Attn: Jean Ragg  
Fisheries & Aquaculture Administrator  
SAI Global/ Global Trust Certification  
Jean.ragg@saiglobal.com

12 August 2015

Re: Comments on ASC Certification draft audits for Marine Harvest Canada’s Doyle Island and Duncan Island farms

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 our comments 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 draft Aquaculture Stewardship Council (ASC) audit for Marine Harvest Canada’s (MHC) Duncan and Doyle Island sites, conducted by SAI Global, we have deep concerns about the robustness of the audits and believe that approving ASC certification of these farms as is would severely undermine the standard established by the ASC.

In particular, we ascertain that these farms have failed to demonstrate that they are part of an active and effective Area Based Management (ABM) scheme which is required under multiple section of the ASC Salmon Standard. SAI Global has relied on a suite of piecemeal aquaculture license requirements and internal company practices to suggest that an ABM scheme is haphazardly in place. We deem this to be unacceptable given the importance of ABM in a region of critical importance to five native salmonid species. In addition, both farm sites have clearly breached their license conditions regarding sea lice levels on multiple occasions in the current production cycle. We believe it would be irresponsible for SAI Global to grant ASC certification to farms that have broken the local regulatory requirements of their license.

Our comments and concerns are provided in much further detail below and thank you in advance for your consideration on these matters. We look forward to hearing how the SAI Global and Marine Harvest will address the outstanding concerns.

Sincerely,

Jenna Stoner
2.4.1 (c) Keep records to show how the farm implements plan(s) from 2.4.1b to minimize potential impacts to critical or sensitive habitats and species.

The draft audit for Doyle Island states that a “compensation plan was proposed in the screening report. There is usually replacement reefs areas put in place. The area lost to Doyle was estimated at 250m²”, while that for Duncan Island states “Compensation Plan was proposed in the screening report. There is usually replacement reefs areas put in place. The area lost to Duncan was estimated at 300.6m²”. These statements do not provide any evidence that the farm has indeed implemented the compensation plan proposed in the screening report. Evidence of action on implementation of the compensation plan should be provided in order to conform to this criterion.

2.4.2 (a) Provide a map showing the location of the farm relative to nearby protected areas or High Conservation Value Areas (HCVAs) as defined above (see also 1.1.1a).

Comments for this criterion in the draft audits state “Map provided from 'Living Oceans' showing marine protected areas around British Columbia and Vancouver Island. Living Oceans are critical of salmon farming. Their map shows that the site is in a high value area but the designations are not official. There is a Marine area planning partnership just completed and overseen by the provincial government. This included all the stakeholders in the area.”

We request that the statement “Living Oceans are critical of salmon farming” be removed from the comments as it holds no pertinence to the criterion being audited. The map referenced in these comments is entitled Marine Protected Areas and Areas of High Conservation Value. These areas were identified under a collaborative, multi-stakeholder process that included representatives from ENGOs, academics, provincial and federal governments, as well as observers from First Nations groups and industry.

As per the description of the map: In 2010, the BC Marine Conservation Analysis (BCMCA) performed a suite of Marxan analyses to identify areas of high conservation value for the Canadian Pacific. These analyses considered 1,234 different ecological features and used a variety of parameters. Areas identified as having high conservation value are those that were selected most often within an analysis, though they might not meet all of the ecological requirements within the study area, this map displays the areas of high conservation value obtained when using the high target values determined by the BCMCA project team and a medium clumping size. Please see the complete BCMCA Marxan report for more details on the analysis: www.bcmca.ca.

The Doyle and Duncan Island sites fall within Unit 47 of the provincial North Island Straits Coastal Plan (www.rdmw.bc.ca/media/North%20Island%20Straits%20Coastal%20Plan.pdf). The Plan was in place at the time these audits began. The management emphasis of the Unit 47 is “Conservation”. Finfish aquaculture in Unit 47 (Nigei Gordon Group) where the Doyle Island and Duncan Island farms are located is determined to be; “Acceptable at existing levels of tenure...” and; “Applications for new tenures should not be accepted.” While both sites were grandfathered into the Unit at the time of Plan development, the approved level of production was lower than what is currently being audited by ASC.

As per the Marine Area Planning Partnership referenced in the comments, the resultant North Vancouver Island/ North Vancouver Island Marine Plan specifically identifies the Nigei Region (where the Doyle Island farm is located) as a Protection Management Area and describes it as “A diverse marine ecosystem, with important marine species IV and habitat; important recreation and tourism area that
includes numerous internationally recognized scuba diving sites; includes important areas for Humpback Whales and northern resident Killer Whales, herring and Sea Otters; connects existing conservation and protection areas” (p.101).

The ASC Standard defines High Conservation Value Areas (HCVA) as “Natural habitats where conservation values are considered to be of outstanding significance or critical importance. HCVA are designated through a multi-stakeholder approach that provides a systematic basis for identifying critical conservation values—both social and environmental—and for planning ecosystem management in order to ensure that these high conservation values are maintained or enhanced”

Given the multi-stakeholder approach taken in both the BCMCA and Marine Area Planning Partnership processes we argue that the area in which the Doyle Island and Duncan Island farms are located constitutes an HVAC as per the ASC standard definition.

3.1.1 Participation in an Area-Based Management (ABM) scheme for managing disease and resistance to treatments that includes coordination of stocking, fallowing, therapeutic treatments and information-sharing. Detailed requirements are in Appendix II-1.

The draft audits provide conflicting rationale as to whether this criterion is effectively met by Marine Harvest and the Doyle Island and Duncan Island Farms. Under compliance criterion 3.1.1(a) it is stated that a Viral management plan exists between the three largest local salmon farming companies and this is audited by Global Trust. Criterion 3.1.1(b) states that an ABM is not required by DFO and hence it does not exist but “there is an element of this done within the company”. Furthermore Criterion 3.1.1(c) states that no documents were provided for evaluation because there is no ABM in place and this is acceptable because all immediate sites are belonging to Marine Harvest. This level of ambiguity with regards to the ABM does not qualify as in compliance with the standards set out under section 3.1.1 of the ASC.

Appendix II-1 of the ASC standard states that “[p]articipation in an area-based scheme for managing disease and parasites and resistance to treatments is required under the ASC Salmon Standard (p.78)” and goes on to outline the main components of the ABM scheme that the ASC Salmon Standard requires. None of the ABM component and guidance outlined in Appendix II-1 have been achieved by Marine Harvest both more broadly or for the Doyle Island and Duncan Island sites more specifically. At minimum, Marine Harvest should have in place an ABM for the Fish Health Management Zone as defined by DFO (http://www.pac.dfo-mpo.gc.ca/aquaculture/maps-cartes-eng.html) that clearly outlines coordination among farms for all five components outlined by the ASC salmon standard.

Additionally it should be noted that the fish at the Doyle Island and Duncan Island sites were transferred to their current location from MHC’s Upper Retreat site in the Broughton Archipelago in September/October 2014. Multiple companies operate in the Broughton Archipelago and near MHC’s Upper Retreat site. MHC should be required to show evidence to the auditors that an ABM is in place for the Upper Retreat site.

3.1.2 A demonstrated commitment [40] to collaborate with NGOs, academics and governments on areas of mutually agreed research to measure possible impacts on wild stocks

3.1.2 (a) Retain records to show how the farm and/or its operating company has communicated with external groups (NGOs, academics, governments) to agree on and collaborate towards areas of research to measure impacts on wild stocks, including records of requests for research support and collaboration and responses to those requests.
The draft audits reference a spattering of communications and actions the parent company, MHC, has taken to reach out to external groups as evidence of conforming to this criterion. Not a single one of the references provided substantiate that the farm and/or operating company has either attempted or agreed to collaborate towards areas of research to measure impact on wild stocks, as is the requirement of this criterion.

We request that the reference to the invitation extended by Marine Harvest to SeaChoice be removed as “evidence” of collaboration. Our coalition did not accept this invitation from Marine Harvest for the specific reason that there was no explicit request to discuss potential areas of research or collaboration; it was nothing more than an invitation to tour one of their farms. Furthermore, we request further clarification on how the other listed events constitute collaboration on research to “measure impacts on wild stocks”.

3.1.1(b) Provide non-financial support to research activities in 3.1.2a by either: - providing researchers with access to farm-level data; - granting researchers direct access to farm sites; or - facilitating research activities in some equivalent way.

3.1.1 (c) When the farm and/or its operating company denies a request to collaborate on a research project, ensure that there is a written justification for rejecting the proposal.

While the parent company, Marine Harvest Canada has allowed a brief period of collaborative sea lice sampling of its fish on 2 farms in the past, and has allowed sampling on a few of its farms for a federal/provincial genetics project, it has stalled or withdrawn support for other initiatives that were not advantageous to the company and set-up road blocks to accessing primary data and publishing scientific seminar proceedings on sea lice science. In addition, the industry association it belongs to argued behind the scenes in a procedural battle to avoid releasing disease and parasite data to participants of a federally mandated Commission of Inquiry.

3.1.3 Establishment and annual review of a maximum sea lice load for the entire ABM and for the individual farm as outlined in Appendix II-2

Neither the Doyle Island farm nor the Duncan Island farm participate in Area Based Management, which appears to be justified in the audit report by the fact that Marine Harvest owns all neighboring farms (3.1.1) and/or that sea lice loads are set by DFO (despite these being farm-level limits). Although falling and treatment procedures may be followed by MHC, this is insensitive to biological realities: "There is no requirement under DFO for a single company to manage an area for falling, Treatments etc. However there is an element of this done within the company" (from drafts). "Area-based management" within the company is not area-based management as specified by the ASC standards. All preliminary modeling work (Mike Foreman, DFO) seems to indicate that both lice and especially viruses travel farther than people had originally thought, and that farms on large sections of the coast may indeed function as a single disease meta-population. The need for area-based management is very real, especially in the context of emerging pathogens. The absence of an ABM means that auditor responses for this criterion, as well as other related criteria, do not satisfy the ASC requirements.

3.1.3 (a) Keep records to show that a maximum sea lice load has been set for: - the entire ABM; and - the individual farm.

3.1.3(b) Maintain evidence that the established maximum sea lice load (3.1.3a) is reviewed annually as outlined in Appendix II-2, incorporating feedback from the monitoring of wild salmon where applicable (See 3.1.6).
3.1.3(c) Provide the CAB access to documentation which is sufficient for the auditor to evaluate whether the ABM has set (3.1.3a) and annually reviewed (3.1.3.b) maximum sea lice load in compliance with requirements in Appendix II-2.

The evidence provided in the draft audits for section 3.1.3(b) and 3.1.3(c) does not substantiate that the farms or the parent company, Marine Harvest Canada, have adopted an ABM scheme that meets the requirements set out in the ASC Salmon Standard Appendix II-2. Most critically the standard states:

For farms located in areas of wild salmonids, the ABM scheme shall demonstrate how the scheme is using the results of wild monitoring to review and potentially revise the maximum lice load for the area each year and/or production cycle. Adjustments to the area’s lice load would lead to corresponding limits on lice levels on individual farms. This feedback loop must be transparent and document how the ABM scheme is being protective of wild fish through the interpretation of wild monitoring data.

As per our previous comment under 3.1.1, we maintain that neither of the farms nor the parent company is involved in an ABM scheme that adheres to the ASC requirements. Furthermore, even though DFO sets farm level lice limits there is no transparent or documented process as to how the limits are reviewed and/or adjusted in order to protect wild fish populations. Both farms being audited have also clearly breached their conditions of license with regards to sea lice limits in this current production cycle. The comments provided for criteria indicator 3.1.1 (a) state “under the farms licence conditions there is a trigger level of 3 motile lice from March to June following bi-weekly monitoring. For the rest of the year the tests shall be carried out every 4 weeks unless the level exceeds 3 motiles”. Public reporting of sea lice counts from the Doyle Island and Duncan Island farms can be found from the DFO public reporting page and the Marine Harvest Canada ASC Dashboard page:

<table>
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<th>Motile L. salmonis</th>
<th>C. clemens</th>
<th>Comment</th>
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<tbody>
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<td>September 2014</td>
<td>1.19</td>
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<td>&quot;2nd count precluded by fish transfer; management action planned for when stocking is complete.”</td>
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<tr>
<td>October 2014</td>
<td>4.2</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td>November 2014</td>
<td>3.2</td>
<td>0.2</td>
<td>&quot;1st count precluded by transfer, area management action planned&quot;</td>
</tr>
<tr>
<td>December 2014</td>
<td>7.5</td>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td>January 2015</td>
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<td>0</td>
<td></td>
</tr>
<tr>
<td>March 2015</td>
<td>0.5</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

*Note Q2 public reporting is not yet available and hence no values are available for April

<table>
<thead>
<tr>
<th>Date</th>
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<th>C. clemens</th>
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</tr>
<tr>
<td>May 28</td>
<td>3.38</td>
<td>1.45</td>
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</tbody>
</table>
It is not appropriate to consider farm-level lice limits set by DFO as a condition of license as evidence that the farm or the parent company are part of an ABM scheme, particularly when the conditions of license are being exceeded multiple times per production cycle. We request that all compliance criteria under criterion 3.1.1 and 3.1.3 are scored as a major non-conformity until the farm and the parent company can demonstrate compliance with their conditions of license for farm-level sea lice levels and they provide a clear, transparent, and publically available ABM scheme that addresses the requirement under Appendix II-2.

3.1.6 (c) Make the results from 3.1.6b easily publicly available (e.g. posted to the company's website) within eight weeks of completion of monitoring.

The draft audits have marked this compliance criteria as ‘N/A’, which we believe is inappropriate. As per the ASC Salmon Standard, results of monitoring sea lice on wild salmonids need to be made publicly available within eight weeks. The Marine Harvest Canada public reporting site, ASC Dashboard, has posted the 2014 data. The 2015 data, however, is not yet available despite the draft audit report stating that it would be available in July 2015. The delay in publicizing this important information should be considered to be, at least, a minor non-conformity for this indicator. Furthermore, any potential approval of certification should be withheld, at minimum, until this information is published.
3.2.2(c) If yes to 3.2.2b, provide evidence of scientific research completed within the past five years that investigates the risk of establishment of the species within the farm's jurisdiction. Alternatively, the farm may request an exemption to 3.2.2c (see below).

The audit report describes research from 1990-2004 and MHC surveys from 2010 (following an escape event), and states that a report will be submitted before 2017. Neither of these are evidence of scientific research having occurred within the past five years and none of the data provided are sufficient to meet the letter or spirit of the standard. As such, the farms should be considered as non-compliant for this indicator.

5.1.5 (c) Submit data on total mortality and viral disease-related mortality to ASC as per Appendix VI on an ongoing basis (i.e. at least once per year and for each production cycle).

The draft audits state that data on total mortality and viral disease-related mortality has been “submitted to ASC previously but only for older production cycles and not the current one. These figures will be submitted”. This criterion should not be deemed conformant until the data on total mortality and viral disease-related mortality are released to ASC for the current production cycle.

**Criterion 5.2 Therapeutic treatments**

There appears to be significantly contradicting evidence throughout the draft audits under this criterion. The opposing comments used as evidence for conformance for various indicators are both irreconcilable and concerning. These discrepancies include:

In the Doyle Island draft audit, comments for indicator 5.2.7(c) state “[f]rom Dec 1st to January 25th for three treatments and the weight of active ingredient was 94.8kg”. The audit then goes on to state for indicator 5.2.9(a) that there are “no treatments for current cycle”. Fish were put in the water in September 2014 for the current production cycle, hence the treatments referred to in comments for indicator 5.2.7(c) would suggest that the comment of no treatments for the current cycle made for indicator 5.2.9(a) are inaccurate.

Furthermore, indicator 5.2.9(b) requires that the total number of treatments of antibiotics be calculated over the most recent production cycle to confirm that the client has used \( \leq 3 \) treatments of antibiotics. The draft audit has assessed this farm as compliant on this indicator, however it appears that the farm has treated with at least 4 antibiotic treatments in this current production cycle. Evidence for this comes from within the audit itself whereby comments of 5.2.7(c) state “[f]rom Dec 1st to January 25th for three treatments and the weight of active ingredient was 94.8kg” and on page 17 it is notes that another treatment was due the week stating 15th of June. As such, there is no way that the farm could be deemed conformant to this indicator at this time.

We also believe that the auditors should verify if any treatments were administered at the Upper Retreat site, where the fish currently stoked at Doyle Island originated from (transfer occurred September 2014). Any treatments applied at the Upper Retreat Site should be included in the audit process because they would have been administered during the same (i.e. current) production cycle.

As for the Duncan Island draft audit, comments made under criterion 5.2.6 are both inaccurate and contradictory to previous comments. It is clear that the requirement to demonstrated a reduction in average parasiticide load does not come into force until June 13, 2017, however the ASC standard and auditing book
state “nonetheless farms should start collecting data on parasiticide load beforehand in case farms have to demonstrate compliance with Indicator 5.2.6 at some point in the future using data from the two previous production cycles”. As this is serving as the first audit for this farm it is critical that the this information start to be measured, collected and recorded accurately. Under compliance criteria 5.2.6 (a) the auditor is required to determine if the PTI score is \( \geq 6 \) for the most recent production cycle. Comments for this compliance criterion simply state “PTI is below 6”, however in the compliance criteria immediately previous 5.2.5(b) the comments state “The current PTI is 3.2. There is another treatment due week starting the 15th of June. The other nearby sites are being treated at the same time. This will bring the PTI to 9.6”. We request that the comments for criteria 5.2.5 and 5.2.6 are re-written to clarify which PTI calculations have been done for which production cycles (current vs most recent) so that clear documentation can be available for future use.

5.2.10 If more than one antibiotic treatment is used in the most recent production cycle, demonstration that the antibiotic load [110] is at least 15% less that of the average of the two previous production cycles

ASC requires the CAB to calculate the antibiotic load (5.2.10 antibiotic load = the sum of the total amount of active ingredient of antibiotic used in kg) for one full production cycle immediately prior to the current cycle during a first audit. The audit report states that the criterion is not applicable due to the first time audit, but the standards outline clearly that the requirements are applicable for first time audits and are more rigorous for subsequent audits. The calculation is possible and should be performed.

5.2.11(a) Prepare a procedure which outlines how the farm provides buyers [112] of its salmon with a list of all therapeutants used in production (see 4.4.3b).

In the interest of transparency to buyers and consumers, ASC standards require that the farm provide a list of all therapeutants used during production. MHC circumvents this requirement by supplying customers with an annual letter outlining potential treatments, rather than what has been used during a given production cycle. Disclosure should be specific and relevant to the fish a buyer is purchasing.