

# ASC GLOBAL REVIEW: CANADA SUMMARY

Canada accounts for just five per cent of all global ASC certified production. Twenty-nine per cent (37,437mT)<sup>1</sup> of the Canadian industry is certified. Canada's ASC certified farms are all located in British Columbia (B.C.) where just under half of the industry (49 per cent) is certified.



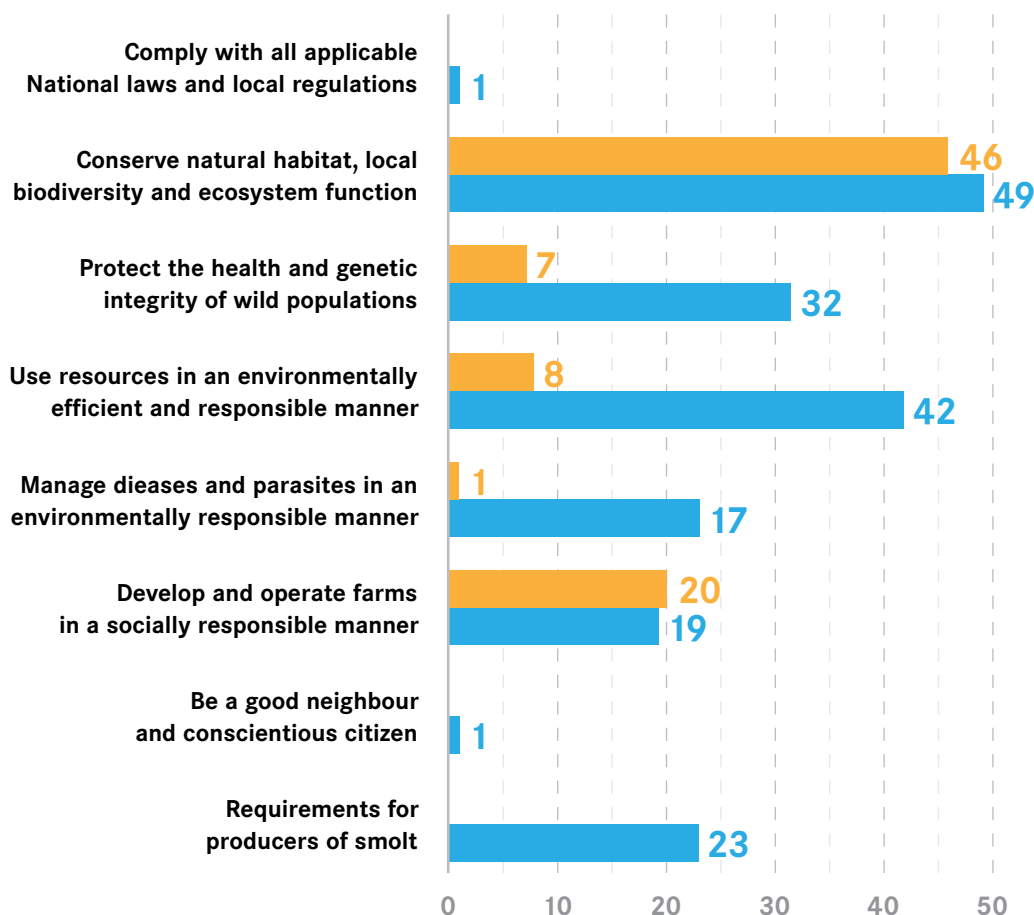
## ANALYSIS

### FARM CONFORMANCE

Thirty-One B.C. ASC certified farms were reviewed. On review of 45 audits (31 initial; 14 surveillance), 82 major non-conformities and 184 minors have been raised. On average, Canadian audits had 1.8 major and four minor non-conformities.

### CANADA (B.C.): MAJOR AND MINOR NON-CONFORMITIES BY PRINCIPLE

● MAJOR ● MINOR



#### COMMONLY RAISED NON-CONFORMITIES:

- Benthic (including copper) sampling and monitoring not completed due to early auditing
- Various sea lice associated indicators, such as failing to record or conduct on-farm sea lice counts
- Socially responsible indicators, such as work place health and safety training

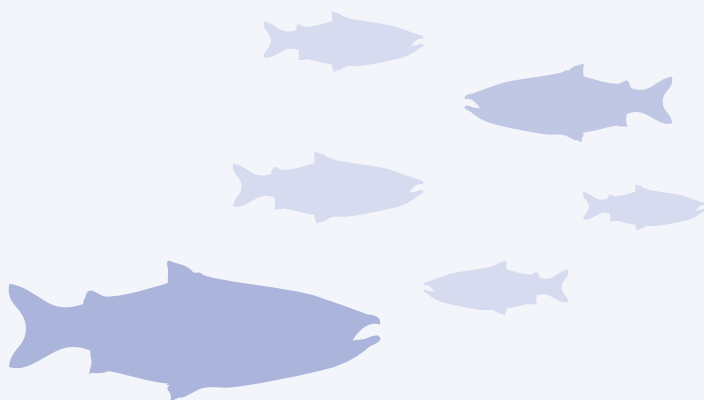


## CASE STUDY: FIRST NATIONS OPPOSED AND EVICTED SALMON FARMS GRANTED ASC CERTIFICATION

As part of the Standard's social sustainability indicators, Criterion 7.2 (Respect for indigenous and aboriginal cultures and traditional territories) requires that farms are respectful of the traditional territories of Indigenous groups.<sup>2</sup> The criterion's intent is to ensure farms identify groups who are negatively impacted by their farming activities and address those impacts satisfactorily. The Standard requires farms to have consulted with the relevant territorial government and to have come to a protocol agreement. If an agreement is not in place, the farm must be in an "active process" to establish an agreement. Criterion 7.2 requirements are stated to be consistent with the United Nations Declaration on the Rights of Indigenous Peoples. Furthermore, Criterion 7.3 (access to resources) requires farms do not restrict community access to vital resources without approval.

Despite these seemingly strong requirements, at least seven ASC certified B.C. farms<sup>1</sup> are sited in unceded First Nations territories where salmon farming has been actively opposed for decades.<sup>3 4 5</sup> These First Nations assert that salmon farms have affected their aboriginal rights by restricting their access to marine resources, including but not limited to, their traditional salmon and herring fisheries and shellfish beds.

During 2016 and 2017, members of the Musgmagw Dzawada'enuwx and 'Namgis First Nations issued notices of eviction to and occupied Broughton Archipelago salmon farms within their territories, leading to much media attention and legal action.<sup>6 7 8 9</sup> Some of these salmon farms are ASC certified.



In the audits for seven farms opposed by local First Nations, this review found that the auditors failed to identify the indigenous territory in which the farms are sited.<sup>10 11 12 13 14 15 16</sup> They also omitted the publicly declared First Nations opposition to the farms. Zero non-conformities were raised. Audit evidence for farm "compliance" included the auditors' general comments that the farming company(s) operate in some Indigenous territories and have several agreements in place. While salmon farming companies do have agreements in place with some B.C. First Nations, it is unequivocally clear that they do not apply to the territories in which these opposed farms operate, where no protocol agreements are in place. Only three (out of seven) of the audits recognized that no protocol agreement was in place. Audit reports relied on company outreach to the relevant First Nation (e.g. letters inviting a meeting despite the known, public stance of opposition)<sup>17</sup> in answer to this criterion. Auditors failed to provide evidence of an 'active process' or 'continued consultations' as instructed by the Standard and audit manual.

Farm regulatory approvals were deemed sufficient evidence that Indigenous groups were consulted. However, this evidence of consultation was challenged in one audit report by a Kwiakah Nation representative who stated such an interpretation was not supported by section 35 of the Constitution Act, which stipulates the Crown has a duty to consult Indigenous Canadians before taking actions that may affect their aboriginal rights or title.<sup>18</sup>

The intent of criterion 7.2, to address potential negative impacts on indigenous communities by ensuring proactive consultation and protocol agreements, becomes moot in circumstances where First Nations adamantly oppose salmon farming in their traditional territories. In practice, the criterion only appears to 'work' when Indigenous groups are willing to engage with salmon farming within their territory. **ASC-certified farms that do not have Indigenous consent to operate in their traditional waters are misrepresenting the Standard's claim to be 'socially responsible' in regard to respecting First Nations' rights and title.**

i First Nations opposed fish farms that are ASC certified as of May 2018: Burdwood, Doctor Islets, Glacier Falls, Maude, Phillips Arm, Sir Edmund and Wicklow.

## FARM PERFORMANCE

No farms had an area-based management agreement that fully complied with all Standard requirements. Farms remained certified despite breaching one of the following criteria limits: marine mammal deaths, high fish mortality rates or elevated sea lice levels. Antibiotic and parasiticide use per production cycle is likely to be higher than reported as intermediary (i.e. early-grow out sites) are not included in audits. B.C. farms successfully met the Standard's fish feed dependency ratios.

### AREA-BASED MANAGEMENT (ABM)

Farms are either certified with no ABM at all or the audit refers to Canadian regulations. Farms with 'no ABM' were excused by the auditors due to the same company owning the neighbouring farms. Yet the Salmon Standard requires all farms except those "that release no water" to participate in an ABM.<sup>19</sup> Therefore, even farms within an area owned by the same company are required to participate in an ABM. Other farms applied variances which defer to Fishery and Oceans Canada (DFO)'s Pacific Region Marine Finfish Integrated Management of Aquaculture Plan in lieu of an ABM scheme.<sup>20</sup> However, the DFO regime falls short of the following Standard requirements: coordinated treatments plans, consideration of cumulative use of treatments (e.g. antibiotics) and tracking of cumulative use of parasiticides are not required. Furthermore, a peer reviewed study strongly suggests DFO's management policy to be inadequate for meeting ABM requirements – particularly regarding sea lice management and treatment coordination.<sup>21</sup>

### SEA LICE MONITORING ON WILD SALMON

B.C. Canada is the only region that fully meets the requirements of this indicator. Companies contract consultants to conduct sea lice monitoring on wild salmon.<sup>22</sup>

### SEA LICE LEVELS

B.C. farms do not adhere to the Standard's sea lice indicator as written due to variances. These variances replace the ASC Standard's threshold of 0.1 mature female lice per fish with the DFO Pacific Aquaculture Regulation's (PAR) three motile *L. salmonis* per fish.<sup>23 24</sup> Fifteen of the 31 ASC certified farms met or exceeded the PAR threshold during the sensitive period (defined as 1 March to 30 June). Farm levels ranged from 3 to 34.4 motile lice per fish. Despite high sea lice levels, farms have been granted or maintained certification. In May 2018, following media attention, some farms were suspended due to high lice loads.<sup>25 26</sup>

### MAXIMUM VIRAL DISEASE

One Canadian farm experienced elevated mortality rates due to viral haemorrhagic septicaemia virus (VHSV).<sup>27</sup> The farm remained certified.

### ESCAPES

No reported escapes in breach of the Standard.

### ANTIBIOTIC USE

25 audits reported antibiotic use for the grow-out stage, with a total of 53 treatments reported. Hatchery antibiotic use was also reported. The total number of antibiotic treatments is likely higher as intermediary farm stages (i.e. early grow-out sites) are excluded from ASC assessments.

### SEA LICE CHEMICAL TREATMENTS (I.E. PTI SCORE)

32 audits reported emamectin benzoate (EMB) use at the grow-out stage. The average B.C. farm had a PTI score of 4.4 (i.e. just over 1 treatment). However, the total number of EMB treatments is likely higher as intermediary farm stages (i.e. early grow-out sites) are excluded from ASC assessments. Evidence of treatments at early grow-out stages, that were excluded from an ASC certified product's assessment, was found.<sup>28</sup>

### FISHMEAL FORAGE FISH DEPENDENCY RATIO (FFDRM)

The average B.C. farm had a 0.74 FFDRm.

### FISH OIL FORAGE FISH DEPENDENCY RATIO (FFDRO)

The average B.C. farm had a 1.76 FFDRO.

### MARINE MAMMAL DEATHS

One farm reported breaching the marine mammal limit. The farm was still able to successfully sell their product as ASC certified twice.<sup>29</sup>

## Transparency: Farm Public Reporting

The accessibility of these metrics varies between companies. Canadian metrics are accessible at the farm site level. Sea lice data for these farms is posted in a timelier manner than that required by DFO.

# ASC AMENDMENTS OF CONCERN

## INTERPRETATIONS

### Intermediary stages omitted from compliance

Intermediary stages of the production cycle, such as B.C.'s early grow-out sites, are never assessed against the ASC Standard. **Up to a year is omitted from compliance with the Standard.** Recently the ASC deemed intermediary stages to be “out of scope”.<sup>30</sup> This ASC interpretation amends the CAR's ‘unit of certification’ definition and contravenes numerous Salmon Standard indicators that rely on data or evidence derived from a full production cycle to demonstrate compliance. Metric counts and data reporting may be false or underreported given that treatments (e.g. antibiotics and sea lice parasiticides) and environmental values from the intermediary stage are not included.

## OPERATIONAL REVIEW

### Parasiticide Treatment Index (PTI) Review

The ASC's proposed revision to the sea lice parasiticide treatment indicator would allow B.C. farms up to four treatments and Atlantic Canada farms up to eight per cycle.<sup>31</sup> The current treatment frequency allowance is 2-3 treatments, thereby, **the amount of parasiticide use allowed under the Standard would increase by: 33%-100% for B.C. and 166%-300% for Atlantic Canada farms.**<sup>32</sup> It would take an Atlantic Canada farm up to 12 years to reach the proposed ‘global target’ metric – defined at four treatments.

In addition, the revision proposes removing lobster impacts from the criterion despite scientific studies demonstrating negative impacts and potential risk to Atlantic lobsters from parasiticides.<sup>33 34 35</sup>

## VARIANCES

21 variances have been approved, with 13 that defer to government regulation instead of the Standard criteria. Reuse of approved variances is common; 145 citations of variances were found in audits. The average Canadian audit cites 3.2 variances (global mean 2.4).

### Common and Problematic Variances

The most problematic variance relates to Standard indicator 3.1.7, which requires farms to maintain on-farm lice levels at 0.1 mature female per fish during and immediately prior to sensitive periods. The variances defer to Department of Fisheries and Oceans' (DFO) Pacific Aquaculture Regulation (PAR) defined three motile *L. salmonis* per fish.<sup>36 37</sup> The variances have been applied to the benefit of all B.C. salmon farms. Audit evidence shows that CABs routinely cite the variance number and the PAR regime, but no compliance with a metric threshold is required and no upper limit on lice per fish is applied. **In practice, farms are treated as exempt from needing to meet a sea lice metric.** Consequently, the variances are undermining the intent of the Standard's sea lice indicator to protect migrating juvenile salmon during their sensitive period (see case study).

Another variance allows B.C. farms an “exception” to the ABM requirement by deferring to the DFO regime,<sup>38</sup> despite the regime not meeting all ABM Standard components and a scientific study that suggested DFO's management regime does not meet ABM principles.<sup>39</sup>

A variance allows a B.C. hatchery to discharge effluent directly into the marine environment without needing to comply with the Standard.<sup>40</sup> The ASC approved the variance, reasoning that the provisions of the Standard with regard to discharge to the marine environment are less than binding.

The ASC approved a variance that allows farms to depart from the Standard and on the basis that Viral Haemorrhagic Septicaemia virus (VHSV) is endemic to B.C. and farms instead follow Canadian authority procedures.<sup>41</sup> ASC's rationale for the exemption of endemic OIE-notifiable diseases from Standard requirements is unclear. Endemic viruses may still pose a risk to vulnerable species.<sup>42</sup>



## CASE STUDY: B.C.'S SEA LICE VARIANCES

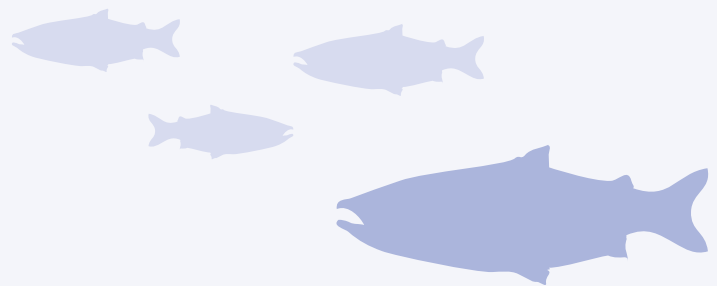
The most routinely applied variances in B.C. farms are the two sea lice variances under Principle 3 of the Standard. These variances replace the ASC Standard's threshold of 0.1 female lice per fish with the DFO Pacific Aquaculture Regulation's (PAR) three motile *L. salmonis* per fish. SeaChoice's What's Behind the Label? report found these sea lice variances enable B.C. farms to be ASC certified.<sup>43</sup>

The variance requests were supported by a literature review commissioned by industry. No stakeholder or other scientific advice was sought by the ASC VR-Committee before their approval.

Farms with sea lice loads up to 10 times the PAR requirement and 149 times the original Standard requirement have been certified.<sup>44</sup> Fifteen B.C. farms have breached the three motile threshold at some point while certified or in assessment. When a Standard criterion is varied, it is logical to expect that farms would need to demonstrate compliance with the varied criterion in order to achieve and maintain ASC certification. In the case of the sea lice variances, however, the interpretation of the variance is also at issue. CABs apply the variances as a "management objective" instead of requiring farms to demonstrate that they maintained lice levels at or below three motile lice per fish throughout the sensitive period.

Despite calls from the accreditation body ASI and from stakeholders, the ASC has yet to clarify to auditors the varied metric threshold to which B.C. farms should be held. After two formal complaints regarding the sea lice variances, **ASI warned ASC that such VRs are "probably putting at risk the program integrity"**.<sup>45</sup> They further recommended, "In case a VR changes the original intent of the Standard it is recommended that this should not be possible without public consultation and stakeholders review".

The impact from salmon farm-derived sea lice on wild salmon populations remains a concern in B.C. For example, one recent analysis based on 15 years of field work modelled a 23 per cent loss to Broughton Archipelago pink salmon population due to 2015 high *L. salmonis* lice loads.<sup>46</sup> Given B.C. certified farms are not held to an absolute maximum sea lice limit, there is the real potential that at least some ASC certified farms are contributing to high lice loads on juvenile salmon. **The intent of the sea lice indicator, to protect vulnerable migrating juvenile salmon from high sea lice loads, is unfulfilled by the approved variances.**



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