report, Exhibit List, and complete set of exhibits may be found at this link https://piercecounty.imagerelay.com/f1/ed6ab381c0bd4ecd89366d3de60036ff

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