

Meeting Summary
Shellfish Aquaculture Regulatory Committee

January 14, 2008
11:00 a.m. – 3:30 p.m.
Lacey Community Center, Room C
Lacey, Washington

Please provide comments on these meeting notes to Candice Holcombe at chol461@ecy.wa.gov prior to the Feb 14 meeting, or bring comments to the meeting.

SUMMARY OF KEY ITEMS

The Committee kicked off the work associated with Task 3—the legislative mandate to develop recommendations to Ecology for “...appropriate guidelines for geoduck aquaculture operations to be included in shoreline master programs under section 5 of this act.” The work on this task is laid out over a six-month schedule and will culminate in recommendations to Ecology.

The Committee discussed land use conflicts and possible guidelines for managing the impacts. Wide-ranging perspectives, concerns, and ideas were voiced. The categories of land use conflicts included impacts from light, noise, hours of operation, debris/litter, and impacts to visual aesthetics.

Through the discussion, members shared their definition of the problems and their ideas for possible guidelines.

The Committee also reviewed and modified a proposed list of topics for 2008 meetings.

INTRODUCTIONS AND COMMITTEE BUSINESS

Agenda Approval, Meeting Goals, and Announcements

After reviewing the proposed agenda and meeting goals, the Committee approved the agenda.

The Committee agreed that they would approve the November meeting notes with a minor clarification related to Task 1. The Committee would like the notes to clarify that after they receive the recommendations on administrative streamlining from the regulatory agencies, that they may make recommendations to agencies for additional rule making.

The legislative report is at the Governor’s Office for final review. Staff will notify the Committee when the report is final, send an electronic copy, and post the report to the website.

Meeting notes will be done in a different format. The new format will be shorter than the meeting transcription that has been produced for the first five meetings. The new format will summarize key points, decisions, perspectives, next steps, the “parking garage”, and provide basic analysis of the discussion. Anyone who desires a more detailed record will be welcome to tape record the meetings. Committee members will be invited to make corrections to the draft notes before the notes are finalized.

PRESENTATIONS AND DISCUSSION

Tom Clingman: Shoreline Management Act

To provide a regulatory reference for Committee members, Tom briefly touched on the principles of the Shoreline Management Act and the Shoreline Master Program (SMP) Guidelines/Regulations¹. Since some Committee members may not be familiar with the SMP Guidelines/Regulations, Tom brought copies of the regulation and encouraged members to either take a copy or go on-line for an electronic copy and review the existing section that addresses aquaculture².

Tom reviewed the connection that Task 3 has with the Shoreline Master Program Guidelines/Regulations. He reviewed that Task 3 assigns the Committee to provide recommendations to Ecology on geoduck siting and operations so that Ecology will have input before they draft amendments to the Shoreline Guideline/Regulations. Task 3 instructs and holds Ecology accountable to develop and adopt amendments on geoduck siting and operations into the Shoreline Guidelines/Regulations.

Tom explained that the Shoreline Management Act is similar to a three legged stool: it has three strong principles that must be in balance. The three legs are:

- Shoreline protection.
- Water-dependent use of the shoreline.
- Public access to shorelines.

Tom highlighted there is a dynamic tension between these three principles, which was intentionally built into the Act. He noted that the membership of the Committee reflects the interests and dynamics of these “three legs”. Finding the right balance of protection, use, and access is a big part of Task 3.

Committee Discussion on Task 3: Overview of Land-Use Issues

Tom explained that today began the first in a series of six months of sequenced discussions related to Task 3. The discussion begins with Land Use issues, will move to Administrative issues, next to Environmental issues, and then to Recommendations. Tom asked members to look at the specific handout that was sent in advance of the meeting, which lists land use issues associated with siting and operations of geoduck aquaculture. Each land use impact on the handout included possible practices or standards that could be used to avoid or minimize the impact. This handout guided discussion for the next several hours.

One member noted that the discussion would be better if it included zoning information. Another member expressed that they did not believe discussing Best Management Practices would help the Committee produce recommendations. This member objected that the land use topics excluded environmental concerns. Tom assured the Committee that environmental topics were staged for a future meeting, to give agency experts time to prepare information and their presentations. Other members did not express objection to using the land use topics and handout as a discussion guide. Therefore, discussion moved forward following the handout topics:

- Aesthetics and View

¹ WAC 173-26 : <http://www.ecy.wa.gov/programs/sea/SMA/guidelines/index.html>

² WAC 173-26 Section 241(3)(b)

- Noise
- Debris Management
- Light
- Litter
- Navigation and Access
- Hours of Operation

Discussion ranged widely, based on the range of opinions and interests of Committee members.

Idea for Possible Guideline

The Committee sees differences between “large” geoduck operations and “small” geoduck operations. This may lead to recommendations that are linked to the size of the operation. No definition of large of small was discussed.

Below is a summary of each land use topic discussed, including a problem statement, ideas for possible guidelines, and the range of perspectives expressed during the discussion.

Aesthetics and Shoreline View Impacts from Geoduck Operations

Problem Statement:

Intertidal geoduck aquaculture impacts shoreline views and aesthetics. When geoducks are planted, devices (plastic tubes) are used to protect baby geoducks from predators. Nets³ are used to cover the tubes. Tubes and nets are visible during low tides for the first 18 months of the six- to seven- year growing/harvest cycle. After 18 months, tubes and nets are removed. Some sites are planted on a rotational basis, with planting and harvest potentially happening every year. Planting and harvesting involves workers and equipment being in intertidal areas for a time period of days to weeks. Vessels may be moored for days to weeks. When large stretches of intertidal areas are being farmed, the visual impact is extremely noticeable to adjacent as well as distant homeowners and recreational users. Over time, geoduck operators have experimented with different tube colors and net sizes to find devices with the least aesthetic impacts. Ecology asks the Committee to identify recommendations on how local and state government should manage visual and aesthetic impacts from geoduck operations.

Ideas for Possible Guidelines:

1. Because planting tubes are least visible if they are not white, require tubes to be a muted color (not white).
2. Growers should remove tubes and nets as soon as they are no longer needed for predator exclusion. Possible recommendation: Require a permit condition that specifies how long tubes can be in the ground.
3. Standards should be established for using the least visible tubes and nets available (puts emphasis on using better devices in the future that may not have as much visual impact). Possible recommendation: Require growers to use the best available tubes and nets that minimize visual impacts. Require a permit condition that specifies how growers will demonstrate this.
4. Standards should be established for net sizes. (i.e., small nets covering individual tubes, or large nets covering entire farm). Possible recommendation: Require permit conditions related to net sizes.

Range of Perspectives:

³ Nets can be large canopy nets or small nets that are the size of hair nets.

Shoreline homeowners, tribes, growers, and environmental organizations expressed different perspectives on visual and aesthetic impacts. During the meeting, the range of perspectives was broad:

1. Some shoreline homeowners and recreational users see geoduck operations as an enormous negative visual impact to shorelines. Current geoduck operations resemble industrial operations to some homeowners and recreational users.
2. Some shoreline homeowners and users do not perceive views of geoduck operations as detracting from shoreline aesthetics.
3. Some people perceive other types of allowable shoreline activities such as bulkheads, docks, and homes as a negative visual impact to shorelines.

Artificial Light Impacts from Geoduck Operations

Problem Statement:

Geoduck operations are done at low tide. Tidal cycles are such that low tides occur during daytime in summer, and during nighttime in winter. During times of the year when low tide occurs in darkness, geoduck operations require artificial lighting to be able to conduct the work and for worker safety. Lighting impacts are somewhat predictable and come from overhead lights, head lamps, and vessel lights. Over time, lighting impacts have been reduced. Ecology asks the Committee to identify recommendations on how local and state government should manage impacts from artificial lighting from geoduck operations.

Ideas for Possible Guidelines:

1. Standards should be established for flood lights, head lamps, and other lighting used for geoduck operations.
2. Growers should use light shields, head lamps, and lighting devices that can be directed downward to minimize impacts.

Range of Perspectives:

1. Some shoreline area homeowners do not feel negatively impacted by artificial lights from geoduck operations.
2. Some shoreline area homeowners and businesses are disturbed by artificial lights from geoduck operations.

Noise Impacts from Geoduck Operations

Problem statement:

Geoduck operations produce different noises along shorelines. Noise is associated with transportation of workers, equipment, and the activities of planting, monitoring, and harvesting. Planting and harvesting takes from days to weeks per site, not longer than 30 days. Large single sites may have multiple planting and harvesting cycles. The State noise standard for residential areas is 55 dba at 200 yards. Noise made near water travels further than noise on land so existing noise standards may not be the right standards for geoduck operations. Some growers are monitoring their operations for noise levels. Ecology asks the Committee to identify recommendations on how local and state government should manage impacts from artificial noise from geoduck operations.

Ideas for Possible Guidelines:

1. Noise standards should be established for geoduck operations, with emphasis on equipment and workers. Standards might include locational standards.

2. Committee should look at noise situations that are comparable, and see what we can learn from those situations.
3. Growers should provide advance notification to adjacent shoreline owners within a defined radius to explain when operations are going to occur and what noise can be expected. Explain duration of the work, and where to call with complaints.
4. State noise standards offer a starting point for discussing noise standards for geoduck operations. Standards may vary depending on whether the area is residential, commercial, or another zone. The current residential noise standard is 55dba at 200 yards.
5. Growers should monitor their noise levels and report noise levels.

Range of Perspectives:

1. Artificial noise disturbs residents, recreational users, and wildlife.
2. Some shoreline homeowners and users hear geoduck noise as a form of industrial noise that does not belong in residential areas. Noise is most disruptive during the night.
3. Some shoreline homeowners and recreation users are not disturbed by sounds from geoduck operations.
4. Some members noted that daytime noises have negative impacts on those with night jobs.

Hours of Operation Impacts from Geoduck Operations

Problem statement:

Geoduck operators have little choice about working non-standard hours because they depend on low tides to access intertidal areas. Tidal cycles are such that low tides occur during daytime in summer, and during nighttime in winter. Geoduck operations are somewhat predictable because they follow tidal patterns and do not typically cease on weekends or holidays. Ecology asks the Committee to identify recommendations on how local and state government should manage the impacts of hours of operation for geoduck planting, maintenance, and harvesting.

Ideas for Possible Guidelines:

1. Growers should sit down with adjacent shoreline property owners and seek solutions that meet the growers' desire to harvest at certain times and the shoreline homeowners' desire to limit disruptive aquaculture operations.
2. On a case-by-case basis, permits could limit hours of operation.
3. Criteria should be identified that would trigger a limit operational hours. Evaluation criteria might link to noise levels, light levels, debris volumes, distance from residences, and public access.

Range of Perspectives:

1. Growers are dependent on tidal cycles to do their work. Limiting the hours when growers can access the intertidal area will economically hurt growers, especially the small growers (in some cases may force closure).
2. During winter months, shoreline residents experience the added visual impact of artificial lights along the shoreline.
3. Intertidal tracts that are planted on a rotational basis will have planting and harvesting going on much more frequently than areas that plant and wait the six or seven years to harvest. These tracts with rotational plantings and annual activities give the shoreline a feeling of industrial use.
4. Some recreational users are not likely to use shoreline during planting or harvesting.

Debris and Litter Impacts from Geoduck Operations

Problem Statement:

When geoducks are planted, devices (plastic tubes and nets) are used to protect baby geoducks from predators. Nets of varying sizes are used to cover the tubes. Small individual nets are typically attached by rubber bands. Tubes, nets, and rubber bands show up as litter in Puget Sound and injure wildlife and pose navigational hazards. Aquaculture growers recently set up a litter/debris hotline so people who find litter can report it. Ecology asks the Committee to identify recommendations on how local and state government should manage impacts from debris and litter from geoduck operations.

Ideas for Possible Guidelines:

1. Growers should be required to use and maintain equipment and devices so that they do not break free and drift or move away from the site to become litter.
2. Growers should label, brand, or mark their tubes and nets so debris problems can be solved at the source.
3. Establish a standard for reducing, managing, and penalizing net, tube, and fastener litter and debris.
4. Because rubber bands in the environment are a concern, require alternatives to rubber bands or require growers to use attachments that do not easily break and become litter.
5. Growers should recover all litter or debris.
6. Standards should not prevent innovation and better ways to eliminate and reduce litter or debris. Standards should describe the required “performance” or outcome (some call this a “performance standard”).
7. Local governments should be a “clearinghouse” for litter reporting that includes alerts to growers of the specific location of litter that has been seen.

Range of Perspectives:

1. Small growers may not be able to afford new devices and fasteners.
2. See the perspectives included in the “Aesthetics” section above.

Navigation and Public Access Impacts from Geoduck Operations

Problem Statement:

Geoduck operations introduce temporary navigation hazards and congestion near beach access points. Ecology asks the Committee to identify recommendations on how local and state government should manage impacts from navigation hazards and congestion related to geoduck operations.

Ideas for Possible Guidelines

1. Growers should have to use designated staging and parking areas to minimize the footprint of impact.
2. Growers who abuse or damage private roads should be responsible for repairs and the road owners should feel free to deny future use of their road.
3. Geoduck vessels should have defined limits for how long they can be moored at a site.
4. Growers should be encouraged to allow public access to private tidelands.
5. Growers leasing state aquatic tidelands should allow public access.
6. Paths to geoduck growing tracts that cross private land need specific standards to avoid trespass, added noise and litter, or damage to property.

Range of Perspectives:

1. Allowing use of public lands for geoduck operations takes those intertidal areas away from some recreational users.

2. Driving equipment and trucks on beaches negatively impacts beaches and Puget Sound.
3. Driving heavy equipment down private roads not built for heavy equipment may damage private roads.
4. Some work crews create noise and parking congestion in neighborhoods where they park or stage equipment.

Outline of 2008 meeting topics

The Committee reviewed the proposed outline of 2008 meeting topics. Members agreed that more time was needed for environmental issue discussions, and modified the schedule to allow environmental issues to be discussed at the March and April meetings. Environmental topics will be led by Department of Fish and Wildlife (forage fish, birds, genetics, and disease), Department of Natural Resources, and the Department of Ecology.

One member suggested that, to help the Committee analyze the environmental topics, each topic include:

1. Explanation of habitat functions and processes.
2. Identification of where geoduck operations intersect with habitat function and processes.
3. Discussion of possible guidelines or Best Management Practices.

One member suggested the agencies should send out their presentation along with proposed Best Management Practices before the meetings. These would be a springboard for Committee discussion.

One member suggested using Best Management Practices from Department of Natural Resources or other source as a starting point.

One member said they do not see Best Management Practices as the way to go for writing regulations that will protect Puget Sound.

One member asked that information be consistent with the Puget Sound Partnership goals.

Parking Garage

1. Jessie DeLoach asked the Committee for more specific direction on what they wanted the agencies to produce with the aquaculture permit evaluation. (Staff was asked to follow up and have since given Jessie more direction.)
2. Lisa Veneroso asked Laura Hendricks if she would consult with her constituents after the meeting and ask them to provide comments on aesthetics. Lisa requested this in response to Laura's comment that she was unable to separate the environmental impacts from the aesthetic impacts and was therefore unable to give feedback on aesthetic impacts. Laura agreed she could do this. (Laura was asked to follow up.)
3. The Committee decided to modify the 2008 meeting topics, to give more time for discussion of environmental impacts of geoduck siting and operations. (Staff will change the schedule of topics)
4. Suggestion that the Department of Natural Resources should get clean-up authority and funding for aquaculture marine debris. How can the Committee support this? (Hold for later discussion and identify how this idea could be advanced.)

Meeting adjourned 3:00 p.m.

Public Comment:

- 1) **William Burrows (Harstine Island resident):** I represent the residents of Harstine Island and they've authorized me to speak for them. Laura (Hendricks) is authorized to speak for me and many others. As I was looking at the March agenda I notice that a discussion of carrying capacity is not included. The Sea Grant synthesis of current knowledge, pages 28-29, says there are no available peer-reviewed studies on geoduck or bivalve carrying capacity in Puget Sound. (Read a quotation about cultured bivalves competing with other feeders, and the possibility that they could displace other species and cause the food system to collapse.) Please consider this in the March discussion, and consider regulating densities of these cultures as well as man-made impacts.
- 2) **Laurie Brauneis (Save our Shoreline):** I understand that these recommendations you're coming up with will not override local jurisdictions' policies. Since consensus is difficult, you could offer local governments a menu of options for managing shellfish aquaculture, rather than a single mandate. Considering zoning for aquaculture away from residential areas. Our group is very interested in siting and zoning, and we have ideas we could share with you about tools/processes that could be used in siting and zoning decisions.
- 3) **Paul Sparks (Washington Chapter of Trout Unlimited):** The press and legislature have characterized this as a debate between the shellfish industry (seen as people doing good for the environment, which is both true and not true) and _____ (shoreline- property owners?). This depiction eliminates the most important parties: environmental groups. We are pioneers on this issue. We know from every kind of intensive agriculture activity that it will change the ecosystem based on intensity and duration. These changes are not reversible (example: clear-cut forestry and single species re-plant). Even if you design a plan with the best of intentions, the fact that profits can be made in this activity will necessarily distort decisions. There should at least be an environmental impact statement and adaptive management. I haven't heard mention of independent scientific review. We need more measurement of environmental impacts and long-term effects.
- 4) **Fritzi Cohen (Moby Dick Hotel and Oyster farm, Willapa Bay):** I believe there should be some discussion about chemical usage as part of oyster aquaculture. We can't talk about monitoring shellfish aquaculture without talking about monitoring the use of chemicals. Our local crab population has been decimated as a result of chemical use. Where does the use of chemicals in aquaculture have a place in this committee's discussion? If not with this committee, then where in Ecology does it have a place? (Laura Hendricks notes that her organization has a position paper on this issue that she'd be happy to share.)
- 5) **Keith Stavrum (formerly of Shoalwater Bay Oysters in Willapa Bay, now with Moby Dick Hotel):** We fought to keep the State weed board from making Spartina a Class A weed, and they ruled in our favor to keep it a Class B weed. We accomplished that with good science. We live on a bay; boats come out there and it is beautiful. When a floodlight a mile out into the bay was on at 4am, we called the sheriff and resolved the problem as a light nuisance. PVC is not good—we're phasing it out, and you're adding it to Puget Sound. Are geoducks native to Puget Sound? I'm not for or against any of this. But we have spent a lot of time and money fighting the unwarranted and excessive use of pesticides to eradicate Spartina. We must get good science on this issue.
- 6) **Anne Mosness (Go Wild Campaign):** Described NOAA's "National Offshore Aquaculture Act" S. 1609 and HR 2010 that would open Washington's EEZ to fish farming operations. Anne passed out a Sept. 2007 handout from NOAA (*available to view in the January public comments digest on the committee website*), which listed "Washington Aquaculture Opportunities for Growth" including "Shellfish production, including oysters, mussels, Manila clams, and geoduck clams; New finfish species such as black cod; Culture of salmon and steelhead; Open ocean aquaculture in the Strait of Juan de Fuca, etc." Our state is targeted for industrial scale aquaculture, with a lot of focus and funding coming into our region. The eyes of

the nation are on how Washington manages aquaculture, since this is one of two states that allow salmon farming. The Committee was advised not to proceed as if marine farming is necessarily a beneficial industry – it's a matter of scale. Concerns were expressed about transmission of diseases and parasites. There have been recent reports of Viral Hemorrhagic Septicemia in the Atlantic salmon farms in the state and no matter what kind of agency plans have been created and sound good in theory, there is no way to contain pathogens or parasites in a fluid environment. We need to continually ask how regulatory agencies and industries that use our public waters plan to contain pathogens and parasites in a fluid environment. The answer is, we can't. I would urge a lot of caution, to not assume that this industry be given a green light simply because there is a lot of pressure and political push behind it. When considering any kind of guiding principles, follow the lead of NOAA in 2002 when they published their Code of Conduct for Responsible Aquaculture Development in the U.S. Exclusive Economic Zone. It said aquaculture needs to be based on the precautionary approach. Unfortunately, this was quickly buried in subsequent NOAA aquaculture promotional material, but it is the least that should be done in Washington.

- 7) **Bill Trandum (Case Inlet Shoreline Association):** I applaud this undertaking. When I was involved with the Pierce County Economic Development Council, we decided we had to stop doing BMPs and stop the harmful practices. It was a combination of ecological concerns and residential concerns. This committee needs to take that on and figures out answers. BMPs can be mere jargon—the underlying issues must be addressed before developing BMPs. I live on the shoreline, and I want to keep the environment pristine. I do not want an industrial aquaculture operation; it cannot be made quiet and unintrusive enough. In Willapa Bay the oyster industry pays no taxes on the land. In Puget Sound maybe Taylor Shellfish could be required to pay the taxes on the tidelands. (Diane Cooper said that Taylor already pays taxes.)

Present:

Committee: Diane Cooper, Jeff Dickison, Peter Downey, Sarah Dzinbal, Bryan Harrison, Eric Hurlburt, Nick Jambor, Krystal Kyer, Pat Prendergast, Lisa Veneroso, Dick Wallace, Ward Willits, Morris Barker (alt.), Cyrilla Cook (alt.), Laura Hendricks (alt.) Blaine Reeves (alt.)

Ecology/Committee Staff: Tom Clingman, Jeanne Koenings, Perry Lund

Interested Agencies: Jessie DeLoach (DOH), Tony Forsman and David Fyfe (NWIFC)

Interested Parties: Allan Moore (personal shellfish grower), Paul Sparks (Trout Unlimited), William Burrows (Mason County), Fritzi Cohen and Keith Stavrum (Moby Dick Hotel and Oyster Farm), Kathryn Townsend (Protect Our Shoreline), Laura Braineis (Save our Shoreline), Kyle Deerkop (Taylor Shellfish), Ann Mosness (Go Wild Campaign), Bill Trandum (Case Inlet Shoreline Association, Brian Phipps

Facilitator: Sally Toteff, Department of Ecology

Note taker: Candice Holcombe, Department of Ecology