23rd September, 2016


Upon review of the draft Aquaculture Stewardship Council (ASC) audit for Marine Harvest Canada’s (MHC) Glacier Falls farm, conducted by Acoura Marine Ltd., the below-noted stakeholders have serious concerns regarding the omissions and lack of available evidence within the report. We believe that approving ASC certification of this farm would severely undermine the salmon standard established by the ASC.

The ASC Certification and Accreditation Requirements (CAR V2.0) stipulates the availability of sufficient records/evidence are needed in order to conduct an audit. Due to the fact that the audit timing occurred before the harvest, we find the draft audit report consequently does not provide sufficient evidence that demonstrates the farm has successfully met the salmon standard criteria, simply because the data is incomplete.

In addition, we believe it would be irresponsible for Acoura Marine Ltd to grant ASC certification given the clear vocal opposition of fish farms by the First Nations of the territory in which the Glacier Falls farm resides. Therefore, the certification of Goat Cove would undermine the credibility of the ASC, the salmon standard and Acoura Marine Ltd.

Our comments and concerns are provided in detail below. We look forward to hearing how the Acoura Marine Ltd will address these serious concerns.

Sincerely,

Kelly Roebuck
Living Oceans Society

John Werring
David Suzuki Foundation

Stan Proboszcz
Watershed Watch Salmon Society

Colleen Turlo
Ecology Action Centre
1. **CARv2.0 Process Requirements: Audit Timing**

We note the audit was conducted under Version 2.0 of the ASC Certification and Accreditation Requirements, as per the footer of the draft audit report. The ASC Certification and Accreditation Requirements (CAR) Version 2.0 has the following stated Process Requirements (17):

**17.1 Unit of Certification**
17.1.2.1 All clients seeking certification shall have available records of performance data covering the periods of time specified in the standard(s) against which the audit(s) is to be conducted; and

**17.4 Audit Timing**
17.4.5 Audits shall not be conducted until sufficient records/evidence are available for all applicable standard requirements as the minimum.

The audit failed to meet these CARv2.0 process requirements, as the audit data and sufficient records/evidence covering the periods of time specified in the salmon standard were not yet available. The following further details our concerns.

a) **Salmon Standard requirements: Current production cycle data**

With the audit taking place before harvest, the records and evidence for the applicable standard requirements are simply not available.

The audit took place before sufficient and complete records/evidence were available to assess:

- 2.1.1 Redox potential or sulphide levels
- 2.1.2 Faunal index score
- 2.1.3 Number of macrofaunal taxa
- 3.4.1 Maximum number of escapees in the most recent production cycle
- 3.4.3 Estimated Unexplained loss
- 4.2.1 Fishmeal Forage Fish Dependency Ratio
- 4.2.2 Fish Oil Forage Fish Dependency Ratio
- 5.1.5 Maximum viral disease-related mortality
- 5.1.6 Maximum unexplained morality rate
- 5.2.1 On farm documentation... chemicals and therapeutants used...
- 5.2.5 Maximum farm level cumulative parasiticide treatment index (PTI) score
- 5.2.7 Allowance for prophylactic use of antimicrobial treatments
- 5.2.8 Allowance for use of antibiotics listed as critically important...WHO
- 5.2.9 Number of treatments of antibiotics
- 5.4.4 If an OIE-notifiable disease is confirmed...

With the exceptions of 2.1.1; 2.1.2; 2.1.3, **all of the indicators above are listed as “conforming” - despite not having available all the sufficient records and evidence required.**
b) Incomplete Production Cycle Data – Intermediary Stage

It is common practice in British Columbia for salmon farming production cycles to include an intermediary stage (such as nursery, transfer or early grow-out pens). For the primary product being assessed, all stages of the production cycle should be included to ensure compliance to the ASC salmon standard indicators and the chain of custody.

There is no mention of an intermediary stage in the draft audit report. We request the CAB provide confirmation if whether an intermediary stage was used during the current production cycle and if so, which MHC farm.

c) Exclusion of harvest activities from initial audit

The ASC CAR V2.0 requires that “The CAB’s initial audit should include harvesting activities of the principle product to be audited.” (Audit Timing 17.4.2).

Again, by conducting the audit before the harvest, there is incomplete evidence to conclude the farm is conforming to the salmon standard indicators. The indicators listed above in 1a) are not able to be assessed until sufficient records and evidence from the completed production cycle are available.

While we acknowledge the audit report meets CAR 17.4.6 requirement of listing and providing an alternative timing, we submit the justification of “…intending to have certified product on the market…” compromises the integrity and rigour of the ASC and salmon standard.

For reasons detailed in 1a)-c), we submit the CAB failed to meet their obligations under 17.4 of the CAR. Similarly, MHC failed to meet their client obligations listed under CAR 17.1 (Unit of Certification).
2. Non Conformities

Indicator 2.2.3 For jurisdictions that have national or regional coastal water quality targets, demonstration through third-party analysis that the farm is in an area recently classified as having “good” or “very good” water quality

The salmon standard indicates jurisdiction water quality targets should include nutrients N, P, chlorophyll A. The Canadian Councils of Ministers of the Environment (CCME) guidelines require only nitrate concentration and therefore should be deemed inadequate. 2.2.3b references The ‘Nutrient release for net cage culture’ by GlobalAquafood Development Corporation April 2014. Another ASC audit report (Duncan Island) also references this report and notes it as a literature review by Dr. Stephen F Cross (Founder of GlobalAquafood) of papers dating from 1982-2005. Footnote 17 requires evidence to be from within the last 2 years prior to the audit. Given the report relies on data 11 years and older, we submit this report to be inadequate. Additionally, the analysis report is required to be from a third-party. We query the third-party impartiality of the analysis report given that GlobalAquafood and the author appear to be in a conflict of interest given their strong support¹ for the BC aquaculture industry.

Therefore, compliance to 2.2.4 should be required.

Indicator 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 audit report refers to Variance Request 145 for indicator 3.1.1 in aim that MHC can simply defer to current DFO management in the absence of an Area-Based Management (ABM) scheme. The Variance (#145) refers to a different BC salmon farming company, Mitsubishi/Cermaq and their farms located in a different area, Clayoquot Sound. Mitsubishi/Cermaq are the only company in Clayoquot Sound north of Tofino. This is unlike the MHC Broughton Archipelago farms where another company operates (also Mitsubishi/Cermaq), therefore requiring area based coordination beyond company best management practices and DFO management. The variance is also specific to the ABM stocking requirement only.

Consequently, we submit the quoted variance request (145) is not applicable, as per our reasons outlined above.

In addition, we provide evidence in the form of a recent peer review study that shows DFO’s management policy to be inadequate for meeting ABM requirements for the application and rotation of treatments.

Appendix II-1 (Application and rotation of treatments) states: “Farmers must be able to demonstrate a coordinated treatment plan and evidence that the schedule and rotation of treatments are being implemented.”

Analysis by Bateman et al. (2016) suggest 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.

Therefore, in the absence of a relevant variance request, and most notably, in the absence of participation in an ABM scheme (as detailed in Appendix II-1), Glacier Falls does not conform to Indicator 3.1.1.

**Indicator 3.1.4 Frequent on-farm testing for sea lice, with test results made easily publicly available within seven days of testing**

Indicator 3.1.4 requires public reporting of results within seven days of testing. As of 22nd September 2016, reporting on the MHC ASC dashboard for Glacier Falls sampling is from 8th August 2016. The draft audit report states MHC conducts twice monthly sampling outside of the sensitive period, however even at the minimum monthly sampling rate required by the standard, an 8th September 2016 (approximate) sampling posting would be expected to be available at this point of time. The lack of a September sampling report (as of 22nd September 2016) suggest either testing was not performed at the bi-monthly/monthly rate or the testing results were not posted publicly; both required by the salmon standard for conformance.

**Indicator 3.1.7 In areas of wild salmonids, maximum on-farm lice levels during sensitive periods for wild fish and Compliance with the Variance**

As previously described in indicator 3.1.4 above, there have been no sea lice sampling report by MHC since the 8th August 2016. While there is no September sea lice report by MHC (as required under 3.1.4), based on the trend seen in reporting from June, it can be reasonably predicted the Department of Fisheries and Oceans’ (DFO) Pacific Aquaculture Regulations (PAR) sea lice requirements of 3 motile lice per fish has been or is close to being exceeded. See the table below.

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We also note Glacier Falls recorded 11.9 *C. clemensi* motile/per fish in May 2015 and 5.3 *C. clemensi* motile/per fish in June 2015.

The draft audit report does not cite a Variance Request, however it can be assumed based on other ASC BC salmon farm audits, that reference to Variance Request 141 will occur.

Under indicator 3.1.7. In VR 141, the CAB recommended:

“Therefore, we recommend that Monday Rocks farm to be certified with a higher sea lice trigger based on the legal definition of 3 motile lice per fish within the context of clause PI 3.1.7”

The Variance Request was approved by the ASC, with a reference to deferring to the Pacific Aquaculture Regulations (PAR):

“Canadian regulations differ from the ASC standard in that up to 3 mature female sea lice per fish are allowed before treatment is triggered. Only one chemical treatment is allowed”.

It is important to note that the quoted statement by ASC is erroneous. The PAR trigger for management action is 3 *motile* (*Lepeophtheirus* spp.) lice per fish; and BC salmon farmers have access to two therapeutants, SLICE and hydrogen peroxide, with the ability to treat as often as required to control lice within the threshold. In any event, the conclusion from the Variance Request was to defer to the PAR requirement of 3 motile lice vs. the Salmon Standard of 0.1 adult females /fish.

Based on the referenced approved variance, it can be expected that the Glacier Falls farm would need to demonstrate meeting the PAR requirements of 3 motile lice per fish in order to be conforming to 3.1.7 of the ASC Salmon Standard.

A DFO Fish Health Inspection\(^3\) cited the following deficiency by Glacier Falls in 2015 (the current production cycle):

- Lice protocol or lice records as per COL Appendix VII or VII-A need

This is the same period of time, in which the Bateman et al. (2016) study noted occurrences of delayed action (past the PAR requirement of 30 days to treat or harvest), a higher number of sensitive period treatments (vs precautionary treatments) and lack of treatment coordination between farms.

We request the CAB reviews all sea lice data post-audit to confirm whether the farm is conforming to the variance of 3 motile/per fish.

**Indicator 5.1.3 Percentage of dead fish removed and disposed of in a responsible manner & Indicator 5.1.4 Percentage of mortalities that are recorded, classified and receive a post-mortem analysis**

A DFO Fish Health Inspection\(^4\) cited the following deficiency by Glacier Falls in 2015 (the current production cycle):

- *Carcass retrieval protocol or record keeping need improvement*

Such evidence from the regulating authority should warrant a non-conformance.

**Criterion 7.2 Respect for indigenous and aboriginal cultures and traditional territories (Indicators: 7.2.1; 7.2.2; 7.2.3) & Criterion 7.3 Access to resources (Indicators: 7.3.1; 7.3.2)**

The draft audit report fails to acknowledge that the Glacier Falls farm resides in the Musgmagw Dzawada’enuwx Nation territory. The report also omits the fact that the Musgmagw Dzawada’enuwx have vocally declared their opposition to fish farms in their territory for nearly 30 years. Their position statement can be viewed publicly on their website: [http://www.mdtc.ca/cleansing-our-waters](http://www.mdtc.ca/cleansing-our-waters)

Most recently, the Musgmagw Dzawada’enuwx launched a dedicated campaign, ‘Cleansing Our Waters’ which declares fish farms must be removed from their respected territories: [http://cleansingourwaters.com/](http://cleansingourwaters.com/)


**Additional links:**
- *Media on eviction notices “…to nearly 30 farms operated by Cermaq and Marine Harvest in their territory…”*: [http://www.thetyee.ca/News/2016/08/31/First-Nations-Fish-Farm-Eviction-Rallies/](http://www.thetyee.ca/News/2016/08/31/First-Nations-Fish-Farm-Eviction-Rallies/)

- Video of an eviction notice being submitted to Marine Harvest Canada’s head office: https://www.youtube.com/watch?v=OJdcKKFyLGw

Given the long history of vocal opposition and the current campaigning by Musgmagw Dzawada’enuwx, Marine Harvest Canada’s Glacier Falls farm clearly does not conform to Criteria 7.2 and 7.3 of the salmon standard.

**Section 8: Standards for Suppliers of Smolts**

Section 8 refers to Dalrymple farm. In contradiction to indicator 3.1.1d that states smolts entered Glacier Falls from Big Tree farm on 10th March 2016.

**Indicator 8.4 Maximum total amount of phosphorus released**

Please provide the Dalrymple site calculation to demonstrate transparency, rigour and that compliance was indeed achieved.

**Indicators 8.15-8.23 Smolt Production; 8.32-8.33 Additional Requirements for Smolt Producers**

These indicators are not appropriately assessed as it simply refers to all being “internal” in nature (8.15-8.23). Whether the smolt producer is MHC or ‘internal’, the ASC salmon standard indicators are still required to be completed (e.g. antibiotics used, amount, etc) to demonstrate compliance. Likewise, the audit report fails to demonstrate compliance with indicators 8.32-8.33, which are listed as “As included in the ASC submission”.

**Indicator 8.34 Macro-invertebrate surveys downstream**

The CAB listing of indicator 8.34 as “compliant”, appears in contradiction of the comment: “2015 results showed some downstream impact at Dalrymple...”. The audit draft notes updated reports are expected in November 2016. We question why a non-conformance was not raised.