

Haarlem, 7th November 2023

Sea Choice

Anderson Cabot Center for Ocean Life
New England Aquarium
Central Wharf, Boston, MA 02110 USA

Subject: Response to the Anderson Cabot Center for Ocean Life at the New England Aquarium

Dear Sea Choice,

Many thanks for taking the time to provide your comments on the GSSI Benchmark Report for the Best Aquaculture Practices Certification System.

GSSI is committed to a transparent benchmark process with opportunity for engagement and comments. Following the consultation, GSSI's detailed response to your comments by component number raised in relation to the GSSI Benchmark of the GLOBALG.A.P. Aquaculture Certification System is set out below.

▪ **Guidelines:**

The response to each of the comments is structured as follows:

1. Description of the component: Essential or Supplementary and the corresponded numeration
2. Text of the Component
3. Submitted Comment
4. Answer from GSSI
5. Conclusion [old part in black] [new part in blue]
6. References [old part in black] [new part in blue]

The answers to the comments and conclusions of the components make use of the GSSI benchmark language, including the following acronyms:

IE: Independent Expert
EC: Essential Component
SC: Supplementary Component
BC: Benchmark Committee
MOCA: Monitoring of Continued Alignment

- **Section A - Governance**

- **Essential Component A.3.05**

The Scheme Owner reviews standards at least every five years for continued relevance and for effectiveness in meeting their stated objectives and, if necessary, revises them in a timely manner.

- **Sea Choice comment**

We submit that BAP is failing to meet its own GSA Standards Development Process. Standard revisions are stated to be conducted at least every four years (1.6 New Standards and Standards Revisions).^[1] The Global Sustainable Seafood Initiative (GSSI) benchmark, for which BAP is currently being reassessed against, requires scheme owners to review standards at least every five years.^[2] It has been seven years since Issue 2 Salmon Farms was published in 2016.

- **GSSI response**

BAP is still in alignment with the GSSI requirement for standards review at least every 5 years. Following Sea Choice's comments, Component A.3.05 remains in alignment and no changes were made. BAP's Standards Oversight Committee has a work program published on their website for all its standards. The effectiveness and continued relevance of standards are discussed during these SOC meetings and Technical Committees are set up as required, and at least every 4 years, to revise the detailed content of individual standards. The BAP Salmon Farm Standard, Issue 2, was indeed published in 2016, and it was benchmarked to GSSI in 2017, and it was subjected to detailed review by the Salmon Farm Technical Committee in a process beginning in 2019. The Salmon Farm Technical Committee is scheduled to release Salmon Farm Standard issue 3 for public comment in Q4 2023 or Q1 of 2024.

Conclusion on GSSI Essential Component A.3.05

Conclusion:

Global Seafood Alliance is in alignment because the review period is defined in the Standards Process Document, Section 1.6 as: "The Standards Oversight Committee works with the TC's to annually review the GSA standards and to make appropriate changes at least every four years."

REFERENCES

1. GSA - Standards Process Document - Issue 3.0 - 25-February-2022

Essential Component A.3.10

The Scheme Owner allows a period of at least 60 days for the submission of comments on the draft standard.

- **Sea Choice comment**

GSA's Standards Development Process also requires a 60-day public comment period for standards and revisions (1.5.1 Development Process, 1.7 GSA Standards Development Process) The last public comment period held for BAP's Salmon Farms standard was Issue 1 in 2011 - 12 years ago. No public comment period was held for Issue 2. This breaches GSSI's requirement of at least 60 days for public comments. Likewise, the FAO Technical Guidelines on Aquaculture Certification^[1] states "before adopting a standard(s), the standards setting body or entity should allow a period of an appropriate duration for the submission of comments on the draft standards by interested parties".

- **GSSI response**

BAP is still in alignment with the GSSI requirement which applies to draft standards. Following Sea Choice's comments, Component A.3.10 remains in alignment and no changes were made.

The draft BAP Salmon Farm Standard (issue 1) underwent a full 60 day public comment period and these comments and responses are published online ([Response to Public Comments on the BAP standards for salmon farming \(bapcertification.org\)](https://www.bapcertification.org)). Salmon Farm Standard, issue 2, was a modified version of this draft that was approved for implementation in 2016 without a public comment period because the Standards Oversight Committee did not deem the changes major. In 2017, the Salmon Farm Standard issue 2 was benchmarked to GSSI and in 2019 the Salmon Farm Technical Committee began a process of detailed technical review to create issue 3 which be subject to the full 60-day public comment period.

Conclusion on GSSI Essential Component C.3.10

Conclusion :

The Scheme Owner has a mechanism in place to assure a minimum of 60 days for comments on major changes of the draft standard.

A Standard is considered to be a set of documents that provide rules and guidelines to achieve results and that include all normative documents used for the certification process. The Scheme owner shall define which documents are part of the standard.

This may include standard governance and setting procedures, requirements for certification bodies and certified entities

Examples of evidence for scheme alignment:

- internal procedure/quality handbook defining public comment period, what are considered major changes and what constitutes the standard
- ToR

Review previous comments and dates for submission on draft standards.

REFERENCES

2. GSA - Standards Process Document - Issue 3.0 - 25-February-2022
3. Capture farm screenshot:
An example of an announcement made regarding the public comment period of the Farm Std
4. Hatchey 2.0 - PC BAP Website screenshot

- **Section B – Scheme Management**

Essential Component B.2.09

The Scheme Owner requires that certification bodies have in place consistent procedures for stakeholders to provide input during the certification process.

- **Sea Choice comment**

Strongly disagree. There is NO requirement or opportunity civil society stakeholders to engage in the audit process. SeaChoice has actively called for BAP to adopt a stakeholder consultation process during audits. See: <https://www.seachoice.org/wp-content/uploads/2021/05/Accountability-in-Seafood-Sustainability.pdf>
<https://www.seachoice.org/wp-content/uploads/2021/05/BAP-Summary.pdf>

- **GSSI response**

BAP is still in alignment with the GSSI requirement which applies to draft standards. Following Sea Choice's comments, Component B.2.09 remains in alignment and no changes were made.

GSSI specifically requires schemes to have procedures for Certification Bodies to take in stakeholder feedback during the certification process at-large, which GSA remains compliant against. The components of the certification process include the audit against the standard. It also includes many other integral components, such as CB and auditor management/calibration, pre-audit application and preparation, post-audit CB closeout and reviews, and also ongoing certification maintenance and controls by both the scheme owner and the certification body. As described via GSSI above, BAP salmon farm standard provides a variety of mechanisms for stakeholder input throughout the certification process, which does include direct guidance on stakeholder engagement specifically during the audit process as well. Civil society stakeholders have multiple opportunities to provide input in the certification process, as described above.

Conclusion on GSSI Essential Component B.2.09

Conclusion :

Global Seafood Alliance is in alignment because requirements for stakeholder consultation are detailed in the standards themselves so that information is recorded in every audit report. See, for example, the requirements in the BAP Farm Std that relate to consultations with members of the community and with employees. The implementation guidelines for Section 2 B (Local Community Relations, on page 19) specify: "During farm visit, the auditor shall verify compliance with this standard through examination of maps that define public and private zones; inspection of fences, canals and other barriers; and interviews with local people and farm workers. The auditor shall select the individuals for interview. This selection can include, but not be limited to, interviewees provided by farm management. "

The process of auditing to BAP standards also represents a consistent procedure for direct stakeholders (employees, facility owners, managers and technicians) to provide input throughout the entire audit process.

Stakeholder input is requested during the audit in alignment with GSSI guidance, but it also must be considered at anytime by the Certification Body or GSA, when it receives challenges to certification through an official appeal or complaint process.

REFERENCES

1. PI - Standard - Farm Standard - Issue 3.0 - 01-March-2021-GSA

Essential Component B.2.14

For aquaculture, the Scheme Owner requires certification bodies to make summary audit reports publicly available (excluding commercially sensitive information) after certification has been granted.

- **Sea Choice comment**

Publicly available is not the same as "upon request". Audit reports should be made available on the website.

- **GSSI response**

BAP is still in alignment with the GSSI requirement which applies to draft standards. Following Sea Choice's comments, Component B.2.14 remains in alignment and no changes were made.

All GSSI Benchmarked Summary Audit Reports are made freely available to any member of the public upon request. BAP has no paywall, log-in, membership fees or barriers of any kind, which is in line with common legal definitions.

Conclusion on GSSI Essential Component B.2.14

Conclusion :

Global Seafood Alliance is in alignment because the Agreement with CBs includes the requirement, page 15: "CERTIFICATION BODY shall make summary audit reports for farms available to BAP once certification has been granted, to be made publicly available on the BAP website, upon request. These summary reports shall exclude commercially sensitive information. Such summary reports shall include: the name and address of the farm, the certification number, a statement that the farm is in compliance with all of the requirements of the BAP standard (state the relevant BAP standard), that all non-conformities were resolved prior to certification, the date of the audit, and the name of the CB and auditor."

REFERENCES

2. GMT - 2021 CBA GSA CB Agreement NSF FINAL SIGNED Corrected 20211209

- **Section C – Salmon Standard**

Essential Component C.5.01

For cage production systems, the standard requires appropriate management measures for preventing excessive impacts of aquaculture facility waste on benthic environments, including impacts of a biological, chemical or physical nature.

- **Sea Choice comment**

Deferring to local regulations that are inadequate. For example BAP certified Macquarie Harbour farms defer to BEMP Licence Conditions that have been found to be "narrowly defined" and "not adequate" by scientists to protect

the health of the harbour or endangered Maugean skate. No peak monitoring. NO sampling. Only visual impacts at 35 meters required. These BAP indicators are not strong enough as they rely on local regulations which in the cause of Macquarie Harbour have caused the Maugean Skate to decline.

<http://www.environment.gov.au/biodiversity/threatened/species/pubs/83504-conservation-advice-06092023.pdf>

- **GSSI response**

Following Sea Choice's comments, Component C.5.01 remains in alignment and no changes have been made. BAP 4.1, 4.2 and 4.7 require compliance with local regulatory standards where they include a metric "trigger" threshold - with conformance to be determined on at least 3 years of monitoring data. Farms lacking sufficient monitoring data must commission of an independent environmental impact assessment - with compliance to be determined by the assessor (4.3)

Alternatively, farms in jurisdictions lacking regulation referred to in BAP4.1 - must design and implement to their own benthic monitoring plan. Monitoring is required at 'peak feeding under BAP 4.5.

Conclusion on GSSI Essential Component C.5.01

Conclusion:

The BAP scheme is in alignment for cages in marine environments because the BAP Salmon Farm Standards - Issue 2 Revision 3 - includes the following clauses:

BAP 4.1: The applicant shall provide documents that describe local standards for benthic impacts under salmon farms, which shall include the benthic indicator "trigger level" above which the farm would not be in full compliance with the local standard, where this is clearly defined, or with its intent where it is not clearly defined.

BAP 4.2: For established farms, the applicant shall provide three years of monitoring data to show that the farm meets or exceeds sediment and water quality criteria specified in 4.1, its operating permits and/or its own monitoring plan at current operating levels.

BAP 4.3: For newly established farms, or farms that have expanded and do not yet have enough monitoring data, the applicant shall provide an independent study that characterizes the hydrographic and benthic characteristics of the area and provides a consultant's opinion (without liability) that the farm can meet or exceed sediment and water quality criteria if operated correctly. This opinion shall be verified by reference to sampling results at the next audit.

BAP 4.4: For farms in countries where sediment monitoring is not required and/or a sediment impact zone is not defined as a condition of the farms' operating permits, the applicant shall write and implement a monitoring plan consistent with the provisions under Implementation above.

BAP 4.5: Monitoring of sediment conditions shall be undertaken at the time of peak feeding during the production cycle and shall be conducted according to the requirements of the farm's operating permits or its own plan in countries or regions where sediment monitoring is not required, and as specified in the implementation requirements.

BAP 4.6: Sediment sampling and analysis performed as part of the monitoring program shall be conducted according to methods generally accepted for such use in the region in which production is occurring.

BAP 4.7: The results of sediment monitoring shall be reported to and approved by the appropriate regulators. Where regulatory approval is conditional upon implementing a program of remedial action, this shall have been implemented and completed to show compliance with 4.1.

BAP 4.8: Data that will enable the farm's feed-based carbon and nitrogen discharges to be calculated shall be collected and recorded, and may be required to be submitted to the BAP database for future use in BAP-sponsored research.

BAP 4.9: Production cycles, fallowing and nutrient monitoring shall be coordinated with the other neighboring BAP applicants or certified farms, or with members of an established AMA.

REFERENCES

1. PI - Standard - Salmon Farm - Issue 2.3 - 13-October-2016-GSA

Essential Component C.8.03

The standard requires, where appropriate, management measures for effluents in order to reduce adverse impacts on the water quality of water bodies receiving effluents. Monitoring of the systems effluents against appropriate criteria is required.

■ Sea Choice comment

There is no effluent monitoring against APPROPRIATE criteria under BAP. GSA is failing to meet this GSSI framework requirement: "Monitoring of the systems effluents against appropriate criteria is required" With appropriate measures expected including:

i) Nutrients - Nitrate/Nitrogen (impacts on seawater) ii) Nutrients - Phosphate/Phosphorous (impacts on freshwater) iii) Dissolved oxygen iv) Salinity v) Suspended Solids vi) pH. Instead, GSA is relying on local standards (i.e. local regulations). The BAP Salmon Farms Standard (4. Environment: Sediment and Water Quality) defers to local regulations instead. For example BAP certified Macquarie Harbour farms defer to BEMP Licence Conditions that have been found to be "narrowly defined" and "not adequate" by scientists to protect the health of the harbour or endangered Maugean skate. BAP has no measurements or limits are defined for DO, phosphates and ammonia. There are no measures or limits for nitrogen in indicators 4.1-4.9 and defer to the "local standard". Section 9 Under Animal Welfare a Water Quality Management Plan is required - again with no measurements or limits. In practice, scientific evidence has found BAP farms are contributing to the degradation of Macquarie Harbour meaning the BAP standard is failing for this criteria. Here is how:

- Macquarie Harbour is naturally low in dissolved oxygen, however since 2009 water quality has crashed particularly in the mid to bottom waters (5-15m; 15-30m) where the endangered Maugean skate, and its eggs, are found.
- The science is conclusive that the expansion of salmon farming since 2009 has contributed to low dissolved oxygen levels, particularly in the mid to bottom waters causing hypoxia.
- The bottom hypoxic (low oxygen) waters can be displaced through the water column into the Maugean skate's habitat during oceanic storms. In 2019, such a weather event resulted in half the skate population suffocating.
- The BAP standard fails to capture the impact salmon farms are having on the harbour's dissolved oxygen levels. The standard has no dissolved oxygen performance metrics. Instead, the BAP standard defers to "local standards".
- Local standards, aka the Macquarie Harbour Broadscale Environmental Monitoring Program (BEMP) Licence Conditions, have been found "not to be adequate as environmental standards to monitor and protect the environmental health of MH..."

Of note, there is only a single limit for oxygen at 2m depth. An oxygen limit for bottom and mid waters is strongly

recommended to ensure the adequate protection of the flora and fauna of MH”.

- BAP certified farms are considered in compliance with these “inadequate” local standards.
- Despite no oxygen limit for bottom and mid waters in the Licence Conditions, oxygen profiles taken by the BEMP (and other studies such as CSIRO Sense-T and EPA water quality monitoring) have found low dissolved oxygen levels in mid to bottom waters due to nutrient loads from salmon and ocean trout farms.
- Consequently “adequate protection” for the skate is not happening under the local standard or BAP Standard. Negative impacts to the endangered skate’s habitat are occurring (as described by the scientific studies) but these impacts are not looked for under the current MH BEMP Licence Conditions and, thus, go undetected and unpenalized.

■ **GSSI response**

Following Sea Choice’s comments, Component C8. 03 remains in alignment and no changes were made. The BAP Salmon Standard addresses (interlinked) benthic and water quality impacts under a suite of overlapping indicators (4.1 - 4.9). Consequently the shortcomings identified against EC 5.01 can also be applied to the standards treatment water quality - specifically the arguable over reliance on regulatory requirements.

The comment also notes there is also a contingent lack of defined key eutrophication pressure and impact indicators or maximum reference points (as per EC guidance) within the Standard.

The comment also cites the MH case study as a justification for internal requirements of this kind. However at issue here is not the failure of MH regulation. This a complex system for which more normative scientific models (of the kind likely to be adapted in voluntary standards) have proved inadequate - consequently regulation has been progressively adapted based on empirical evidence.

Rather greater specification is needed within voluntary standards, primarily to address situations where there are more fundamental deficits in regulatory standards or their implementation.

Conclusion on GSSI Essential Component C.8.03

Conclusion:

The BAP scheme is in alignment because Section 4 of the BAP Salmon Farm Standards - Issue 2 Revision 3 - addresses Sediment and Water Quality:

"Farms shall be located and operated in such a way that they minimize negative impacts on sediment quality outside a defined sediment impact zone, or on water quality within the general vicinity of the farm."

The scheme also includes the following specific clauses:

BAP 4.2: For established farms, the applicant shall provide three years of monitoring data to show that the farm meets or exceeds sediment and water quality criteria specified in 4.1, its operating permits and/or its own monitoring plan at current operating levels.

BAP 4.3: For newly established farms, or farms that have expanded and do not yet have enough monitoring data, the applicant shall provide an independent study that characterizes the hydrographic and benthic characteristics of the area and provides a consultant’s opinion (without liability) that the farm can meet or exceed sediment and water quality criteria if operated correctly. This opinion shall be verified by reference to sampling results at the next audit.

Section 9 states that the farm shall have a written Water Quality Management Plan that includes:

- Frequent or continuous monitoring of dissolved oxygen concentration and at least daily monitoring of water temperature and salinity.
- Monitoring for other aspects of water quality that may affect fish in the vicinity of the farm, including seasonal occurrences such as phytoplankton blooms.
- Training of staff on measuring temperature, dissolved oxygen and, where relevant, concentrations of harmful phytoplankton.
- A list of practical mitigation measures that can be used in the event of water quality problems, as well as available equipment and trained staff to deploy them rapidly.
- Provision for equipment to maintain and monitor dissolved- oxygen levels at 80 to 100 percent of saturation during live fish transport.

BAP 9.4: Where weather conditions allow, trained staff shall make at least daily inspections and reports on the culture facility, water quality, and behavior and condition of fish.

BAP 9.5: Staff status reports on the facility, water quality and fish conditions shall be documented, investigated and addressed by the fish health professional and/or farm management.

REFERENCES

1. PI - Standard - Salmon Farm - Issue 2.3 - 13-October-2016-GSA