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2nd April 2019,

Stakeholder Submission RE: draft Initial Full Assessment Report (multi-site), Mowi Canada’s Alexander Inlet, Goat Cove and Kid Bay farms

Upon review of the draft Aquaculture Stewardship Council (ASC) multi-site audit for Mowi Canada’s Klemtu farms (Alexander Inlet; Goat Cover; Kid Bay), we find Lloyd’s Register has failed to comply with the ASC Certification and Accreditation Requirements (CAR) and the ASC audit manual. In particular, we contend that the client was not eligible for an external audit given their failure to meet a multi-site prerequisite (17.1.3.2b) v.A.1).

Our comments and concerns are provided in detail below. We look forward to hearing how Lloyd’s Register will address these outstanding concerns. Furthermore, we ask that our stakeholder submission be included in the final published report.

Sincerely,

Kelly Roebuck
Living Oceans Society
I. Certification and Accreditation Requirements

a) CAR Multi-site Prerequisite

As part of the Client Internal Management System, CAR v2.1 requires that the multi-site client’s internal audit must include all relevant ASC requirements:

17.1.3.2.b). v.A.1 *The internal audit included all relevant ASC requirements at all sites and the central office*

The ASC Audit Manual further defines 17.1.3.2b) v.A.1 as a:

“Pre-requisite, without which an external audit is not allowed to take place”

The draft audit report states, “Other than the Health and safety elements the remaining social elements of the audit were not completed. Equally the sub-contractors were not audited at all”. Subsequently, the internal audit failed to include the following relevant ASC requirements:

**PRINCIPLE 6: DEVELOP AND OPERATE FARMS IN A SOCIALLY RESPONSIBLE MANNER**

6.1 Freedom of association and collective bargaining
6.2 Child labor
6.3 Forced, bonded or compulsory labor
6.4 Discrimination
6.6 Wages
6.7 Contracts (labor) including subcontracting
6.8 Conflict resolution
6.9 Disciplinary practices
6.10 Working hours and overtime
6.11 Education and training
6.12 Corporate policies for social responsibility

**PRINCIPLE 7: BE A GOOD NEIGHBOR AND CONSCIENTIOUS CITIZEN**

7.1 Community engagement
7.2 Respect for indigenous and aboriginal cultures and traditional territories
7.3 Access to resources

By not including the above 14 criteria in their internal audit, Mowi Canada has failed to meet the pre-requisite as described under 17.1.3.2b) v.A.1. We contend that the client was not eligible for an external audit (i.e. the initial audit for multi-sites) and that it is incorrect for Lloyd’s Register to raise a major non-conformance instead of enforcing the pre-requisite.
b) CAR Annex E map requirement

The draft audit report fails to provide a map of all sites, as per CAR Annex E ASC Certification for Multi-site Organisations:

*E5.4 The CAB shall prepare a map of the location and boundaries of each site that are included in the unit of certification.*

i. *The map of all sites within the unit of certification shall be included in the audit report.*

II. Salmon Standard Requirements

For the Salmon Standard indicators below, we submit the CAB did not conform to the following CARv2.1 requirement:

*17.3 Audit methodology*

*17.3.1 The ASC audit shall use the ASC Audit Manual as guidance for the standard(s) for which the client is being audited.*

Further details to our reasoning are provided below.

a) **Indicator 1.1.1** Presence of documents demonstrating compliance with local and national regulations and requirements...

According to DFO’s list of current valid marine finfish B.C. aquaculture licence holders, Mowi Canada’s Kid Bay farm site is licenced for 4,000mT.¹ However, the audit report lists the estimated annual production volumes of the unit of certification of the current year (6.5) to be 6,004,000 kg (or 6,004mT).

We request clarity on whether the discrepancy is a breach of the farm’s maximum combined peak biomass as per their licence and whether the farm indeed conforms to indicator 1.1.1.

b) **Indicator 2.2.1** Weekly average percent saturation [9] of dissolved oxygen (DO) [10] on farm...

**Indicator 2.2.2** Maximum percentage of weekly samples from 2.2.1 that fall under 2 mg/L DO

Indicator 2.2.1 is listed as “conforming” despite the audit evidence stating weekly oxygen levels did fall below 70% within the multisite:

“There were a few weeks within the multisite where oxygens have fallen below the weekly 70% threshold. This was during holiday periods and justification was given about too few people being on site to conduct sampling as lone worker issues would arise.”

DFO reporting shows Goat Cove farm experienced mortalities above licence thresholds due to dissolved oxygen on 1st October 2018.²

Given the evidence, we contend a non-conformity should have been raised for indicator 2.2.1. In addition, we request confirmation that Goat Cove farm is in compliance with indicator 2.2.2.

c) Indicator 2.2.3 For Jurisdictions that have national or regional coastal water targets…; and Indicator 2.2.4 Evidence of weekly monitoring...

The draft audit report fails to reference or apply variance 198 to Indicator 2.2.3. VR 198 appropriately states,

“Chile and Canada are amongst the salmon production regions which do not have such a national classification and therefore they are bound by indicator 2.2.4.”

As acknowledged by the variance request, with no national water classification, Canadian farms are required to comply with Indicator 2.2.4. The Canadian Council of Ministers of the Environment (CCME) 2012 guidelines for water quality referenced here do not meet the definition of “national or regional water quality targets”. The ASC standard identifies nitrate, phosphorus and chlorophyll A (footnote 16) as the relevant nutrients for water quality targets. CCME guidelines only measure nitrate and cannot be used as evidence of “national water classification”.

VR 198 was approved by the ASC VR-committee on the 13th November 2016. As per the ASC’s variance process, the reapplication of an approved variance occurs when a “certifier encounters an identical situation for which an earlier variance request has been submitted and approved”.

The farms ought to be required to demonstrate compliance with Indicator 2.2.4; or an application should be made to apply the provisions of Variance 198 to this audit.

d) Indicator 2.4.2 Allowance for the farm to be sited in a protected area or High Conservation Value Areas (HCVAs)

The draft audit report incorrectly states Alexander Inlet is not located in a HCVA. The Marine Area Planning Partnership’s (MaPP) Central Coast Marine Plan specifically identifies Group 2 (Finlayson) zone (PMZ 14), for which the Alexander Inlet farm resides, as an IUCN Protected Area Category IV.⁴ IUCN

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² https://open.canada.ca/data/dataset/7fbb2662-391a-4df7-99b4-3343fa68fc93/resource/1cb32039-828c-49aa-9a0f-5c8876043d1a/download/ep-mort-ev-2011-ongoing-rpt-pac-dfo-mpo-aquaculture-eng.xlsx
defines Category IV Habitat/Species Management Area as “Protected areas aiming to protect species or habitats and management reflects this priority”\(^5\).

\(^5\) https://www.iucn.org/theme/protected-areas/about/protected-areas-categories/category-iv-habitatspecies-management-area
The Central Coast Marine Plan states the following objective for PMZ14:

“Protect larval sources and marine habitats that are important for various life history stages (e.g., spawning areas, nursery areas).”

The area’s conversation value is described as,

“This PMZ encompasses Myers Passage and Alexander Inlet. It supports a variety of invertebrate species and includes multiple kelp beds that support herring spawn. The area provides important at-sea habitat for Marbled Murrelets. Meyers Passage is a Sea Cucumber refugia, which acts as a larval source for adjacent areas. The area is also culturally significant to local First Nations. There is concern with the following habitat and species: benthic habitat, herring and Sea Cucumber populations”.

Of particular significance, the Marbled Murrelet (*Brachyramphus marmoratus*) is listed as “endangered” by the IUCN Red List⁶ and “threatened” under COSEWIC⁷.

The ASC audit manual instructs:

“c. If the farm is sited in a protected area or HCVA, review the scope of applicability of Indicator 2.4.2 (see Instructions above) to determine if your farm is allowed an exception to the requirements. If yes, inform the CAB which exception (#1, #2, or #3) is allowed and provide supporting evidence.”

Furthermore:

“Exception #2: For HCVAs if the farm can demonstrate that its environmental impacts are compatible with the conservation objectives of the HCVA designation. The burden of proof would be placed on the farm to demonstrate that it is not negatively impacting the core reason an area has been identified as a HCVA.”

Therefore, the farm should be required to demonstrate “that it is not negatively impacting the core reason an area has been identified as a HCVA”. Otherwise, the Alexander Inlet farm does not meet this ASC requirement and should not be awarded certification.

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⁶ https://www.iucnredlist.org/species/22694870/39191645#assessment-information
⁷ https://wildlife-species.canada.ca/species-risk-registry/species/speciesDetails_e.cfm?sid=39
e) **Indicator 3.1.1 Participation in an Area-Based Management scheme.**

The audit report incorrectly determines “no ABM is required” as no other companies operate within the Klemtu area. Yet the Salmon Standard requires all farms except those “that release no water” to participate in an ABM. Therefore, even farms within an area owned by the same company are required to participate in an ABM as outlined by the Standard. The audit fails to demonstrate how MHC meets all components of Appendix II-1.

The importance of an ABM scheme, even for farms that are owned by the same company was highlighted in analysis by Bateman et al. (2016) which suggested the combination of unusual environmental factors and delayed management action by farms contributed to the factors leading to the 2015 Broughton Archipelago sea louse outbreak. The study found DFO sea lice management policy to be “not sufficient” and instead recommended a cooperative coordinated ABM approach be adopted. Specifically, the study observed a lack of coordination between farms, as demonstrated by the offset treatment schedules at some farms, including those owned by the same company.

Case in point occurred during the 2015 sensitive period when Mowi Canada (then Marine Harvest Canada) experienced significant challenges in effectively managing sea lice numbers at their Klemtu area farms, as lice loads greatly exceeded thresholds and amplified from site to site.

The below DFO graph, titled ‘Abundance of sea lice at Atlantic salmon farms in fish health zone 3.5’, clearly shows the challenges with managing sea lice at farms within the area and demonstrates how the PAR threshold was exceeded in the zone or "management area" for the entire year 2015 until December.

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Similarly, Mowi Canada’s Klemtu farms also experienced significant challenges in managing sea lice numbers in 2013. The company’s ineffective management likely contributed to failure of SLICE and its documented resistance.\(^9\)

Therefore, in the absence of participation in an ABM scheme (as detailed in Appendix II-1) and evidence that sea lice management has failed in the past due to the lack of an ABM, the three farms do not conform to Indicator 3.1.1.

f) Indicator 3.2.2 If a non-native species is being produced, evidence of scientific research...

The auditor notes the farm produces non-native Atlantic salmon and cites Canadian Technical Report of Fisheries and Aquatic Science 3061 (Andres 2015).

The ASC requires a credible methodology for non-native escape monitoring. Scientific studies show escapes remain a concern\(^{11}\). The limited number of snorkel surveys actually conducted by Andres\(^{12}\) and his students, during the peak runs of other species, do not constitute ‘monitoring’. More specifically, the Andres study did not include any water bodies within the Klemtu region or the B.C. Central Coast (i.e. of relevance to the three farms). Rivers and streams included by Andres were located on Vancouver Island.

The ASC also requires:

... evidence of scientific research completed within the past five years that investigates the risk of establishment of the species within the farm’s jurisdiction

Andres’ surveys were completed in 2011 and 2012 - more than five years ago. DFO has not monitored for non-native establishment and, until recently, their Atlantic Salmon Watch program was defunct. A recent study found DFO wild salmon monitoring to be woefully inadequate, with around half of B.C. wild salmon streams not monitored\(^{13}\). In the absence of any monitoring at all on half of the streams known to support salmon, including those in the vicinity of Klemtu, the potential to detect impacts from escapes is vastly reduced.

Specifically, evidence of compliance for 3.2.2C requires:

C. Confirm that the scientific research included: multi-year monitoring for non-native farmed species; used credible methodologies & analyses; and underwent peer review...

The Andres summary report is not peer reviewed, did not use a credible methodology and looked at only four Vancouver Island streams in both of the two years’ field work reported. The only prior


monitoring of those streams was conducted more than a decade earlier and it did find evidence of multiple year-classes of juvenile Atlantic salmon in two of those same streams.

Furthermore, the CAB also inappropriately cites industry-commissioned sea lice monitoring as evidence of compliance for this indicator requirement. The methodology used for this report is based on sea lice monitoring on wild fish and is not sufficient for non-native species monitoring.

The ASC requires a credible methodology for non-native escape monitoring. No such scientific study, as required by the ASC, currently exists for the B.C. region. An independent scientific research study that is multi-year, with credible and appropriate methodology and analyses and underwent peer review should be required for B.C. salmon farmers to demonstrate compliance with Indicator 3.2.2.