LIVING OCEANS
Healthy Oceans. Healthy Communities.

SeaChoice.org
for healthy oceans

18 December 2015

Aquaculture Stewardship Council
Nieuwekade 9
3511 RV Utrecht
The Netherlands

Re: Comments on proposed revisions for the ASC salmon standard under the operational review.

To Whom It May Concern,

Living Oceans Society is a marine conservation organization that, since 1998, has strived to ensure Canada's oceans are sustainably managed and thriving with abundant and diverse sea life that support vibrant and resilient communities. All of our work engages scientific, social and economic research to ensure we are advocating for change that is grounded in fact and for solutions that are science-based and viable for both coastal communities and ocean health. We have a long history of engaging on aquaculture issues on the BC coast from scientific research, regulatory reform, and certification development. We are also founding members of SeaChoice, Canada's Sustainable Seafood program, where we work with retail partners to improve their seafood purchasing practices. We are submitting these comments herein as Living Oceans Society as well as on behalf of SeaChoice (member organizations include Canadian Parks and Wilderness Society-BC, the David Suzuki Foundation, and Ecology Action Centre).

Upon review of the initial papers presented for the operational issues for review of the salmon standard – Forage Fish Dependency Ratio (FFDR) and Parasiticide Treatment Index (PTI) – we have deep concerns that the proposed changes fall short from ensuring that the ASC standard will continue to differentiate true better performers within the industry.

Our comments and concerns are provided in further detail below and thank you in advance for your consideration on these matters. If you have any questions or require clarification on any of the suggested changes presented herein, please do not hesitate to contact us.

Sincerely,

Jenna Stoner

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Comments for FFDR

Comment #1

The information and data provided in the white paper on proposed revisions to the FFDR values for Atlantic and King Salmon are helpful additions to the general literature and knowledge bank of understanding of progress in salmon farming over recent years. The improvements in feed efficiencies at farms, as seen through the data within this paper, are notable and undoubtedly call for an update of the FFDR ratios for fishmeal (FM) and fish oil (FO) in the ASC salmon standard so that it can strive to certify best practice within the industry, as well as promote continuous improvement in farm-level production practices. Overall, we support the move to lower the FFDR values for both FM and FO. That said, the suggested revised limits for the FFDR of both FM(from 1.35 to 1.2) and FO (from 2.95 to 2.8) are poorly justified and would fail to position the ASC salmon standard to achieve its goals, as per the rationale developed through the Salmon Aquaculture Dialogue (SAD) and provided within the standard, with regards to Principle 4.

Rationale

The rationale for criterion 4.2 makes two particularly relevant statements with respect to the establishment of the FFDR levels:

"The Forage Fish Dependency Ratio (FFDR) contained in these requirements aim to support the trend toward lower inclusion rates and increasingly efficient use of marine resources, which are expected to continue."

"The requirement was set at a level that is achievable by better performers today according to available nutritional knowledge, scientific results and data on the range of performance on this indicator today"

These two statements make it clear that the goal of the ASC salmon standard is to set FFDR levels that are meant to reflect those seen in better performers and that they should be set at a level that support the continued reduction of FM and FO use within this industry. All of the data sets provided within the backgrounder paper for this proposed revision suggest that better performance of FFDR levels are far below the proposed revised levels for both FM and FO.

Reviewing the data presented for Fish Meal shows that setting a new FFDR level at 1.2 would not highlight industry best practice, but rather would incorporate all current practices. The FFDR fish meal values reported for in ASC salmon farm audits today (a total of 21 farms across three companies) range from 0.41-0.74, which demonstrates that achieving a FM FFDR below 1.2 is well within the realm of possibility. This is further supported by the data provided by GSI that highlights 96% of the 23 regional companies (From nine countries) that reported data for this report would be able to achieve an FFDR value less than 1.2. The data from NOFIMA (which notably is the only multi-year data set provided) and

the Marine Harvest global data, which report FM FFDR values at 0.7 and 0.66, respectively, provide further support to demonstrate that current feeding practices are already achieving better practices than what would be set out in the ASC standard if the FM FFDR was revised to 1.2.

The data for Fish Oil presented within the paper also demonstrate that current better production practice for fish oil FFDR is already below the proposed revised level of 2.8. The data made available on fish oil FFDRs through ASC Salmon audits to date undoubtedly demonstrates significant variability between various salmon farming companies, however all of them are currently reporting FFDR below 2.77 for fish oil. From the GSI data, 21 of 23 companies have a FFDR level below 2.5 for fish oil. The Marine Harvest data provided demonstrates that an FFDR level below 2.0 for fish oil is an achievable average within their company. Presumably this level is achievable by the best industry performers, globally.

Given the fact that feed is one of the major material and financial inputs to salmon farming, the data presented within the discussion paper and the clear intent of the SAD and the resulting ASC salmon standard to set standards that reflect ambitious yet achievable levels of performance, the recommendation to set the revised FFDR levels for fish meal and fish oil at 1.2 and 2.8, respectively, seems both unjustified and unsupportive of the broader goal of the ASC salmon standard. As presented, the rationale for the proposed revised values seems to hinge completely on the benchmarking exercise against the SFW standard rather than an evidence-based alignment of the available data with the intent to certify top performers and incentivise improvement. Although improved alignment between the ASC standard and SFW criteria will have a positive impact in the marketplace, that factor should not drive criteria-setting within the ASC.

The concerns raised within the third policy option presented in the paper (revise FFDR values to below SFW's 'good alternative' recommendation) are notable, however they are not reason enough to dismiss this option given the data presented within this discussion paper. Even given variations in the data, availability of less than full-industry information and a generous interpretation of the concept of "best performers" there is clear room for increased stringency of these FFDR meal and oil criteria.

It should be noted that the current level of data presented in the discussion paper represents a far more robust data set than was available at the time the original standard was set – a positive result at least partly due to the existence and attractiveness of the ASC, one could argue – and should give reassurance to the ASC that the revisions proposed are not unachievable or an unreasonable hardship for farms wishing to attain ASC certification.

Proposed Change

The ASC FFDR levels for fishmeal and fish oil should be set to reflect the leading end of current industry practice. Based on the data provided within the discussion paper, this would mean reducing the FFDR for fishmeal and fish oil to 1.0 and 2.0, respectively, at the very minimum. There is clear evidence from the data presented in the discussion paper to show that even at that level, the standard is setting a bar equivalent to current industry practice as opposed to best practice. For example, setting the FFDR level

at 1.0 for fishmeal would incorporate 20 of the 21 farms (95%) with available ASC audit data, as well as 20 of the 23 (87%) regional companies that provided data through GSI. For fish oil, setting the FFDR level at 2.0 would still encompass 13 out of the 23 regional companies (57%) that provided data through GSI. We recognize that an FFDR level lower than 1.0 may result in significant tradeoffs on other environmental impacts. Likewise, we recognise that the ASC standard includes over 100 criteria that collectively represent the overall stringency of the standard. As such, we do not recommend that ASC move FFDR standards to the lowest levels possible that would still allow top performers to be certified (e.g. FFDR fish meal and oil, respectively, of 0.7 and 1.75). We strongly urge the ASC to conduct further research into the broader tradeoffs and implications of setting an FFDR standard below 1.0 during the development of the ASC Feed standard and we support currently certified farms being given some reasonable opportunity (e.g. 2-3 production cycles) to conform to the new standard without loss of certification.

Comments for PTI Scoring

Comment #1

The Parasiticide Treatment Index (PTI) was developed by the SAD to be a novel, quantitative means to measure multiple impacts of parasiticde use including toxicity, impact on non-target organisms, and risk of resistance. Although the PTI presents a good first step in assessing complex concerns around parasiticide use, like most new indicators there is opportunity to refine the methodology as more information becomes available over time. The SAD explicitly notes this opportunity for refinement on page 48 stating “the data collected from this requirement will also help the SAD set more measurable requirements in the future”. The discussion paper presented in the Operational Review is a first step in this process, however, the review of data is incomplete, the scope of research is narrow, and the final recommendations are, as a result, poorly conceived and do not appear to meet the short or long term goals of the ASC.

Rationale

Principle 5.2 “Therapeutic Treatments” is inherently complex and requires consideration of multiple variables that are often non-linear in their interactions. The rationale for the indicator, however, sets out a clear ultimate goal for this principle that “the ultimate goal would be that farms could meet the ASC Salmon Standard without using therapeutants or without the risk of those therapeutants negatively impacting the environment.” Presentations to the Salmon Aquaculture Dialogue Steering Committee (SAD SC) indicated that numerous farms, globally, could have met a “zero use” standard for paraciticides and this was the preferred standard for the environmental representatives on the SAD SC. The request for a more nuanced indicator came from industry. Data presented in the PTI review paper also indicate that some farms meet a zero paraciticide use standard and the ASC should be creating incentives for farms to move in that direction. The research conducted for the discussion paper for the operational review is not thorough enough to justify the degree of changes suggested in the policy recommendations.

Suggested Change

Strike an advisory committee of experts in the fields of salmon farming, chemical fate and effect in the marine environment, sensitive organism biology (e.g. crustaceans) and therapeutant use to better research the concerns raised with the PTI and develop more comprehensive, better articulated solutions to update the PTI scoring.

Comment #2

We have significant concerns about the suggested shift to applying a regional lens to Principle 5.2 "Therapeutant Treatments". If this principle were to shift towards geographic specific thresholds, it automatically removes the ability to measure impact across regions and overlooks the reality that some geographic locations have an inherently lower environmental risk when it comes to salmon farming.

Rationale

It is clear that one of the main conclusions drawn in the discussion paper from the PTI data provided by GSI is the importance of geographic sitting of a farm on the influence of the PTI score. On p.6 the discussion paper states "[t]hus since country, region and site are beyond the existing management influence of the companies and explain most of the observed variation in PTI scores, a basic premise that PTI would drive improved management of the status quo is questionable."

The data and analysis provided within the discussion paper present a strong argument that geographic location is a key driving factor in the PTI score, which emphasizes the importance of appropriate farm siting to moving the industry towards more sustainable practice (as defined in this indicator by a lower PTI score). We reject the conclusion that siting (be it at the country, region, or zonal level) are beyond the existing management influence of salmon farming companies. Contrastingly, siting (at the country, regional, and zonal level) is a fundamental component to effective management that underpins appropriate growth and development of the industry. Moving towards country or regional standards in this principle would completely overlook the fact that inherently some countries/regions/sites are better suited for salmon farming then others.

The related issue of exposure to sensitive species in certain areas is also not well assessed in the review paper. Negative impacts to lobster were well researched and studied at the time of the SAD and included scientific research and court rulings from Canada . Again, a simple ban on paraciticide application during moulting periods of the most sensitive species was one suggested criteria at the time (it was determined that most other identifiable sensitive crustaceans did not undergo the same temporally constrained moulting period as American and European lobster). A criteria that would allow a farm the opportunity to still treat at these times and meet the PTI standard by reducing or eliminating

tratements at other times was requested by industry. Thus the imperfect "multiply by 4.5" approach was the compromise.

Suggested Change

Do not allow the PTI (or other scoring mechanism for this indicator) to vary regionally. And if the regionally relevant "lobster factor" is to be changed, make it a ban on paraciticide application during the moulting period of relevant spp (i.e. those with regular, identifiable, and population-wide moulting events.) Farms could treat outside these periods without further modification to the PTI score (which, if we are not mistaken, they should still be able to do under the current PTI regime).

Comment #3

The discussion paper fails to review the PTI scoring of farms currently certified by ASC, which upon review provide a significantly different perspective than what is presented herein.

Rationale

As of December 3rd, 2015 there were 84 farms from six countries certified under the ASC salmon standard and not a single one of these farms has exceeded the allowable PTI level of 13. Below is a high level overview of the PTI scoring by region:

Country	Number of Farms Certified	PTI Scores (Range)	PTI Score (Median)
Canada	3	0 -3.2	0
Norway	50 (5 did not provide PTI scores in the audit)	0 -10.93	3.2
Chile	21 (1 did not provide a PTI score in the audit)	0 -11.2	0
Scotland	2	0	0
Australia	6	0	0
Faroe Islands	1	Score not provided	n/a
Ireland	1	0	0

These data suggest that the ultimate goal for this principle, as set out by the Salmon Standard (p.49), "that farms could meet the ASC Salmon Standard without using therapeutants or without the risk of those therapeutants negatively impacting the environment" is not only achievable, but it is achievable across geographic regions.

Suggested Change

The data provided by currently certified farms must be reviewed alongside other data available (such as that provided by GSI) in order to ensure that updates to the PTI are reflective of current best practice and continue to incentivize the industry towards better practice (as per the goal of the ASC).