



The National Organic Standards Board
c/o Valerie Frances; Room 4008 - South Building
1400 and Independence Avenue, SW
Washington, D.C. 20250-0001

November 3, 2008

Dear Committee Members,

Thank you for the opportunity to comment on the proposed organic standards for net pens, fish feed, and related management issues dated September 28, 2008. The Coastal Alliance for Aquaculture Reform (CAAR) is a coalition of seven conservation groups, which has been working collaboratively in British Columbia for over ten years to protect wild salmon and ocean ecosystems from the impacts of open net-cage salmon farming. We appreciate the opportunity to be involved in the NOSB's aquaculture standards development process and overall we commend you for your diligence in putting together your most recent proposed standards.

We are encouraged by much of the language that has been included in the proposed standards (e.g. recycling of nutrients, measures to protect wild fish, etc.) as it shows the NOSB are taking the scientific evidence of open net-cage impacts and limits of wild forage fisheries seriously. However, we still have significant concerns regarding the difficulty for organic production standards to address the complex issues that arise in aquaculture when there is a high level of interaction between the farm and marine ecosystems. These interactions are greatest when wild fish are used for feed and in net pen production systems.

We propose that the feed standards be modified to account for the lack of a scientifically rigorous definition of sustainable fisheries management that has shown ecological benefits over time and the timeframe for the step-wise phase out of wild fish meal and oil be reduced. For net pens, we strongly support the intent of the proposed standards to address the impacts of disease and parasite transfer, escapes and effluent on marine species. However, evidence from government data and published science shows net pens are not able to meet the intent of the proposed standards. For this reason, we are very concerned as to how compliance with the language in the standards will be ensured. If a mechanism for rigorously ensuring compliance is not included in the NOSB's organic standards we strongly believe that net pens should not be included at this time because of the high potential for the erosion of the credibility of the USDA label. Our recommendations are outlined in detail below.

Comments on proposed standards for fish feed

We strongly support the 1:1 ratio of fish product fed to live weight of cultured aquatic animal harvested as stated in § 205.252 (f). This ratio sets a standard that promotes the development of an organic aquaculture industry that is a net contributor of fish protein and meets the principles of promoting and enhancing biological diversity adopted by the NOSB in 2001.

However, the reference to “sustainable food grade fisheries or sustainably-managed forage fisheries” in § 205.612 is problematic and its inclusion in the standards introduces a high degree of uncertainty. Recent research suggests that the ecological benefits of current definitions of sustainably managed fisheries still lack rigor, including those used by third party certifiers (Ward 2008). For example, Alaskan Pollock, which has been deemed sustainable by a third party certifier and is referred to in the discussion section, offers an interesting example of this uncertainty. Since the Livestock Committee’s proposed aquaculture feed standards were released, hydroacoustic survey results have shown a 50% drop in biomass for eastern Bering Sea Pollock, the remaining major commercial Alaskan Pollock fishery (NOAA 2008). This stock has declined an average of twenty percent per year since 2003 (NMFC 2007). This suggests that the definition of sustainable fisheries management that accounts for ecological impacts is still a work in progress and that even the best third-party standards and determinations of sustainable fisheries are an uncertain course for national organic standards at this time.

Furthermore, organic aquaculture standards which certify the feeding of forage fish that are, or once were, eaten by people (particularly in developing countries) run the risk of undermining the stability of both global marine and human food systems. “Forage fish” (such as anchovies, sardines, menhaden) represent the primary food for ocean-dwelling marine mammals, seabirds and several large fishes as well as highly nutritious food well-suited for direct human consumption (Alder et al. 2008).

Due to the difficulties in determining the sustainability of wild fisheries, the inclusion of wild fish meal and oil in organic feeds is not a feasible option for standards that consumers look to as an indicator for sustainability. If the NOSB feels compelled to provide some source of fish meal and oil while the US organic aquaculture industry further develops, we recommend substituting the allowance of “sustainable food grade fisheries or sustainably-managed forage fisheries” in §205.612 with carcasses, viscera and trimmings from wild caught fish from sustainably managed fisheries. Such a standard would promote nutrient recycling while acknowledging the complexities of marine food webs and the lack of a scientifically rigorous definition of sustainable fisheries management that has shown ecological benefits over time. We also recommend the timeframe for the step-wise approach in §205.612 to be shortened to four years in order to match business planning horizons, innovation in alternative feeds and marine fishery forecasts.

Comments on proposed standards for net pens

1. Disease and parasite transfer

First, we would like to commend the Livestock Committee for including standards that explicitly protect wild fish populations if properly implemented and monitored. The transfer of parasites and diseases between farmed and wild fish is one of the most ecologically damaging impacts of net pen aquaculture. We strongly support the intent behind standard § 205.255 (k)(1) which states net pens must be sited to avoid migratory routes of native species and to avoid disturbing reproductive patterns of local species. In

the case of Canada's Pacific coast, there are 9,663 known migrating salmon stocks (Slaney 2006). However, the interpretation of § 205.255 (k)(1) is complicated by the fact that the routes these fish use for migration are not documented, and both local and traditional ecological knowledge suggest that set migratory routes are rarely followed and in fact could involve the vast majority of coastal marine ecosystems especially in locations like British Columbia and Alaska.

In order for these standards to remain credible, avoiding lethal interactions with wild fish is of paramount importance. Published research demonstrates that a single net pen salmon can raise the infection pressure for sea lice up to 75 kilometers from the farm operation (Krkosek et al. 2007). Research on the transmission dynamics between net pen stock and wild fish for other diseases is extremely limited. For this reason, we strongly encourage the NOSB to recommend a rigorous application of § 205.255 (k)(1) which does not allow net pens to be sited in regions where lethal impacts on wild species or disturbance of reproductive patterns have been identified as potential risks.

The Aquatic Livestock Health Care section further reinforces the intent of the proposed standards to eliminate the threat of disease and parasite transfer between the aquaculture production system and wild species. §205.253(a)(3) states: "Culture water used in the system must be from a source tested and determined free of reportable pathogens and free of known vectors of diseases or disinfected to remove such infectious disease agents." In order to prevent disease and parasite transmission this standard must be applied to all organic aquaculture production system. If net pens cannot meet §205.253(a)(3) they should not be considered for organic certification.

2. Effluent from aquaculture production

We welcome language that strongly recognizes the need to prevent adverse effects from effluent. CAAR strongly supports the performance target of recycling a minimum of 50% of all nutrients as stated in § 205.555 (g)(1)ii. We recommend the standard be more specific with regards to the rate of effluent permitted and the monitoring required at the site, with particular consideration given to the far field effects when there are numerous farms in a region (Sutherland et al. 2007).

3. Escape prevention and management

The net pen system cannot adequately control the risk of escapes of farmed fish into the wild. The current language of § 205.555 (j) is not substantially different than current conventional practice. Escapes and 'leakage' represent financial loss to companies and are therefore already avoided with "all reasonable security measures," but escapes are nonetheless common and recovery rates are typically low (Moring 1989). On July 1st, 2008, Marine Harvest Canada reported a loss of 30,000 Atlantic salmon from a net pen farm in the Broughton Archipelago of British Columbia due to a slipped anchor. Marine Harvest stated that from their experience, less than 10 per cent of the escaped fish were likely to be recovered, however less than 1.5% of the escaped farmed salmon were recovered. (Canadian Press 2008; Paperny 2008). Given the inherent risk and frequency of escape events from net pens, the intent of organic certification is unlikely to be met even with the strongest measures of prevention in place.

4. Compliance and verification

If the NOSB chooses to move forward with net pens, how farms will be audited for compliance deserves further consideration. Standards such as “ensure that the natural assimilative capacity is not overburdened” and “net pens must be situated in such a manner that avoid migratory routes of native species and do not disturb reproductive patterns of local wild fish populations” speak to the core of scientifically documented impacts of open net pens and will require more in depth scientific review of the company’s claims to ensure compliance. For example, §205.201 (xi)(a) requires a justification for the location of the net pens including a detailed description of how the location minimizes impacts to the surrounding environment.

We suggest that it will not be possible for a certifier to verify compliance on these issues. A special mechanism would need to be put in place to avoid non-compliant farms being certified, which would threaten the high standing of the USDA label in the public eye. Net pen salmon production has been closely investigated by the marine conservation community because of the substantial ecological impacts of these producers. Any farms labeled as organic by the USDA will most certainly be investigated by conservationists and consumers alike.

General Comments

1. Use of the words “should” and “minimize”

These words represent a watering down of the standards and offer opportunities for variability in how the standards are applied. They also bring the standards closer to the status quo of conventional production (e.g. all farms want to minimize disease, escapes, etc. to lower costs and raise productivity). This is at odds with the tenet that organic standards represent a significantly more environmentally responsible form of production. We suggest that “should” and “minimize” language be removed from the standards.

Examples:

§ 205.201 (7) “...the organic system plan for aquaculture systems should include:”

§205.255 (k)(5) i. “Most antifouling on the nets should be a physical or biological control”

2. Definitions

There are several definitions that require further clarification in order to be meaningful, including:

§ 205.201 (7)(v)(c) “adequacy of wild forage”

§ 205.201 (vii)(a) “proper disposal”

§ 205.254(a)(2) iii “densities as recommended by species”

We thank you for soliciting and considering our input and welcome you to contact us for further clarification or information on any of the issues raised.

Sincerely,

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Submitted on behalf of the Coastal Alliance for Aquaculture Reform.

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