

SPECIFIC NOSB QUESTIONS THAT NEED TO BE ADDRESSED REGARDING PROPOSED ORGANIC AQUACULTURE STANDARDS JUNE 2007

A. Compatibility of Open Cage Net Pens with organic aquaculture standards

1. How can open cage net pens be ecologically responsible? What requirements need to be included in the proposed regulation to assure this? How can the issues of water flow and rotational locations be included? What are the other issues?
2. Sea-lice: What is the prevalence or rate of sea lice infestation in wild fish populations where there are no net pens? What are the regional variations? Are sea lice infestations inherent with open cage net pen systems? How can they be controlled without prohibited substances in an organic system?
3. Escape: What is the current rate of escape in the conventional aquaculture and the developing organic aquaculture industry? How can the issue of escape be better controlled in an organic system than in a conventional ocean-based system? Are there any implications to containment farming of fish species not indigenous to that geographic area other than cross-breeding with native species?
4. Assimilation of waste: How much can any system expect to mitigate waste in outflow and settling of waste in open pen systems? Actual data regarding the inflow and outflow of nutrients of existing operations claiming sustainable practices would be the most helpful.
5. Predators: What is the risk to and from predators in open pen systems? In relation to language in the AWG document, in what ways is the section on predators adequate, or in need of changing, etc?
6. Migratory issues: How is migration a valid issue for these fish at the stage of life when they would be housed in open net pen systems? If so, what are these issues and their implications?

B. Alternative nutritional technologies to Fish Meal (12%) & Fish Oil (12%) at 24% of Total Feed

1. What alternative nutritional technology is available, or in development, to fish meal and fish oil for fish that have a high requirement for nutrients provided in these feedstuffs? What are the prospects for research to yield new knowledge that would make it possible for fish meal and oil levels in feeds for farmed fish species to be reduced below the proportions in the diet that are considered the minimum today?

2. Would these alternatives meet the principles of organic production for allowance as a feed source?
3. Would the fish product resulting from the use of these alternative feed sources be considered nutritionally comparable for humans to fish consuming feed from their natural environment regarding such nutrients as omega-3 fatty acids?
4. What is the feed conversion rate of these different technologies compared to the traditional diets in current conventional and organic confinement systems? How would the feed conversion ratio be affected by using alternative protein and oil sources that were compatible with organic principles compared to current commercial diets containing fish meal and oil?
5. What is the state-of-the-art with regard to the minimum percentages of fish meal and oil needed in feeds for commercially important farmed fish species that currently are reared using feeds containing relatively high proportions of fish meal and oil?
6. Is utilization of wild-caught sources in organic fish farming systems feasible or acceptable to the organic community? Why or why not?
7. How can fish meal and fish oil from the waste processing stream of wild caught fish sources only coming from sustainably-fished species be separated and segregated in "the real world" from non-sustainably-fished species?
8. If wild-caught fish meal and fish oil were to be allowed as feed for organic fish, what would be a realistic time frame until organic sources of fish meal become available? Are wild caught sources feasible? What wild fish sourcing guidelines should be placed on the various potential fishery industries and what governmental agencies or NGO's should be utilized to monitor these fisheries? Special consideration should be given to consider that many of these fisheries would be out of US waters.
9. If the farmed fish species are the source of fish meal and fish oil, what are the implications of this practice? Discuss the environmental footprint of such procedures especially related to feed supply and environmental waste.