



July 19, 2007

Kathryn Townsend  
7700 Earling St. NE  
Olympia, Washington 98506

Ms. Townsend:

Thank you for your e-mail dated June 27<sup>th</sup> 2007, concerning the Washington State Department of Natural Resources' (DNR's) proposed Dickenson Point geoduck aquaculture lease in Henderson Inlet.

You are correct that DNR has been searching for an alternate site for this lease, which is why the Aquaculture website still states this. DNR has a number of screening criteria for its proposed geoduck aquaculture leases, one of which seeks to find areas of high bank or no upland residential development. DNR's Geoduck Aquaculture Program Fact Sheet, which is on our website, states:

2006 DNR lease area sites were chosen with the following characteristics in mind:

- No upland residential development, or high bank with low development;
- Absence of eelgrass;
- Low natural stock densities of shellfish;
- Low recreational or tribal shellfish use;
- Greater than 200 feet from wild stock geoduck tracts;
- Approved or potential to be approved for Health Certification, and
- Suitable sediment substrate.

As you know, the potential aquaculture sites are chosen with these criteria in mind. They are broad factors used to select potential sites. When a particular site is selected, DNR's Best Management Practices (BMPs) and Plan of Operations apply on a site-specific basis. (For example, if there are patches of eelgrass on the site, then a buffer must be applied, per the BMPs.)

The no upland development/high bank criterion is intended to address visual concerns. The bank height around the proposed Dickenson Point site could be considered medium bank. DNR sought to locate a potential replacement lease area in South Puget Sound with equivalent site conditions, but with higher bank. DNR was not able to locate such a site in the area. We began significant outreach efforts with upland owners in the Dickenson Point area in order to ascertain whether DNR's assumption of visual concerns were in fact real. DNR mailed letters to upland owners and has recently conducted in-person meetings. It is my understanding, based on reports from DNR's Land Manager, that the upland owners in this area are amenable to DNR leasing a one-acre site for geoduck aquaculture.



Your e-mail also mentions that there is surf smelt spawning identified in this area. In a previous correspondence we included the following information related to this subject:

*Geoduck aquaculture and forage fish spawning areas are located in different zones of the beach. Intertidal geoduck aquaculture is most successful in the lower portions of the intertidal area, with the upper limit being around a +2 foot tidal level. Surf smelt primarily spawn in coarse sand and pea gravel substrate near the mean higher high water level (approximately +14 ft in south Puget Sound). Sand lance spawn on fine sand substrates slightly lower in the intertidal zone than surf smelt, but well above the geoduck aquaculture lease sites. Therefore, geoduck aquaculture and forage fish activity would have minimal interaction due to the physical separation between the habitats.*

In addition, your e-mail asks about criteria for siting intensive geoduck operations in relation to carrying capacity and flushing capacity in inlets of South Puget Sound. Carrying capacity studies need to be specific to a species, and we have not conducted carrying or flushing capacity studies for the inlets at this time. The State Department of Ecology addresses general water quality issues in south sound. For more information you can refer to the following websites:

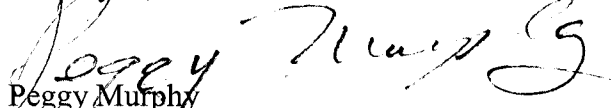
<http://www.ecy.wa.gov/programs/eap/sps/>

[http://www.ecy.wa.gov/programs/eap/sps/psrc\\_2001\\_bos\\_poster.ppt](http://www.ecy.wa.gov/programs/eap/sps/psrc_2001_bos_poster.ppt)

I would also like to point out that House Bill 2220, passed during the 2007 Legislative Session, provides funding for research into these types of environmental questions, and that Washington Sea Grant is currently in the process of planning a science symposium on the impacts of aquaculture. A Request for Proposals will be released by Sea Grant later this year, to solicit bids for contracts to investigate these types of questions.

You ask whether DNR's criteria create a standard for acres cultivated versus acres protected. As mentioned above, the criteria are broad site selection screening factors that are combined at the site specific level with other factors, such as Best Management Practices. DNR's geoduck aquaculture program plans to lease up to fifteen acres per year across Puget Sound. This is fewer acres than previously planned and is based on a recent legislative change.

Thank you,

  
Peggy Murphy  
Asset Management & Protection Division