Mariculture Regulation Review Committee
Minutes for 1/5/2004 teleconference

Attending:

Jon Agosti, David Bedford, Clay Bezenek, Richie Davis, Julie Decker, Kathy Hansen, Bob Hartley, Jeff Hetrick, Kyle Hebert, Steve LaCroix, Ron Long, Steve McGee, Ted Meyers, Sid Morgan, Roger Painter, David Petree, Ray RaLonde, Jim Seeb, Paula Terrel, Jackie Timothy

David Bedford opened the meeting at 9:05 a.m. He said that the following items would be on the agenda for discussion: (1) proposed definition of significance for geoducks, (2) genetic subgroup report, and (3) comments on overall committee process. Bedford noted that although Roger Painter had provided additional suggested changes to the regulations the committee would not be addressing those until everyone had an opportunity to review them. He said that January 16 would be the closing date for submission of suggestions for modifications of the regulations and that they would tentatively meet again through teleconference on January 28.

Kyle Hebert provided an overview on a new definition for significant abundance of geoducks in 5 AAC41.240: ". . . (b) The commissioner may issue an operation permit for an aquatic farm or hatchery if the commissioner determines that. . . (5) the proposed site does not contain (A) for geoduck clams, an abundance of wildstock that would support a competitive limited entry commercial fishery; for the purposes of this subparagraph an abundance that would support a competitive limited entry commercial fishery exists when an abundance estimate contains (i) a lower bound of the one-sided 90 percent confidence interval that is greater than or equal to 25,000 pounds of whole geoduck clams, or; (ii) a lower bound of the one-sided 90 percent confidence interval that is less than 25,000 pounds of whole geoduck clams, the density of geoducks is greater than or equal to 0.40 per meter squared, and the proposed site is within ten nautical miles, navigable by water, of the nearest boundary of an existing active or recovering geoduck fishery management area; (B) more than can be collected, acquired, or used by a hatchery or aquatic farm under a stock acquisition permit, unless a number of species

intended for culture can be removed under a permit issued under AS 16.05.050 or 16.05.092 or 5 AAC01 to 5 AAC77;"

Kyle said significance was a three-pronged approach—a list of criteria to define abundance, density, and proximity to existing commercial fisheries. In terms of background, he said the 25,000 pound was a back-calculation based on the 2% per year harvest rate, which is regulation for the commercial fishery. The lowest manageable quota for a competitive fishery is 2,000 pounds. Various harvest rate/rotation combinations have been used in the commercial fishery (e.g. 2% for 1 year cycle, 4% for 2 year cycle), but the maximum has been 8% for a 4-year cycle. Therefore, using the longest rotation, 8% of 25,000 pounds produces a manageable quota of 2,000 pounds. For the 0.40 geoducks per meter squared density, he said they had looked at densities of geoducks for all the areas for which this type of data exists, and with the exception of Sitka, all had densities over that amount. Sitka was just under 0.40 gd/sq meter. He also said other entities (e.g., Washington State) used 0.4 clams per meter squared as an indicator of commercial abundance. Steve LaCroix asked what the ten-mile criterion was based on, and Kyle said that the largest geoduck commercial fishing area was 13 nautical miles in subdistrict 103-50 (west of Craig), and they had determined that 10 miles was a reasonable distance to set that was fairly easy to incorporate into an existing fishery, and attempted to be consistent with past permitting. LaCroix asked, relative to the decision-making process, whether a lack of any of the criteria set out in 41.240 would be a limiting factor in getting a permit. Kyle said yes. LaCroix said he was glad to see the department quantifying standards the same way that commercial quotas were determined. He said he would like to see language incorporated into the regulation that was aligned with language in the commercial regulations. He asked if there was a definition of recovery. Kyle said it was not defined in the regulations; he said the biomass threshold is identified as 30% and a fishery would be closed until the initial population returned above that level. LaCroix said that those areas that were no longer sustainable would be ideal farming ground. LaCroix also pointed out that past sites may have been permitted that are not consistent with language concerning proximity to "recovering" geoduck areas.

Paula Terrel asked whether the requirements listed in both (A) and (B) had to be met or was it an either/or situation. Kyle said it was an either/or condition. The considerations in (A) applied to geoducks; those in (B) applied to other species. Julie Decker asked if Kyle would explain a one-sided 90 percent confidence interval. Kyle said that when they conducted surveys for geoducks in a commercial fishery they laid down transects and estimated the numbers of animals in them. He said when they calculated the estimates they had to have some idea of the variance between transects so there was also an estimate of that variability. He said the confidence interval was a statistical/mathematical calculation that indicated the precision of the estimate. He said they used the lower boundary of the confidence interval, which meant they were 90% certain that the true mean is above that lower bound value. He said that confidence intervals also applied to estimates for sea urchins and cucumbers and were in regulation at this time.

Decker said she wanted to make sure the biomass was estimated in the same way as for commercial fisheries; she asked how the density was calculated. Kyle said that when they conducted commercial surveys they didn't always estimate geoducks per meter squared; rather they based abundance estimates on geoducks per meter of linear shore line.. Density is estimated by dividing the number of geoducks on each transect by the measured area (length*width) of the transect and taking the mean of transects. Decker asked how it aligned with those farms that had already been permitted. Kyle said it complies with "what has been permitted in the past." He said they tried to make the language consistent with everything that had been done in the past; e.g., pertinent to the 10-mile language, they looked at the Point Alava site and its proximity to the commercial fishery there, and it was approximately 10 miles away.

Decker reiterated that in order for an operational permit to be issued the proposed site must have geoduck densities less than 0.40 per meter squared if within 10 nautical miles of a commercial fishery boundary or have greater than 0.40 per meter squared and be more than 10 nautical miles from the nearest boundary of a commercial fishery. She said she applauded the efforts of the Mariculture Regulation Review Committee. She also said that the Southeast Alaska Regional Dive Fisheries Association (SARDFA) Board

had met on December 19, 2003, to discuss the issue of significance. She summarized the motion passed by the Board: (1) No taking of standing stock on geoduck farm sites. Although the Board understands this is not a realistic stance due to the current court decision, they are trying to make the point that the less wild stock on a site, the better. They also discussed the fact that geoduck permit holders are trying to move the Alaska Board of Fisheries toward an IFQ system for the geoduck fishery. This would allow for small quotas to be managed by ADF&G in the commercial fishery. (2) Required reporting of all geoducks sold off the site. (3) Post bond for geoducks on the site. This is above and beyond the $2,500 bond DNR requires for clean-up. (4) Require profits from wild stock sold to go to the state. (5) Ensure scrutiny of enforcement. (6) Only allow geoducks to be retained for spat.

Painter asked if the proposed site were 10 miles away from a commercial fishery and less than the proscribed density then a permit could be issued, and Bedford said yes. Painter said the purpose of denoting significance and the focus on geoducks was because of Judge Thompson's order. He asked whether significance as applied to geoducks would also be the blueprint for establishing it for other species such as mussels and littlenecks. Bedford said he relied on staff as to how they conducted their management of those species. Painter said he assumed that littlenecks would be handled the same way. He said there were very few personal-use fisheries and no commercial fisheries for that species and that when the department applied some type of significance criteria for littlenecks all the populations would become insignificant. He said he wanted to get at a potential solution to the problem. Bedford said that issue was outside the context of what they were addressing at this meeting; however, if there were problems associated with significance for littlenecks and section (B) then they should be informed of them. Painter admitted the problems were conceptual and that they had figured a way around them. He asked if there was a remote site (e.g., Labouchere Bay) and fairly high abundance and no one dug there because it's too remote to become a viable commercial fishery, why would they have to impose significance restrictions. He said he had suggestions for changing 5 AAC 41.240(b)(5)(B).

Bob Hartley said one solution was to make the definition of significance apply to all species, although it made sense that what applies to geoducks would not necessarily apply to all species. He said significance should be determined on a species by species basis. Jon Agosti asked if a geoduck site wasn't going to recover from a commercial fishery for 40 years, for example, would that site be considered appropriate for a farm site? Decker said that one of the recent SARDFA goals was to start a pilot enhancement project for geoducks, and that they would like to enhance those areas that have been closed for recovery. Bedford noted they had closed the book on potential definitions of significance but they would be meeting again on the 28th to further discuss these issues. He said they were not in the process of writing the regulations, rather they were taking public comment on the regulations. He asked Jim Seeb to provide an update on genetic considerations.

Seeb said the Genetic Subgroup members were Jon Agosti, Ray LaLonde, Dan Moore, and Roger Painter. He said they were not restricting input to the subgroup and encouraged participation. He said they had put together a bibliography that included RaLonde's paper on drift as well as a department paper on bivalve mollusks. He said in the past he had met with departmental staff in all the regions, including Juneau to discuss genetic issues; e.g., genetics in broodstock management, and he was comfortable with what was already occurring there. He noted they could develop a set of guidelines for intra-state genetic transport zones. Seeb said that they were at the introductory stage of their discussions and had not tackled any major issues as of yet.

Bedford said the definition of significance for species other than geoducks was not quite clear to him, but the department was open to suggestions or any comments related to section (B). Painter said that in terms of process, on thing he thought might be useful was for the department to draft responses to the regulatory suggestions—that way the committee would have a chance to digest them and have another discussion before going public with them. He said they needed a healthy exchange and more movement on the proposed regulations. Bedford said the department had gotten together to discuss that and they'd like to have further discussions on the issues.

RaLonde said he had some comments relative to the bibliography that Seeb had referred to. He said he'd been looking at new information they could include; they needed to look at what Puget Sound, Canada, and Europe were doing with shellfish genetics. He noted it was a difficult thing to get a handle on because of the lack of information and the "regionality" of the issues. He said they would have to broaden their perspective and look at things like oceanographic currents, etc. Seeb said that RaLonde's perspective in terms of the bibliography was "right on," noting they had pulled in all the papers they could find from all over the world. He said there might be other important genetic factors (e.g., larval development) that might vary between groups, and there wasn't much data out there on Alaska stocks. Agosti said it was a "substantial" bibliography that the genetics group had assembled that would take some time to wade through. Seeb said he was interested in getting comments back on the information provided to the subgroup.

Bedford said the next meeting would be on Wednesday, January 28, 2004 at 9:00 a.m. He adjourned the meeting at 10:10 a.m.