

GLOBAL BENCHMARK TOOL GSSI Benchmark Report

Scheme: Best Aquaculture Practices

Scope: BAP Farm Standard (version 3.1, 2021), Salmon Farms Standard (version 2.4, 2016), Mollusk Farms Standard (version 1.2, 2021)

Date: 7th November 2023

STATEMENT OF RECOGNITION

Scheme	Best Aquaculture Practices
Scope	BAP Farm Standard (version 3.1, 2021), Salmon Farms Standard (version 2.4, 2016), Mollusk Farms Standard (version 1.2, 2021)
Date	7 th November 2023

The Global Sustainable Seafood Initiative (GSSI) Steering Board recognizes Best Aquaculture Practices (BAP) to be in alignment with all applicable essential components of:

A Section A. Governance of Seafood Certification Schemes

B Section B. Operational Management of Seafood Certification Schemes

C Section C. Aquaculture Certification Standards

D Section D. Fisheries Certification Standards

Thereby, GSSI considers the above seafood certification scheme to be in alignment with the FAO Guidelines for the Ecolabelling of Fish and Fishery Products from Marine/Inland Capture Fisheries.

This Report lists evidence of alignment with applicable GSSI Essential Components and GSSI Supplementary Components, where implemented.

STATEMENT OF RECOGNITION PAGE 2

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Section D. Fisheries Certification Standards.....Error! Bookmark not defined.

D.1 Evidence of Alignment

SCHEME OVERVIEW

Scheme name	Best Aquaculture Practices
Standard	BAP Farm Standard (version 3.1, 2021), Salmon Farms Standard (version 2.4, 2016), Mollusk Farms Standard (version 1.2, 2021)
Headquarters location	New Hampshire, the United States

SCHEME OVERVIEW PAGE 4

FROM APPLICATION TO RECOGNITION

	1 ↓	Application Received	The Benchmark Process begins once a Scheme Owner decides to apply for recognition and contacts the Secretariat, who provides an overview of the process.
797	2 ↓	Desktop Review	This step helps to assess the Scheme Owner's capability to proceed and successfully complete the Benchmark Process within the expected timeframe.
ķ īģ	3 ↓	Office Visit	The Office Visit may be conducted by the Process IE or both IEs, depending on the outstanding issues of the Desktop Review.
	4 ↓	Benchmark Committee Meeting	The Benchmark Committee acts as the 'Quality Assurance' for the work undertaken by the IE team in the Desktop Review and Office Visit.
#†† ††††† †††††	5 ↓	Public Consultation	If recognition is recommended by the Benchmark Committee, the Scheme Owner's approval is required to publish the Benchmark Report for a four-week Public Consultation.
	6 ↓	Recognition Decision by Steering Board	The Steering Board is briefed by the Steering Board Liaison on the Benchmark Report and the Benchmark Committee's recommendation for recognition.
	7	Monitoring of Continued Alignment	GSSI ensures continued alignment of recognized schemes with GSSI Essential Components through an annual reporting process of relevant changes.

Read more about the steps to recognition <u>here</u>.

FROM APPLICATION TO RECOGNITION PAGE 5

WHO IS INVOLVED



Scheme Representative Dan Lee and David Yunker



Independent Expert (Process)

Osires de Melo



Independent
Expert (Technical)

Francis Murray



Steering Board Liaison

Adriana Sanchez



GSSI Secretariat Representative

Georgia Armitage



Steering Board Members Sonia Cordera
Han Han
Ingrid Kelling
Jason Clay
Laurent Develle
Nianjun Shen
Trent Hartill
Marcelo Hidalgo
Judy Panayos
Adriana Sanchez
Jennifer Kemmerly

Angel Matamoro Irago

Annika Mackensen



Benchmark Committee Members Josanna Busby Josie Foster Nigel Peacock

WHO IS INVOLVED PAGE 6

EVIDENCE OF ALIGNMENT

A	Section A. Governance of Seafood Certification Schemes	
В	Section B. Operational Management of Seafood Certification Schemes	
C	Section C. Aquaculture Certification Standards	
D	Section D. Fisheries Certification Standards	

EVIDENCE OF ALIGNMENT PAGE 7

SECTION A.
GOVERNANCE OF
SEAFOOD
CERTIFICATION
SCHEMES

A.1.01 Legal Status	A.1.01 Legal Status			
GSSI Component	Guidance			
The Scheme Owner is a legal entity, or	, , , , , , , , , , , , , , , , , , , ,			
an organization	Examples of evidence for scheme alignment:			
that is a partnership	- an official document showing registration with legal authorities			
of legal entities, or a government or	and current legal status of organization. Examples include incorporation papers, statutes, business licenses and registration with tax authorities.			
inter-governmental agency.				
	Pre-application to require scheme to identify legal registered entity or lea	d government agency/department.		
Conclusion		References		
Scheme owner is in a	lignment because the legal entity is registered with the Secretary of state	2022 GSA Commercial Insurance Package		
in Delaware , and certified copy of Articles of incorporation and IRS Tax exempt status were Policy				
submitted for desktop review (not publicly available) • Insurance, Articles & GSA Bylaws				

A.1.02 Impartiality		
GSSI Component Guidance		
The Scheme Owner is not Scheme Owner is not directly engaged in auditing, certification or accreditation activities in order to		
directly engaged in the	freedom of commercial or financial pressure of assurance processes and decision making.	
operational affairs	This does not include complaint resolution or performance reviews.	

A.1.02 Impartiality (auditing or certification)

of the certification or accreditation program.

Examples of evidence for scheme alignment:

- impartiality policy, impartiality clauses in certification body and accreditation body contracts, management control procedures

Conclusion

The scheme GSA is in alignment because the scheme rules and regulations relating to certification bodies and accreditation clearly lay out the separate roles. Documents provided. As an independent verification of the validity of these arrangements, please note that in 2008, GSA restructured their Standards and Certification Management to validate that they met the requirements of ISO 65 (now updated to 17065) and the benchmarking requirement of the Global Food Safety Initiative. This process was completed in 2009 and further enhancements made in 2012 in line with the requirements for GFSI v.6. The GFSI requirements regarding the independence of the scheme owner, the auditors and the accreditation body are detailed and strict and GAA compliance is recognized on the GFSI website.

References

- AGMT 2021 DRAFT CBA GSA CB
 Agreement Template DRAFT 0308
 2022
 - Agreement GSA CBA, Conflict of Interest, Conflict of Interest Declaration

A.1.03 Operating Procedures

GSSI Component	Guidance
The Scheme Owner operates to a documented set of governance policies	The Scheme Owner has policies/procedures available covering all
and procedures specifying at least the following:	aspects in this Essential Component except Member categories if
- Board or governance body election or appointment process,	not applicable.
- Process to facilitate participation of stakeholders	
- Board or governance body representation and Terms of Reference,	Examples of evidence for scheme alignment:
- Member categories (where applicable).	

A.1.03 Operating Procedures

- Income generation or funding processes,
- An organizational structure,
- The decision making processes of each governance body,
- Key personnel roles (responsibility and authority),
- Managing conflict of interest, and
- quality assurance program.

- statutes and by-laws, organizational chart, internal procedures, job descriptions, conflict of interest statements, quality assurance procedures or manual.
- online process document for submission of input, governance body selection process and stakeholder composition, review of previous stakeholder inputs and verify if/how this reached top governance.

Conclusion The Scheme owner is in alignment because is The BAP Scheme is governed by the Standards Oversight Committee (SOC). The SOC selection and appointment process is defined in Best Aquaculture Practices Standards GSA Byelaws GSA Byelaws; GSA Development: Committee Selection, Duties, Functions, within the BAP Standards Development Process document, which is freely downloadable. The BAP Process Document defines: the ToR of the committee members; the rules for obtaining broad stakeholder representation in 3 member categories (eNGOs; industry; academia); the organizational structure; the decision making process; key personnel roles. Conflict of interest is addressed by a separate policy document and disclosure form. The GSA Board of Directors are listed on the website. As are the members of the oversite committee. The GSA Board operates under a set of Bylaws

A.1.04 Transparency		
GSSI Component	Guidance	
The Scheme Owner makes information freely	All applicable listed governance documents are easily accessible online, free or at cost of any	
available about the scheme's ownership,	printing and handling costs.	
governance structure, the composition,		
operating procedures and responsibilities of its	Examples of evidence for scheme alignment:	

A.1.04 Transparency				
governance bodies, standard-setting - applicable documents posted on website, easy to find and free to down procedures and standards.		nload.		
Conclusion		References		
The scheme owner is in alignment because the Bagoverning board (Standards Oversight Committee Document covers the procedures relevant to the information on the GSA board; lists the board me	• <u>Program</u> <u>Integrity page</u>			

A.1.05 Scheme Scheme	ope		
GSSI Component	Guidance	nce	
The Scheme Owner has a defined scope for certification under its standard. Examples of cexplicit sco		Owner clearly defines the scope that the standard covers, for example which species, production systems/gear phical locations, company structures (single units, sites/boats, smallholder groups/small-scale fisheries, subcontractors, product categories, certifiable units in custody etc.). evidence for scheme alignment: pe definition in standards, certification methodology/requirements, objectives. vith accreditation bodies, certification bodies and/or certified operations	
Conclusion		References	
The scheme owner alignment because each standard is cle out in the opening p	the scope of early spelled	 Farm 3.0 Scope Image Farm 3.0 Scope Image; Farm Standard; Salmon Farm Standard; Mollusk Farm Standard; Screen Capture PI Page; Salmon Scope Image 	

A.1.06 Scheme Objectives				
GSSI Component	SSI Component Guidance			
The Scheme Owner has defined objectives covered in the standards; this would normally be for example fish populations, habitats and ecosystems, water, possibly energy endangered species and biodiversity within the impact zone. Indirect use of resources for e.g. feed production may be addressed. For each objective and associated resources, performance publicly available.		s, water, possibly energy, feed production may also		
	indicators related to Examples of evidence for scheme alignment:			
scheme objectives.	- standard document with objectives and thresholds.			
Conclusion	Conclusion References			
The scheme owner is in alignment because the objective of the scheme is stated within the mission of GSA on the 'about GSA' page under "our mission" Progress with the overall objective is addressed in the GSA Annual Report. • GSA Annual Report. • GSA Mission				

A.1.07 Non-Discrimination		
GSSI Component	Guidance	
The Scheme Owner ensures that all	The Scheme Owner application process ensures equal access within the defined standard scope	
types of fishery/aquaculture operations	whether directly, sub-contractors or outsourcing (i.e. to certification body).	
within the scope of its scheme can apply		
for certification, regardless of their scale,	Examples of evidence for scheme alignment:	

A.1.07 Non-Discrimination

size or management arrangements, and has not set an upper limit on the number of operations that can be certified.

- application process selection criteria do not discriminate on factors such as size, scale, management, minimum number of operators.
- review declined applications are due to other non-discriminatory issues (i.e. incomplete, out of scope)

Conclusion

The scheme owner is in alignment because application procedures and forms are available online, freely downloadable. There are no limits to the number of applicants. There are no limits that relate to the size, scale or management arrangements of the farms. BAP Management initially handles the applications rather than the Certification Bodies so that consistent treatment is assured. Applications that do not go forward are due to the facility themselves not completing them or deciding not to make the investment for certification.

References

 BAP Website – open invitation to applicants

A.1.08 Non-Discrimination

GSSI Component

The Scheme Owner does not have mandatory requirements that require a fishery / aquaculture operation to be certified in order to access any markets.

Guidance

Application selection process and certification methodology/ requirements do not include mandatory requirements for access to markets.

Absence of such requirements indicates alignment.

Conclusion

The scheme owner is in alignment because the BAP Program is a voluntary program. It is not mandatory for market access. The standards amount to a buyer specification and by providing farm assurance they serve to facilitate international trade rather than to hinder it. The BAP Program states (in the BAP Process document, page 2) that it is voluntary and committed to meeting the FAO Technical Guidelines on Aquaculture Certification and these explicitly require adherence to WTO SPS criteria that prohibit standards that act as trade barriers.

References

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

A109 Internal Review			
GSSI Component	Guidance		
review of scheme performance, including its assurance program, and the performance of certification and accreditation bodies. The results of the bodies and certification		and documented management review that ance, assurance program, accreditation bodies as applicable. A documented s of the review to revise operating s is available.	
Conclusion		References	
The scheme owner is in alignment because management review meetings are conducted throughout the year involving staff as appropriate to the topic(s). Reviews at the executive level (Board of Directors) occur twice per year in Boston and at the GSA GOAL conference. Management review documents are created.		 2021 Annual Management Review; GSA Annual Internal Management Review 	

A201 Logo Use and Claims		
GSSI Component	Guidance	
The Scheme Owner has a publicly available policy governing use of symbols, logos and claims.	Scheme Owner has a policy that covers use of symbols, logos and claims if applicable to its system. The policy is public, easily accessible and available in languages appropriate to geographic scope.	
This policy includes the provision of written authorizations or licenses to use the scheme's	Contracts or formal agreements with the certified entity specify legal responsibility for scheme's mark/claim/logo only when the facility and/or product are certified.	the use of the
mark/claim/logo only when the	Examples of evidence for scheme alignment:	
facility and products have been certified to the relevant standard.	- publicly available Logo Use and Claim statement which is explicitly referenced in formal arrangement with certified entity.	
Any misleading use or statement by the certified entity regarding the status or scope of its certification, shall be prohibited.	 other examples include: direct logo agreements, licensing or membership agreement Owner or its commercial partner or indirect contracts/agreements through the certific in the latter case the requirements to include this in contracts/ agreements should be certification requirements/ methodologies or similar contract/agreement between the the certification body. 	cation body. e outlined in
Conclusion		References
The scheme owner is in alignment because logo policy, usage rules and claims are detailed in a policy document on the Program Integrity tab of the BAP website. https://www.bapcertification.org/Downloadables/pdf/BAP%20- %20BAP%20Logo%20Use%20Requirements%20-%20Issue%202.5%20-%2001-April-2022.pdf • BAP - Policy - BAP Logo Use Requirements		•

A.2.02 Logo Use and Claims		
GSSI Component	Guidance	
Through the claims policy, the Scheme Owner ensures copyright is protected and that symbols, logos and claims are only applied to activities that are within the scope of certification, do not overstate or mislead users relative to the defined scope, and are	Claims policy (see A.2.01), contracts and MoUs ensure that logo use and claims are copyright protected and are restricted to activities within the scope of certification. This includes symbols, logos and claims on and off product, such as marketing materials, consumer brochures and the internet. Examples of evidence for scheme alignment: - legal registration of logos and seals with applicable agents. - claims policy covers clear scope for on and off product use, claims and statements including policy for misuse. - contractual relationships specify explicitly adherence to claims policy.	
relevant to that scope.	- records of applications for use of claims, records of complaints or violations.	
Conclusion		References
The scheme owner is in alignment because a consistent claims policy is applied throughout the BAP program as specified in the logo use requirements document and the agreement signed between BAP and the certified facilities.		 CBA GSA Agreement; BAP - Agreement - Facility Agreement

A.2.03 Logo Use and Claims		
GSSI Component	Guidance	
The Scheme Owner requires certificates to include, at a	The issuer of the certificate ensures that minimum information enables	
minimum:	identification and contact information of assurance process parties (accreditation	
- the identification of the Scheme Owner;		

A.2.03 Logo Use and Claims - identification of the accreditation body; body, Scheme Owner and certification body), unique name and address of certified - the name and address of the certification body; entity, date and validity, scope and signature of issuing officer. - the name and address of the certification holder; - the effective date of issue of the certificate: Examples of evidence for scheme alignment: - mandatory normative documents such as certification - scope of certification - the term for which the certification is valid; requirements/methodologies with certification bodies that cover all points listed. - signature of the issuing officer. - mandatory certificate template includes all points listed. - review examples of certificates. Conclusion References The scheme owner is in alignment because these minimum requirements are spelled out in the CB • BAP - CB Requirements Requirements Document, Section 4.12 **Document**

A.2.04 Logo Use and Claims		
GSSI Component	Guidance	
Where a seafood ingredient can be	The Scheme Owner specifies minimum percentages for use of logo and claims in mixed products. This	
certified, the Scheme Owner	states that at least 95% of the total seafood ingredient that can be certified, for unqualified claims and for	
requires that at least 95% of the	lower percentages, a qualifying statement of the percentage must be used in conjunction with the logo or	
total seafood ingredient within a	claim.	
product is of certified origin in order		
for the scheme's logo or	Examples of evidence for scheme alignment:	
certification mark to be used.	- normative documents such as scope definition, certification requirements/ methodologies or other	
Where there	agreements between the Scheme Owner and certification body that define these percentage claims.	

A.2.04 Logo Use and Claims

is less than 95%, the scheme requires that the percentage must be stated and the logo or certification mark cannot be used.

- logo use and claims policy which is explicitly referenced in formal contracts and agreements with certification bodies and/or certified entities.
- review examples of issued certificates where these are public or product information in online databases of certified products where these are available.
- if the Scheme Owner does not allow mixed product, then this Essential Component is aligned.

Conclusion		Refer	rences
The scheme owner is in alignment because the logo use rules, page 18, specify that 100% of product must		•	BAP - Policy - BAP Logo Use
be from certified sources if the logo is to be used			Requirements

A.3 EVIDENCE OF ALIGNMENT

A.3.01 Standard Setting Body

GSSI Component

The Scheme Owner shall have a process and governance structure in place for standard setting, reviewing, revising, assessing, verifying and approving.

The process shall be carried out with the participation of technically competent persons (e.g. independent experts, and open to suitably qualified representatives of all key stakeholders).

The information about the process and organization for standard development and revision shall be made publicly available. It is the Scheme Owners responsibility to ensure a balanced participation by stakeholders.

Guidance

The Scheme Owner clearly identifies the responsible person for assigning the management of the standard setting process. In addition, the procedure, organizational chart or related TORs/contracts with external bodies identifies where each of the tasks (setting, reviewing, revising, assessing, verifying and approving standards) are assigned to. This documentation clearly indicates where the overall responsibility for the standard setting process lies. Procedures defining the process of standard development and revision are easily available for the public, such as online, in appropriate languages.

Conclusion

The scheme owner is in alignment because the standard setting process, the roles of the technical committees and the Standards Oversight Committee are clearly defined on the website and in the BAP Process Document

References

GSA - Standards Process
 Document

A.3.02 Standard Setting Body		
GSSI Component	Guidance	
The Scheme Owner identifies a central point of contact for standards-related enquiries and for submission of comments. The Scheme Owner makes contact information for this contact point readily available on its website.	Contact details for standard related enquiries and comments are easily available for the public, including online. This can be the same as a general contact point, but should explicitly identify standard related scope. Examples of evidence for scheme alignment: - review website and verify that point of contact responds to enquiries. - review past enquiries and submitted comments	
Conclusion		References
The scheme owner is in alignment because this contact point (The Standards Coordinator) is defined in the BAP Standards Process Document and because the website includes the details of the contact point and a link.		 Screenshot showing BAP Standards Coordinator as contact point Standards Point of Contact Screenshot; GSA Standards Process Document

A.3.03 Decision Making Process		
GSSI Component	Guidance	
The Scheme Owner strives for consensus	A mechanism is in place to assure a consensus decision is found where possible. In addition, the	
decisions on the content of the	mechanism describes how decisions shall be made when a consensus is not possible. The	
standard.	mechanism assures that stakeholders are informed about this mechanism.	
Where consensus cannot be achieved,		
the Scheme Owner defines criteria in	Examples of evidence for scheme alignment:	
advance to determine when alternative	- internal procedures and/or quality handbook for standard setting and maintenance outlines	
decision-making procedures should	decision making.	

come into effect and what the decision-	- meeting minutes/email correspondence.		
making thresholds will be.	Standard setting archives and draft standards and meeting minutes could verify that this mechanism		
	was implemented during previous decision-making.		
Conclusion		References	
The scheme owner is in alignment because the procedures for attaining consensus decisions within the		GSA - Standards Development	
Technical Committees and the Standards Oversight Committee are detailed in the BAP Process		Process - Issue 3.1 - XX-October-	
Document.		2022	
		GSA - Standards Process	
New wording inserted into the BAP Process Document:		Document	
"If a consensus cannot be achieved among the committee the Technical Committee shall vote			
on approval of this draft by at least 75% of a quorum of 60% or more of the committee membership."			

A.3.04 Complaints	
GSSI Component	Guidance
The Scheme Owner has a transparent process to assess and handle complaints based on a publicly available procedure for resolving complaints related to governance,	Complaints procedure is documented and clearly outlines steps, timelines and responsibilities to address and resolve complaints. The process for submitting a complaint - how and to whom - is public and easily understood. A process is in place to identify when and if the complaint is addressed and resolved.
scheme management, executive functions and standard setting. Decisions taken on complaints are disclosed at least to the affected parties.	Examples of evidence for scheme alignment: - easily found complaint process and submission form online documentation of existing complaints and their resolution possibly request accreditation and certification bodies for previous submissions of complaints and resolution request and cross check with any complaints from stakeholders.

A.3.04 Complaints	
Conclusion	References
The scheme owner is in alignment because they have a publicly available procedure for	Complaints File; GSA Complaint Intake; GSA
handling complaints, appeals and disputes.	Complaints, Appeals and Disputes

GSSI Component	Guidance	
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.	The Scheme Owner has a process in place for reviewing all standards to ensure continued relevance and meeting stated objectives. Relevance can include market uptake, stakeholder scope and support. Outcome and assessment reports can identify progress towards objectives. Review should be at least every five years after the publication of the current version. Example of evidence of alignment:	
	- internal procedure, quality handbook, public work program.	
	- monitoring and evaluation system.	
	- public comments and consideration of reports for standard revisions.	
Conclusion		References
The scheme owner is in alignment because the review period is defined in the Standards Process		GSA - 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		Document
appropriate changes at least every four years."		

A.3.06 Standards Review and Revision			
GSSI Component	Guidance		
The Scheme Owner	The Scheme Owner has a permanent publicly available point of contact defined online for the submission of comments		
allows for comments	on the standard. This is not just during the development or revision process.		
on the standard to be	A general point of contact online is acceptable for small schemes, as long as it explicitly states that all stakeholders can		
submitted by any	submit comments on the standard at any time. All comments on standards are considered in subsequent revision		
interested party at	process.		
any time and			
considers them	Examples of evidence for scheme alignment:		
during the	- scheme's website with form for submitting comments on standards.		
subsequent	- internal procedure, quality handbook describing the receiving, filing and incorporation of submissions during the		
standards revision	subsequent		
process.	revision process.		
	Review ongoing submissions by interested parties on file.		
Conclusion	Ref	erences	
The scheme owner is in	The scheme owner is in alignment because a transparent public comment process is adhered to • Public Comment Screenshot		
with all public comments posted with responses. https://www.bapcertification.org/Standards			

A.3.07 Record Keeping	
GSSI Component	Guidance

A.3.07 Record Keeping

The Scheme Owner keeps on file for a period of at least one full standards revision the following records related to each standard development or revision process:

- policies and procedures guiding the standard setting activity;
- lists of stakeholders contacted;
- interested parties involved at each stage of the process;
- comments received and a synopsis of how those comments were taken into account; and
- all drafts and final versions of the standard.

The Scheme Owner has a mechanism is in place to assure all records outlined remain on file for at least one full standards revision period.

Examples of evidence for scheme alignment:

- internal procedure, quality handbook describing records to be kept, document and retention policy.

Povious the full range of records for the most provious standard.

Review the full range of records for the most previous standard development and revision process.

Conclusion References

The scheme owner is in alignment because there is a defined document control procedure and because all public comments are logged and responded to (please refer to A3.06).

 GSA Document Management and Control

A.3.08 Participation and Consultation

GSSI Component

At the outset of a standard development or revision process, the Scheme Owner makes publicly available a summary of the process that includes:

- contact information and information on how to contribute to the consultation;
- summary of the terms of reference for the standard, including the proposed scope, objectives and justification of the need for the standard;
- steps in the standard-setting process, including timelines and clearly identified opportunities for contributing; and

Guidance

The Scheme Owner has a mechanism in place assuring that a summary of the process is made easily available for the public online at the outset of the process. This includes Who and How to contribute, timeline, summary ToR and decision making (who and how).

Examples of evidence for scheme alignment:

– decision-making procedures, including how decisions are made and who makes	- internal procedure/quality handbook describing	
them.	elements and process of public summary.	
	- examples of availability of past or current information.	
Conclusion	References	
The scheme owner is in alignment because the standards development procedure is defined in a publicly available document and because GSA actively seeks public input through media and through its website.	 GSA - Standards Process Document; Example of outreach and publicity (using the BAP Hatchery 2.0 Standard) 	

A.3.09 Participation and Consultation		
GSSI Component	Guidance	
The Scheme	The Scheme Owner, or delegated authority, has mechanism to ensure participation of necessary technical experts and	
Owner or	balance of different stakeholder perspectives in standard development	
delegated	and maintenance. A balanced participation of stakeholders would include: fisheries/aquaculture management authorities,	
authority	the fishing/aquaculture industry, fish workers organizations, fishing/	
ensures	aquaculture communities, the scientific community, environmental interest groups, fish processors/traders/retailers,	
participation by	aquaculture input	
independent	providers such as feed providers, hatcheries/nurseries and possibly treatment providers, as well as consumer associations.	
technical experts		
and enables	Examples of evidence for scheme alignment:	
balanced	- internal procedure/quality handbook for standard development	
participation by	- revision and approval processes that describe how balance is achieved, such as through stakeholder mapping,	
stakeholders in	announcements	

A.3.09 Participation and Consultation		
the standard	and invitation.	
development,		
revision and	Draft documents and meeting minutes/email correspondence indicate that during standard development, revision and	
approval	approval	
process.	processes of the past, independent technical experts participated, and a balanced participation by stakeholders was	
	encouraged.	
Conclusion		References
The scheme owner is in alignment because these requirements for participation are defined		GSA - Standards Process Document
in the BAP Standards Process Document.		

A.3.10 Participation and Consultation		
GSSI Component	Guidance	
The Scheme	The Scheme Owner has a mechanism is in place to assure a minimum of 60 days for comments on major changes of the	
Owner allows a	draft standard.	
period of at least	A Standard is considered to be a set of documents that provide rules and guidelines to achieve results and that include all	
60 days for the	normative documents used for the certification process. The Scheme owner shall define which documents are part of the	
submission of	standard.	
comments on	This may include standard governance and setting procedures, requirements for certification bodies and certified entities	
the draft		
standard.	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	

A.3.10 Participation and Consultation		
Review previous comments and dates for submission on draft standards.		
Conclusion	References	
The scheme owner is in alignment	 GSA - Standards Process Document; Example - Capture for Farm Std; Example - Website 	
because the 60 day period is a defined	featuring Hatchery Std	
requirement that is adhered to.		

GSSI Component	Guidance	
No later than the start of	Timely announcements are made regarding the public comment period in appropriate channels so that they are	
the comment period, the	easily available to relevant stakeholders. This can be online and/or in an appropriate publications. Dates should be	
Scheme Owner publishes a	clearly stated.	
notice announcing the		
period for commenting in a	Examples of evidence for scheme alignment:	
national or, as may be,		
regional or international	- internal procedure defining process.	
publication of	- previous announcements are dated and were published before the beginning of the comment period.	
standardization activities	- newsletters	
and/or on the internet.	- record of publication on SO's w	ebsite
Conclusion		References
The scheme owner is in alignment because this requirement		Capture farm
is adhered to and is an integral part of both seeking public		 An example of an announcement made regarding the public comment
input and of generating publicity for the standard		period of the Farm Std

A.3.12 Participation and Consultation		
GSSI Component	Guidance	
The Scheme Owner identifies all impacted stakeholders and ensures proactively that all can participate in the standard-setting process through a consultation forum or are made aware of alternative mechanisms by which they can participate. This includes stakeholders that are not well represented in consultations and disadvantaged stakeholders (small-scale operations and vulnerable groups).	ne Scheme Owner has a mechanism is in place to identify all impacted stakeholders. It makes are that, when needed, alternative tools are in place to leverage potential barriers to participate. camples of evidence for scheme alignment: Stakeholder mapping including past participation Internal procedure/quality handbook defining public consultation process. FOR. Review participation, communication and mechanisms/tools of past or current consultation. The meeting minutes, announcements, publications and or email communication indicate that the cheme Owner is proactively seeking the input of specific stakeholder groups.	
Conclusion	References	
The scheme owner is in alignment because a implementation plan is followed that includes stakeholders. It includes announcements on the consultation phase for new standards. To enceparticipation, BAP employs Country Coordinates.	 Outreach seeking public input on the BAP Farm Standard (Capture Farr he public Webpage listing of BAP operatives in multiple countries, including developing/emerging nations (Country coordinators) 	

A.3.13 Participation and Consultation	
GSSI Component	Guidance
The Scheme Owner makes publicly	All comments received during the public comment period are made publicly available without
available all comments received in the	attribution or identifier.

A.3.13 Participation and Consultation	
consultation respecting personal data protection.	Examples of evidence for scheme alignment: - internal procedure/quality handbook describing policy, current or past public comment comments posted online.
Conclusion	References
The scheme owner is in alignment because all comments are published along with responses and modifications to the standard.	 Farm 3.0 (showing public comments and responses); Public Comment Archives (showing previous sets of comments and responses)

A.3.14 Participation and Consultation		
GSSI Component	Guidance	
The Scheme Owner takes into account in further processing of the standard, comments received during the period for commenting.	The Scheme Owner has a process for considering all comments received during the public consultation on the standard. Comments which are integrated into the standard should be clearly identified. Examples of evidence for scheme alignment: - some sort of system (e.g. excel) for organizing, categorizing and responding to comments review past consultation system, comments and response taken.	
Conclusion		References
The scheme owner is in alignment because all comments are published along with responses and modifications to the standard.		 Farm 3.0; Public Comment Archive; Public Comment Folder Structure

GSSI Component	Guidance	
The Scheme Owner ensures that the standard is consistent with the following requirements: – only includes language that is clear, specific, objective and verifiable; – is expressed in terms of process, management and / or performance criteria, rather than design or descriptive characteristics; (ISO 59) – does not favor a particular technology, patented item or service provider; and (ISO 59) – attributes or cites all original intellectual sources of content.	The Scheme Owner has a mechanism in place to review standards requirements. Examples of evidence for scheme alignment: - internal procedure/quality handbook defining all list requirements state these in their preamble as principles or references review that this list was checked for the current standards - review standards and if available mandatory checklists/audit molisted requirements review any available complaints relating to this requirement.	s. Some standards
Conclusion		References
also meets FAO guidelines. All standard requirements are listed in numbered, auditable clauses. Standards include Proces		 GSA - Standards Process Document.

A.3.16 Standards Content		
GSSI Component	Guidance	
As part of the standard	The Scheme Owner has a mechanism in place to test the feasibility (cost, time) and auditability (interpretation,	
development process, the	consistency) of requirements prior to finalization of the standards.	

providers.

A.3.16 Standards Content

Scheme Owner assesses the feasibility and auditability of requirements in the draft standard.

Examples of evidence for scheme alignment:

- internal procedure, quality handbook, standard setting work plan.
- review assessment outcomes of past processes including revisions based on findings.

Conclusion

The scheme owner is in alignment because the scheme's commitment to workable/auditable standards is made plain in all BAP standards in their preamble: "The BAP standards are achievable, science-based and continuously improved global performance standards for the aquaculture supply chain that assure healthful foods produced through environmentally and socially responsible means". As another example of commitment to auditability, the chair of the Standards Oversight Committee (Ken Corpron) is a trainer for auditors and he teaches them how to interpret and apply the standards. Oversight Committee meetings involve reviewing BAP standards and we always have other auditor training experts in attendance, such as Chris Weeks and David Yunker, who are well equipped to assess auditability.

References

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

A.3.17 Standards Content

The Scheme Owner demonstrates that all criteria in the standard contribute to the standard's defined objectives.

GSSI Component

Guidance

Criteria are related to how the Scheme Owner's objectives are met by identifying the acceptable performance. Often they are logically grouped around principles and objectives.

Examples of evidence for scheme alignment:

- comparison of the Scheme Owner performance indicators with the standard's criteria.
- monitoring and evaluation system of the performance indicators.
- criteria that are not monitored and not evaluated may be surplus to the objective of the standards.

A.3.17 Standards Content	
Conclusion	References
The scheme owner is in alignment because, as stated in all standards: "The BAP standards are	 PI - Standard - Farm Standard -
achievable, science-based and continuously improved global performance standards for the	Issue 3.0 - 01-March-2021-
aquaculture supply chain that assure healthful foods produced through environmentally and socially	GSA.pdf
responsible means". The performance indicators are listed in each standard and are consistent with	
these objectives.	

A.3.18 Standards Content			
GSSI Component	Guidance		
The Scheme Owner ensures that the	The Scheme Owner has mechanisms in place to ensure local applicability and relevance. For national		
standard is locally applicable. Where the	or regional standards, the Scheme Owner has a process to take into account local environmental and		
Scheme Owner adapts the standard for	regulatory conditions through guidance and policies.		
direct application at the national or			
regional level, the Scheme Owner	Examples of evidence for scheme alignment:		
develops interpretive guidance or	- policies, internal procedures and quality handbook documenting process to consider environmental		
related policies and procedures for how	and regulatory aspects.		
to take into account local environmental	- compare geographical scope of standard and implementation (certificates) with available		
and regulatory	documented interpretation guidance.		
conditions.	- assessment or monitoring reporting indicating where locally specific guidance is required.		
Conclusion	References Control of the Control of		
The scheme owner is in alignment becaus	e BAP Standards are global standards • PI - Standard - Farm Standard - Issue 3.0 - 01-March-		
that are designed to be applied in any loc	ality. Interpretation and explanations 2021-GSA.pdf		

A.3.18 Standards Content

are imbedded within each standard preceding the audit clauses as previously described. They do not vary nationally or regionally.

A.S.18 Sturidurus Accessibility	
GSSI Component	G

GSSI Component

The Scheme Owner promptly publishes adopted standards, and makes them available for free on its website, and on request, to anyone expressing interest.

Guidance

Standards are published in a timely fashion and are freely available online and on request. Validity dates coincide with publication dates of standards (taking transition periods into account) and the public

work program on standard setting and maintenance.

Conclusion

The scheme owner is in alignment because standards are promptly published (new or revised) and are all available free of charge on our website

References

Link to page listing BAP Standards

A.3.20 Standards Accessibility

GSSI Component

The Scheme Owner shall make translations of the standard into English and in the most relevant/appropriate languages, to ensure access and transparency, freely available and authorizes translations into other languages

Guidance

The Scheme Owner has a mechanism in place to identify the applicability and need for translations based on geographical scope of certification, as well as the geographical range of certified entities and products. The process includes an assessment in order to ensure accurate translation.

Examples of evidence for scheme alignment:

A.3.20 Standards Accessibility		
where necessary for credible implementation of		- internal procedure, quality handbook, current language availability, work plan of translations,
the standard.		process for ensuring accuracy of translations.
Conclusion	References	
Scheme owner is in alignment because	•	list of translated standards on BAP website
translations are made accordingly and	nd	
freely distributed		

A.3.21 Transition Period		
GSSI Component	Guidance	
The Scheme Owner ensures that certified entities are informed of the revised standard and transition period, either directly or through their certification bodies.	The Scheme Owner has a mechanism in place assuring that certified entities are informed of standard revision and transition periods. This can be done directly or through other assurance bodies. Examples of evidence for scheme alignment: internal procedures, quality handbook, contracts/agreements or formal arrangements with certification bodies. review process of previous revisions if applicable.	
Conclusion	References	
Scheme owner is in alignment because certified entities are informed of revisions accordingly and transition periods applied, following defined procedures.	 GSA Stakeholder notification procedure; GSA Standard Release Procedure; Example - Farm 3.0 public webinar 	

A.3.22 Transition Period		
GSSI Component	Guidance	
The Scheme Owner requires that the certified entities are given a period of at least three years to come into compliance with revised fishery standards and at least one year for	Certified entities are given sufficient time to come into compliance with revised standards, for fisheries – minimum three years and at least one year for revised aquaculture standards. Examples of evidence for scheme alignment: - standards, certification requirements/methodologies which state	
revised aquaculture standards Conclusion	minimum transition period for revised standa	References
Scheme owner is in alignment because revised aquaculture standards are released with an issue date and an indication 'previous issue invalid on dd/mm/yyyy' on the cover, separated by 12 months.		Farm 3.0 Public Webinar; BAP Farm Std 3.0

A.3.23 Transition Period		
GSSI Component	Guidance	
The Scheme Owner notes in the	Standards include date of version and any transition period for the certified entity to come into	
standard the date of a revision or	compliance. If there are normative documents other than the standard and certification	
reaffirmation of the standard along with	requirements/ methodologies which affect compliance of fisheries/aquaculture, these similarly	
a transition period after which the	should contain the described validity dates.	
revised standard will come into effect.		

	A.3.23 Transition Period	
	Conclusion	References
Scheme owner is in alignment because revised aquaculture standards		 PI - Standard - Farm Standard - Issue 3.0 - 01-March-2021-GSA.pdf
	are released with an issue date and an indication 'previous issue	
	invalid on dd/mm/yyyy' on the cover, separated by 12 months.	

SECTION B. **OPERATIONAL MANAGEMENT OF** SEAFOOD **CERTIFICATION SCHEMES**

B.1.01 ISO-17011 Compliance		
GSSI Component	Guidance	
The Scheme Owner has a contractual, enforceable arrangement or formal	The Scheme Owner has a contract, memorandum of understanding or enforceable arrangement with a certification body or accreditation body that require the accreditation bodies to be compliant to ISO/ IEC 17011.	
understanding that requires accreditation bodies to be compliant with the requirements of ISO/IEC 17011 in its applicable version.	Examples of evidence for scheme alignment: - contracts, - memorandums of understanding and/or memorandum of agreements between scheme and accreditation bodies or certification bodies that specify accreditation bodies to be compliant with ISO/IEC 17011 accreditation bodies' certificate of accreditation (on website) rules for accreditation bodies in standard.	
Conclusion		References
The scheme owner is in alignment because ABs are required to be members of IAF which requires ISO 17011 compliance and we have agreements with our ABs		 AGMT - 2021 MoU GSA Accreditation Body Agreements with CB - BoA; Agreement with CB NABCB

B.1.02 Non-Discrimination	
GSSI Component	Guidance

B.1.02 Non-Discrimination

The Scheme Owner ensures that accreditation services are available to certifying bodies irrespective of their country of residence, size, and of the existing number of already accredited bodies, within the scope of the scheme.

The Scheme Owner ensures that access to accreditation is open to qualified certification bodies without consideration of size, country or number of existing accredited certification bodies. This could be through contracts/agreements, in referenced policies or certification equirements/methodologies.

Examples of evidence for scheme alignment:

- application process/forms,
- review list of accredited certification bodies

Conclusion

The scheme is in alignment because the CB Application process and requirements are transparent, open to all and with documents downloadable from the BAP website.

References

- AGMT 2021 MoU GSA Accreditation Body
 - Agreements between GSA and ABs BoA and NABCB
- Certification Body Application for Recognition
 - Certification Body Application for Recognition
- Registration form for Certification Bodies
 - Registration form for Certification Bodies

B.1.03 Specified Requirements

GSSI Component

Guidance

The Scheme Owner specifies the requirements for certification bodies that the accreditation

The Scheme Owner defines requirements for certification bodies to ensure accurate and consistent implementation. These are verified as part of the accreditation process by the accreditation body.

Examples of evidence for scheme alignment:

B.1.03 Specified Requirements body is required to verify, - requirements are specified in certification requirements/ methodologies or a separate certification body including the respect of the and/or accreditation manual. scope of the scheme - reference to requirements in contracts or formal agreements with certification bodies or accreditation bodies. Conclusion References The scheme owner is in alignment because ehe scheme AGMT - 2021 MoU GSA Accreditation Body requirements for CBs and their auditors that the AB are to verify are • Agreements between GSA and ABs - BoA and NABCB; BAP - CB described in detail by the scheme documents posted on the **Requirements Document** website and referenced earlier

B.1.04 Transition Period		
GSSI Component	SSI Component Guidance	
Subsequent to any changes in the requirements for assessing certification	The Scheme Owner specifies transition periods for any changes to certification requirements (B.1.03) for certification bodies to come	
bodies, the Scheme Owner ensures certification bodies are given a defined	into compliance with changes. For certification bodies in developing countries consideration is given that may include a longer transition	
time period within which to conform to	period, capacity building or other measures.	
the changes. Special considerations should be given	given Examples of evidence for scheme alignment:	
to certification bodies in developing countries and countries in transition.	- see B.1.03 reference to transition period and/or special consideration for developing country certification bodies.	
Conclusion References		References

B.1.04 Transition Period

The scheme owner is in alignment because the majority of the changes to the CB Requirements Document have not been to add new requirements so much as to clarify existing ones. In which case transition periods are not necessary. Where transition would be necessary, the Certification Bodies are given adequate time to conform to any changes. Please refer to the CB Requirements document that states on page 5, Section 1.3: "As changes are made to this document, the Certification Bodies will be given 30 days to make necessary changes and adaptations. The time allocated to CBs in developing countries will be 60 days and with due consideration to capacity building by the BAP Management."

- BAP CB Requirements
 Document
 - BAP CB
 Requirements
 Document

B.1.05 Competencies		
GSSI Component Guidance		
The Scheme Owner only works with accreditation bodies that have personnel	rks with accreditation contracts or enforceable arrangements with accreditation bodies. Personnel competency incudes education,	
with the necessary education, training, technical knowledge and		
experience for performing accreditation functions in fisheries and aquaculture	- Agreement/contract between the Scheme Owner and certification body to use national accreditation bodies which are IAF members and signatories to the Multilateral Recognition Arrangement for ISO 17065. - Contract/agreement between the Scheme Owner and the accreditation body if applicable,	
operations. certification/accreditation manuals. - Requirements for Accreditation Bodies and personnel mentioned in the standard Conclusion References		

B.1.05 Competencies

The scheme owner is in alignment because the agreement between GSA and the accreditation body stipulates that the AB must implant its program in accordance with ISO/IEC 17011. This standard has multiple requirements relating to the competence and performance of the AB's human resources and documentation and review thereof. Additionally, the competency of ABs is a requirement to be an IAF member and an MLA signatory with the IAF overseeing AB competency.

Additionally, overseeing, monitoring and accrediting the AB is the job of the IAF. Which

is why the AB is required to be to an IAF member and MLA signatory as per the CB

Requirements Document. That document also describes the requirement to share

information between the AB and Scheme owner. As does the MOU agreement to 17011.

 AGMT - 2021 MoU GSA Accreditation Body

BAP - CB Requirements Document

18-August-2021.pdf

BAP - CB Requirements Document - Issue 14.10 -

 Agreements between GSA and ABs – BoA and NABCB

B.1.06 External Review		
GSSI Component	Guidance	
The Scheme Owner ensures that external	The Scheme Owner ensures accreditation bodies undergo external/independent performance assessments.	
	Examples of evidence for scheme alignment:	
-	 assessment process and requirements of IAF, ISEAL or other membership organization. Scheme Owner accreditation manual or requirements, contracts or agreements, assessment reports. 	
Conclusion		References
 The scheme owner is in alignment because, as per B 1.01, agreements with ABs require oversight of the AB performance with regard to its accreditation activities, reviewing any sanctioning activity related to GSA recognized CBs and providing AGMT - 2021 MoU GSA Accreditation Body Agreements between GSA and ABs - BoA and NABCB BAP - CB Requirements Document 		

B.1.07 Transparency		
GSSI Component	Guidance	
The Scheme Owner	Scheme owner ensures accreditat	tion body transparency regarding organizational structure and financial support.
ensures that the	The Scheme Owner requires disclo	sure of this information directly from the accreditation body.
accreditation body is		
transparent about ist its	Examples of evidence for scheme	
organizational structure	- accreditation body website with information, certification/ accreditation manuals, contracts and/or agreements.	
and the financial and	- agreement/contract between the Scheme Owner and certification body to use national accreditation bodies which	
other kinds of support it	are IAF members	
receives from public or	and signatories to the Multilateral	Recognition Arrangement for ISO 17065;
private entities.	- annual or periodic reports.	
Conclusion		References
The scheme owner is in alig	gnment because the agreement	AGMT - 2021 MoU GSA Accreditation Body
between GSA and ABs requires compliance with ISO 17011		 Agreements between GSA and ABs - BoA and NABCB
which includes (Section 7.3) a resource review. The		BAP - CB Requirements Document
agreement covers the AB's responsibilities with regard to		BAP - CB Requirements Document
communicating all such relevant information to GAA, as		BAP - CB Requirements Document - Issue 14.10 - 18-August-2021.pdf
does the CB Requirements	Document.	

B.1.08 Office Audit		
GSSI Component	Guidance	
The Scheme Owner ensures	The Scheme Owner specifies that accreditation includes an on-site audit of the certification body.	
that the accreditation process includes an on-site audit of the certification body.	Examples of evidence for scheme alignment: - accreditation/certification requirements/methodologies, accreditation body office audit reports, audit schedule specified in accreditation body or certification body contracts/ agreements agreement/contract between the Scheme Owner and certification body to use national accreditation bodies which are IAF members and signatories to the Multilateral Recognition Arrangement for ISO 17065.	
Conclusion		References
The scheme owner is in alignment because the agreement between GSA and ABs includes a requirement for the AB to provide on-going monitoring of the CBs, and the AB is also required to provide additional surveillance activities, including office audits, whenever requested. The scheme owner also conducts office audits of the CBs		 AGMT - 2021 MoU GSA Accreditation Body Agreements between GSA and ABs - BoA and NABCB

B.1.09 Field Audit	
GSSI Component Guidance	
The Scheme Owner The Scheme Owner specifies that accreditation includes a performance review of certification bodies and auditor	
ensures that the that may include desktop reviews, office visits, witness audits.	
accreditation process	
includes a review of the	Examples of evidence for scheme alignment:
performance of - accreditation/certification requirements/methodologies, accreditation body audit reports, audit schedule,	
certification bodies and specified in accreditation body or certification body contracts/agreements.	

B.1.09 Field Audit		
auditors, using witness	ng witness - agreement/contract between the Scheme Owner and certification body to use national accreditation bodies	
audits.	which are IAF members and signatories to the Multilateral Recognition Arrangement for ISO 17065.	
Conclusion		References
The scheme owner is in alignment because the requirements in agreements between GSA and its ABs are centred on reviewing all aspects of CB performance. The MOUs provided with the ABs already refers to the		 AGMT - 2021 MoU GSA Accreditation Body Agreements between GSA and ABs - BoA and NABCB
requirement for field audits	(i.e. "witness " audits)	

B.2.01 ISO-17065		
GSSI Component	Guidance	
The Scheme Owner requires that certification bodies operating in the scheme are accredited to conduct certifications for the	The Scheme Owner has a contract, memorandum of understanding or enforceable arrangement with certification body that require to follow the principles of ISO/ IEC 17065 for the scope of the respective standard of the scheme.	
scope of their respective standards in conformance with ISO/IEC 17065 in its applicable version.	Examples of evidence for scheme alignment: - contracts, memorandums of understanding and/or memorandum of agreements between Scheme and accreditation bodies or certification bodies that specify certification bodies be accredited with ISO 17065 - accreditation manual or certification requirements/methodologies; certification bodies certificate of accreditation.	
Conclusion		References
The scheme owner is in alignment because this requirement is clear from the CB Requirements Document. GSA has further revised its CB Requirements Document to create two tiers of CB - Restricted Approved and Fully Approved. Restricted Approved are given a set amount of assessments and timeline to achieve accreditation extension. If this is not met the CB arrangement will be reviewed. The Program has tiered its CBs and maintains a CB Approval Matrix		 BAP - CB Requirements Document BAP - CB Requirements Document CB Accreditation Matrix

B.2.02 Fee Structure

GSSI Component

The Scheme Owner requires certification bodies to maintain a written fee structure that is available on request and is adequate to support accurate and truthful assessments commensurate with the scale, size and complexity of the fishery, fish farm or chain of custody. The fee structure is non-discriminatory and takes into account the special circumstances and requirements of developing countries and countries in transition.

Guidance

The Scheme Owner defines this requirement in the contract, memorandum of understanding or enforceable agreement with the accreditation body and/or certification body.

Examples of evidence for scheme alignment:

- accreditation manual/certification requirements/methodologies.
- possibly also review accreditation body audit reports that this requirement is verified, and for compliance of certification bodies on this requirement.
- policy or procedure which outlines how fee structures of certification bodies could address special requirements of developing and in transition countries in a non-discriminatory manner; certification body fee structure and policy (online or request).

Conclusion

The scheme owner is in alignment because BAP Management sets the duration of evaluation for each type of facility in the CB Requirements Document. Duration and therefore cost depends on the size and complexity of the operation. Duration must be adequate to ensure accurate assessment. Duration and therefore cost would tend to naturally increase or decrease by operational complexity. So for smallholders the cost would decrease due to their smaller size. Within the BAP Program, the Group program is also for small- to medium- holders with a reduced fee approach. BAP Management fixes the minimum and maximum allowable audit charges based upon duration. And in-country auditors are typically used by the CB to keep costs down. In these ways the duration and costs are non-discriminatory.

Note that the BAP Program differs from other programs in that the facility seeking certification makes a contract with BAP rather than the certification body. Thus requirements on audit duration are set by BAP rather than the CBs.

References

- AGMT 2021 CBA GSA CB
 Agreement NSF FINAL
 SIGNED
- AGMT 2021 MoU CBA GSA CB Agreement
- BAP CB Requirements
 Document
- GSA Audit Duration
 Guidelines Issue 1.0 03-November-2021

B.2.03 Certification Cycle		
GSSI Component	Guidance	
The Scheme Owner defines that the validity of a certification cycle does not exceed 5 years in the case of fishery or 3 years in the case of aquaculture certification and 3 years in the case of chain of custody certification.	The Scheme Owner defines this requirement in the contract, memorandum of understanding or enforceable agreement with the accreditation body and/or certification body. Examples of evidence for scheme alignment: - accreditation manual/certification requirements/methodologies. Issued certificates with validity (online database or on request)	
Conclusion		References
GSA is in alignment because the validity of certificates is covered in the CB Requirements Document, Section 4.13, page 41, on certificate validity. Section 4.2, page 29 specifies recertification is typically required annually.		BAP - CB Requirements Document

B.2.04 Surveillance		
GSSI Component	Guidance	
The Scheme Owner requires that	The Scheme Owner defines this requirement in the contract, memorandum of understanding or	
certification bodies carry out periodic	enforceable agreement with accreditation body and/or certification body. Scheme owner risk	
surveillance and monitoring at	assessment system should identify "sufficient close intervals".	
sufficiently close intervals to verify that		

B.2.04 Surveillance

certified operations continue to comply with the certification requirements. For aquaculture operations, this shall be on an annual basis. Examples of evidence for scheme alignment:

- accreditation manual/certification requirements/methodologies.
- Scheme Owner internal risk assessment system with assessment reports.
- Audit reports, schedules and issued certificates.

Conclusion

GSA is in alignment because the CB Requirements, Section 4.2, page 29, specify recertification addresses audit frequency accordingly.

References

- BAP CB Requirements Document
 - BAP CB Requirements Document
 - BAP CB Requirements Document Issue 14.10 18-August-2021.pdf
- Farm 3.0 Annual Requirement
 - Farm 3.0 Annual Requirement
 - Mollusk 1.1 Annual Requirement

B.2.05 Assessment Methodology

Gasi Component
The Scheme
Owner ensures
that certification
bodies apply a
consistent
methodology to
assess

GSSI Component | Guidance

The Scheme Owner defines the methodology to assess compliance with the standard. An internal assessment (updated regularly) with clear outcomes, identifies if the methodology is consistent between certification bodies or if the methodology needs revising.

Examples of evidence for scheme alignment:

- certification requirements/methodologies,
- contracts and agreements with the certification body,
- guidance interpretation documents,

B.2.05 Assessment Methodology

compliance with the standard.

- Scheme Owner internal assessment system with assessment reports,
- e standard. training and calibration records.

Conclusion

GSA is in alignement because relevant requirements are detailed in the CB Requirements document. Therein the requirement to attend BAP training and for testing is one of the many elements that assures this. Additionally the requirement for CBs to track auditor performance over time, provide calibration training where results begin to skew, refresher training requirements, and the requirement to maintain competency. Additionally each standard contains explanations and interpretations to help ensure consistency (See BAP Farm standard as an example). And, BAP reviews audit reports for accuracy, consistency and correct interpretation.

References

BAP - CB
 Requirements
 Document

B.2.06 Termination, Suspension, Withdrawal

GSSI Component

The Scheme Owner ensures that certification bodies have consistent documented procedure(s) that specify the conditions under which certification may be suspended or withdrawn,

Guidance

For accurate and consistent implementation of the standard, the Scheme Owner ensures that certification bodies have documented procedures that specify the conditions under which certification may be suspended or withdrawn, partially or in total, for all or part of the scope of certification.

Examples of evidence for scheme alignment:

- contract, memorandum of understanding or enforceable agreement between the Scheme Owner and the certification body; accreditation manual, certification requirements/methodologies,

B.2.06 Termination, Suspension, Withdrawal		
partially or in total, for all or part of the scope of certification.	 audit reports, guidance documents specifying the conditions under which certification may be suspended or withdrawn. 	
Conclusion References		
Quality Management System) of requires a fully documented Quality Procedures in relation to the use suspending or withdrawing a ce	se details are covered in Section 3.1.2 (CB the CB Requirements Document, which ality Management System that includes: of the certificate, rules for granting, rtificate, and the actions taken by the ension or withdrawal take place".	 BAP - CB Requirements Document BAP - CB Requirements Document CU 2021 Remote Audit Checklist CU Suspension

B.2.07 Multi-Site Certification			
GSSI Component	Guidance		
The Scheme Owner requires that certification bodies follow procedures and guidance for multi-site	If the Scheme Owner explicitly does not allow multi-site certification (prohibits, not that it is not yet developed or exists) requirement is "Not applicable". Otherwise, the Scheme Owner requires certification body to follow have documented procedures and guidance for multi-site certification, detailed in the agreement or in the standards		
certifications as written in the standard or other scheme documents, if allowed under the scheme.	Examples of evidence for scheme alignment: - memorandum of understanding or enforceable agreement between the Scheme Owner and the certification body; - requirements and guidance for multi-site certification - audit reports.		
Conclusion References			

B.2.07 Multi-Site Certification GSA is in alignment because these procedures are defined in the Group Program Policy Document • PI - Standard - Farm and Hatchery Group Program Policy

B.2.08 Audit Reports			
GSSI Component	Guidance		
The Scheme Owner requires certification	The Scheme Owner defines this requirement for certification bodies and has some system for quality control.		
bodies to ensure	Examples of evidence for scheme alignment:		
consistency in audit	- contract/agreement between the Scheme Owner and the certification body, certification		
report formats and in	requirements/methodologies;		
how the reports are	- guidance specifying formats for audit reports and reporting, mandatory audit templates;		
completed.	- review online audit reports for consistency of report format and reporting, Scheme Owner quality management		
·	system for review of audit reports.		
Conclusion		References	
GSA is in alignment because consistent reporting is required by the scheme as described in		BAP - CB Requirements Document	
Section 4.8 of the CB Requirements Document. A report template is provided to all CBs by			
the scheme for provision to the CB's auditors. It is mandatory for all auditors to complete			
and pass a BAP training course before they gain auditor approval.			

B.2.09 Participation and Consultation			
GSSI Component	Guidance		
The Scheme Owner requires that certification bodies	The Scheme Owner defines this requirement for certification bodies to have a documented procedure to enable input from all stakeholders during the certification process.		
have in place consistent procedures for stakeholders to provide input during the certification	- guidance specifying procedures. during - review certification body process for input:		
process. Conclusion	- audit reports with stakeholder input.	References	
GSA 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.			

B.2.10 Non-Compliances			
GSSI Component	Guidance		
The Scheme Owner requires that certification bodies follow its requirements for determining non-compliances, verifying corrective actions arising from non-compliances and allowing for appeals of non-compliances.	For accurate and consistent implementation of the standard, the Scheme Owner ensures that certification bodies follow non-compliances, verifying corrective actions arising from non-compliances, and allowing for appeals of non-compliances. Examples of evidence for scheme alignment: - contract, memorandum of understanding or enforceable agreement between the Scheme Owner and the certification body. - accreditation manual, certification requirements/methodologies. - guidance documents, determining non-compliances, verifying corrective actions arising from non-compliances and allowing for appeals of non-compliances, in order to support consistency between certification bodies. - audit reports. - standards.		
Conclusion References		References	
GSA is in alignment because non-conformity definitions are in the CB Requirements Document, Section 4.7. In section 4.11 of that document the CB is required to have a written Appeals and Complaints process to allow the facility to appeal any CB decision. Further, the GSA scheme has a Complaints, Appeals and Disputes document on its website		 BAP - CB Requirements Document Complaints, Appeals & Disputes Online procedure document regarding Complaints, Appeals & Disputes 	

B.2.11	Site	Audit
		Tagit

GSSI Component Guidance

B.2.11 Site Audit			
The Scheme	The Scheme Owner requires that the scope of the audit (initial, annual or re-assessment) includes on-site assessment of		
Owner requires	premises covered by the scope of the standards and within which one or more key act	ivities are performed.	
that the scope of			
the (re-	Examples of evidence for scheme alignment:		
)certification audit	dit - contract, memorandum of understanding or enforceable agreement between the Scheme Owner and the certification		
includes a visit to	to body,		
locations pertinent	- accreditation manual, certification requirements/methodologies,		
to the scope of the	ne - guidance documents specifying procedures for determining site visits including sampling,		
certification.	n. – review audit reports.		
Conclusion	Conclusion References		
GSA is in alignment	GSA is in alignment because BAP audits require annual site visits. Staff interviews, record inspections, site • <u>BAP - CB Requirements</u>		
inspections, water sampling, employee interviews are all specified and are impossible without a site visit. Document			
Minimum durations for on-site audits are specified in the CB Requirements document, as is the frequency			
of audits. All of whic	of audits. All of which are to the full scope of each BAP standard.		

B.2.12 Transpa	B.2.12 Transparency		
GSSI	Guidance		
Component			
The Scheme	The Scheme Owner makes publicly available a list of certified entities either directly or requires of certification		
Owner requires	bodies/accreditation bodies.		
that a list of			
certified entities	Examples of evidence for scheme alignment:		
is made			

B.2.12 Transparency			
publicly available.	- system to show the certification status of entities is publicly available online (e.g. database or online certificate list). If this system is outsourced to the accreditation bodies or certification bodies, this is required and the system described in the contract/ agreement between the Scheme Owner and the accreditation body/certification body, in a separate accreditation manual or certification requirements/methodologies.		
Conclusion	Conclusion References		
GSA is in alignr	nent because all certified farms are listed online.	Certified farms, list	

B.2.14 Transparency			
GSSI Component	Guidance		
For aquaculture, the Scheme Owner requires certification bodies to make summary audit reports publicly available	Applicable only to Aquaculture. For Fisheries "Not Applicable". The Scheme Owner defines this requirement for certification bodies to make summary audit reports, after certification has been granted, publicly available. Commercially sensitive information is excluded. Contracts with certified entities should clearly give notice of this requirement.		
(excluding commercially sensitive material information) after certification has been granted.	Examples of evidence for scheme alignment: - contract/agreement between the Scheme Owner and the certification body, contract with certification body and certified entity with this requirement certification requirements/methodologies specifying requirement guidance specifying that making reports available to stakeholders happens in a timely manner certification body website for posted reports.		
Conclusion		References	

B.2.14 Transparency

GSA 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."

 AGMT - 2021 DRAFT CBA GSA CB Agreement

B215 Notification of Changes

GSSI Component

Guidance

The Scheme Owner notifies accreditation bodies, certification bodies and certified entities of any change in management procedures which affects scheme rules and procedures for accreditation or certification.

The Scheme Owner has a system to ensure that accreditation bodies, certification bodies and certified entities are notified in a timely manner of any substantive change in management procedures. This is defined as changes which affect scheme rules and procedures for accreditation and/or certification. Where the scheme outsources responsibility of notification to accreditation bodies or certification bodies, there is a requirement for certification bodies to have a procedure for this notification and guidance on how this should take place (timeframe, manner, channel, etc.).

Examples of evidence for scheme alignment:

- contracts/agreements with accreditation bodies and certification bodies regarding notification of changes, internal procedure/qualityhandbook for change management, ring information flow.

Conclusion

References

GSA

GSA is in alignment because it follows a defined stakeholder notification procedure following such changes. The CB Requirements document addresses exchange of information between GAA and CBs, including in Sections 2.3

Stakeholder

B215 Notification of Changes

Communications, and 4.15 Changes in the Certification Requirements. Section 5 covers requirements for performance monitoring, and covers the need for the CB to keep up with changes. Requirements for timely exchange of information between the AB and GAA are covered in the agreements with ABs. Certified enterprises are notified of changes via the sending of any modified standard, press releases, and website postings as previously described. GSA has established a Document Control Procedure and established an annual CB forum and review process.

notification procedure

B.2.16 Corrective Action		
GSSI Component	Guidance	
The Scheme Owner clearly defines the criteria relating to the classification of non-conformities. Where the Scheme Owner allows for certification of an entity with non-compliances, the Scheme Owner requires that: - only non-conformities on minor, non-critical issues are allowed; - a timeline for closing out corrective actions must be defined; - a system to verify that corrective actions have been closed out is in place.	certification bodies. If Scheme must be met): minor/non-critic verify resolution. Examples of evidence for sche - contract/agreement between requirements/methodologies and allowing certification with non-	n the Scheme Owner and the certification body, certification specifying classifications of non-conformities and conditions for -compliances. ures and process for classifying nonconformities and conditions for
Conclusion		References
GSA is in alignment because the BAP prog	ram requires all non-	BAP - CB Requirements Document
compliances to be resolved before certification	cation, regardless of the level	Example of NC sign off

B.2.16 Corrective Action

of non-conformity. The time frames for closure and closure process are described in the CB Requirements Document Sections 4.7 - 4.10

Guidance

B.2.17 Auditor Competence

GSSI Component

The Scheme Owner has defined the qualifications and competence criteria required by auditors and audit teams, employed by certification bodies, and it makes this information publicly The Scheme Owner defines the requirement for certification body auditor and audit teams qualifications and competency and these requirements are publicly available. Competencies and qualifications include knowledge in the standard, education, experience and personal attributes.

Examples of evidence for scheme alignment:

- contract/agreement between the Scheme Owner and the accreditation body/certification body, accreditation/certification requirements/methodologies specifying criteria for each function,
- auditor assessment and training records,
- auditor CVs.

available. Conclusion

References

GSA is in alignment because auditor competency and training requirements are defined in 2 documents. In general terms in the CB Requirements document, sections 3.7 - 3.8, and specific details in the BAP Auditor Competency and Course Approval document. Both are on the GSA website

- BAP Auditor Competency
- BAP CB Requirements Document

B.2.18 Auditor Competen	ce	
GSSI Component	Guidance	
The Scheme Owner requires certification body auditors to have successfully completed training in the scheme to the satisfaction of the Scheme Owner.	The Scheme Owner defines the requirement for cer and ongoing development. Examples of evidence for scheme alignment: - contract/agreement between the Scheme Owner accreditation/certification requirements/methodol-auditor assessment and training records.	·
Conclusion		References
defined in 2 documents. In ge	auditor competency and training requirements are eneral terms in the CB Requirements document, details in the BAP Auditor Competency and Course on the GSA website.	 BAP - Auditor Competency BAP - Auditor Competency and Course Approval Requirements BAP - CB Requirements Document

B.2.19 Auditor Competence			
GSSI Component	Guidance		
The Scheme Owner	The Scheme Owner defines the requirement for certification body auditors to have successfully completed (passed)		
requires that certification body	training based on ISO 19011 Guidelines for auditing management systems) and that the audit team includes at least one auditor. Technical experts can supplement auditor expertise, but are not formally auditors and do not count as an		
auditors successfully	auditor.		
complete auditor			
training based on ISO	Examples of evidence for scheme alignment:		

B.2.19 Auditor Competence

19011. This does not include technical experts seconded to audit teams.

- contract/agreement between the Scheme Owner and the accreditation body/certification body, accreditation/certification requirements/methodologies specifying criteria for each function.
- auditor assessment and training records.
- auditor CVs.
- audit Reports.

Conclusion

Please See also response under B.2.17. GSA is in alignment because auditor training requirements are described in detail and are consistent with ISO 19011: CB Requirements Document Sections 3.7,3.8.3.10,3.12. BAP Management conducts regular reviews of the operation of the scheme to protect program integrity and ensure compliance with the requirements of global standards including, as applicable, examples such as ISO Guide 17065, ISO 17011, and GFSI. These reviews are conducted in multiple ways including internal audits, CB and auditor performance monitoring, consultation with the GAA and SOC in standards review and revision.

References

- BAP Auditor Competency
 - Example of ISO 9001 certificate
- BAP CB Requirements
 Document

B.2.20 Auditor Competence

GSSI Component

The Scheme Owner requires that certification bodies include the following in their competence assessment of auditors:

- an assessment of knowledge and skills for each fundamental area the auditor will be expected to be working,
- an assessment of knowledge of pertinent fishery and /or aquaculture Programs and the ability to access and be able to apply relevant laws and regulations,

Guidance

The Scheme Owner defines the requirement for certification bodies to include all of the elements in the Essential Component in the management of personnel competence (ISO 17065 clause 6.1.2).

Examples of evidence for scheme alignment:

B.2.20 Auditor Competence

- an assessment of the personal attributes of the auditor, to ensure they conduct themselves in a professional manner,
- a period of supervision to cover the assessment fishery and/or aquaculture principles, specific audit techniques and specific category knowledge,
- a documented sign off by the certification body of the satisfactory completion of assessment requirements.

- contract/agreement between the Scheme Owner and the certification body, accreditation/certification requirements/ methodologies specifying requirement,
- guidance outlining the system and criteria for competencies, training, etc. (see B.2.17-B2.19, 21-22),
- auditor assessment and training records,
- auditor CVs,
- accreditation body reports.

Conclusion References

GSA is in alignment because this is all defined in CB Requirements document in Sections 3.8 to 3.12

• BAP - CB Requirements Document

B.2.21 Auditor Competence

B.Z.ZI Auditor Co	ompetence
GSSI Component	Guidance
The Scheme	The Scheme Owner defines the requirement for certification body lead auditors to have and maintain the necessary training,
Owner requires	technical knowledge and experience to ensure consistent and accurate audits.
that certification	
body lead	Examples of evidence for scheme alignment:
auditors	- contract/agreement between the Scheme Owner and the certification body, accreditation/certification requirements/
maintain	methodologies specifying requirement,
category and	- guidance outlining the system and criteria for lead auditors,
scheme	- lead auditor assessment and training records,
knowledge.	- lead auditor CVs,

B.2.21 Auditor Competence				
	- accreditation body reports.			
Conclusion		Refer	rences	
GSA is in alignmen	t because this is defined in CB	•	BAP - CB Requirements Document - Issue 14.10 - 18-August-2021.pdf	
Requirements doc	ument in Section 3.8.3 Maintain			
Audit Experience. T	his is verified at CB review.			

B.2.22 Auditor Competence				
GSSI Component	Guidance			
The Scheme Owner requires that certification bodies	The Scheme Owner defines the requirement for certification body auditor ongoing professional development to maintain current best practice in sector.			
have a continuing professional development program in place that provides auditors with current best practice for fishery and/or aquaculture. The development best practice in soctor. Examples of evidence for scheme alignment: - contract/agreement between the Scheme Owner and the accreditation body/certification body, accreditation/certification requirements/methodologies specifying criteria for continuous professional development, - auditor training, assessment and training records.				
Conclusion		References		
GSA is in alignment because this is defined in CB Requirements document in Section 3.8.4 Continuing Training, Refresher Training, and Competency Monitoring • BAP - CB Requirements Document - Issue 14.10 - 18- August-2021				

B.3.01 Segregation		
GSSI Component	Guidance	
The Scheme Owner requires that all certified products are identified and segregated from noncertified products at all	The Scheme Owner requires clear identification and separation of certified from no of the supply chain. Examples of evidence for scheme alignment: - Chain of Custody standards, audit checklists, certification requirements/method	·
stages of the supply chain.	- Chain of Custody audit reports.	
Conclusion		References
Traceability section of each Traceability Section of the BA Identity Preservation', p 62. T all inputs and outputs for bo	requirements for identification and segregation of BAP products are included the standard and thus compliance is audited annually. For example, refer to AP Farm Standard, p 60, which includes requirements in a section titled 'Product his section of the standard describes the requirement to keep detailed records for th traceability purposes and the clear separation and identification of certified These are the same requirements for all BAP standards at each step in the	 PI - Standard - Farm Standard Farm Standard; Mollusk Standard; Salmon Standard

B.3.02 Entities to be Audited	
GSSI Component	Guidance

B.3.02 Entities to be Audited

The Scheme Owner requires all entities that are physically handling the certified product to undergo a Chain of Custody audit by an accredited certification body if the product can be destined for retail sale as a certified, labelled product. Exceptions: No audit is required for storage and distribution of tamperproof, packaged products.

The Scheme Owner requires all entities in a supply chain that physically handle the product and where there is the possibility of mixing undergo a Chain of Custody audit if the product will be claimed as certified or carry a label. Entities in the supply chain which do not take physical control or only handle storage and distribution in tamper proof packaging need to be identified, but do not require a Chain of Custody audit.

Examples of evidence for scheme alignment:

- contract/agreement between the Scheme Owner and the accreditation body/certification body, certified entity, certification requirements/methodologies defining types of operations and activities that require auditing according to these requirements,
- Chain of Custody reports.

Conclusion

GSA is in alignment because BAP certificates are issued to BAP compliant facilities and this is apparent on each certificate. BAP compliant facilities are annually audited against traceability requirements and 'Product Identity Preservation' standards (please see B.3.01 above). Only tamper-proof, packaged products can bear the BAP logo. Acceptable uses for the BAP logo and associated claims are defined in the BAP Logo use document.

References

- BAP Logo Use Requirements
- PI Standard Farm Standard
 - PI Standard Farm Standard; Mollusk Farm Standard;
 Salmon Farm Standard; Seafood Processing Standard

B.3.03 Records for Traceability

GSSI Component

Guidance

B.3.03 Records for Traceability

The Scheme Owner requires certification bodies to verify that all entities within the chain maintain accurate and accessible records that allow any certified product or batch of products to be traceable from the point of sale to the buyer.

The Scheme Owner defines the requirement for certification bodies that all entities within the supply chain, including those which may not undergo a Chain of Custody audit (see B.3.02), maintain up to date, complete and accessible records that allow for full traceability of the product along the entire supply chain.

Examples of evidence for scheme alignment:

- Chain of Custody standard.
- contract/agreement between the Scheme Owner and the certification body, accreditation/certification requirements/ methodologies specifying criteria for document control and maintenance.
- auditor checklists.

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GSA is in alignment because requirements for identification and segregation of BAP products are included the Traceability section of each standard and thus compliance is audited annually. Please refer also to B 3.01 and B 3.02 above.

References

- PI Standard Farm Standard
 - PI Standard Farm Standard; Mollusk Farm Std; Salmon Farm Std

B.3.04 Sub-Contractors	
GSSI Component	Guidance
The Scheme Owner requires	The Scheme Owner ensures that certified entity takes full responsibility that all subcontractors fully meet Chain
that entities are able to	of Custody requirements and has a system to demonstrate this.
demonstrate that these Chain	
of Custody requirements are	Examples of evidence for scheme alignment:
met by the enterprise's	- sub-contract agreements, internal audits. If the Scheme Owner does not allow sub-contracting then this is
subcontractors.	aligned (as opposed to Not Applicable)

B.3.04 Sub-Contractors	
Conclusion	References
GSA is in alignment because BAP compliant facilities (sub-contractors or others) are audited annually to assure	n/a
traceability and product identity preservation. Please refer also to answers above B 3.01; B 3.02; B 3.03.	

B.3.05 Auditing Methods and Frequency

GSSI Component

Guidance

The Scheme Owner has or requires certification bodies to have documented procedures for auditing methods and frequency of audits that meet the following requirements:

- certificate validity does not exceed 3 years;
- periodicity depends on risk factors
- changes to an entity's traceability system that are deemed to affect the integrity of the Chain of Custody result in a re-audit (onsite).

The Scheme Owner has or ensures certification bodies have documented Chain of Custody audit methodologies including: validity of certificate cannot exceed 3 years, frequency of audits takes into consideration risk factors and an onsite audit is required when substantive changes to the certified entities traceability system take place. These are instances where the integrity of the Chain of Custody could be affected such as company mergers, major new markets.

Examples of evidence for scheme alignment:

- requirements in the contract/agreement between the Scheme Owner and the certification body, in a separate accreditation manual or for example in certification requirements/methodologies.
- guidance interpretation specifying frequency, auditing methods and risk factors, in order to support consistency between certification bodies.

Conclusion

References

GSA is in alignment because all elements of this requirement are addressed in the CB Requirements Document and other explanations and evidence submitted under previous clauses.

 BAP - CB Requirements Document -Issue 14.10 - 18-August-2021.pdf

B.3.06 Non-Conformity/Corrective Actions		
GSSI Component	Guidance	
The Scheme Owner requires the certification body to record all identified breaches of the chain of custody, including: - an explanation of the factors that allowed the breach to occur; - an explanation of the corrective actions required to ensure that a similar breach does not re-occur; - the time frames for the corrective actions to be completed; and - the date of closing out of the corrective actions and how the problem was solved.	t Examples of evidence for scheme alignment:	
Conclusion		References
GSA is in alignment because all BAP compliant facilities are audite preservation. Please refer also to answers above. The requirement report, the definitions of the levels of non-conformity, and the requirevious responses.	t to document non-conformities for all subjects in every	n/a

B.3.07 Audit Reports	
GSSI Component	Guidance
The Scheme Owner requires that certification body audit reports include:	The Scheme Owner requires of certification bodies
- the date of the inspection/audit;	that all Chain of Custody audit reports include all of
- the name(s) of the person(s) responsible for the audit and report;	the elements in the Essential Component.

B.3.07 Audit Reports

- the names and addresses of the sites inspected/audited;
- the scope of the inspection/audit;
- the non-conformities identified;
- the result of at least one mass balance assessment for each product covered by the Chain of Custody audit; and
- a conclusion on the conformity of the client with the Chain of Custody requirements.

Examples of evidence for scheme alignment:

- certification requirements/methodologies defining requirements of reports, mandatory template reports.
- Chain of Custody audit report.

Conclusion

GSA is in alignment because all BAP compliant facilities are audited annually to assure full traceability and product identity preservation. Please refer to previous answers and evidence provided. The requirements stated are described in the CB Requirements Document as well as being included in the standards themselves provided in previous clauses.

References

BAP - CB Requirements
 Document - Issue 14.10 - 18 August-2021.pdf

B.3.08 Audit Reports

GSSI Component

Guidance

Certification bodies are required to maintain files of Chain of Custody audit reports (paper or electronic) and make these available upon request to relevant parties, within contractual arrangements with certified entities.

Examples of evidence for scheme alignment:

- contracts, agreements, certification requirements specify Chain of Custody reports are filed and process for making them available.

Conclusion References

B.3.08 Audit Reports

GSA is in alignment because this requirement is included in the CB Requirements Document. Please see previous evidence submitted.

• BAP - CB Requirements Document - Issue 14.10 - 18-August-2021.pdf

B.3.09 Record Keeping				
GSSI Component	Guidance			
The Scheme Owner requires that an enterprise certified entity keeps records that demonstrate conformity with the Chain of Custody requirements for a period that: - exceeds the shelf life of the certified product; and	Certified entity must keep records documenting compliance with Chain of Custody standard requirements at a minimum time that is longer than a. the shelf life of the product and b. time between audits. Examples of evidence for scheme alignment:			
- exceeds the periodicity between audits	- Chain of Custody standard, guidance interpretation and audit checklist that specify document retention policy.			
Conclusion		References		
GSA is in alignment because all BAP compliant facilities are audited annually to assure full traceability and product identity preservation. The relevant audit requirements address record keeping. Please see, for example, Traceability Section of the BAP Farm Standard, p 62, which states: "Original files or paper records shall be kept for five years to allow verification of the electronic data."		PI - Standard - Farm Standard		

B.3.10 Multi-Site CoC				
GSSI Component	Guidance			
Where a scheme allows for Chain of Custody certification of multiple sites managed under the control of a single entity, the Scheme Owner defines specific audit procedures that ensure all sites comply with the Chain of Custody certification requirements.	If the Scheme Owner does not allow Chain of Custody of multi-sites (prohibits not that it is not yet developed or exists)- requirement is "Not applicable". Otherwise, the Scheme Owner defines audit procedure for multi-sites (under control of one entity) and requirements for internal control management system.			
Control can include direct ownership, franchises, or	Examples of evidence for scheme alignment:			
where the entity has a signed agreement or contract with each site.	- Chain of Custody standard, guidance or checklist specifying procedure and internal control system.			
Conclusion		References		
GSA is in alignment because these procedures are covered in the Farm and Hatchery Group Program Policy document and the All Standards Group Workbook		 All Standards Group Workbook Farm and Hatchery Group Program Policy 		

B.3.11 Multi-Site CoC			
GSSI Component	Guidance		
Where the Scheme Owner allows	The Scheme Owner does not allow Chain of Custody of multi-siterequirement is "Not applicable". Otherwise,		
for multisite certification, they	the Chain of custody standard requires all sites are assessed as part of the internal audit during the validity		
require that all sites are assessed	period of the certificate.		
as part of the internal audit during			
the period of validity of the	Examples of evidence for scheme alignment:		
certificate.	- standard, guidance interpretation and audit checklist.		
Conclusion References		References	

B.3.11 Multi-Site CoC

GSA is in alignment because these requirements are covered in the Farm and Hatchery Group Program Policy document, Section 3.3 Internal Member Site Audits.

- Farm and Hatchery Group Program Policy
 - Farm and Hatchery Group Program Policy

SECTION C.

AQUACULTURE

CERTIFICATION

STANDARDS



C.1 EVIDENCE OF ALIGNMENT

C.1.01 Antimicrobial Usage

GSSI Component

The standard requires that the decision to treat with antimicrobial agents, and their subsequent application, is consistent with the Principles for Responsible & Prudent Use of Antimicrobial Agents in Aquatic Animals and other guidance of the OIE Aquatic Animal Health Code i.e., by the aquatic animal health professional or other relevant competent authority and in response to a diagnosed disease; see Articles 6.2.7 and 6.2.8 of the 2015 Aquatic Animal Health Code).

Guidance

The standard is expected to prohibit prophylactic usage for growth promotion and require that all antimicrobials are used in response to a diagnosed disease (i.e., by the aquatic animal health professional or other relevant competent authority) and the audit is expected to include a review of suitable evidence (e.g., records of disease testing etc. prescriptions for treatments).

The audit is expected to include a review of evidence (such as written records or through interviews) to ensure consistency with OIE guidelines (2015) Article 6.2.7 "The veterinarian or other aquatic animal health professional authorized to prescribe veterinary medicines should indicate precisely to the aquatic animal producer the treatment regime, including the dose, the treatment intervals, the duration of the treatment, the withdrawal period and the amount of antimicrobial agents to be delivered, depending on the dosage and the number of aquatic animals to be treated. The use of antimicrobial agents extra-label/off-label may be permitted in appropriate circumstances in conformity with the relevant legislation" and Article 6.2.8 "Aquatic animal producers should use antimicrobial agents only on the prescription of a veterinarian or other aquatic animal health professional authorized to prescribe veterinary medicines, and follow directions on the dosage, method of application, and withdrawal period."

Conclusion

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

References

• <u>BAP</u> <u>Salmon</u> Farm

C.1.01 Antimicrobial Usage

BAP 10.9: If used, drug treatments shall be based on authorizations by the fish health professional, who shall be guided by the FHMP (Fish Health Management Plan) and principles of best practice for the veterinary profession. The health professional shall prescribe medicines only to treat

Standard 2.4

diagnosed diseases in accordance with instructions on product labels and national regulations.

BAP 11.5: Antibiotics shall only be used to treat diagnosed bacterial disease (see also Standard 10.9) and shall not be used as growth promoters.

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GSSI Component

The standard requires that workers with responsibilities in aquatic animal husbandry have been adequately trained and are aware of their responsibilities in aquatic animal health management practices.

Guidance

The audit is expected to include a review of evidence that relevant workers have been appropriately trained and aware of their responsibilities. Examples of suitable evidence could include suitable training or appropriate qualifications, and interviews with staff. The training of workers may be a component in a broader management system e.g., a health management plan.

Conclusion

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

BAP 10.6: The applicant shall adequately train farm staff in applying these biosecurity and health management procedures.

References

• <u>BAP</u> <u>Salmon</u> <u>Farm</u> Standard

2.4

C.1.02 Biosecurity

BAP 9.8: The applicant shall be able to demonstrate compliance with a written Water Quality Management Plan described in the

implementation requirements above that includes provisions for water quality monitoring, staff training, mitigation measures for poor quality and procedures for the monitoring and control of dissolved oxygen during fish transport.

BAP 8.2: Farm staff shall be familiar with the MSHWDP and trained in aspects of it they may be required to implement. This will be tested at audit by interview.

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.

C.1.03 Biosecurity		
GSSI Component	Guidance	
The standard requires that aquatic	The objective of this requirement is to verify that the species is being farmed in the proper	
animals are kept under farming	environment to maintain its health. Due to the very broad nature of this Essential Com	•
conditions suitable for the species being	guidance cannot be provided. Expected evidence could include requirements for farm siting	
raised.	(including permitting for the farm site and species), aquatic health plan maintenance, assurance or	
	monitoring aquatic animal health, on-farm water quality and temperature monitoring, etc.	
Conclusion		References
The BAP scheme is in alignment because Section 9 of the BAP Salmon Farm Standards - Issue 2 Revision 3 - covers this from the		• <u>BAP</u>
perspective of animal health and welfare:		<u>Salmon</u>
		Farm

C.1.03 Biosecurity

BAP 9.2: The farm shall be located in waters where salmon would be expected to thrive, and farm facilities shall be clean and orderly.

Standard 2.4

BAP 9.8: The applicant shall be able to demonstrate compliance with a written Water Quality Management Plan described in the

implementation requirements above that includes provisions for water quality monitoring, staff training, mitigation measures for poor quality and procedures for the monitoring and control of dissolved oxygen during fish transport.

BAP Section 4 also addresses water quality management:

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.

C.1.04 Biosecurity

GSSI Component

Guidance

C.1.04 Biosecurity

The standard requires the aquaculture facility to establish, implement and maintain appropriate procedures to respond to disease outbreaks, which includes the ability to quarantine the aquatic animal where feasible.

It is expected that disease response procedures would be a component of the aquatic animal health management system. Feasibility of quarantine depends on a combination of species, culture system and production environment. In cases where quarantine is applicable, a review of suitable evidence is expected to demonstrate and verify the ability to contain diseased aquatic animals.

Conclusion References

The BAP scheme is in alignment because Section 10 of the BAP Salmon Farm Standards - Issue 2 Revision 3 - covers biosecurity and disease management:

BAP 10.1: The applicant shall designate an accredited fish health professional to oversee the Fish Health Management Plan, direct the diagnosis and treatment of fish diseases and coordinate activities with neighboring farms under an Area Management Agreement, where such an agreement is in place (see Section 2). The fish health professional shall be available in person or by phone at audit to answer questions. The applicant shall notify the certifying body if the fish health professional changes.

BAP 10.3: The applicant shall have written biosecurity and health management plans consistent with the implementation requirements, which shall include procedures for site fallowing, cleaning of farm equipment, visitor and vessel hygiene precautions, sanitary disposal of dead fish, increased vigilance if disease is suspected, sea lice management procedures and plans for disposal in the event of a mass fish kill, and shall be able to demonstrate compliance with them.

BAP 10.4: The fish health professional shall ensure compliance with all legal requirements for disease testing, fish movements (including zoosanitary regulations of inbound and outbound transports), treatments for fish diseases and reporting of notifiable diseases.

• <u>BAP</u>
<u>Salmon</u>
<u>Farm</u>
Standard

2.4

C.1.04 Biosecurity

BAP 10.5: Written procedures for the diagnosis and treatment of disease in fish shall include monitoring for endemic parasitic, bacterial and viral infections.

BAP 10.9: If used, drug treatments shall be based on authorizations by the fish health professional, who shall be guided by the FHMP and principles of best practice for the veterinary profession. The health professional shall prescribe medicines only to treat diagnosed diseases in accordance with instructions on product labels and national regulations. (See also Section 11.)

Also, In Section 9:

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.

C.1.05 Biosecurity

GSSI Component

The standard requires the aquaculture facility to establish, implement and maintain appropriate procedures and/or systems for the early detection of aquatic animal health issues,

Guidance

Appropriate procedures are expected to include general health/ behavioral inspections or testing for specific diseases with suitable monitoring (e.g., regular and including a suitable range of parameters, and of sufficient sample size to identify or anticipate disease outbreaks expediently, as well as increased surveillance when potential issues are identified.) Environmental monitoring is expected to include detection of unfavorable environmental quality factors that could adversely affect the health of the aquatic animal (e.g., water temperature and quality).

which include routine		
monitoring of stocks and the	Verification is expected and could include reviews of written records and monitoring results	to ensure
environment.	procedures and/or systems are operational is also expected. This could also be captured in a	
environment.	management plan.	an aquado nead
Conclusion	management plan.	References
	ecause the BAP Salmon Farm Standards - Issue 2 Revision 3 - includes the following clauses	• BAP
in Section 9:	•	Salmon
		Farm
BAP 9.4: Where weather condition	s allow, trained staff shall make at least daily inspections and reports on the culture facility,	Standar
water quality, and behavior and a	, · · · · · · · · · · · · · · · · · · ·	2.4
BAP 9.5: Staff status reports on the	e facility, water quality and fish conditions shall be documented, investigated and addressed	
by the fish health professional an	· · · · · · · · · · · · · · · · · · ·	
Section 10, covering biosecurity, d	lisease management and animal health and welfare, requires written procedures for disease	
diagnosis in a Fish Health Manage	ement Plan: "Monitoring for endemic or locally identified parasitic, bacterial and viral	
infections, and recording of finding	ngs and actions taken, which may or may not be mandated by government; Guidelines on	
indicators for disease that direct	farm staff as they tend fish or remove dead fish from the cages, and provide procedures for	
timely reporting if an indicator is	observed; A written response plan to be followed by the fish health professional to ensure	
ranid diagnosis if disease is suspe	ected, followed by prompt treatment."	
rapia alagnosis il alsoaso is saspo		
	nate an appropriated find health professional to everyon the Eigh Health Management Dlan	
BAP 10.1: The applicant shall design	nate an accredited fish health professional to oversee the Fish Health Management Plan,	
BAP 10.1: The applicant shall design direct the diagnosis and treatmen	nt of fish diseases and coordinate activities with neighbouring farms under an Area	
BAP 10.1: The applicant shall design direct the diagnosis and treatment Management Agreement, where	·	

C.1.05 Biosecurity

BAP 10.3: The applicant shall have written biosecurity and health management plans consistent with the implementation requirements, which shall include procedures for site fallowing, cleaning of farm equipment, visitor and vessel hygiene precautions, sanitary disposal of dead fish, increased vigilance if disease is suspected, sea lice management procedures and plans for disposal in the event of a mass fish kill, and shall be able to demonstrate compliance with them.

BAP 10.4: The fish health professional shall ensure compliance with all legal requirements for disease testing, fish movements (including zoosanitary regulations of inbound and outbound transports), treatments for fish diseases and reporting of notifiable diseases.

BAP 10.5: Written procedures for the diagnosis and treatment of disease in fish shall include monitoring for endemic parasitic, bacterial and viral infections.

C.1.06 Biosecurity		
GSSI Component	Guidance	
The standard requires that mortalities and moribund aquatic animals are routinely collected, where collection is a feasible practice.	GSSI expects this Essential Component to be applied where collection is a feasible func management practice (e.g., finfish grow out). Examples where this is not suitable could aquatic animals may be too small to effectively collect (e.g., shrimp farming). Record ke numbers of, and reason for, mortalities is expected.	include where
Conclusion		References
The BAP scheme is in alignment because the BAP Salmon Farm Standards - Issue 2 Revision 3 - includes the following clauses:		• <u>BAP</u> <u>Salmon</u> Farm

C.1.06 Biosecurity

BAP 9.6: When impaired fish and unwanted species are removed, their number, total weight and condition shall be recorded. They shall be killed by humane techniques, with the carcasses disposed of in a manner that ensures biosecurity and in accordance with applicable local and state regulations and/or the provisions of Section 8.

<u>Standard</u>

2.4

BAP 10.3: The applicant shall have written biosecurity and health management plans consistent with the implementation requirements, which shall include procedures for site fallowing, cleaning of farm equipment, visitor and vessel hygiene precautions, sanitary disposal of dead fish, increased vigilance if disease is suspected, sea lice management procedures and plans for disposal in the event of a mass fish kill, and shall be able to demonstrate compliance with them.

BAP 10.8: Observations by farm staff of disease indicators and resulting actions concerning disease diagnosis and treatment shall be recorded.

The BAP standard requires a written, Fish Health Management Plan that includes: "A recovery and disposal plan for dead fish in the event of a mass kill, with available equipment in place and identified services that can be called on to help quickly."

C.1.07 Biosecurity

GSSI Component

The standard requires the aquaculture facility to have operational fish health management practices. Evidence must be shown that these address the following elements (where relevant to the species, scale, and production system covered by the Standard's scope): 1. Effective biosecurity

2. Identification and use of suitable available vaccines

Guidance

It is expected that the standard will contain sufficient elements and/ or audit of culture practices for an operational program relative to the scale, species, and production systems covered by the standard's scope, including a focus on disease prevention (e.g. the use of vaccines). The content of the measures are expected to

C.1.07 Biosecurity

3. Introductions and transfers of farmed animals (where relevant, which is overseen by an aquatic animal health professional.

be overseen (but not necessarily full time employment) of an aquatic animal health professional.

Conclusion

The BAP scheme is in alignment because the BAP Salmon Farm Standards- Issue 2 Revision 3 - requires a written, detailed biosecurity plan with a focus on preventative controls. This plan must link to the Health Management Plan (Section 10).

BAP 10.1: The applicant shall designate an accredited fish health professional to oversee the Fish Health Management Plan, direct the diagnosis and treatment of fish diseases and coordinate activities with neighboring farms under an Area Management Agreement, where such an agreement is in place (see Section 2). The fish health professional shall be available in person or by phone at audit to answer questions. The applicant shall notify the certifying body if the fish health professional changes.

BAP 10.2: The applicant shall show that the designated fish health professional has the required licenses and accreditations to act in the farming region.

BAP 10.3: The applicant shall have written biosecurity and health management plans consistent with the implementation requirements, which shall include procedures for site fallowing, cleaning of farm equipment, visitor and vessel hygiene precautions, sanitary disposal of dead fish, increased vigilance if disease is suspected, sea lice management procedures and plans for disposal in the event of a mass fish kill, and shall be able to demonstrate compliance with them.

BAP 10.4: The fish health professional shall ensure compliance with all legal requirements for disease testing, fish movements (including zoosanitary regulations of inbound and outbound transports), treatments for fish diseases and reporting of notifiable diseases.

BAP 10.7: All smolts brought into the farm shall be free from diseases and parasites specified in applicable national health regulations, and shall be vaccinated against diseases for which effective vaccines are available prior to stocking.

References

• BAP Salmon Farm Standard 2.4

C.1.07 Biosecurity

The BAP standard requires a written, Fish Health Management Plan that includes:

- A plan for the cyclical production of fish that mandates a fallow period of at least eight weeks after the completion of harvesting and before restocking, and that is coordinated with neighboring BAP-certified farms and, where there is an established Area Management Agreement, with all farms in the AMA.
- Assurance that only smolts certified clinically healthy and free of diseases and parasites specified in applicable national fish health regulations are brought onto the farm.
- Vaccination of fish before they are brought onto a farm and revaccination, if needed, at the direction of the fish health professional.
- Cleaning and disinfection of all fish-handling equipment before it enters or leaves the farm.
- Management and/or limitation of "visiting" vessels from sites of higher or unknown risk, and a supplemental plan for increased oversight in the event of disease concerns.
- Disinfection or changes of footwear by all personnel entering or leaving the farm.
- Accurate recording of all fish movements and transfers to, from and within the farm.
- A requirement to move to the use of closed well boats when transporting fish, as methods and equipment become available.
- Procedures for the accurate and regular cage-by-cage recording, examination and sanitary disposal of dead fish recovered as "normal mortality" from cages.
- An alert status that defines extra precautions, checks on fish and increased vigilance if an occurrence of infectious disease is known or suspected in the region.
- A recovery and disposal plan for dead fish in the event of a mass kill, with available equipment in place and identified services that can be called on to help quickly.
- Monitoring for endemic or locally identified parasitic, bacterial and viral infections, and recording of findings and actions taken, which may or may not be mandated by government.

C.1.07 Biosecurity

- Guidelines on indicators for disease that direct farm staff as they tend fish or remove dead fish from the cages, and provide procedures for timely reporting if an indicator is observed.
- A written response plan to be followed by the fish health professional to ensure rapid diagnosis if disease is suspected, followed by prompt treatment.
- Written procedures based on current guidelines for best professional veterinary practices on how medicinal treatments with drugs, vaccines or anesthetics, and any non-medicinal use of chemicals (i.e., for disinfection or water treatment) shall be selected and administered in order to minimize risks to human health and the environment.
- Written procedures for recording withdrawal times to minimize the risk of residues remaining in the fish.
- Where possible and where the welfare of the fish will not be compromised by delay in treatment, a procedure for antibiotic sensitivity or resistance testing prior to each subsequent course of treatment with the same antibiotic and for recording of trends.

C.1.08 Off-farm Disease Transmission		
GSSI Component	Guidance	
The standard requires the aquaculture facility to establish and implement procedures for the disposal of mortalities using appropriate methods that prevent the spread of disease.	Given the nature of this requirement, the standard may appear as a general require verification that practices are employed is expected. Relevant examples can be fou and 4.7.8 of the Aquatic Animal Health Code 2015 (see www.oie.int/index.php?id=171&L=0&htmfile=chapitre_aquatic_animal_waste.htm).	
Conclusion		References
The BAP scheme is in alignment because	the BAP Salmon Farm Standards - Issue 2 Revision 3 - includes the following clause:	• <u>BAP</u> <u>Salmon</u> Farm

C.1.08 Off-farm Disease Transmission

BAP 10.3: The applicant shall have written biosecurity and health management plans consistent with the implementation requirements, which shall include procedures for site fallowing, cleaning of farm equipment, visitor and vessel hygiene precautions, sanitary disposal of dead fish, increased vigilance if disease is suspected, sea lice management procedures and plans for disposal in the event of a mass fish kill, and shall be able to demonstrate compliance with them.

Standard 2.4

In addition, the Fish Health Management Plan must include: "A recovery and disposal plan for dead fish in the event of a mass kill, with available equipment in place and identified services that can be called on to help quickly."

C.1.09 Off-farm Disease Transmission

GSSI Component

The standard requires the aquaculture facility to establish, implement and maintain appropriate procedures and/or systems to reduce the likelihood of disease and parasite transmission within the aquaculture facility and between it and natural aquatic fauna.

Guidance

Appropriate procedures or systems are expected to address both on farm disease and parasite transfer (such as the ability to quarantine diseased stocks, separating equipment) as well as between the facility and natural fauna (such as disinfection of effluents for diseased stocks, fallowing). The approach taken would be expected to be relevant to the species, production system, scale of production, and legal requirements. Can be "not applicable" with suitable justification provided by the scheme.

Where pathogens or parasites are a known concern (for example, sea lice on farmed salmon); Appropriate procedures or systems are expected to include specific requirements or actions defined in the standard or specified by the aquaculture facility through a suitable risk assessment or other evidence such as local or national regulations.

Appropriate management measures in these cases could include treatment trigger levels of parasite numbers on the farm-facility or siting requirements that require that the aquaculture facility is located at suitable distances from wild populations.

Verification that the management measures are suitable and employed is expected.	
Conclusion	References
The BAP scheme is in alignment because Section 10 of the BAP Salmon Farm Standards - Issue 2 Revision 3 - covers the	• <u>BAP</u>
requirements for biosecurity and addresses the spread of disease within and beyond the farm and requires:	Salmon
	<u>Farm</u>
· A plan for the cyclical production of fish that mandates a fallow period of at least eight weeks after the completion of	Standa
harvesting and before restocking, and that is coordinated with neighboring BAP-certified farms and, where there is an established Area Management Agreement, with all farms in the AMA.	<u>2.4</u>
• Assurance that only smolts certified clinically healthy and free of diseases and parasites specified in applicable national fish health regulations are brought onto the farm.	
• Vaccination of fish before they are brought onto a farm and revaccination, if needed, at the direction of the fish health professional.	
• Cleaning and disinfection of all fish-handling equipment before it enters or leaves the farm.	
 Management and/or limitation of "visiting" vessels from sites of higher or unknown risk, and a supplemental plan for increased oversight in the event of disease concerns. 	
• Disinfection or changes of footwear by all personnel entering or leaving the farm.	
 Accurate recording of all fish movements and transfers to, from and within the farm. 	
• A requirement to move to the use of closed well boats when transporting fish, as methods and equipment become available.	
• Procedures for the accurate and regular cage-by-cage recording, examination and sanitary disposal of dead fish recovered as "normal mortality" from cages.	
• An alert status that defines extra precautions, checks on fish and increased vigilance if an occurrence of infectious disease is known or suspected in the region.	
• A recovery and disposal plan for dead fish in the event of a mass kill, with available equipment in place and identified services that can be called on to help quickly.	
The relevant clauses are:	

C.1.09 Off-farm Disease Transmission

BAP 10.1: The applicant shall designate an accredited fish health professional to oversee the Fish Health Management Plan, direct the diagnosis and treatment of fish diseases and coordinate activities with neighboring farms under an Area Management Agreement, where such an agreement is in place (see Section 2). The fish health professional shall be available in person or by phone at audit to answer questions. The applicant shall notify the certifying body if the fish health professional changes.

BAP 10.3: The applicant shall have written biosecurity and health management plans consistent with the implementation requirements, which shall include procedures for site fallowing, cleaning of farm equipment, visitor and vessel hygiene precautions, sanitary disposal of dead fish, increased vigilance if disease is suspected, sea lice management procedures and plans for disposal in the event of a mass fish kill, and shall be able to demonstrate compliance with them.

BAP 10.4: The fish health professional shall ensure compliance with all legal requirements for disease testing, fish movements (including

zoosanitary regulations of inbound and outbound transports), treatments for fish diseases and reporting of notifiable diseases.

BAP 10.5: Written procedures for the diagnosis and treatment of disease in fish shall include monitoring for endemic parasitic, bacterial and viral infections.

BAP 10.6: The applicant shall adequately train farm staff in applying these biosecurity and health management procedures.

BAP 10.7: All smolts brought into the farm shall be free from diseases and parasites specified in applicable national health regulations, and shall be vaccinated against diseases for which effective vaccines are available prior to stocking.

BAP 10.8: Observations by farm staff of disease indicators and resulting actions concerning disease diagnosis and treatment shall be recorded.

C.1.09 Off-farm Disease Transmission

BAP 10.9: If used, drug treatments shall be based on authorizations by the fish health professional, who shall be guided by the FHMP and principles of best practice for the veterinary profession. The health professional shall prescribe medicines only to treat diagnosed diseases in accordance with instructions on product labels and national regulations. (See also Section 11.)

BAP 10.12: If the applicant is a member of an Area Management Agreement (Section 2), the farm shall demonstrate compliance with

the fish health management requirements of the AMA or, if an AMA is not yet in place, that it coordinates fish health management activities with other BAP-certified farms in an area twice the regulatory minimum separation distance to an upper limit of 5 kilometers.

BAP 10.13: The applicant shall demonstrate compliance with national or regional rules designed to minimize parasite reproduction and optimize control.

Also in Sections 2 and 4:

BAP 2.7: Where an AMA [Area Management Agreement] has not been established, applicants shall nevertheless demonstrate cooperation on matters of stocking, fallowing, fish health and biosecurity with BAP-certified farms within an area twice the regulatory minimum separation distance to an upper limit of a 5-kilometer radius.

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.

C.1.10 Record Keeping		
GSSI Component	Guidance	
The standard requires the aquaculture facility to maintain records on veterinary drug and chemical usage and the rationale for their use.	Verification that suitable records are maintained is expected. Suitable records are type, concentration, and dosage, method of administration and withdrawal times veterinary drugs and the rationale for their use.	•
Conclusion		References
The BAP scheme is in alignment because the BAP Salmon Farm Standards - Issue 2 Revision 3 -includes the following clauses:		• <u>BAP Salmon</u> <u>Farm</u> <u>Standard</u>
10.10: Records shall be maintained for every application of drugs and other chemicals that include the date, compound used, reason(s) for use, dose, withdrawal time and harvest date. (See the Traceability requirement.)		<u>2.4</u>
BAP 12.3: The facility shall keep complete and accurate records concerning any antibiotic, pesticide or other drug use at the farm.		

C.2 EVIDENCE OF ALIGNMENT

C.2.01 Chemical Usage		
GSSI Component	Guidance	
The standard requires the establishment, implementation and maintenance of an appropriate system for the application of chemicals and veterinary drugs.	An appropriate system could conform to the relevant sections of Article 6.2.7 at Animal Health Code (2015) (www.oie.int/index.php?id=171&L=0&htmfile=chapitre_antibio_resp_prudent_us suitable reference. The system is expected to ensure that the application of the instructions of the manufacturer or other competent authority. Verification that operational is also expected.	se.htm) or other e product follows the
Conclusion		References
The BAP scheme is in alignment because the BAP Salmon Farm Standards - Issue 2 Revision 3 -includes the following clauses: BAP 10.9: If used, drug treatments shall be based on authorizations by the fish health professional, who shall be guided by the FHMP and principles of best practice for the veterinary profession. The health professional shall prescribe medicines only to treat diagnosed diseases in accordance with instructions on product labels and national regulations.		BAP Salmon Farm Standard 2.4
BAP 10.10: Records shall be maintained for every application of drugs and other chemicals that include the date, compound used, reason(s) for use, dose, withdrawal time and harvest date. (See the Traceability requirement.) BAP 10.1: The applicant shall designate an accredited fish health professional to oversee the Fish Health Management		
Plan, direct the diagnosis and treatment of fish diseases and coordinate activities with neighboring farms under an Area		

C.2.01 Chemical Usage

Management Agreement, where such an agreement is in place (see Section 2). The fish health professional shall be available in person or by phone at audit to answer questions. The applicant shall notify the certifying body if the fish health professional changes.

BAP 12.3: The facility shall keep complete and accurate records concerning any antibiotic, pesticide or other drug use at the farm.

8.6: Fuel, lubricants and chemicals shall be labelled, stored and disposed of in a safe and responsible manner and marked with warning signs.

C.2.02 Chemical Usage

GSSI Component

The standard requires appropriate controls for all chemicals, incl. veterinary drugs, that enter the environment during or after use (whether already covered by GSSI Essential Components or not) in order to minimize adverse impacts on environmental quality. Manufacturer's guidance or equivalent directions should be followed, and where appropriate, relevant examples of chemicals that pose a high risk of adverse

Guidance

It is expected that the standard will require all chemicals used by the aquaculture facility and that will enter the environment are at least used according to the manufacturer's guidance (such as on label requirements or Safety Data Sheets (SDS) or, in the case of veterinary drugs, the guidance of the aquatic animal health professional to prevent adverse impacts upon the environment. Chemicals that pose a high risk of adverse impacts to environmental quality, examples of which should be specifically defined by the standard (e.g., copper-based anti-foulant treatments in marine cage aquaculture or anti-parasite or anti-microbe bath treatments), accepting that perceptions regarding high risk and the chemicals involved are subject to rapid change, or identified through a risk based self-assessment by the farmer (e.g., an environmental risk assessment)—or through reference to a recognized relevant classification system (e.g. the UN

C.2.02 Chemical Usage

demonstrate compliance with it.

impacts to environmental quality should be specifically defined by the standard

Globally Harmonized System of Classification and Labelling of Chemicals (GHS)). It is expected that the standard or the risk-assessment will define any necessary additional requirements to minimize the impacts (e.g., EQS limits for copper residues in the benthic environment).

The BAP scheme is in alignment because the BAP Salmon Farm Standards- Issue 2 Revision 3 - contains the following clauses:

BAP 8.1: The applicant shall have a written Material Storage, Handling and Waste Disposal Plan that includes the BAP requirements for proper handling and disposal as outlined in the implementation requirements above and be able to

BAP 8.2: Farm staff shall be familiar with the MSHWDP and trained in aspects of it they may be required to implement. This will be tested at audit by interview.

BAP 8.4: An inventory shall be kept of all hazardous materials or wastes (chemotherapeutants and materials that are hazardous to people) stored on or disposed of by the farm.

BAP 8.5: Material safety data sheets shall be available for all hazardous materials.

BAP 8.6: Fuel, lubricants and chemicals shall be labeled, stored and disposed of in a safe and responsible manner and marked with warning signs.

BAP 8.7: Precautions shall be taken to prevent spills, fires and explosions, and procedures and supplies shall be readily available to manage chemical and fuel spills or leaks.

BAP Salmon
 Farm
 Standard 2.4

C.2.02 Chemical Usage

BAP 8.9: Garbage and other solid waste shall be disposed of in compliance with local regulations and shall avoid environmental contamination.

BAP 8.10: If any farm nets are treated with copper or other toxicant-based antifouling materials, cleaning procedures shall collect, treat and dispose of wash water in compliance with national regulations regarding collection, treatment and disposal of such toxic wastes.

BAP 8.11: In farms that are shifting from the use of antifoulants to in situ net cleaning, copper-based antifoulant-treated nets may be cleaned in situ if the nets have first been cleaned ashore by approved methods (8.10) and not retreated before redeployment.

BAP 8.12: The applicant shall have a written waste reduction plan and be able to demonstrate compliance with it, including a program to test alternatives to the use of toxicant-based antifoulant paints on farm nets.

BAP 10.9: If used, drug treatments shall be based on authorizations by the fish health professional, who shall be guided by the FHMP and principles of best practice for the veterinary profession. The health professional shall prescribe medicines only to treat diagnosed diseases in accordance with instructions on product labels and national regulations.

C.3 EVIDENCE OF ALIGNMENT

C.3.01 Maintaining Good Culture and Hygienic Conditions

GSSI Component

The standard requires that the aquaculture facility and its daily operations ensure that good culture and hygienic conditions are maintained. Relevant aspects include proper management of all chemicals, fuels and feeds including their safe storage

Guidance

This is a general Essential Component that covers a range of potential issues depending on the type of production system, species being cultured, and the local environment, and as such there is a need for flexibility in how consistency is achieved. It is expected that the following issues would be addressed and the systems verified to be operational:

- Appropriate storage of chemicals and fuel (e.g., stored in a lockable, labeled facility, limited access by personnel, leakage prevention all based on Safety Data Sheets (SDS) (see figure 4.14 of the A Guide to The Globally Harmonized System of Classification and Labeling of Chemicals (GHS), available at: www.osha.gov/dsg/hazcom/ghsguideoct05.pdf)
- Appropriate storage of feed (e.g., stored separately from sources of contamination, accurately labeled, keeping medicated and nonmedicated feed separated.)
- Appropriate pest control (e.g., prevent contamination of feed, chemicals by rodents or insects etc.)
- Domestic sewage control/disposal to avoid local contamination
- General farm waste (e.g., empty feed bags, household rubbish, food containers etc.).

Conclusion

The BAP scheme is in alignment because the BAP Salmon Farm Standards - Issue 2 Revision 3 - contains the following clauses:

BAP 8.1: The applicant shall have a written Material Storage, Handling and Waste Disposal Plan (MSHWDP) that includes the BAP requirements for proper handling and disposal as outlined in the implementation requirements above and be able to demonstrate compliance with it.

References

• BAP Salmon Farm Standard 2.4

C.3.01 Maintaining Good Culture and Hygienic Conditions

BAP 8.2: Farm staff shall be familiar with the MSHWDP and trained in aspects of it they may be required to implement. This will be tested at audit by interview.

BAP 8.3: Feed shall be stored so that it is protected from spoilage or infestation by pests and vermin.

BAP 8.4: An inventory shall be kept of all hazardous materials or wastes (chemotherapeutants and materials that are hazardous to people) stored on or disposed of by the farm.

BAP 8.5: Material safety data sheets shall be available for all hazardous materials.

BAP 8.6: Fuel, lubricants and chemicals shall be labeled, stored and disposed of in a safe and responsible manner and marked with warning signs.

BAP 8.7: Precautions shall be taken to prevent spills, fires and explosions, and procedures and supplies shall be readily available to manage chemical and fuel spills or leaks.

BAP 8.8: Garbage from housing and food waste shall be retained in water-tight receptacles with covers to protect contents from insects, rodents and other animals.

BAP 8.9: Garbage and other solid waste shall be disposed of in compliance with local regulations and shall avoid environmental contamination.

BAP 11.6: Where there is a discharge of potential contaminants within 5 kilometers of a farm, the farm shall check for that contaminant in the flesh of exposed fish on at least an annual basis and verify that levels are below those required by the exporting and importing countries.

C.3.01 Maintaining Good Culture and Hygienic Conditions

BAP 11.7: Equipment and containers used to harvest and transport fish shall be clean and free of lubricants, fuel, metal fragments and other foreign material.

BAP 11.8: Ice in which fish are placed following harvest shall be made from potable water or seawater that has been disinfected to an equivalent standard.

C.3.02 General Environmental Management

GSSI Component

The standard requires that aquaculture facility infrastructure is appropriately maintained in order to prevent negative environmental impacts, whether from construction, operation or decommissioning (e.g., including the requirement for derelict equipment and materials to be collected and disposed of responsibly.)

Guidance

Given the wide variety of production systems in aquaculture specific guidance cannot be provided and flexibility by the evaluator is required using a risk-based approach. Examples could include the requirement for derelict or damaged gear in shellfish or cage aquaculture to be collected and disposed of responsibly, or for that waste from pond construction is not placed in mangrove forests in shrimp farming. It is expected that specific requirements or risk based management systems would be required where appropriate, along with suitable verification. These requirements may also be included in other Standards, such as sensitive habitat protection or escape prevention.

Conclusion

The BAP scheme is in alignment because two sections of the BAP Salmon Farm Standards- Issue 2 Revision 3 - are aimed at controlling pollution:

Section 4. Sediment and Water Quality

Section 8. Storage and Disposal of Farm Supplies

References

<u>Salmon</u> <u>Farm</u> Standard

BAP

2.4

C.3.02 General Environmental Management

In addition, the following specific clauses apply:

BAP 8.9: Garbage and other solid waste shall be disposed of in compliance with local regulations and shall avoid environmental contamination.

BAP 8.1: The applicant shall have a written Material Storage, Handling and Waste Disposal Plan that includes the BAP requirements for proper handling and disposal as outlined in the implementation requirements above and be able to demonstrate compliance with it.

BAP 1.3: Current documents shall be available to prove compliance with applicable environmental and other regulations for construction and operation.

The implementation requirements for BAP 8.1 specify:

- Procedures for the sanitary storage and handling of feed and its protection from vermin.
- A current inventory of all hazardous materials used and wastes stored and/or disposed of by the farm.
- Availability of material safety data sheets on site for all hazardous materials in the inventory.
- Procedures for the storage, transport, handling, labeling and use of fuel, oil, chemicals and other potentially toxic materials used on the farm that limit the risk of accidental spills and release into the environment. Secondary containment shall be provided for individual or multiple fuel storage tanks. The containment volume shall be equivalent to the total stored volume plus 10%.
- Refueling, maintenance and record-keeping procedures for all equipment that uses oil or fuel in order to prevent leaks or spills and ensure that used oil is sent to an approved handling facility.
- Procedures for the collection, storage and disposal of trash, garbage, refuse and other waste materials.

C.3.02 General Environmental Management

- Procedures and the necessary materials and equipment for emergency containment and cleanup of spilled materials.
- Procedures for washing nets treated with copper or other toxicant-based antifouling materials. Nets treated with antifoulant that is deemed toxic, such as cooper, shall be cleaned out of the water at a licensed off-farm net-cleaning establishment, or on the farm if equipment and procedures are in place to treat the wash water and collect the solid waste before disposal. In all cases, methods of collection and treatment shall comply with national or regional regulations governing the disposal of toxic wastes.
- Procedures for the sanitary storage and disposal of human waste (black water).
- Procedures for recycling waste, where this is feasible.
- Procedures for the safe disposal of materials deemed surplus or out of date, including medicated feed.
- A written waste reduction plan for measuring and recording waste volumes and how such volumes will be reduced by recycling or other means over time.
- The waste reduction plan shall include a program to test alternatives to the use of toxicant-based antifoulant paints on farm nets with the goal of reducing release of toxicants to the environment, especially toxicant particles that can accumulate in marine sediments.

BAP 6.2: Local rules notwithstanding, the applicant shall demonstrate that the farm meets the BAP procedural, performance, documentation and reporting requirements for fish containment required by the Fish Containment Plan outlined under Implementation above, which shall include a classification of the farm site, an engineer's structural report, a mooring certification, an escape risk analysis, monitoring procedures that respond to the risk analysis, predator deterrence procedures, precautions related to the use of boats, fish handling procedures and inventory accounting procedures.

The specific implementation requirements for BAP 6.2 include:

• Net inventory management procedures that track the ages of all nets on the farm or in storage, and provide strength tests on all nets between crops or every two years, whichever period is shorter. Nets shall be retired when their strength is below levels specified in local regulations or, where there are none, below the manufacturer's or supplier's recommendations.

C.3.02 General Environmental Management

• Cage inspection procedures that ensure all operational nets are surface checked for holes at least weekly and checked subsurface at least every four weeks. Nets and cage superstructure shall be checked for holes and other indications of structural damage after risk events such as storms or big tides.

C.4 EVIDENCE OF ALIGNMENT

C.4.01 Environmental Considerations of Feed Ingredients

GSSI Component	Guidance	
The standard requires the aquaculture facility to sources feed from a manufacturer that can trace aquatic feed ingredients including fish meal and fish oil (>1% inclusion) to the species and, at least, to the country of origin.	Verification is expected to include a review of evidence (e.g., documentation, self-dec feed manufacturer). The standard is expected to apply to other relevant marine feed algae, krill, and squid) and to whole fish and fishery byproducts.	•
Conclusion		References
Ç	he BAP Salmon Farm Standards - Issue 2 Revision 3 -includes the following clauses: m a BAP-certified feed mill or a feed mill that declares and documents compliance r fishmeal and fish oil conservation.	BAP Feed Mill Standard
BAP 5.2: Documents from feed suppliers shall be available that assure the traceability to source of marine protein and lipid ingredients present in feed at levels of 1% and non-marine ingredients at levels of 10% or greater.		
The relevant BAP Feed Mill Standards are:		
3.1 (p 19) This standard focuses attention on meals and oils derived from wild or farmed aquatic sources including fish, mollusks, crustaceans and algae		

C.4.01 Environmental Considerations of Feed Ingredients

- 4.1. The facility shall obtain declarations from suppliers on the species and fishery origins of each batch of fishmeal and fish oil.
- 4.2. The facility shall not source raw material from IUU fisheries. It shall have documented procedures of corrective actions in the event of usage of any raw material sourced from IUU fisheries and shall prevent recurrence.
- 4.3. Feed mills shall indicate on packaging, shipping documents, invoices, or in written declarations for all feeds the inclusion rates of fishmeal and fish oils derived from reduction fisheries.
- 4.4. The facility shall develop and implement a clear, written Plan of Action defining policies for responsibly sourcing fishmeal and fish oil from reduction fisheries and setting clear goals for responsibly sourcing soy ingredients

Feed Mill Standard 3.1 (p 19) states: 'This standard focuses attention on meals and oils derived from wild or farmed aquatic sources including fish, mollusks, crustaceans and algae'

C.4.02 Environmental Considerations of Feed Ingredients		
GSSI Component	Guidance	
The standard requires the aquaculture	Verification is expected to include a review of evidence (e.g., documentation, self-declaration by the	
facility to source feed from a	feed manufacturer). The standard is expected to apply to other relevant marine feed ingredients (e.g.,	
manufacturer who produces feed that	algae, krill, and squid) and to whole fish and fishery byproducts.	
excludes fishmeal and fish oil from		
endangered species and is validated as	Endangered species are expected to be defined in the Standard, with reference to relevant national	
such.	listings (e.g., Vietnam's Red Data Book) and/or global listing organizations such as CITES (Appendix 1),	

C.4.02 Environmental Consideratio	ns of Feed Ingredients	
	IUCN Red List (Categories Critically Endangered (CR), Endangered (EN), Vulnerable (VU)). See	
	www.iucnredlist.org and www.cities.org for more information.	
Conclusion		References
The BAP scheme is in alignment because t	he BAP Salmon Farm Standards - Issue 2 Revision 3 - specifies:	BAP Feed Mill Standard
BAP 5.1: The applicant shall source feed from a BAP-certified feed mill or a feed mill that declares and documents compliance with the BAP feed mill standards criteria for fishmeal and fish oil conservation.		
And the relevant BAP Feed Mill 3.1 Standard	ls are:	
4.1. The facility shall obtain declarations from	om suppliers on the species and fishery origins of each batch of fishmeal and	
•	ial from IUU fisheries. It shall have documented procedures of corrective actions sourced from IUU fisheries and shall prevent recurrence.	
With regard to the requirement that the standard excludes endangered species, the BAP Feed Mill Std 3.1 requires:		
4.4. The facility shall develop and implement a clear, written Plan of Action defining policies for responsibly sourcing fishmeal and fish oil from reduction fisheries and setting clear goals for responsibly sourcing soy ingredients.		
And the standard explains what must be in 'critically endangered' fish as designated	ncluded in the Plans of Action (p20) and refers to exclusion of 'endangered and by the IUCN:	
The Plans of Action shall address how to:		

C.4.02 Environmental Considerations of Feed Ingredients

- Exclude use of fishmeal or fish oil sourced from illegal, unreported or unregulated (IUU) fisheries, or by-products from such fisheries.
- Exclude fishmeal or fish oil sourced from fish or fish by-products from fisheries designated by the International Council for the Exploration of the Sea (ICES), Food and Agriculture Organization (FAO) of the United Nations, National Marine Fisheries Service of the United States, International Union for Conservation of Nature or Commission for the Conservation of Antarctic Marine Living Resources as "subject to overfishing," "overfished," "harvested unsustainably," "fishery closed," "stock overexploited," "no fishing recommended," "stock critical," "endangered" or "critically endangered."

C.4.03 Environmental Considerations of Feed Ingredients		
GSSI Component	Guidance	
The standard requires the aquaculture facility to source feed from a manufacturer that prohibits the use of fishmeal and fish oil from illegal, unreported, and unregulated fishing (I.U.U.).	Verification is expected to include a review of evidence (e.g., documentation, self-defeed manufacturer). The standard is expected to apply to other relevant marine fee algae, krill, and squid) and to whole fish and fishery byproducts.	-
Conclusion		References
The BAP scheme is in alignment because the BAP Salmon Farm Standards - Issue 2 Revision 3 - specifies:		• <u>BAP Feed</u> <u>Mill</u>
BAP 5.1: The applicant shall source feed from a BAP-certified feed mill or a feed mill that declares and documents compliance with the BAP feed mill standards criteria for fishmeal and fish oil conservation.		<u>Standard</u>
And the relevant BAP Feed Mill Standards are:		

C.4.03 Environmental Considerations of Feed Ingredients

- 4.1. The facility shall obtain declarations from suppliers on the species and fishery origins of each batch of fishmeal and fish oil.
- 4.2. The facility shall not source raw material from IUU fisheries. It shall have documented procedures of corrective actions in the event of usage of any raw material sourced from IUU fisheries and shall prevent recurrence.
- 4.4. The facility shall develop and implement a clear, written Plan of Action defining policies for responsibly sourcing fishmeal and fish oil from reduction fisheries and setting clear goals for responsibly sourcing soy ingredients.

The plans of action (in FM 4.4) must address how to avoid:

- Use of fishmeal or fish oil sourced from illegal, unreported or unregulated fisheries, or by-products from such fisheries.
- Fishmeal or fish oil sourced from fish or fish byproducts from fisheries designated by the International Council for the Exploration of the Sea (ICES), Food and Agriculture Organization (FAO) of the United Nations, National Marine Fisheries Service of the United States, International Union for Conservation of Nature or Commission for the Conservation of Antarctic Marine Living Resources as "subject to overfishing," "overfished," "harvested unsustainably," "fishery closed," "stock overexploited," "no fishing recommended," "stock critical," "endangered" or "critically endangered."
- Any products of the same genus as the species for which the feed is intended.

C.4.04 Environmental Considerations of Feed Ingredients

GSSI Component

Guidance

C.4.04 Environmental Considerations of Feed Ingredients

The standard requires that the aquaculture facility to source feed from a manufacturer that has a written policy which includes assessment of source fishery status and identification of improvement needs and work plan to deliver improvements. The policy must include a commitment and timeline to source aquaculture and fishery products from responsible/best practice sources, such as those certified a standard benchmarked at minimum consistent with relevant FAO's ecolabelling guidelines or by identified independent risk assessment.

Verification is expected to include a review of evidence (e.g., documentation, self-declaration by the feed manufacturer). The standard is expected to apply to other relevant marine feed ingredients (e.g., algae, krill, and squid) and to whole fish and fishery byproducts.

Conclusion	References
The BAP scheme is in alignment because the BAP Salmon Farm Standards - Issue 2 Revision 3 - specifies:	BAP Feed Mill
BAP 5.1: The applicant shall source feed from a BAP-certified feed mill or a feed mill that declares and documents compliance with the BAP feed mill standards criteria for fishmeal and fish oil conservation.	<u>Standard</u>
And the relevant BAP Feed Mill Standards are:	
4.1. The facility shall obtain declarations from suppliers on the species and fishery origins of each batch of fishmeal and fish oil.	
4.2. The facility shall not source raw material from IUU fisheries. It shall have documented procedures of corrective actions in the event of usage of any raw material sourced from IUU fisheries and shall prevent recurrence.	
4.4. The facility shall develop and implement a clear, written Plan of Action defining policies for responsibly sourcing fishmeal and fish oil from reduction fisheries and setting clear goals for responsibly sourcing soy ingredients.	
The Feed Mill Standard states, p20:	

C.4.04 Environmental Considerations of Feed Ingredients

Facilities shall create and implement clear Plans of Action that define: policies for the responsible sourcing of fishmeal and fish oil from reduction fisheries and material derived from fish-processing by-products from capture fisheries or from aquaculture or; goals for soy inputs such that 50% come from certified sources by 2022, and; ensure 100% certified palm oil by 2022. Additionally, facilities shall have policies to reduce any inputs of fishmeal and oil from uncertified sources toensure they attain at least 75% fishmeal and oil from certified sources or fishery improvement projects (FIPs) by June 2025. Note that for salmon feed mills there is no delay till June 2025 for this 75% requirement to apply

The plans of action must address how to avoid:

- Use of fishmeal or fish oil sourced from illegal, unreported or unregulated fisheries, or by-products from such fisheries.
- Fishmeal or fish oil sourced from fish or fish byproducts from fisheries designated by the International Council for the Exploration of the Sea (ICES), Food and Agriculture Organization (FAO) of the United Nations, National Marine Fisheries Service of the United States, International Union for Conservation of Nature or Commission for the Conservation of Antarctic Marine Living Resources as "subject to overfishing," "overfished," "harvested unsustainably," "fishery closed," "stock overexploited," "no fishing recommended," "stock critical," "endangered" or "critically endangered."
- Any products of the same genus as the species for which the feed is intended."

The Guidance continues:

"Aquafeed producers shall actively favor marine oils and proteins derived from fisheries that are classified by reputable international third parties such as the FAO and ICES as sustainably fished, fully fished or underexploited. One example of an appropriate tool for developing a responsible sourcing plan is the FishSource data bank created by the Sustainable Fisheries Partnership (http://www.fishsource.com)."

C.4.05 Food Biosecurity		
GSSI Component	Guidance	
The standard prohibits the use of raw fish as a direct feed source in growout.	0% of feed at any time during production (under the scope of certification) may contain "whole fish" or "wet fish", which includes any form of uncooked wet fish (whole or chopped or frozen etc.), which includes direct feed, supplemental feeding, or on-farm made applications. Alternatives would be to require 100% use of commercial dry pelleted feeds. Verification is expected to include a suitable review of evidence, such as feed use records, visual observation, and financial records in aquaculture industries where this is common practice. A non-applicable (N/A) designation is only acceptable where 100% of production under the scope of the standard (including species, production intensity and production systems covered) uses entirely commercial dry pelleted feeds (e.g., Atlantic salmon).	
Conclusion		
The BAP scheme is in alignment because the BAP Salmon Farm Standards - Issue 2 Revision 3 - only allows the use of compound feeds from reputable feed mills and thus excludes feeding of whole fish. Salmon Farm		
BAP 9.3: Fish shall be fed feed made by a reputable feed company and subject to the requirements for documentation specified in Section 5.		
BAP 5.1: The applicant shall source feed from a BAP-certified feed mill or a feed mill that declares and documents compliance with the BAP feed mill standards criteria for fishmeal and fish oil conservation.		
BAP 12.4: Complete and accurate records regarding manufacturer and lot numbers for each feed used shall be maintained.		
BAP 12.5: The facility shall maintain complete and accurate records of the sources and numbers of juvenile fish (smolts) stocked, stocking dates and all feeds used for each culture unit.		

C.4.06 Feed Biosecurity		
GSSI Component	Guidance	
The standards prohibits aquatic feed protein from the same species and genus as the species being farmed.	Verification is expected to include a review of evidence (e.g., documentation, self-d feed manufacturer).	eclaration by the
Conclusion		References
The BAP scheme is in alignment because I with BAP Feed Mill Standard.	3AP 5.1 of the BAP Salmon Farm Standards - Issue 2 Revision 3 - requires compliance	• <u>BAP</u> <u>Salmon</u> <u>Farm</u>
BAP 5.1: The applicant shall source feed from a BAP-certified feed mill or a feed mill that declares and documents compliance with the BAP feed mill standards criteria for fishmeal and fish oil conservation.		<u>Standard</u> 2.4
FM 4.4: The applicant shall develop and implement a clear, written plan of action defining policies for responsibly sourcing fishmeal and fish oil from responsibly managed fisheries.		
The plans of action must		
• Exclude any ingredients containing prote	ein	
from members of the same genus as the		
species for which the feed is intended [but		
protein hydrolysates (routinely tested to verify		
<10,000 daltons) are permissible].		

C.4.07 Feeding Efficiency		
GSSI Component	Guidance	
Where applicable, the standard requires that the aquaculture facility has suitable measures in place to ensure that feed is used efficiently at the individual production unit level.	Suitable measures are expected to be part of a wider feed management system, su measurement of FCR (Feed Conversion Ratio) and FIFO (Fish In Fish Out ratio) as well records of visual feed response and staff training. Verification that the measures are fit for purpose is also expected.	as documented
Conclusion		References
shall provide facilities for holding and rear intervals." In addition, the following clauses BAP 9.2: The farm shall be located in waters orderly BAP 9.4: Where weather conditions allow, to water quality, and behavior and condition BAP 5.4: The facility shall calculate and rec BAP 5.5: The facility shall calculate and ach	s where salmon would be expected to thrive, and farm facilities shall be clean and rained staff shall make at least daily inspections and reports on the culture facility, of fish. ord a feed-conversion ratio for each year class. nieve a final fish in:fish out ratio of 1.5 or less for each year class harvested. te and accurate records of the sources and numbers of juvenile fish (smolts)	• BAP Salmon Farm Standard 2.4

C.4.07 Feeding Efficiency

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.

0 4 00	B 1/ !	
CANS	Record Keeping	
O.T.UU	Necola Rechilia	

GSSI Component

Guidance

The standard requires that appropriate records are kept on all feed use. At a minimum this must include: feed source, feed Batch/Lot/ID number, date of purchase, and feed conversion ratio (FCR) MT

Appropriate records are expected to include those stated in the component, and, where appropriate, feed inclusion percentages of fishmeal and fish oil or a fish in: fish out ratio. Appropriate records are expected to be kept for each individual production unit. Verification of appropriate record keeping and suitable documentation from feed manufacturers is also expected.

Conclusion

maintained.

References

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

BAP 12.4: Complete and accurate records regarding manufacturer and lot numbers for each feed used shall be

BAP 12.5: The facility shall maintain complete and accurate records of the sources and numbers of juvenile fish (smolts) stocked, stocking dates and all feeds used for each culture unit.

5.4: The facility shall calculate and record a feed-conversion ratio for each year class.

BAP Salmon
 Farm
 Standard 2.4

C.4.08 Record Keeping

5.5: The facility shall calculate and achieve a final fish in:fish out ratio of 1.5 or less for each year class harvested.

C.5 EVIDENCE OF ALIGNMENT

C.5.01 Benthic Habitats

GSSI Component

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

Guidance

Appropriate measures for marine cage production systems are expected to consider biological, chemical and physical impacts and additional chemical residues resulting from culture practices and should use appropriate sampling methods. Where relevant, they should conform to ISO 16665. The use of systems combining suitable allowable zones of effect and environmental quality standards (EQS) of effect are expected. Verification that the measures are operational and fit for purpose is expected. Evidence of the prevention of adverse impacts could include comparisons with baseline conditions, reference locations, or standardized limits with a suitable justification for their use. Where adverse impacts are detected it is expected that appropriate mitigation measures/ remedial action for the identified adverse impacts on the surrounding natural ecosystem are applied. Sanctions that address situations where EQS' are exceeded and there is no effective remediation within a suitable timeframe could include withholding certification. While generally recognized as a marine cage issue, benthic impacts can also occur in freshwater cage systems. The degree of management measures should reflect the degree of potential impacts relative to the environment, production system, species, and size of production.

Conclusion

physical nature.

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.

References

• BAP Salmon Farm Standard 2.4

C.5.01 Benthic Habitats

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.

C.5.01 Benthic Habitats

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.

C.5.02 Predator Control

GSSI Component

The standard prohibits the use of any lethal predator control techniques on endangered species. Exceptions for worker safety and where euthanization is an act of mercy are acceptable and expected.

Guidance

Verification of the predator controls used, appropriate record keeping, and details of the endangered species in the region of the aquaculture facility are expected. Examples of supporting evidence of non-use could include interview, appropriate signage, and mortality records. Exceptions for worker safety and where euthanization is an act of mercy are acceptable and expected.

Endangered species are expected to be defined in the standard, with reference to relevant national listings (e.g., Vietnam's Red Data Book) and/or global listing organizations such as CITES (Appendix 1), IUCN Red List (Categories Critically Endangered (CR), Endangered (EN), Vulnerable (VU)). See www.iucnredlist.org and www.cities.org for more information.

Conclusion

The BAP scheme is in alignment because the BAP Salmon Farm Standards - Issue 2 Revision 3 - includes the following clauses: BAP 7.5: The applicant shall actively favor passive and/or non-lethal methods of predator control. No controls, other than non-lethal exclusion, shall be applied to species listed as "critically endangered" or "endangered" on the IUCN Red List or that are protected by local or national laws, unless specific written permission for such control is granted by the regulator.

References

• BAP Salmon Farm Standard 2.4

C.5.02 Predator Control

BAP 7.7: The applicant shall record, and report when required, the species and numbers of all avian, mammalian and reptilian predator mortalities, including accidental mortalities.

C.5.03 Sensitive Habitat and Biodiversity

GSSI Component

The standard requires that in areas where damage of sensitive habitats has occurred previously, and where restoration is possible and effective; restoration efforts will or have resulted in a meaningful amount of restored habitat; either through direct on-farm restoration or by an off-farm offsetting approach. Grandfathering of historical losses is allowed.

Guidance

It is expected that the standard will define sensitive habitat in context with its scope and an appropriate date to be used prior to which legal impacts can be "grandfathered in" and provide supporting evidence for the date. Verification at the aquaculture facility is expected to include whether restoration is necessary, to what degree (evidence could include maps, aerial photos, satellite images, government certification etc.) and whether that the active restoration is suitable (i.e., will it be successful and restore a suitable area of sensitive habitat).

Conclusion References

C.5.03 Sensitive Habitat and Biodiversity

This Requirement is not applicable because the BAP Salmon Farm Standard is exclusively for marine cage operations. The GSSI requirement and guidance are written with protection and restoration of wetlands in mind.

The BAP scheme does protect sensitive habitats. BAP Salmon Farm Standards - - Issue 2 Revision 3 - includes the following relevant sections and clauses:

Section 6 addresses potential habitat impacts related to escapes.

BAP 6.7: The farm shall not be located within an area officially designated as "critical" or "sensitive" habitat (or equivalent terminology) with respect to wild salmon unless site-specific, valid, official documentation authorizing an exemption, supported by an environmental impact analysis, can be provided.

Section 7 also addresses sensitive habitats:

BAP 7.3: The applicant shall provide site maps or other current documentation that show the farm is not within geographic areas officially designated "critical" or "sensitive" habitat (or equivalent). If such documentation is not available, the applicant shall provide proof of regulatory authorization of the farm site and operations, as well as a risk assessment of farm/wildlife interactions and related procedures.

Section 7 requires a Wildlife Interaction Plan that includes:

- A map that identifies officially designated "critical" and/or "sensitive" marine and coastal habitat in the region. If the farm is in an area so designated, a list of the classified or endangered sedentary species within a 2-kilometer radius of the farm and of mobile coastal species within the region, updated where necessary to show wildlife established after the farm was started, shall also be included.
- Independent expert risk assessment of the farm's possible interactions with the wildlife in the critical or sensitive habitat, if this has not been considered by regulators in granting the farm's license(s).

• BAP Salmon Farm Standard 2.4

C.5.03 Sensitive Habitat and Biodiversity

Section 1 lists legal compliance requirements and includes "protection of sensitive habitats."

C.6 EVIDENCE OF ALIGNMENT

C.6.01 Record Keeping			
GSSI Component	Guidance		
The standard requires the	An appropriate records system may include source of the seed, date of purchase, stocking density,		
establishment, implementation and	vaccination record of the seed, and stocked seed batch identification.		
maintenance of an appropriate record	ntenance of an appropriate record		
keeping system for all seed that is	Verification is expected to include a review of evidence that the system is operational and fit for		
intentionally stocked.	purpose.		
Conclusion	Conclusion		
The BAP scheme is in alignment because the BAP Salmon Farm Standards- Issue 2 Revision 3 - includes the following • <u>BAF</u>		• <u>BAP Salmon</u>	
clause:		<u>Farm</u>	
	Standard 2.4		
BAP 12.5: The facility shall maintain complete and accurate records of the sources and numbers of juvenile fish (smolts)			
stocked, stocking dates and all feeds used for each culture unit.			

C.6.02 Wild Seed		
GSSI Component	Guidance	
The standard requires that where the deliberate	Expected examples of "justifiable use" include where there is a lack of commercially-	
use of wild seed is justifiable, it is collected in a available hatchery-raised seed, inability/lack of technology to hatchery-raised the fo		
manner that:	species, or passive collection of mollusks. Justification could be offered at the standard or	
- Ensures controls are in place so that the	aquaculture facility level. Verification is expected to include the need to provide suitable	
collection of seed is not detrimental to the status	evidence by the aquaculture facility (e.g., a summary report written by a credible 3rd party	

C.6.02 Wild Seed

of the wild target and non-target populations, nor that of the wider ecosystem. This requires a documented management approach that ensures those wild populations are not overfished and not subject to recruitment overfishing or other impacts that are likely to be irreversible or very slowly reversible, and avoids, minimizes or mitigates fishing impacts on essential habitats and on habitats that are highly vulnerable to damage by the fishing gear;

 Avoids the use of environmentally damaging collection practices;
 And ensures that the source fishery is regulated by an appropriate authority. on the source fishery, a self-certification by the appropriate management authority, a 3rd party fishery certification that verifies suitable compliance).

A documented management approach is expected to follow Component D.3.01 where the standard requires the existence of documented management approaches or other management framework covering the unit of certification and the stock under consideration, including management measures consistent with achieving management objectives for the stock under consideration. Expected outcomes of the management approach are described in the Guidance of D.6.01 Target Stock Status, D.6.05 Non-Target Catches, D.6.06 Endangered Species, and D.6.07 Habitat, respectively. Definitions of terms related to wild fisheries can be found in Section D terms of the Glossary.

Examples of environmentally damaging collection practices include blast, poison, and Muro-ami fishing practices.

Conclusion	References
This GSSI Component is not applicable because production systems and species use only hatchery seed.	 BAP Salmon Farm
	Standard 2.4

C.6.03 Hatchery Seed

GSSI Component

Guidance

C.6.03 Hatchery Seed

The standard requires that hatchery-raised seed are free from relevant/important pathogens before stocking for grow-out.

Relevant/important pathogens are expected to include those identified by the aquatic health professional and sources such as the OIE/ transboundary disease lists (See Chapter 1.3 of the Aquatic Animal Health Code 2015 http://www.oie.int/en/international-standard-setting/aquatic-code/access-online/).

Verification of suitable measures is expected to include reviews of disease-testing methods, the disease tested for, and the results (including ISO 23893-1:2007), and the vaccination record of the seed. This could form part of the aquatic animal health management plan.

Conclusion References The BAP scheme is in alignment because the BAP Salmon Farm Standards - Issue 2 Revision 3 -includes the following **BAP Salmon** Farm Standard clauses: 2.4 BAP 10.4: The fish health professional shall ensure compliance with all legal requirements for disease testing, fish movements (including zoosanitary regulations of inbound and outbound transports), treatments for fish diseases and reporting of notifiable diseases. BAP 10.7: All smolts brought into the farm shall be free from diseases and parasites specified in applicable national health regulations, and shall be vaccinated against diseases for which effective vaccines are available prior to stocking. Section 10 requires a Fish Health Management Plan that includes: · Assurance that only smolts certified clinically healthy and free of diseases and parasites specified in applicable national fish health regulations are brought onto the farm. • Vaccination of fish before they are brought onto a farm and revaccination, if needed, at the direction of the fish health professional.

C.7 EVIDENCE OF ALIGNMENT

C.7.01 Escapes		
GSSI Component	Guidance	
The standard	An appropriate system is expected to be based on an evaluation of the likelihood of events and the magnitude of	
requires that the	impacts on surrounding environment (where risk assessments are used they met use a suitable scientific method and	
aquaculture facility	taking into consideration, siting, culture practices, local environmental conditions, including extreme events, and other	
establishes,	relevant uncertainties) according to the precautionary approach and possible impacts on surrounding natural	
implements, and	ecosystems, including fauna, flora, and habitat. Specific requirements stated in the standard are acceptable.	
maintains an		
appropriate system	Verification is expected to include a review of evidence of an operational and fit for purpose system.	
to minimize the		
unintentional release	The monitoring of the management practices could include but are not limited to:	
or escape of cultured	i) Measures for escape detection	
species. This should	his should ii) Monitoring for and record keeping of escapes events	
include monitoring	nclude monitoring iii) Suitable training of employees	
and management of	and management of iv) Incident management and infrastructure, including response or recapture measures.	
the physical facilities	he physical facilities v) Regular monitoring and maintenance of the culture system	
and practices	nd practices vi) Regular review and failure analysis	
	vii) containment infrastructure	
	(Relative to the species being farmed and the production system individual elements can be "Not Applicable" with these	
	considerations).	
Conclusion	References	

C.7.01 Escapes

The BAP scheme is in alignment because Section 6 of the BAP Salmon Farm Standards - Issue 2 Revision 3 - addresses escapes and includes the following clauses:

BAP 6.1: If the farm operates in a jurisdiction where there are government regulations for fish containment, the applicant shall comply with the regulations and provide proof of so doing.

BAP 6.2: Local rules notwithstanding, the applicant shall demonstrate that the farm meets the BAP procedural, performance, documentation and reporting requirements for fish containment required by the Fish Containment Plan outlined under Implementation above, which shall include a classification of the farm site, an engineer's structural report, a mooring certification, an escape risk analysis, monitoring procedures that respond to the risk analysis, predator deterrence procedures, precautions related to the use of boats, fish handling procedures and inventory accounting procedures.

BAP 6.3: The applicant shall provide documents to show that all staff members have received training in the Fish Containment Plan, which shall be verifiable by training certificates in employees' files and verified at audit by a subset of interviews.

BAP 6.4: If an escape is suspected or has occurred since the last audit, the applicant shall provide reports and farm records to show that these incidents were dealt with in a manner consistent with the Fish Containment Plan, including deployment of recapture equipment where allowed, investigation of the cause and a report to the regulator.

BAP 6.5: If an escape is suspected or has occurred since the last audit, the applicant shall demonstrate, based on the counts of inventory required, that the losses were less, individually or cumulatively, than the limits specified in the Implementation requirements.

BAP 6.6: The applicant shall provide documents to show that the variance between the projected and actual harvest numbers of fish from the last year class harvested was ± 3% or less after accounting for known losses.

BAP
 Salmon
 Farm
 Standard
 2.4

C.7.01 Escapes

BAP 6.7: The farm shall not be located within an area officially designated as "critical" or "sensitive" habitat (or equivalent terminology) with respect to wild salmon unless site-specific, valid, official documentation authorizing an exemption, supported by an environmental impact analysis, can be provided.

BAP 6.8: The applicant shall provide documents that prove the species of salmon farmed is approved for farming in that country and that the stocked fish are not transgenic. Where the species farmed is not native or not already farmed, further documents shall be provided to demonstrate that approval for farming is based on the 2005 ICES Code of Practice on Introductions and Transfers of Marine Organisms.

C.7.02 Genetically Modified Organisms

GSSI Component

In the case where the culture of GMO organisms is permitted, the standard requires a suitable evaluation of the risk of environmental

Guidance

A suitable evaluation is expected to have been performed using an appropriate scientific method that assesses the likelihood of events and the magnitude of impacts, and take into account relevant uncertainties according to the precautionary approach. The evaluation should consider the possible impacts on genetic diversity, aquatic communities and ecosystems. Where ICES Code of Practice on the Introductions and Transfers of Marine Organisms 2005 is relevant, consistency with these requirements on genetically modified organisms (GMO) is also expected. Verification is expected to include a review of supporting evidence.

Conclusion

impacts.

The BAP scheme is in alignment because the BAP Salmon Farm Standards - Issue 2 Revision 3 - does not permit the farming of transgenic fish.

References

• BAP Salmon Farm

C.7.02 Genetically Modified Organisms	
BAP 6.8: The applicant shall provide documents that prove the species of salmon farmed is approved for farming in that country and that the stocked fish are not transgenic. Where the species farmed is not native or not already farmed, further documents shall be provided to demonstrate that approval for farming is based on the 2005 ICES Code of Practice on Introductions and Transfers of Marine Organisms.	<u>Standard</u> <u>2.4</u>
Furthermore, the standard states (page 11):	
Genetically Modified Salmon	
Cage farms shall not stock transgenic fish, which are defined	
as fish that have been genetically modified by artificial trans1fer of genetic material from a different species. Sex-reversed	
salmon and their offspring, and organisms created by hybrid1ization and polyploidy are not transgenic salmon.	

C.8 EVIDENCE OF ALIGNMENT

C.8.01 Salinization		
GSSI Component	Guidance	
The standard requires that the aquaculture facility establishes, implements, and maintains an appropriate system that addresses the impact of salinization of freshwater resources and the surrounding environment by the aquaculture facility.	An exemption for standards that do not cover land-based saline water systems is expected. Appropriate measures are expected to be based on risk assessments or standardized requirements. Controls could include relevant monitoring of freshwater resources (e.g., groundwater resources, local water bodies, local soils) for salinity changes and measures such as pond-linings, limiting groundwater use and other control techniques. The standard is expected to prohibit the aquaculture facility to contributing to changing freshwater resources and the surrounding environment to saline conditions. Verification is expected to include a review of evidence that the system is operational and fit for purpose, such as a visual inspection of the site.	
Conclusion	References	
This GSSI Component is not applicable because the Salmon "standards and guidelines apply to the cage and net pen production in marine waters", no land-based freshwater ponds are considered. • BAP Salmon Farm Standard 2.4		BAP Salmon Farm Standard 2.4

C.8.02 Water Use	
GSSI Component	Guidance

C.8.02 Water Use

Where appropriate
(e.g. land-based
freshwater ponds
supplied with
groundwater and all
culture systems where
water resources are
limiting) the
standard requires that
the aquaculture facility
has appropriate
management
measures for efficient
water use.

This requirement is based on Paragraph 47 of the Technical Guidelines on Aquaculture Certification state "Measures should be adopted to promote efficient water management and use, as well as proper management of effluents to reduce impacts on surrounding land, and water resources should be adopted." GSSI recognizes that standards for efficient water management and use are not common in many current aquaculture standards. Generally it is expected that this Essential Component will only apply to aquaculture facilities that use land-based freshwater ponds supplied with groundwater and all culture systems where water resources are limiting. An exemption for all other production systems is expected. This can also be "not applicable" for standards that do not cover relevant production systems.

Management measures may include a general promotion or awareness of efficient water use or actions that may lead to more efficient use. Where groundwater is used the standard is expected to require that the aquaculture facility establish, implement and maintain an appropriate system to prevent aquifer drawdown and negative impacts on freshwater resources and the surrounding environment caused by the facilities operations. Verification that the system is operational and fit for purpose is expected.

Conclusion	References
This GSSI Component is not applicable because the Salmon "standards and guidelines apply to the cage and	• BAP Salmon Farm
net pen production in marine waters", no land-based freshwater ponds are considered.	Standard 2.4

C.8.03 Water Quality		
GSSI	Guidance	
Component		
The standard	Appropriate measures are expected to include.	
requires, where	1. Monitoring and recording of effluent or receiving water quality, and which may including key parameters that need to be	
appropriate,	addressed include, where applicable:	
management	i) Nutrients – Nitrate/Nitrogen (impacts on seawater)	
measures for	ii) Nutrients – Phosphate/Phosphorous (impacts on freshwater)	
effluents in	iii) Dissolved oxygen	
order to	iv) Salinity	
reduce	v) Suspended Solids	
adverse	vi) pH	
impacts on the		
water quality	2. Defined, aquaculture appropriate, maximum reference points (e.g., general concentration limits or aquaculture facility-	
of water bodies	specific limits) or mandatory systems (e.g., presence of a suitable filter) are defined to prevent pollution	
receiving	3. Where reference points are exceeded, the scheme either refuses certification or that mitigation methods are employed and	
effluents.	monitored to meet a time bound goal to come into compliance.	
Monitoring of		
the systems	Verification is expected to include a review of evidence that the system is operational and fit for purpose, including visual	
effluents	inspection of the site. Where effluent concentration limits are used for compliance, independent verification of conformance is	
against	also expected.	
appropriate		
criteria is	"Where appropriate" is expected to include standards that cover production systems that release effluent that has the	
required.	potential to impact water quality, e.g., fed/intensive aquaculture in ponds and raceways. An exception for marine cage	
	aquaculture and on or offbottom shellfish culture is expected.	
Conclusion	References	

C.8.03 Water Quality

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 dissolvedoxygen 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.

BAP
 Salmon
 Farm
 Standard
 2.4

C.8.03 Water Quality

• 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.

C.9 EVIDENCE OF ALIGNMENT

C.9.01 Legal Compliance			
Guidance			
Verification is expected to include a review of evidence provided by the aquaculture facility to support compliance with relevant laws. For feed, its ingredients & fertilizers, verification is expected to include a review of evidence (e.g., documentation, self-declaration by the feed manufacturer). For seed sourcing this could include international laws (e.g., CITES, OIE and ICES import guidelines) and laws governing introductions and transfers of live aquatic animals.			
	References		
Conclusion The BAP scheme is in alignment because Salmon Farm Standards - Issue 2 Revision 3 - addresses this in Section 1: BAP 1.1: Current documents shall be available to prove legal land and water use by the applicant.			
BAP 1.2: Current documents shall be available to prove all business and operating licenses have been acquired.			
	Verification is expected to include a reversity provided by the aquaculture facility to a compliance with relevant laws. For feed fertilizers, verification is expected to include evidence (e.g., documentation, self-deceded manufacturer). For seed sourcing this could include into (e.g., CITES, OIE and ICES import guideling governing introductions and transfers of animals. - addresses this in Section 1:		

C.9.01 Legal Compliance

BAP 1.3: Current documents shall be available to prove compliance with applicable environmental and other regulations for construction and operation.

BAP 1.4: Where applicable, current documents shall be available to prove compliance with Area Management Agreements or other local agreements to which the farm has committed. (See also Standard 2.7.)

BAP 1.5: Where applicable, current documents shall be available to prove compliance with laws protecting the resources of indigenous

peoples and/or independent agreements the applicant may have made with them.

BAP 1.6: Where applicable, current documents shall be available to show compliance with the farm's own industry codes of practice.

Additional specific BAP requirements to follow legal requirements:

Water quality and waste

p7: Existing farms shall provide at least three years of monitoring data to show that the farms meet or exceed benthic standards required by operating permits at current production levels.

P7: New farms shall have completed a baseline study, with review by an independent expert, that describes hydrographic and benthic conditions at the farm site, and that in the expert's opinion (given without liability), the farm can meet or exceed the benthic standards required by its operating permits at current or proposed production levels. This opinion shall be verified by reference to sampling results at the next audit

C.9.01 Legal Compliance

- 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
- 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
- 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.
- 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.
- 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
- p 15: Applicants shall have a written Materials Storage, Handling and Waste Disposal Plan (MSHWDP) that includes provisions stipulated in local laws and the farms' operating permits, as well as the following requirements, if not so stipulated.
- p15: Procedures for washing nets treated with copper or other toxicant-based antifouling materials. Nets treated with antifoulant that is deemed toxic, such as cooper, shall be cleaned out of the water at a licensed off-farm net-cleaning establishment, or on the farm if equipment and procedures are in place to treat the wash water and collect the solid waste

C.9.01 Legal Compliance

before disposal. In all cases, methods of collection and treatment shall comply with national or regional regulations governing the disposal of toxic wastes.

8.9: Garbage and other solid waste shall be disposed of in compliance with local regulations and shall avoid environmental contamination.

Escapes

p10: Fish Containment Plan Applicants shall have a written Fish Containment Plan that includes provisions stipulated in the farm's operating permits as well as the provisions below, if not so stipulated

6.1: If the farm operates in a jurisdiction where there are government regulations for fish containment, the applicant shall comply with the regulations and provide proof of so doing.

biodiversity

p 13: The WIP (Wildlife Interaction Plan) shall include but is not limited to:

A list of relevant local laws and specific conditions of the farm's operating permits that apply to wildlife management and protection.

7.1: If the farm operates in a jurisdiction with government regulations related to interactions with wildlife and predator control, the applicant shall comply with the regulations and provide proof of so doing

p13: Documentation to show that acoustic harassment devices used are approved by regulators through a review of environmental impacts with specific reference to endangered, protected, threatened or cetacean species in the area. Such devices shall not be deployed if the review shows they can adversely affect these species

C.9.01 Legal Compliance

Habitats

7.3: The applicant shall provide site maps or other current documentation that show the farm is not within geographic areas officially designated "critical" or "sensitive" habitat (or equivalent). If such documentation is not available, the applicant shall provide proof of regulatory authorization of the farm site and operations, as well as a risk assessment of farm/wildlife interactions and related procedures biosecurity

9.6: When impaired fish and unwanted species are removed, their number, total weight and condition shall be recorded. They shall be killed by humane techniques, with the carcasses disposed of in a manner that ensures biosecurity and in accordance with applicable local and state regulations and/or the provisions of Section 8

P18: Assurance that only smolts certified clinically healthy and free of diseases and parasites specified in applicable national fish health regulations are brought onto the farm.

10.4: The fish health professional shall ensure compliance with all legal requirements for disease testing, fish movements (including zoosanitary regulations of inbound and outbound transports), treatments for fish diseases and reporting of notifiable diseases.

10.7: All smolts brought into the farm shall be free from diseases and parasites specified in applicable national health regulations, and shall be vaccinated against diseases for which effective vaccines are available prior to stocking.

Application of drugs and chemicals

C.9.01 Legal Compliance

10.9: If used, drug treatments shall be based on authorizations by the fish health professional, who shall be guided by the FHMP and principles of best practice for the veterinary profession. The health professional shall prescribe medicines only to treat diagnosed diseases in accordance with instructions on product labels and national regulations

8.10: If any farm nets are treated with copper or other toxicant-based antifouling materials, cleaning procedures shall collect, treat and dispose of wash water in compliance with national regulations regarding collection, treatment and disposal of such toxic wastes

11.1: Antibiotics or chemicals that are proactively prohibited in the producing or importing country shall not be used in feeds or any treatment that could result in harmful residue in fish.

p20: To avoid possible contamination of fish, farms shall also: • Require suppliers of smolts or juvenile fish to provide written assurance that the fish have been reared without the use of medicinals or substances that are proactively prohibited in food animals in the producing and importing country, and that the hatcheries in which they were produced were compliant with the regulations under which they operate

SECTION C.

AQUACULTURE
CERTIFICATION
STANDARDS

- FARM STANDARD

C.1 EVIDENCE OF ALIGNMENT

C.1.01 Antimicrobial Usage

GSSI Component

The standard requires that the decision to treat with antimicrobial agents, and their subsequent application, is consistent with the Principles for Responsible & Prudent Use of Antimicrobial Agents in Aquatic Animals and other guidance of the OIE Aquatic Animal Health Code i.e., by the aquatic animal health professional or other relevant competent authority and in response to a diagnosed disease; see Articles 6.2.7 and 6.2.8 of the 2015 Aquatic Animal Health Code).

Guidance

The standard is expected to prohibit prophylactic usage for growth promotion and require that all antimicrobials are used in response to a diagnosed disease (i.e., by the aquatic animal health professional or other relevant competent authority) and the audit is expected to include a review of suitable evidence (e.g., records of disease testing etc. prescriptions for treatments).

The audit is expected to include a review of evidence (such as written records or through interviews) to ensure consistency with OIE guidelines (2015) Article 6.2.7 "The veterinarian or other aquatic animal health professional authorized to prescribe veterinary medicines should indicate precisely to the aquatic animal producer the treatment regime, including the dose, the treatment intervals, the duration of the treatment, the withdrawal period and the amount of antimicrobial agents to be delivered, depending on the dosage and the number of aquatic animals to be treated. The use of antimicrobial agents extra-label/off-label may be permitted in appropriate circumstances in conformity with the relevant legislation" and Article 6.2.8 "Aquatic animal producers should use antimicrobial agents only on the prescription of a veterinarian or other aquatic animal health professional authorized to prescribe veterinary medicines, and follow directions on the dosage, method of application, and withdrawal period."

Conclusion

BAP Farm Standard 3.0 is in alignment because the Farm Standard specifies:

• BAP Farm Standard v3.1

1.2: Use of any treatment with antimicrobial agents shall be based only on recommendations and authorizations

C.1.01 Antimicrobial Usage

overseen by a qualified aquatic animal health specialist or veterinarian and only to treat diagnosed diseases, supported by antimicrobial agent sensitivity testing conducted as soon as possible, in accordance with instructions on product labels and national regulations, as part of an Animal Health Management Plan.

BAP Guidance on p 12 refers to OIE stating: Chapter 6.2 of the OIE Aquatic Animal Health Code (2019) describes the principles for responsible and prudent use of antimicrobial agents. Responsible and prudent use 1) maintains the efficacy of antimicrobial agents both for veterinary and human medicine and to ensure the rational use of antimicrobials in aquatic animals with the purpose of optimizing both their efficacy and safety; 2) complies with the ethical obligation and economic need to keep aquatic animals in good health; 3) prevents or reduces the transfer of both resistant microorganisms and resistance determinants from aquatic animals to humans and terrestrial animals; and 4) prevents antimicrobial residues that exceed the established maximum residue limit (MRL) occurring in the food. Article 6.2.7 of the OIE Aquatic Animal Health Code (2019) describes the responsibilities of veterinarians and other aquatic animal health professionals. These include:

- Identification, prevention and treatment of aquatic animal diseases, as well as the promotion of sound animal husbandry methods, hygiene procedures, vaccination and other alternative strategies to minimize the need for antimicrobial use in aquatic animals.
- Prescription, dispensation or administration of a specific course of treatment with an antimicrobial agent for aquatic animals under their care.
- Carrying out a thorough clinical assessment of the aquatic animal(s), including as appropriate: clinical examination, post-mortem examination, bacteriology with culture and sensitivity, and other laboratory tests to arrive at the most definitive diagnosis possible before initiating a specific course of treatment with an antimicrobial agent.
- Evaluation of environmental factors and husbandry at the production site (e.g. water quality) should be considered as potential primary factors leading to infection and should be addressed prior to prescribing a course of antimicrobial agent treatment.

C.1.02 Biosecurity				
GSSI Component	Guidance			
The standard requires that workers with responsibilities in aquatic animal husbandry have been adequately trained and are aware of their responsibilities in aquatic animal health management practices. The audit is expected to include a review of evidence that relevant workers have been appropriate and aware of their responsibilities. Examples of suitable evidence could include a review of evidence that relevant workers have been appropriate and aware of their responsibilities. Examples of suitable evidence could include a review of evidence that relevant workers have been appropriate and aware of their responsibilities. Examples of suitable evidence could include a review of evidence that relevant workers have been appropriate and aware of their responsibilities. Examples of suitable evidence could include a review of evidence that relevant workers have been appropriate and aware of their responsibilities. Examples of suitable evidence could include a review of evidence that relevant workers have been appropriate and aware of their responsibilities. Examples of suitable evidence could include a review of evidence that relevant workers have been appropriate and aware of their responsibilities. Examples of suitable evidence could include a review of evidence that relevant workers have been appropriate and aware of their responsibilities. Examples of suitable evidence could include a review of evidence that relevant workers have been appropriate and aware of their responsibilities. Examples of suitable evidence could include a review of evidence that relevant workers have been appropriate and aware of their responsibilities.		clude suitable		
Conclusion	References			
BAP Farm Standard 3.0 is in alignment bed	• <u>BAP Farm</u> Standard			
4.10: Farm workers shall be trained in their animals.	<u>v3.1</u>			

C.1.03 Biosecurity				
GSSI Component	Guidance			
The standard requires that aquatic	The objective of this requirement is to verify that the species is being farmed in the p	oroper		
animals are kept under farming	environment to maintain its health. Due to the very broad nature of this Essential Co	omponent, specific		
conditions suitable for the species being	guidance cannot be provided. Expected evidence could include requirements for fo	ırm siting		
raised.	(including permitting for the farm site and species), aquatic health plan maintenan	ce, assurance or		
monitoring aquatic animal health, on-farm water quality and temperature monitoring, etc.		ing, etc.		
Conclusion		References		

C.1.03 Biosecurity BAP Farm Standard 3.0 is in alignment because the Farm Standard addresses farming conditions via water quality requirements and via health and welfare requirements. Pillar 1 Section E. (page 36) Water Quality and Sediment Monitoring Pillar 4 Sections A and B. (pages 55 & 57) Health and Biosecurity; Welfare An Aquatic Health Management Plan is required (as per Clause 4.1) and this must include (p55): "• Protocols for water quality management to maintain water quality within the tolerance limits of aquatic animals – aeration,

C.1.04 Biosecurity					
GSSI Component	Guidance				
The standard requires the aquaculture facility to establish, implement and maintain appropriate procedures to respond to disease outbreaks, which includes the ability to quarantine the aquatic animal where feasible.	It is expected that disease response procedures would be a component of the accompanent system. Feasibility of quarantine depends on a combination of special production environment. In cases where quarantine is applicable, a review of expected to demonstrate and verify the ability to contain diseased aquatic animals.	ecies, culture system of suitable evidence is			
Conclusion	References				
BAP Farm Standard 3.0 is in alignment be Pillar 4 Section A (p55) Health and Biosect	• <u>BAP Farm</u> Standard v3.1				

water exchange, liming, fertilization, etc."

C.1.04 Biosecurity

4.1: The farm shall have in place an operational Animal Health Management Plan or manual, reviewed and approved by an aquatic animal health specialist, that includes the listed elements in the Implementation Guidelines.

4.2: The farm shall have in place biosecurity controls that seek to prevent the introduction and spread of disease agents and disease on the farm or to neighboring farms and these controls shall be detailed in an operational Biosecurity Plan that includes the listed elements in the Implementation Guidelines.

The clauses above refer to listed elements in the Aquatic Health Management Plan that include (p56):

Disease control procedures that will be followed in the event of disease outbreaks. The procedures should consider a broad range of options, including vaccination, quarantine, therapeutic treatments and treatment types (e.g. medicated feed, baths or dips, etc.) and humane slaughter (euthanasia). The steps followed shall include reporting to the Competent Authority if the disease is listed by the OIE or is required by local regulations.

C.1.05 Biosecurity				
GSSI Component	Guidance			
The standard requires the aquaculture	Appropriate procedures are expected to include general health/ behavioral inspections or testing for			
facility to establish, implement and	specific diseases with suitable monitoring (e.g., regular and including a suitable range of parameters,			
maintain appropriate procedures	and of sufficient sample size to identify or anticipate disease outbreaks expediently, as well as			
and/or systems for the early detection of	increased surveillance when potential issues are identified.) Environmental monitoring is expected to			

C.1.05 Biosecurity

aquatic animal health issues, which include routine monitoring of stocks and the environment.

include detection of unfavorable environmental quality factors that could adversely affect the health of the aquatic animal (e.g., water temperature and quality).

Verification is expected and could include reviews of written records and monitoring results to ensure procedures and/or systems are operational is also expected. This could also be captured in an aquatic health management plan.

Conclusion References BAP Farm Standard 3.0 is in alignment because the Farm Standard requires detection of disease outbreaks as detailed in

Pillar 4 Section A (p55) Health and Biosecurity. Specific clauses are:

4.1: The farm shall have in place an operational Animal Health Management Plan or manual, reviewed and approved by an aquatic animal health specialist, that includes the listed elements in the Implementation Guidelines.

The list includes, p55:

"• Routine disease surveillance and characterization of the health status of the farm. Regular health monitoring is a fundamental part of the health and welfare management of aquatic animals. It provides an early warning detection system that allows rapid response to disease outbreaks. Protocols for regular observation of the behavior and welfare of aquatic animals should be described. Operational disease surveillance shall be demonstrated by a healthmonitoring record-keeping program. The plan should describe the diagnostic capacity (on-farm and contracted labs) available to support infectious disease surveillance."

BAP Farm

Standard v3.1

C.1.06 Biosecurity		
GSSI Component	Guidance	
The standard requires that mortalities and moribund aquatic animals are routinely collected, where collection is a feasible practice.	GSSI expects this Essential Component to be applied where collection is a feasible management practice (e.g., finfish grow out). Examples where this is not suitable caquatic animals may be too small to effectively collect (e.g., shrimp farming). Reconumbers of, and reason for, mortalities is expected.	ould include where
Conclusion		References
Plan:	ause this is covered in Pillars 3 and 4. The latter requires a Health Management	• BAP Farm Standard v3.1
4.1: The farm shall have in place an operational Animal Health Management Plan or manual, reviewed and approved by an aquatic animal health specialist, that includes the listed elements in the Implementation Guidelines.		
The Guidelines on p 54 specify: "Dead aque mortality, shall be removed promptly and	atic animals, whether arising from an acute mortality episode or chronic daily placed in dedicated containers"	
And on p56: "To demonstrate that the Animal Health Management Plan is operational and fit-for-purpose, the farm shall maintain or have access to regularly updated records of water quality monitoring, feeding, aquatic animal health and behavior, water quality monitoring, daily mortalities, disease outbreaks, and use of veterinary drugs, therapeutic chemicals or disinfectants."		
Also Clause 4.6		
•	ons, abrasions or fin damage; and gill damage or condition shall be vidual-based welfare indicators of physical health.	

C.1.06 Biosecurity

With Guidance on p 58: "Ideally floating dead fish would be removed and recorded as they appear at the water surface, but regular daily removal is best practice."

Additionally, Clause 3.76 states:

3.76: Mortalities from acute die-offs or euthanized diseased animals shall be removed from culture units promptly and disposed of responsibly by rendering, incineration, sterilization, composting, biogas production or ensiling. Disposal by burial is also permitted, with the assistance of a competent contractor if needed and in accordance with applicable regulations.

C.1.07 Biosecurity

GSSI Component

The standard requires the aquaculture facility to have operational fish health management practices. Evidence must be shown that these address the following elements (where relevant to the species, scale, and production system covered by the Standard's scope): 1. Effective biosecurity

- 2. Identification and use of suitable available vaccines
- 3. Introductions and transfers of farmed animals (where relevant, which is overseen by an aquatic animal health professional.

Guidance

It is expected that the standard will contain sufficient elements and/ or audit of culture practices for an operational program relative to the scale, species, and production systems covered by the standard's scope, including a focus on disease prevention (e.g. the use of vaccines). The content of the measures are expected to be overseen (but not necessarily full time employment) of an aquatic animal health professional.

Conclusion

BAP Farm Standard 3.0 is in alignment because these aspects are covered in Pillar 4 Section A - Health and Biosecurity and Section B - Welfare.

References

• <u>BAP Farm</u> Standard v3.1

C.1.07 Biosecurity

- 4.1: The farm shall have in place an operational Animal Health Management Plan or manual, reviewed and approved by an aquatic animal health specialist, that includes the listed elements in the Implementation Guidelines.
- 4.2: The farm shall have in place biosecurity controls that seek to prevent the introduction and spread of disease agents and disease on the farm or to neighboring farms and these controls shall be detailed in an operational Biosecurity Plan that includes the listed elements in the Implementation Guidelines.

Pillar 4 Section A, page 56, covers the requirements for the Biosecurity Plan, which addresses the spread of disease within and beyond the farm and, specifically requires:

- Active control measures to prevent disease introduction in spread by movement of aquatic animals. This includes new introductions, regular stockings and internal movements of aquatic animals. Stock health inspections and certificates should be used to demonstrate the disease freedom of batches of introduced aquatic animals
- 4.3: Farm staff shall be trained in biosecurity procedures and shall, along with all visitors, comply with them.
- 4.4: The farm shall obtain written assurance from the feed manufacturer that the feed does not contain aquatic feed protein from the same genus as the species being farmed. However, protein hydrolysates verified to <10,000 daltons are permissible.
- 4.5: Farms located in an area with more than three aquaculture facilities (hatcheries, farms, processing plants) per 10 km2 sharing the same surface water body shall initiate or participate in an Area Management Plan to coordinate biosecurity measures with neighboring sites, irrespective of BAP certification status, unless a documented disease risk assessment determines that there is a low risk of disease transmission among facilities.

C.1.07 Biosecurity

An Aquatic Health Management Plan is a requirement and the corresponding Guidelines, p56, state that the AHMP shall include: "Disease control procedures that will be followed in the event of disease outbreaks. The procedures should consider a broad range of options, including vaccination, quarantine, therapeutic treatments and treatment types (e.g. medicated feed, baths or dips, etc.) and humane slaughter (euthanasia)."

Guidance on p12 also states that the responsibilities of the veterinarians (as per OIE 2019) include:

"• Identification, prevention and treatment of aquatic animal diseases, as well as the promotion of sound animal husbandry methods, hygiene procedures, vaccination and other alternative strategies to minimize the need for antimicrobial use in aquatic animals."

C.1.08 Off-farm Disease Transmission		
GSSI Component	Guidance	
The standard requires the aquaculture	Given the nature of this requirement, the standard may appear as a general requirement; however	
facility to establish and implement	verification that practices are employed is expected. Relevant examples can be found in Articles 4.7.7	
procedures for the disposal of	and 4.7.8 of the Aquatic Animal Health Code 2015 (see	
mortalities using appropriate methods	www.oie.int/index.php?id=171&L=0&htmfile=chapitre_aquatic_animal_waste.htm).	
that prevent the spread of disease.		
Conclusion		References

C.1.08 Off-farm Disease Transmission

BAP Farm Standard 3.0 is in alignment because Clause 3.76 states

3.76: Mortalities from acute die-offs or euthanized diseased animals shall be removed from culture units promptly and disposed of responsibly by rendering, incineration, sterilization, composting, biogas production or ensiling. Disposal by burial is also permitted, with the assistance of a competent contractor if needed and in accordance with applicable regulations.

• <u>BAP Farm</u> Standard v3.1

C.1.09 Off-farm Disease Transmission

GSSI Component

Guidance

The standard requires the aquaculture facility to establish, implement and maintain appropriate procedures and/or systems to reduce the likelihood of disease and parasite transmission within the aquaculture facility and between it and natural aquatic fauna.

Appropriate procedures or systems are expected to address both on farm disease and parasite transfer (such as the ability to quarantine diseased stocks, separating equipment) as well as between the facility and natural fauna (such as disinfection of effluents for diseased stocks, fallowing). The approach taken would be expected to be relevant to the species, production system, scale of production, and legal requirements. Can be "not applicable" with suitable justification provided by the scheme.

Where pathogens or parasites are a known concern (for example, sea lice on farmed salmon); Appropriate procedures or systems are expected to include specific requirements or actions defined in the standard or specified by the aquaculture facility through a suitable risk assessment or other evidence such as local or national regulations.

Appropriate management measures in these cases could include treatment trigger levels of parasite numbers on the farm-facility or siting requirements that require that the aquaculture facility is located at suitable distances from wild populations.

Verification that the management measures are suitable and employed is expected.

conclusion	References
AP Farm Standard 3.0 is in alignment because this is addressed through the requirement for a Biosecurity Plan and ne requirement for an Area Management Plan.	BAP Farm Standard v3.1
.2: The farm shall have in place biosecurity controls that seek to prevent the introduction and spread of disease gents and disease on the farm or to neighboring farms and these controls shall be detailed in an perational Biosecurity Plan that includes the listed elements in the Implementation Guidelines.	
illar 4 Section A, page 56, covers the requirements for the Biosecurity Plan, which addresses the spread of disease vithin and beyond the farm and, specifically requires:	
Identification of the likely infectious disease risks for the culture species within the region around the farm. Identification of entry and exit points and establishment of critical control points such as movement of quatic animals and equipment, and farm access by visitors. Active control measures to prevent disease introduction in spread by movement of aquatic animals. This includes new introductions, regular stockings and internal movements of aquatic animals. Stock health inspections and certificates should be used to demonstrate the disease freedom of batches of introduced quatic animals. Active control measures to prevent disease introduction and spread by movement of people and quipment. The plan should establish protocols that allow tracing of equipment and people movements, such as through visitor and delivery logs. Hygiene and sanitization protocols and standards for equipment and personnel. If slaughtering is conducted at the farm, procedures that will be followed to contain or treat blood water and other ffluents generated through processing so they do not contaminate the environment or present biosecurity risk."	

C.1.09 Off-farm Disease Transmission

The BAP Farm standard also requires coordinated measures with neighbours via Clause 4.5:

"4.5: Farms located in an area with more than three aquaculture facilities (hatcheries, farms, processing plants) per 10 km2 sharing the same surface water body shall initiate or participate in an Area Management Plan to coordinate biosecurity measures with neighboring sites, irrespective of BAP certification status, unless a documented disease risk assessment determines that there is a low risk of disease transmission among facilities."

C.1.10 Record Keeping		
GSSI Component	Guidance	
The standard requires the aquaculture facility to maintain records on veterinary drug and chemical usage and the rationale for their use.	Verification that suitable records are maintained is expected. Suitable records are e type, concentration, and dosage, method of administration and withdrawal times of veterinary drugs and the rationale for their use.	•
Conclusion		
BAP Farm Standard 3.0 is in alignment because Pillar 1 Section B, page 11, details Chemical and Drug Management and the Traceability Requirements, p60, further specify record keeping requirements. Clause 1.2 states:		• BAP Farm Standard v3.1
"1.2: Use of any treatment with antimicrobial agents shall be based only on recommendations and authorizations overseen by a qualified aquatic animal health specialist or veterinarian and only to treat diagnosed diseases, supported by antimicrobial agent sensitivity testing conducted as soon as possible, in accordance with instructions on product labels and national regulations, as part of an Animal Health Management Plan.		

C.1.10 Record Keeping

Clause 1.4 states:

"1.4: Records shall be maintained for every application of antimicrobial agents and other therapeutic chemicals that include the date, compound used, reason(s) for use, drug sensitivity test results, dose, required withdrawal period and harvest date for treated production lots. Antibiotic use shall be reported as kg API/MT of harvested aquatic animals."

The Guidelines on page 13 cover recordkeeping and specify:

"Detailed records on the use of antimicrobial agents shall be kept. Records shall include date, compound used, reason(s) for use, drug sensitivity test results, dose, required withdrawal period and harvest date for treated production lots."

C.2 EVIDENCE OF ALIGNMENT

C.2.01 Chemical Usage		
GSSI Component	Guidance	
The standard requires the establishment, implementation and maintenance of an appropriate system for the application of chemicals and veterinary drugs.	An appropriate system could conform to the relevant sections of Article 6.2.7 and 6.2.8 of the Aquatic Animal Health Code (2015) (www.oie.int/index.php?id=171&L=0&htmfile=chapitre_antibio_resp_prudent_use.htm) or other suitable reference. The system is expected to ensure that the application of the product follows the instructions of the manufacturer or other competent authority. Verification that the system is	
Conclusion	operational is also expected.	References
BAP Farm Standard 3.0 is in alignment because the system for applying chemicals and drugs is covered by the Animal Health Management Plan, the contents of which are listed on p 55 and include: "• Routine disease surveillance and characterization of the health status of the farm. Regular health monitoring is a fundamental part of the health and welfare management of aquatic animals. It provides an early warning detection system that allows rapid response to disease outbreaks. Protocols for regular observation of the behavior and welfare of aquatic animals should be described. Operational disease surveillance shall be demonstrated by a health-monitoring record-keeping program. The plan should describe the diagnostic capacity (on-farm and contracted labs) available to support infectious disease surveillance. • Disease diagnosis techniques that will be used to evaluate prevalence of expected diseases. • Disease control procedures that will be followed in the event of disease outbreaks. The procedures should consider a		• <u>BAP Farm</u> <u>Standard v3.1</u>

C.2.01 Chemical Usage

types (e.g. medicated feed, baths or dips, etc.) and humane slaughter (euthanasia). The steps followed shall include reporting to the Competent Authority if the disease is listed by the OIE or is required by local regulations. Procedures should also consider responses in the event of a disease emergency with potential to cause mass mortality."

Specific clauses include:

1.2: Use of any treatment with antimicrobial agents shall be based only on recommendations and authorizations overseen by a qualified aquatic animal health specialist or veterinarian and only to treat diagnosed diseases, supported by antimicrobial agent sensitivity testing conducted as soon as possible, in accordance with instructions on product labels and national regulations, as part of an Animal Health Management Plan.

1.4: Records shall be maintained for every application of antimicrobial agents and other therapeutic chemicals that include the date, compound used, reason(s) for use, drug sensitivity test results, dose, required withdrawal period and harvest date for treated production lots. Antibiotic use shall be reported as kg API/MT of harvested aquatic animals.

1.5: Periodic verification testing of the effectiveness of the withdrawal period shall be conducted by measurements of antimicrobial agent residues in samples of harvested crops of aquatic animals.

1.6: Antimicrobial agents or chemicals that are prohibited in the producing or importing country shall not be used in feeds, pond additives or any other treatment.

1.7: Antimicrobial agents or hormones shall not be used for growth promotion or applied prophylactically to prevent disease outbreaks. However, metaphylactic treatments in response to diagnosed disease outbreaks are permitted.

Correct use of all chemicals is addressed on p52:

C.2.01 Chemical Usage

p52: Material Safety Data Sheets (MSDS) should be available for all chemicals used on the farm. A chemical inventory should be maintained. Chemicals should be labeled with the date received and date opened. Storage and containment facilities that are safe, secure, and properly designed, well ventilated and properly managed must be provided for all fuel, lubricants and agricultural chemicals used. Chemicals shall be stored in secure area with access only to authorized personnel. Chemicals shall never be stored on the floor. Materials should be segregated by hazard class and according to compatibility to prevent undesirable chemical reactions should two or more chemicals accidently mix. Material used in shelving should be compatible with the chemical being stored. Chemicals must not be stored in direct sunlight or near any heat source. Cylinders of compressed gases should be secured properly such as by using chains and not using breakable materials such as rope or raffia string. Highly toxic or controlled substances and veterinary medicines should be stored in a locked cabinet.

C.2.02 Chemical Usage

GSSI Component

The standard requires appropriate controls for all chemicals, incl. veterinary drugs, that enter the environment during or after use (whether already covered by GSSI Essential Components or not) in order to minimize adverse impacts on environmental quality. Manufacturer's guidance or equivalent directions should be followed, and where appropriate, relevant examples of

Guidance

It is expected that the standard will require all chemicals used by the aquaculture facility and that will enter the environment are at least used according to the manufacturer's guidance (such as on label requirements or Safety Data Sheets (SDS) or, in the case of veterinary drugs, the guidance of the aquatic animal health professional to prevent adverse impacts upon the environment.

Chemicals that pose a high risk of adverse impacts to environmental quality, examples of which should be specifically defined by the standard (e.g., copper-based anti-foulant treatments in marine cage aquaculture or anti-parasite or anti-microbe bath treatments), accepting that perceptions regarding high risk and the chemicals involved are subject to rapid change, or identified through a risk based self-assessment by the farmer (e.g., an environmental risk assessment)--or through reference to a recognized relevant classification system (e.g. the UN Globally Harmonized System of

C.2.02 Chemical Usage

chemicals that pose a high risk of adverse impacts to environmental quality should be specifically defined by the standard Classification and Labelling of Chemicals (GHS)). It is expected that the standard or the risk-assessment will define any necessary additional requirements to minimize the impacts (e.g., EQS limits for copper residues in the benthic environment).

Conclusion

BAP Farm Standard 3.0 is in alignment because drug and chemical use is required to follow manufacturers instructions and there are: bans on the use of chloramphenical and nitrofurans and WHO critical antimicrobials; a ban on the use of antibiotics for growth promotion and; restrictions relating to copper- based antifoulants. Corresponding Clauses are:

"1.2: Use of any treatment with antimicrobial agents shall be based only on recommendations and authorizations overseen by a qualified aquatic animal health specialist or veterinarian and only to treat diagnosed diseases, supported by antimicrobial agent sensitivity testing conducted as soon as possible, in accordance with instructions on product labels and national regulations, as part of an Animal Health Management Plan."

"1.7: Antimicrobial agents or hormones shall not be used for growth promotion or applied prophylactically to prevent disease outbreaks. However, metaphylactic treatments in response to diagnosed disease outbreaks are permitted."

"1.13: Any chemicals that are prohibited in the producing or importing country shall not be used during the transport of harvested aquatic animals to processing plants. Any chemicals used shall be listed and only applied according to a documented Standard Operating Procedure"

1.14: Antimicrobial agents designated as Critically Important for Human Medicine by the World Health Organization (WHO) shall not be used.

ERROR! NO TEXT OF SPECIFIED STYLE IN DOCUMENT.

Guidelines on antifouling agents, p14, specify:

GSSI BENCHMARK REPORT

References

 BAP Farm Standard v3.1

C.2.02 Chemical Usage

"Antifouling agents are often used to prevent or minimize biofouling of mesh material used to construct cages and net pens that are typically placed in the marine environment. Residues of antifouling agents may accumulate in sediment beneath net pens or enter marine food webs. Any antifouling agents used must be legally permitted and applied using protocols that prevent contamination of farmed aquatic animals. Farms using authorized antifoulant treatments must retain a copy of permits and the relevant laws or regulations on file."

Guidelines for solid waste disposal specify, p53:

"Biofouling organisms on net cages shall not be cleaned at the production site. Nets should be transported to a shore-based facility for cleaning in facilities designed to capture solid wastes from net cleaning. Biofouling solid wastes should be diverted into a sedimentation pond, sanitary sewer or other treatment system"

C.3 EVIDENCE OF ALIGNMENT

C 3 01 Maintaining Good Culture and Hygienic Conditions

C.S.OF Maintaining Good Culture and Hygieriic Conditions			
GSSI Component	Guidance		
The standard requires	This is a general Essential Component that covers a range of potential issues depending on the type of production		
that the aquaculture	system, species being cultured, and the local environment, and as such there is a need for flexibility ir	n how consistency	
facility and its daily	is achieved. It is expected that the following issues would be addressed and the systems verified to be	e operational:	
operations ensure that	- Appropriate storage of chemicals and fuel (e.g., stored in a lockable, labeled facility, limited access k	· ·	
good culture and	leakage prevention - all based on Safety Data Sheets (SDS) (see figure 4.14 of the A Guide to The Globo	-	
hygienic conditions are	System of Classification and Labeling of Chemicals (GHS), available at: www.osha.gov/dsg/hazcom/g	_	
maintained. Relevant	- Appropriate storage of feed (e.g., stored separately from sources of contamination, accurately labe	led, keeping	
aspects include proper	medicated and nonmedicated feed separated.)		
management of all	- Appropriate pest control (e.g., prevent contamination of feed, chemicals by rodents or insects etc.)		
chemicals, fuels and	- Domestic sewage control/disposal to avoid local contamination		
feeds including their	- General farm waste (e.g., empty feed bags, household rubbish, food containers etc.).		
safe storage			
Conclusion		References	
BAP Farm Standard 3.0 is	in alignment because Pillar 3 Section K addresses storage and management of farm supplies and	• <u>BAP Farm</u>	
solid wastes. The Clauses	s are:	<u>Standard</u>	
	<u>v3.1</u>		
	3.66: Fuel, lubricants, feed and agricultural chemicals shall be labelled, stored, used and disposed of in a safe and		
responsible manner.	responsible manner.		
3.67: Fuel, lubricants and agricultural chemicals shall not be stored near feed, in worker housing or kitchen areas,			

C.3.01 Maintaining Good Culture and Hygienic Conditions

or near harvest equipment and supplies.

- 3.68: Fuel, lubricant and chemical storage areas shall be marked with warning signs and risk indicators.
- 3.69: Secondary fuel containment volume shall be at minimum equivalent to the total fuel container capacity plus 10%.
- 3.70: Precautions shall be taken to prevent spills, fires and explosions, and procedures and supplies shall be readily available to manage chemical and fuel spills or leaks. Designated staff shall be trained to manage such spills and leaks.
- 3.71: Decomposable wastes from housing and food preparation shall be retained in water-tight receptacles with covers to protect contents from insects, rodents and other animals.
- 3.72: Solid wastes generated on farms shall be collected promptly and stored appropriately before disposal and shall not be dumped in mangrove areas, adjacent wetlands or vacant land.
- 3.73: Solid wastes shall be disposed of in ways that avoid environmental contamination and odor problems and comply with local regulations.
- 3.74: Damaged, discarded, decommissioned or derelict net pen facilities or other floating gear shall be collected and removed promptly from oceans, lakes, rivers, shorelines or other water bodies to avoid accumulation or loss.
- 3.75: Measures shall be taken to prevent infestation of feed storage areas by animal and insect vectors and pests.

C.3.01 Maintaining Good Culture and Hygienic Conditions

3.76: Mortalities from acute die-offs or euthanized diseased animals shall be removed from culture units promptly and disposed of responsibly by rendering, incineration, sterilization, composting, biogas production or ensiling. Disposal by burial is also permitted, with the assistance of a competent contractor if needed and in accordance with applicable regulations.

3.77: Where slaughtering is conducted at the farm, blood water and other effluents generated shall be contained or treated so they do not contaminate the environment or present a biosecurity risk.

C.3.02 General Environmental Management

GSSI Component

Guidance

The standard requires that aquaculture facility infrastructure is appropriately maintained in order to prevent negative environmental impacts, whether from construction, operation or decommissioning (e.g., including the requirement for derelict equipment and materials to be collected and disposed of responsibly.)

Given the wide variety of production systems in aquaculture specific guidance cannot be provided and flexibility by the evaluator is required using a risk-based approach. Examples could include the requirement for derelict or damaged gear in shellfish or cage aquaculture to be collected and disposed of responsibly, or for that waste from pond construction is not placed in mangrove forests in shrimp farming. It is expected that specific requirements or risk based management systems would be required where appropriate, along with suitable verification. These requirements may also be included in other Standards, such as sensitive habitat protection or escape prevention.

Conclusion References

C.3.02 General Environmental Management

BAP Farm Standard 3.0 is in alignment because there is a section on solid waste management and it includes Clause 3.74:

"3.74: Damaged, discarded, decommissioned or derelict net pen facilities or other floating gear shall be collected and removed promptly from oceans, lakes, rivers, shorelines or other water bodies to avoid accumulation or loss."

BAP Farm Standard v3.1

Other aspects are covered in these clauses and following Guidance

3.17: Dredge and fill activities shall not be conducted in sensitive wetlands or wetland buffers to increase the area for farm construction.

3.18: Dredged material shall be properly contained and not placed in mangrove areas, natural water bodies, or other sensitive habitats.

3.19: Farm operations shall not cause vegetation at the farm perimeter to die off.

3.20: Farm operations shall not permanently impede the flow of fresh water in watersheds, and the normal flow of brackish water to mangroves or fresh water to wetlands, unless specific permits apply.

p32: Sediment and Sludge Management

Most aquaculture ponds have long hydraulic retention times and solids generated during production from feeding will settle and to some extent be treated on the pond bottom. However, negative environmental impacts can arise when sediments are resuspended during harvest or when sediment is pumped from ponds during the culture period and discharged as a highly fluid sludge. The sludge contains organic material from feces, uneaten feed, and dead algae and mineral particles from source water, if rivers and streams are used, and scoured from embankments or resuspended from the pond bottom. The first principles of sediment management on farms are to prevent excessive sedimentation through good management practices and confine sedimentation to specific parts of the farm. Where farm supply water has a large sediment load,

C.3.02 General Environmental Management

reservoirs for pre-sedimentation can remove much of the suspended material so it will not settle in water supply canals and production ponds. Sediment accumulation in ponds and canals can be reduced by:

- implementing proper earthen infrastructure design and construction to reduce erosion by rainfall and water currents,
- placing aerators to avoid impingement of water currents on embankments that cause scouring,
- placing a layer of large stones (riprap) or other lining materials in erosion-prone areas, and
- covering bare areas of embankments with gravel or grass. Discharge of sludge may not be an issue for ponds with production of less than 20 mt/ha per crop, but above this threshold, sedimentation basins for sludge storage are needed. The minimum required sedimentation basin volume can be estimated using the following equation: Sedimentation basin volume = $37.5 \times [Fish \text{ production (mt)} \div Sludge \text{ transfers (times/crop)}] + [Fish \text{ production (mt)} \div 0.6] In this equation, fish production is the total quantity of fish produced in all ponds that discharge into a sedimentation basin, and sludge transfers are the mean frequency at which sludge is moved from ponds to a sedimentation basin. It is also assumed that:$
- The minimum hydraulic retention time to allow coarse and medium solids to settle out is six hours. One mt of fish production equates to 1 mt sediment.
- Sludge removal can be spread over a 24-hour period.
- Sediment bulk density is 0.6 t/m3.
- The solids content of sludge is 6.5 kg/m3
- Accumulated sediments in the basin are removed at the end of each crop to return the basin to its original capacity. If sludge is removed more frequently from ponds, the required size of the sedimentation basin can be reduced. For farms producing more than 20 mt/ha per crop, the farm operator shall provide the auditor with mean values for fish production and sludge transfer frequency so the required sedimentation basin volume can be calculated. The auditor will verify that the farm has the required volume of basins in use and available for sludge containment. Basins should be configured so that raw sludge enters at the surface at one end of the basin and the resulting effluent exits at the surface at the other end of the basin. Five or six calibrated poles should be installed in basins to allow the accumulation of settled solids to be monitored and ensure the available capacity can always support a minimum six-hour hydraulic retention time. Raceways or similar flow-through systems have short retention times, and in high-intensity operations, sediment loads can often exceed acceptable limits. Therefore, such farms must incorporate suitably sized settling zones or other engineered solutions that assure removal

C.3.02 General Environmental Management

of the majority of settleable solids. Accumulated solids must be pumped or siphoned periodically to offline sludge basins, where they can be dewatered and subsequently removed for use as fertilizer in land-based agriculture crops. Any accumulated sludge removed from ponds, reservoirs or sedimentation basins shall be confined within the farm property or consolidated and used locally as fill material or for agriculture. Pond sediment from bank erosion can usually be reused to restore the slope of eroded pond embankments. Sludge or sediment shall not be applied to sensitive natural wetlands or wetland buffers. On large farms, sediments removed by dredging shall discharge into containment areas rather than directly into streams or other estuarine areas. These can be installed along the margins of canals or on areas of salt flats above high tide. When sediment is stored, it shall be confined within a diked area so that solids resuspended by rainfall can be retained. The sediment can also be spread in a thin layer over the land and vegetative cover established. If dredged accumulated sediment is disposed of outside water holding structures, care shall be exercised to prevent the formation of spoil piles that can cause ecological disruption through erosion and transport to surrounding areas.

p31: Salinization

Some inland shrimp farms use brackish groundwater as a water source or may import concentrated brine from coastal salt ponds. Discharge of this water into low salinity receiving waters can cause salinization of those waters or the soils and wells of nearby agricultural crop farms that draw from those surface waters. Several practices can be adopted to reduce the risk of salinization. One of the most important is to avoid constructing ponds in highly permeable, sandy soil, or to provide clay or plastic liners to minimize seepage. Saline water should not be discharged into freshwater areas. Excessive pumping of groundwater from freshwater aquifers should be avoided and freshwater from wells should not be used to dilute salinity in grow-out ponds. Farm ponds should be surrounded by a ditch to intercept seepage. This ditch should be large enough to capture overflow from ponds following rainfall. When ponds are drained for harvest, water should be stored in a reservoir or transferred to other ponds for reuse. A vegetative barrier of salt-sensitive vegetation around farms can help detect movement of salt into adjacent areas. For farms supplied by naturally saline groundwater with over 550 mg/L of chloride, pond effluent should be captured in a reservoir and reused. If brackishwater ponds are drained into a freshwater stream, the water should be discharged when stream flow is high. The water should be discharged slowly to avoid increases in chloride concentration greater than 250 mg/L in the receiving water body. To determine if salinization is occurring, monitoring of

C.3.02 General Environmental Management

chloride concentration in nearby (within 1 km) groundwater wells and surface waters must demonstrate that chloride concentrations are not increasing as a result of discharges of brackishwater effluent. On inland shrimp farms, runoff from spoil piles of saline sediment onto non-saline soil or into freshwater can cause salinization. Saline sediment should be confined to prevent overflow after rainfall events. The confinement structures should be large enough to hold the largest amount of rainfall expected within any 24-hour period over 25 years. If the soil is highly pervious, downward seepage can result in salinization of freshwater aquifers. In this case, the confinement area must be lined to prevent seepage. When sediment is disposed of outside the immediate farm area, it should be confined to an earthen containment area where soils are saline to prevent runoff. Overflow or seepage of saline soil and water from the confinement area must not cause harm in adjacent areas. Once sediment is leached of salt by rainfall, it can be disposed of by using as construction fill or for other purposes.

p35: Hydrological Alteration

Water is an obvious input for aquaculture farms. In general, farms should operate in a way that normal surface water flows and groundwater aquifer levels are maintained within the range of natural variation. Hydrological conditions shall not be altered in a way that deprives water that leads to the loss of wetland vegetation or causes erosion and sedimentation where farm drainage canals meet natural water bodies (i.e. streams, rivers, estuaries). To demonstrate compliance, farms shall provide maps indicating natural water flows and how these flows are affected by farm construction and operations. In freshwater floodplains, excessive pond construction can reduce the cross-sectional area of flow and increase flood levels and water velocities. This can result in water overtopping pond embankments, erosion of farm earthwork and damage to other property on the floodplain. The problem usually can be avoided if no more than 40% of the floodplain is blocked by pond embankments. Maps should be provided to demonstrate the proportion of a floodplain developed into the aquaculture farm. When farms constructed in former mangrove or wetland areas are closed, pond embankments shall be breached to restore natural water flow so that wetland vegetation can reestablish. Excessive pumping of groundwater can lead to aquifer depletion and affect the availability of water to other users in the area. Farms using groundwater shall provide the results of a groundwater level monitoring program, including wells within 1 km of the farm perimeter, taking into consideration natural variation in aquifer level and withdrawals by other users of groundwater resources.

C.4 EVIDENCE OF ALIGNMENT

GSSI Component	Guidance	
The standard requires the aquaculture facility to sources feed from a manufacturer that can trace aquatic feed ingredients including fish meal and fish oil (>1% inclusion) to the species and, at least, to the country of origin.	Verification is expected to include a review of evidence (e.g., documentation, self-declaration by the feed manufacturer). The standard is expected to apply to other relevant marine feed ingredients (e.g., algae, krill, and squid) and to whole fish and fishery byproducts.	
Conclusion		References
BAP Farm Standard 3.0 is in alignment because. Clause 3.43 states: 3.43: The farm shall obtain feed either from a BAP-certified feed mill or from a feed mill that provides declarations that it complies with BAP Feed Mill standards regarding: • The recording of species and fishery origins of each batch of fishmeal and fish oil, and; • Having a written Plan of Action defining policies for responsibly sourcing fishmeal and fish oil from reduction fisheries and setting clear goals for responsibly sourcing soy ingredients		 BAP Farm Standard v3.1 BAP Feed Mill Standard
Feed Mill Standard (p 19) states: 'This stand sources including fish, mollusks, crustaced	ard focuses attention on meals and oils derived from wild or farmed aquatic ins and algae'	

C.4.02 Environmental Considerations of Feed Ingredients			
GSSI Component	Guidance		
The standard requires the aquaculture facility to source feed from a manufacturer who produces feed that Verification is expected to include a review of evidence (e.g., documentation, self-declaration by the feed manufacturer). The standard is expected to apply to other relevant marine feed ingredients (e.g., algae, krill, and squid) and to whole fish and fishery byproducts.			
excludes fishmeal and fish oil from endangered species and is validated as such.	from endangered species Vietnam's Red Data Book) and/or global listing organizations such as CITES (Appendix 1), IUCN Red List (Categories		
Conclusion	Conclusion References		
BAP Feed Mill standard or feed mills that meet specific sourcing requirements within the BAP Feed Mill Standard and these requirements exclude IUU fish and endangered species. The corresponding Guidelines in the BAP Farm Standard •		 BAP Farm Standard v3.1 BAP Feed Mill Standard 	
"Compliance with BAP Feedmill Standards - To promote responsible sourcing of marine ingredients, the farm shall obtain feed from a BAP-certified feed			
mill or a feed mill that declares	mill or a feed mill that declares and documents compliance with BAP Feed Mill Standards - Issue 3.0 clauses 4.1 and		
4.4. BAP Feed Mill Standard 4.1 requires declarations from suppliers on the species and fishery origins of each batch			
of fishmeal and fish oil. BAP Feed Mill Standard 4.4 requires a clear, written Plan of Action defining policies for			
responsibly sourcing fishmeal	responsibly sourcing fishmeal and fish oil from reduction fisheries and setting clear goals for responsibly sourcing		

C.4.02 Environmental Considerations of Feed Ingredients

soy ingredients. Additional implementation guidance regarding options for the Plan of Action can be found in the BAP Feed Mill Standard – Issue 3.0."

The referenced clauses in the BAP Feed Mill Standard 3.1 are:

- 4.1. The facility shall obtain declarations from suppliers on the species and fishery origins of each batch of fishmeal and fish oil.
- 4.4. The facility shall develop and implement a clear, written Plan of Action defining policies for responsibly sourcing fishmeal and fish oil from reduction fisheries and setting clear goals for responsibly sourcing soy ingredients.

With regard to the requirement that the standard excludes endangered species, the BAP Feed Mill Std 3.1 requires:

Plans of Action (p20) and refers to 'endangered and 'critically endangered' as designated by the IUCN.

The BAP Feed Mill Standard 3.1 states, p20:

The Plans of Action shall address how to

- Exclude use of fishmeal or fish oil sourced from illegal, unreported or unregulated (IUU) fisheries, or by-products from such fisheries.
- Exclude fishmeal or fish oil sourced from fish or fish by-products from fisheries designated

C.4.02 Environmental Considerations of Feed Ingredients

by the International Council for the Exploration of the Sea (ICES), Food and Agriculture Organization (FAO) of the United Nations, National Marine Fisheries Service of

the United States, International Union for Conservation of Nature or Commission for the

Conservation of Antarctic Marine Living Resources as "subject to overfishing,"

"overfished," "harvested unsustainably," "fishery closed," "stock overexploited," "no fishing recommended," "stock critical," "endangered" or "critically endangered."

C.4.03 Environmental Considerations of Feed Ingredients

GSSI Component

Guidance

The standard requires the aquaculture facility to source feed from a manufacturer that prohibits the use of fishmeal and fish oil from illegal, unreported, and unregulated fishing (I.U.U.).

Verification is expected to include a review of evidence (e.g., documentation, self-declaration by the feed manufacturer). The standard is expected to apply to other relevant marine feed ingredients (e.g., algae, krill, and squid) and to whole fish and fishery byproducts.

Conclusion

References

BAP Farm Std 3.0 is in alignment because farms are required to source feed from feed mills that meet the BAP Feed Mill standard or feed mills that meet specific sourcing requirements within the BAP Feed Mill Standard and these requirements exclude IUU fish and endangered species. The corresponding Guidelines in the BAP Farm Standard state, p43:

- BAP Farm Standard v3.1
- BAP Feed Mill
 Standard

Compliance with BAP Feedmill Standards - To promote responsible sourcing of marine ingredients, the farm shall obtain feed from a BAP-certified feed

C.4.03 Environmental Considerations of Feed Ingredients

mill or a feed mill that declares and documents compliance with BAP Feed Mill Standards - Issue 3.0 clauses 4.1 and 4.4. BAP Feed Mill Standard 4.1 requires declarations from suppliers on the species and fishery origins of each batch of fishmeal and fish oil. BAP Feed Mill Standard 4.4 requires a clear, written Plan of Action defining policies for responsibly sourcing fishmeal and fish oil from reduction fisheries and setting clear goals for responsibly sourcing soy ingredients. Additional implementation guidance regarding options for the Plan of Action can be found in the BAP Feed Mill Standard – Issue 3.0."

The BAP Feed Mill Standard 3.1 states, p20:

The Plans of Action shall address how to

- Exclude use of fishmeal or fish oil sourced from illegal, unreported or unregulated (IUU) fisheries, or by-products from such fisheries.
- Exclude fishmeal or fish oil sourced from fish or fish by-products from fisheries designated by the International Council for the Exploration of the Sea (ICES), Food and Agriculture Organization (FAO) of the United Nations, National Marine Fisheries Service of the United States, International Union for Conservation of Nature or Commission for the Conservation of Antarctic Marine Living Resources as "subject to overfishing," "overfished," "harvested unsustainably," "fishery closed," "stock overexploited," "no

C.4.03 Environmental Considerations of Feed Ingredients

fishing recommended," "stock critical," "endangered" or "critically endangered."

BAP Feed Mill Standard 3.1 requires:

- 4.1. The facility shall obtain declarations from suppliers on the species and fishery origins of each batch of fishmeal and fish oil.
- 4.2. The facility shall not source raw material from IUU fisheries. It shall have documented procedures of corrective actions in the event of usage of any raw material sourced from IUU fisheries and shall prevent recurrence.

C.4.04 Environmental Considerations of Feed Ingredients

GSSI Component

The standard requires that the aquaculture facility to source feed from a manufacturer that has a written policy which includes assessment of source fishery status and identification of improvement needs and work plan to deliver improvements. The policy must include a commitment and timeline to source aquaculture and fishery

Guidance

Verification is expected to include a review of evidence (e.g., documentation, self-declaration by the feed manufacturer). The standard is expected to apply to other relevant marine feed ingredients (e.g., algae, krill, and squid) and to whole fish and fishery byproducts.

C.4.04 Environmental Considerations of Feed Ingredients products from responsible/best practice sources, such as those certified a standard benchmarked at minimum consistent with relevant FAO's ecolabelling guidelines or by identified independent risk assessment. Conclusion References BAP Farm Standard 3.0 is in alignment because farms are required to source feed from feed mills that meet the BAP Feed BAP Farm Mill standard or feed mills that meet specific sourcing requirements within the BAP Feed Mill Standard and these Standard requirements include the need for an Action Plan that defines policy on sourcing of marine ingredients. v3.1 BAP Feed Clause 4.4 in the BAP Feed Mill Standard states: Mill Standard 4.4. The facility shall develop and implement a clear, written Plan of Action defining policies for responsibly sourcing fishmeal and fish oil from reduction fisheries and setting clear goals for responsibly sourcing soy ingredients. The BAP Feed Mill Standard 3.1 states, p20: The Plans of Action shall address how to • Exclude use of fishmeal or fish oil sourced from illegal, unreported or unregulated (IUU) fisheries, or by-products from such fisheries.

 Exclude fishmeal or fish oil sourced from fish or fish by-products from fisheries designated

C.4.04 Environmental Considerations of Feed Ingredients

by the International Council for the Exploration of the Sea (ICES), Food and Agriculture Organization (FAO) of the United Nations, National Marine Fisheries Service of the United States, International Union for Conservation of Nature or Commission for the Conservation of Antarctic Marine Living Resources as "subject to overfishing," "overfished," "harvested unsustainably," "fishery closed," "stock overexploited," "no fishing recommended," "stock critical," "endangered" or "critically endangered."

Content of the BAP Feed Mill 3.1 Standard, p20:

Facilities shall create and implement clear Plans of Action that define: policies for the responsible sourcing of fishmeal and fish oil from reduction fisheries and material derived from fish-processing by-products from capture fisheries or from aquaculture or; goals for soy inputs such that 50% come from certified sources by 2022, and; ensure 100% certified palm oil by 2022. Additionally, facilities shall have policies to reduce any inputs of fishmeal and oil from uncertified sources to ensure they attain at least 75% fishmeal and oil from certified sources or fishery improvement projects (FIPs) by June 2025. Note that for salmon feed mills there is no delay till June 2025 for this 75% requirement to apply

C.4.05 Feed Biosecurity		
GSSI Component	Guidance	
The standard prohibits the use of raw fish as a direct feed source in growout.	0% of feed at any time during production (under the scope of certification) may contain "whole fish" or "wet fish", which includes any form of uncooked wet fish (whole or chopped or frozen etc.), which includes direct feed, supplemental feeding, or on-farm made applications. Alternatives would be to require 100% use of commercial dry pelleted feeds. Verification is expected to include a suitable review of evidence, such as feed use records, visual observation, and financial records in aquaculture industries where this is common practice. A non-applicable (N/A) designation is only acceptable where 100% of production under the scope of the standard (including species, production intensity and production systems covered) uses entirely commercial dry pelleted feeds (e.g., Atlantic salmon).	
Conclusion		References
BAP Farm Standard 3.0 is in alignment because Clause 1.18 specifies: 1.18: Uncooked whole organisms and their uncooked by-products shall not be used as feed in any production system. • BAP Farm Standard v3.1		BAP Farm Standard v3.1

C.4.06 Feed Biosecurity	
GSSI Component	Guidance
The standards prohibits aquatic feed protein from the same species and genus as the species being farmed.	Verification is expected to include a review of evidence (e.g., documentation, self-declaration by the feed manufacturer).
Conclusion	References

C.4.06 Feed Biosecurity

BAP Farm Standard 3.0 is in alignment because Clause 4.4 states:

4.4: The farm shall obtain written assurance from the feed manufacturer that the feed does not contain aquatic feed protein from the same genus as the species being farmed.

BAP Farm
 Standard v3.1

C.4.07 Feeding Efficiency		
GSSI Component	Guidance	
Where applicable, the standard requires that the aquaculture facility has suitable measures in place to ensure that feed is used efficiently at the individual production unit level.	Suitable measures are expected to be part of a wider feed management system, such as the measurement of FCR (Feed Conversion Ratio) and FIFO (Fish In Fish Out ratio) as well as documented records of visual feed response and staff training. Verification that the measures are operational and fit for purpose is also expected.	
Conclusion		References
		• <u>BAP Farm</u> <u>Standard v3.1</u>
3.38: The farm shall record the inclusion rates, as indicated in 3.37, and protein levels of all feeds used, the total amounts of each feed used each year and the total annual aquatic animal production.		
3.39: The farm shall calculate and record an average feed conversion ratio for completed crops in a calendar year.		

C.4.07 Feeding Efficiency

3.40: The farm shall calculate and record a final Fish-in Fish-out (FIFO) ratio and Forage Fish Dependency Ratio (FFDR) value for all completed crops in a calendar year.

3.41: Depending on the species farmed, the FIFO shall not exceed the following values:

- Whiteleg shrimp (Litopenaeus vannamei) 1.0
- Black tiger shrimp (Penaeus monodon) 1.2
- Tilapia 0.5
- Pangasius catfish 0.3
- Channel catfish 0.3
- Rainbow trout 1.2 (note: does not include steelhead salmon raised in sea cages).
- Atlantic salmon 1.4 (note: in recirculating systems only).

3.42: For species not named in 3.41, the FIFO shall not exceed 4, or 5 if fish processing byproducts are included in the feed.

Corresponding Guidelines on FCR specify, p42:

"Average FCR Calculation -

Feed conversion ratio (FCR) is the fundamental measure of feed efficiency in aquaculture and is calculated as the amount of feed needed to produce a unit weight of aquatic animals. Farms shall calculate and record FCR yearly as follows: Feed conversion ratio = Annual feed use ÷ Net biomass (live weight) of aquatic animals produced. The amount of feed used and net biomass of aquatic animals produced can be reported in metric tons or kilograms, but the same units shall be used for both in the calculation. The net biomass of fish or shrimp produced is calculated by subtracting the total weight of stocked juveniles from the total live weight of the harvested aquatic animals. The FCR shall be reported on an annual basis for all crop cycles completed within a calendar year.

FCR as calculated for the purpose of BAP certification is also known as economic FCR (eFCR). Economic FCR is very sensitive to survival rate, rising sharply if the survival rate drops significantly.

C.4.07 Feeding Efficiency

Although BAP for FCR have not been established, producers should always strive to reduce FCR because it is among the best indicators of potential profitability and is direct evidence of efficient use of marine feed ingredients. Farms should always attempt to demonstrate continuous improvement after initial certification by progressive reductions in FCR. Proposed FCR targets, which may become limits in future versions of this standard, are: L. vannamei, 1.2; P. monodon, 1.5; tilapia, 1.5; Pangasius catfish, 1.5; channel catfish, 2.0; rainbow trout, 1.2; Atlantic salmon, 1.1."

Additional clauses and guidance relating to management of feeding:

p56: To demonstrate that the Animal Health Management Plan is operational and fit-for-purpose, the farm shall maintain or have access to regularly updated records of water quality monitoring, feeding, aquatic animal health and behavior, water quality monitoring, daily mortalities, disease outbreaks, and use of veterinary drugs, therapeutic chemicals or disinfectants.

4.8: Feeding response and swimming behavior shall be measured in each production unit as group-based welfare indicators of behavior

4.10: Farm workers shall be trained in their roles and responsibilities in maintaining the welfare of farmed aquatic animals.

Implementation Guidance, p 58: Feeding should be managed to avoid stress caused by under- or overfeeding.

p59: The farm shall maintain a recordkeeping system for group-based welfare indicators of behavior. Trained farm workers shall regularly inspect each production unit, noting the behavior of aquatic animals in each unit. Through training and experience, farm workers learn and can assess normal behavior. Often, a loss of appetite is the first sign of

C.4.07 Feeding Efficiency

disease. Thus, regular assessment of feeding response is a component of health management that can permit rapid response, if necessary. Assessing feeding response can also indicate if fish are being underfed.

p59: Training

Farm workers shall be trained in their roles and responsibilities in maintaining the welfare of farmed aquatic animals. Farm managers are responsible for providing training to workers about 1) evaluation of welfare indicators, including normal and abnormal behavior, signs of poor welfare and expected diseases, 2) water quality management and aquatic animal husbandry, 3) aquatic animal handling procedures (crowding, disease treatment, transfers, loading for transport), and 4) humane euthanasia methods. Training logs should be maintained by the farm to indicate worker training activities

C.4.08 Record Keeping		
GSSI Component	Guidance	
The standard requires that appropriate records are kept on all feed use. At a minimum this must include: feed source, feed Batch/Lot/ID number, date of purchase, and feed conversion ratio (FCR) MT	Appropriate records are expected to include those stated in the component, and, where appropriate, feed inclusion percentages of fishmeal and fish oil or a fish in: fish out ratio. Appropriate records are expected to be kept for each individual production unit. Verification of appropriate record keeping and suitable documentation from feed manufacturers is also expected.	
Conclusion		References
BAP Farm Standard 3.0 is in alignment because these requirements are included in the Traceability Section of the Farm Standard, p61:		• <u>BAP Farm</u> <u>Standard v3.1</u>

C.4.08 Record Keeping

T7: The farm shall keep complete and accurate records regarding feed manufacturer (including BAP certification status of feed manufacturer), lot numbers and quantities of each feed used in each production unit in each production/crop cycle.

Additionally:

- 3.37: The farm shall use feed for which the manufacturer has provided data on the inclusion rate (%) in feeds of total fishmeal, fishmeal from byproducts, fish oil, and fish oil from byproducts.
- 3.38: The farm shall record the inclusion rates, as indicated in 3.37, and protein levels of all feeds used, the total amounts of each feed used each year and the total annual aquatic animal production.
- 3.39: The farm shall calculate and record an average feed conversion ratio for completed crops in a calendar year.
- 3.40: The farm shall calculate and record a final Fish-in Fish-out (FIFO) ratio and Forage Fish Dependency Ratio (FFDR) value for all completed crops in a calendar year.
- 3.41: Depending on the species farmed, the FIFO shall not exceed the following values: Whiteleg shrimp (Litopenaeus vannamei) 1.0 Black tiger shrimp (Penaeus monodon) 1.2 Tilapia 0.5 Pangasius catfish 0.3 Channel catfish 0.3 Rainbow trout 1.2 (note: does not include steelhead salmon raised in sea cages). Atlantic salmon 1.4 (note: in recirculating systems only).
- 3.42: For species not named in 3.41, the FIFO shall not exceed 4, or 5 if fish processing byproducts are included in the feed.
- 3.66: Fuel, lubricants, feed and agricultural chemicals shall be labelled, stored, used and disposed of in a safe and responsible manner.

C.4.08 Record Keeping

p53: The farm should keep an accurate and current inventory of all feed types used. The oldest feeds should be used first (first in, first out). Feeds should not be stored past the manufacturer's recommended use date, usually 90 days, especially in the tropics. Feed purchases should be managed to keep feed fresh.

C.5 EVIDENCE OF ALIGNMENT

C.5.01 Benthic Habitats

GSSI Component

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.

Guidance

Appropriate measures for marine cage production systems are expected to consider biological, chemical and physical impacts and additional chemical residues resulting from culture practices and should use appropriate sampling methods. Where relevant, they should conform to ISO 16665. The use of systems combining suitable allowable zones of effect and environmental quality standards (EQS) of effect are expected. Verification that the measures are operational and fit for purpose is expected. Evidence of the prevention of adverse impacts could include comparisons with baseline conditions, reference locations, or standardized limits with a suitable justification for their use. Where adverse impacts are detected it is expected that appropriate mitigation measures/remedial action for the identified adverse impacts on the surrounding natural ecosystem are applied. Sanctions that address situations where EQS' are exceeded and there is no effective remediation within a suitable timeframe could include withholding certification. While generally recognized as a marine cage issue, benthic impacts can also occur in freshwater cage systems. The degree of management measures should reflect the degree of potential impacts relative to the environment, production system, species, and size of production.

GSA is in alignment because this is covered by Pillar 3 Sections E and F. The corresponding clauses are: • BAP Farm Standard v3.1 3.26: For cages in lakes or reservoirs, cages shall be placed in locations with an average water depth of greater than 10 m or at least twice the depth of the cage, whichever is greater. 3.27: For cages in water less than 30 m deep, and where sediments are usually aerobic in the absence of cages, divers or cameras shall be used periodically, at least once per production cycle, to inspect the bottom for

C.5.01 Benthic Habitats

accumulation of faeces and uneaten feed. When such conditions are identified, aerobic benthic conditions shall be restored by fallowing or other means.

- 3.28: Monitoring of sediment conditions shall be undertaken within 30 days of the peak sustained feeding period during the production cycle and shall be conducted according to the requirements of the farm's operating permits or its own Sediment Monitoring Plan in countries or regions where sediment monitoring is not required, and as specified in the implementation guidance.
- 3.29: Sediment sampling and analysis performed as part of the monitoring program shall apply generally accepted international methods and be adapted to the local hydrographic or benthic conditions.
- 3.30: For newly established farms (first production cycle) or farms that have expanded and do not yet have enough monitoring data, the farm 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.
- 3.31: For established farms (after first production cycle), the farm shall provide sediment monitoring data for the most recent production cycle to show that the farm meets or exceeds the sediment quality criteria specified in its operating permits and/or its own Sediment Monitoring Plan at current operating levels.
- 3.32: The farm shall provide documents that describe local standards for benthic impacts under net pen farms or at water discharge sites from coastal flow-through facilities. These standards shall include benthic indicator "trigger levels" above which the farm would not be in compliance with local standards. In the absence of benthic trigger levels set by regulatory bodies, the farm shall define these trigger levels based on the benthic characteristics study as per 3.30.

C.5.01 Benthic Habitats

3.33: The results of sediment monitoring shall be reported to and reviewed and accepted by the appropriate regulators. Where regulatory approval is conditional upon implementing a program of remedial action, this shall have been implemented and completed.

The corresponding Guidelines state:

"Sediment Monitoring - Wastes can accumulate beneath cages and cause deterioration of sediment quality. This is environmentally

undesirable and can have negative impacts on the welfare of fish in cages as well. Sediment quality in areas with fish cages can be protected by fallowing – periodically moving cages to new sites in a concession and allowing the sediment beneath the original sites to recover. Observations on sediment quality shall be used to determine if and when to move cages. For cages located in rivers or in reservoirs with extremely short HRT's (<5 days), the restriction concerning location of cages where depths are >10 m or where the reservoir depth is at least twice the depth of the cage, is not applicable.

Some freshwater lakes and reservoirs are normally stratified throughout the year, with a bottom layer of water with little or no oxygen. In such conditions, restoration of bottom condition is not possible or practical because the processes leading to anaerobic bottom waters are naturally occurring. In this case, farms are not required to inspect sediment. However, farms shall demonstrate that bottom waters are anaerobic with monthly sampling of dissolved oxygen concentration in the hypolimnion (bottom layer), with specification of the depth sampled. Farms placed in locations with water depths greater than 30 m are exempt from sediment monitoring."

C.5.02 Predator Control

GSSI Component

Guidance

C.5.02 Predator Control

The standard prohibits the use of any lethal predator control techniques on endangered species.

Exceptions for worker safety and where euthanization is an act of mercy are acceptable and expected.

Verification of the predator controls used, appropriate record keeping, and details of the endangered species in the region of the aquaculture facility are expected. Examples of supporting evidence of non-use could include interview, appropriate signage, and mortality records. Exceptions for worker safety and where euthanization is an act of mercy are acceptable and expected.

Endangered species are expected to be defined in the standard, with reference to relevant national listings (e.g., Vietnam's Red Data Book) and/or global listing organizations such as CITES (Appendix 1), IUCN Red List (Categories Critically Endangered (CR), Endangered (EN), Vulnerable (VU)). See www.iucnredlist.org and www.cities.org for more information.

Conclusion	References
BAP Farm Standard 3.0 is in alignment because Clause 3.64 specifies:	• BAP Farm Standard v3.1
3.64: No predator controls other than non-lethal exclusion and deterrence shall be applied to species that	
are	
listed as endangered or critically endangered on the IUCN Red List or that are protected by local or national	
laws.	

C.5.03 Sensitive Habitat and Biodiversity				
C 5 U.S. Sensitive Hololici and Blootversity	OEO2	Copolitivo	I larkitart are	al Dia alivo voitue
	C-5.U.5	Sensitive		

GSSI Component

Guidance

C.5.03 Sensitive Habitat and Biodiversity

The standard requires that in areas where damage of sensitive habitats has occurred previously, and where restoration is possible and effective; restoration efforts will or have resulted in a meaningful amount of restored habitat; either through direct on-farm restoration or by an off-farm offsetting approach. Grandfathering of historical losses is allowed.

It is expected that the standard will define sensitive habitat in context with its scope and an appropriate date to be used prior to which legal impacts can be "grandfathered in" and provide supporting evidence for the date. Verification at the aquaculture facility is expected to include whether restoration is necessary, to what degree (evidence could include maps, aerial photos, satellite images, government certification etc.) and whether that the active restoration is suitable (i.e., will it be successful and restore a suitable area of sensitive habitat).

Conclusion References

BAP Farm Standard 3.0 is in alignment because this is addressed in Pillar 3 Section D, p 34, with these clauses:

- 3.12: New farms shall not be located in mangrove forests, sensitive wetlands or any other critical or vulnerable habitats.
- 3.13: New farms shall not result in the loss of critical habitat for endangered or critically endangered species.
- 3.14: If net loss of wetland habitat (delineated by evaluation of hydrological conditions and the presence of wetland vegetation) occurred on farm property since 1999, the loss shall have been due to allowable purposes.
- 3.15: If net loss of wetland habitat occurred on farm property since 1999, the loss shall have been mitigated by restoring an area three times as large with the equivalent diversity of native species or by an equivalent donation to measurably successful restoration projects.
- 3.16: If wetland restoration has been conducted, the restored vegetation shall be maintained in a healthy state, viable and appropriately diverse.

Guidance p35:

During initial inspection, the auditor will record farm areas occupied by mangroves or wetland vegetation. If dying vegetation is observed around farms, the auditor will determine if that die-off is the result of farm operations. If it is, a warning will be issued and the deficiency shall be corrected as a condition of continued certification. Wetland removal for purposes other than those identified previously (for inlet and outlet canals, pump stations and docks) or failure to mitigate allowable removal will result in loss of certification.

• <u>BAP Farm</u> Standard v3.1

C.5.03 Sensitive Habitat and Biodiversity Reference on p36 Convention on Wetlands of International Importance, 1971 (Ramsar Convention) https://www.ramsar.org/

C.6 EVIDENCE OF ALIGNMENT

C.6.01 Record Keeping		
GSSI Component	Guidance	
The standard requires the establishment, implementation and maintenance of an appropriate record system may include source of the seed, date of purchase, stocking density, vaccination record of the seed, and stocked seed batch identification.		se, stocking density,
keeping system for all seed that is	Verification is expected to include a review of evidence that the system is opera	tional and fit for
intentionally stocked.	purpose.	
Conclusion		References
BAP Farm Standard 3.0 is in alignment because this is addressed in Clause 3.44:		• <u>BAP Farm</u> Standard v3.1
3.44: The farm shall keep complete and accurate records of the sources, purchases of stocking material and numbers of seed (e.g. post-larvae, juveniles, fingerlings) stocked in each culture unit for each crop, stocking dates, species stocked and, if applicable, species characteristic specifications such as non-native, specific pathogen-free, specific pathogen-resistant, hybrid, triploid, sex-reversed, genetically modified (GM) or bioengineered (BE).		

C.6.02 Wild Seed	
GSSI Component	Guidance

C.6.02 Wild Seed

The standard requires that where the deliberate use of wild seed is justifiable, it is collected in a manner that:

- Ensures controls are in place so that the collection of seed is not detrimental to the status of the wild target and non-target populations, nor that of the wider ecosystem. This requires a documented management approach that ensures those wild populations are not overfished and not subject to recruitment overfishing or other impacts that are likely to be irreversible or very slowly reversible, and avoids, minimizes or mitigates fishing impacts on essential habitats and on habitats that are highly vulnerable to damage by the fishing gear;
- Avoids the use of environmentally damaging collection practices;
 And ensures that the source fishery is regulated by an appropriate authority.

Expected examples of "justifiable use" include where there is a lack of commercially-available hatchery-raised seed, inability/lack of technology to hatchery-raised the farmed species, or passive collection of mollusks. Justification could be offered at the standard or aquaculture facility level. Verification is expected to include the need to provide suitable evidence by the aquaculture facility (e.g., a summary report written by a credible 3rd party on the source fishery, a self-certification by the appropriate management authority, a 3rd party fishery certification that verifies suitable compliance).

A documented management approach is expected to follow Component D.3.01 where the standard requires the existence of documented management approaches or other management framework covering the unit of certification and the stock under consideration, including management measures consistent with achieving management objectives for the stock under consideration. Expected outcomes of the management approach are described in the Guidance of D.6.01 Target Stock Status, D.6.05 Non-Target Catches, D.6.06 Endangered Species, and D.6.07 Habitat, respectively. Definitions of terms related to wild fisheries can be found in Section D terms of the Glossary.

Examples of environmentally damaging collection practices include blast, poison, and Muroami fishing practices.

Conclusion	References
BAP Farm Standard 3.0 is in alignment because this is addressed in Clause 3.46:	• BAP Farm
	Standard
3.46: Wild juveniles shall not be stocked, other than as incidental introductions in extensive ponds that rely on	<u>v3.1</u>
tides for pond filling and water exchange.	

C.6.03 Hatchery Seed		
GSSI Component	Guidance	
The standard requires that hatchery- raised seed are free from relevant/important pathogens before stocking for grow-out.	Relevant/important pathogens are expected to include those identified by the aquatic health professional and sources such as the OIE/ transboundary disease lists (See Chapter 1.3 of the Aquatic Animal Health Code 2015 http://www.oie.int/en/international-standard-setting/aquatic-code/access-online/).	
	Verification of suitable measures is expected to include reviews of disease tested for, and the results (including ISO 23893-1:2007), and the vertical form part of the aquatic animal health management plan.	•
Conclusion		References
		• <u>PI - Standard - Farm</u> <u>Standard</u>
"• Active control measures to prevent disease introduction in spread by movement of aquatic animals. This includes new introductions, regular stockings and internal movements of aquatic animals. Stock health inspections and certificates should be used to demonstrate the disease freedom of batches of introduced aquatic animals."		
Guidelines also state:		

C.6.03 Hatchery Seed

"To demonstrate that the Biosecurity Plan is operational and fit-for-purpose, the farm shall maintain regularly updated records that trace aquatic animal movements from hatchery to processing plant (see Traceability section). Stock health inspections and certificates should be retained and compiled. Personnel, equipment and vehicle movement logs shall be maintained. Logs of sanitization and disinfection events should be maintained. The Biosecurity Plan should be evaluated once per year to assess compliance with the plan, effectiveness in meeting goals of improved biosecurity, and whether documentation and record-keeping have been sufficient. The Biosecurity Plan should designate a member of the farm staff as biosecurity plan manager that will be responsible for implementing biosecurity measures, maintaining the recordkeeping system and training staff and making visitors aware of their roles and responsibilities in implementing biosecurity measures

3.44: The farm shall keep complete and accurate records of the sources, purchases of stocking material and numbers of seed (e.g. post-larvae, juveniles, fingerlings) stocked in each culture unit for each crop, stocking dates, species stocked and, if applicable, species characteristic specifications such as non-native, specific pathogen-free, specific pathogen-resistant, hybrid, triploid, sex-reversed, genetically modified (GM) or bioengineered (BE).

3.45: If government regulations control the use or importation of any of the species or stocks farmed, relevant permits shall be made available for inspection, even if imported fry were purchased from an intermediary.

Guidance p44:

During an audit, documentation of compliance with government regulations (i.e. permits) relating to the importation of aquatic animal seed (fry, fingerlings or postlarvae) and any associated health certificates shall be available for review. The farm should demonstrate awareness of the relevant national and local laws and regulations regarding introductions and transfers of live aquatic animals. The farm should establish a link to the domestic competent authority (veterinary health authority or other government regulatory body) to verify international importation requirements and follow the International Health Certificate protocol defined by the OIE. Government regulations differ by country and the certification body is not expected to maintain complete

C.6.03 Hatchery Seed

records of the requirements in every country. However, auditors should become familiar with relevant regulations and importation procedures in countries where they regularly perform audits. Farms importing a new species for the first time should be scrutinized with extra vigilance to demonstrate that legal channels were followed.

C.7 EVIDENCE OF ALIGNMENT

C.7.01 Escapes		
GSSI Component	Guidance	
The standard requires that the	An appropriate system is expected to be based on an evaluation of the likelihood of	f events and the
aquaculture facility establishes,	magnitude of impacts on surrounding environment (where risk assessments are u	sed they met use a
implements, and maintains an	suitable scientific method and taking into consideration, siting, culture practices, lo	ocal environmental
appropriate system to minimize the	conditions, including extreme events, and other relevant uncertainties) according	to the
unintentional release or escape of	precautionary approach and possible impacts on surrounding natural ecosystems	s, including fauna,
cultured species. This should include	flora, and habitat. Specific requirements stated in the standard are acceptable.	
monitoring and management of the		
physical facilities and practices	Verification is expected to include a review of evidence of an operational and fit for	r purpose system.
	The monitoring of the management practices could include but are not limited to: i) Measures for escape detection ii) Monitoring for and record keeping of escapes events iii) Suitable training of employees iv) Incident management and infrastructure, including response or recapture mea v) Regular monitoring and maintenance of the culture system vi) Regular review and failure analysis vii) containment infrastructure species being farmed and the production system individual elements can be "Not these considerations).	elative to the
Conclusion		References

C.7.01 Escapes

BAP Farm Standard 3.0 is in alignment because Pillar 3 Section I, p45, addresses control of escapes. The Clauses are:

- 3.49: All holding, transport and culture systems shall be designed, operated and maintained to minimize the release of aquatic animals at any life stage.
- 3.50: Screens and nets of a size to retain the smallest farmed animals present at the farm shall be installed as a barrier between the culture unit and the environment.
- 3.51: During harvesting and stock transfer operations, effective secondary containment measures shall be applied to control the escape of animals.
- 3.52: All incidents involving escapes of aquaculture animals shall be accurately documented.
- 3.53: For tilapia farms in watersheds where tilapia are not indigenous and not established, farms shall have at least two independent containment systems to prevent escapes. Additionally, they shall only stock monosex juveniles (minimum 99% phenotypically monosex).

Net Pens

- 3.54: The farm shall have a written Containment Plan that includes procedures to prevent, detect and respond to incidences of escapes of aquatic animals from culture units.
- 3.55: The farm shall provide documents to show that all staff members have received training in the Containment Plan, which shall be verifiable by training certificates in workers' files and verified during the audit by interviews with a subset of workers.
- 3.56: Cages, nets and pens shall be labeled and maintained in good condition, and records of repairs shall be kept.
- 3.57: Regular inspections by divers or underwater cameras of mooring lines and cage mesh condition shall be documented.
- 3.58: Jump nets that extend above the water line shall surround the perimeter or cover the entire surface of net pens and shall have appropriate mesh sizes to contain the aquatic animals

BAP Farm Standard v3.1

C./.U2 Genetically Modified Organic		
GSSI Component	Guidance	
In the case where the culture of GMO organisms is permitted, the standard requires a suitable evaluation of the risk of environmental impacts.	A suitable evaluation is expected to have been performed using an appropriate science assesses the likelihood of events and the magnitude of impacts, and take into account uncertainties according to the precautionary approach. The evaluation should consimpacts on genetic diversity, aquatic communities and ecosystems. Where ICES Conthe Introductions and Transfers of Marine Organisms 2005 is relevant, consistency of requirements on genetically modified organisms (GMO) is also expected. Verification include a review of supporting evidence.	unt relevant sider the possible de of Practice on vith these
Conclusion	minimude a review of supporting evidences.	References
includes the clauses below and requires a 3.44: The farm shall keep complete and ac (e.g. post-larvae, juveniles, fingerlings) sta	cause this is addressed in Pillar 3 Section H - Stocking Sources and GMOs, which is sessment with reference to relevant international codes: ccurate records of the sources, purchases of stocking material and numbers of seed icked in each culture unit for each crop, stocking dates, species stocked and, if cations such as non-native, specific pathogen-free, specific pathogen-resistant, modified (GM) or bioengineered (BE).	• <u>BAP Farm</u> <u>Standard</u> <u>v3.1</u>
· · · · · · · · · · · · · · · · · · ·	e use or importation of any of the species or stocks farmed, relevant permits shall mported fry were purchased from an intermediary.	
·	ve, not escaped and subsequently established in the wild, or not be provided to demonstrate that regulatory approval for farming	

C 7 02 Genetically Modified Organisms

C.7.02 Genetically Modified Organisms

is based on the 2005 ICES Code of Practice on Introductions and Transfers of Marine Organisms or, for freshwater species, the Codes of Practice and Manual of Procedures for Consideration of Introduction and Transfers of Marine and Freshwater Organisms, FAO 1988.

3.48: Farms that produce genetically modified or bioengineered aquatic animals shall comply with all regulations in producing and consuming countries.

C.8 EVIDENCE OF ALIGNMENT

C.8.01 Salinization		
GSSI Component	Guidance	
The standard requires that the aquaculture facility establishes,	An exemption for standards that do not cover land-based saline water s	systems is expected.
implements, and maintains an	Appropriate measures are expected to be based on risk assessments or	•
appropriate system that addresses the	Controls could include relevant monitoring of freshwater resources (e.g.	•
impact of salinization of freshwater	water bodies, local soils) for salinity changes and measures such as pon	id-linings, limiting
resources and the surrounding	groundwater use and other control techniques. The standard is expected	d to prohibit the aquaculture
environment by the aquaculture facility.	facility to contributing to changing freshwater resources and the surrou	nding environment to saline
	conditions. Verification is expected to include a review of evidence that t	the system is operational and
	fit for purpose, such as a visual inspection of the site.	
Conclusion		References
BAP Farm Standard 3.0 is in alignment because this topic is covered through Pillar 3, Section C, p 28, Clauses:		 BAP Farm Standard
		<u>v3.1</u>
3.6: If ponds are constructed on permeable soil, measures (such as the use of pond liners) shall be taken to		
control seepage and avoid contamination of aquifers, lakes, streams and other natural bodies of freshwater.		
3.7: For inland brackishwater ponds, quarterly monitoring of neighboring well and surface water shall show that chloride levels are not increasing due to farm operations.		

C.8.01 Salinization

3.10: Removed sediment shall be properly contained and located to prevent the salinization of soil and groundwater and not cause other ecological nuisances.

Guidelines on the topic start on p29:

"Salinization - Some inland shrimp farms use brackish groundwater as a water source or may import concentrated brine

from coastal salt ponds. Discharge of this water into low salinity receiving waters can cause salinization of those waters or the soils and wells of nearby agricultural crop farms that draw from those surface waters. Several practices

can be adopted to reduce the risk of salinization. One of the most important is to avoid constructing ponds in highly

permeable, sandy soil, or to provide clay or plastic liners to minimize seepage. Saline water should not be discharged

into freshwater areas. Excessive pumping of groundwater from freshwater aquifers should be avoided and freshwater from wells should not be used to dilute salinity in grow-out ponds. Farm ponds should be surrounded by a ditch to intercept seepage. This ditch should be large enough to capture overflow from ponds following rainfall.

When ponds are drained for harvest, water should be stored in a reservoir or transferred to other ponds for reuse. A vegetative barrier of salt-sensitive vegetation around farms can help detect movement of salt into adjacent areas.

For farms supplied by naturally saline groundwater with over 550 mg/L of chloride, pond effluent should be captured in a reservoir and reused. If brackishwater ponds are drained into a freshwater stream, the water should be discharged when stream flow is high. The water should be discharged slowly to avoid increases in chloride

concentration greater than 250 mg/L in the receiving water body. To determine if salinization is occurring,

C.8.01 Salinization

monitoring of chloride concentration in nearby (within 1 km) groundwater wells and surface waters must demonstrate that chloride concentrations are not increasing as a result of discharges of brackishwater effluent. On inland shrimp farms, runoff from spoil piles of saline sediment onto non-saline soil or into freshwater can cause salinization. Saline sediment should be confined to prevent overflow after rainfall events. The confinement structures should be large enough to hold the largest amount of rainfall expected within any 24-hour

period over 25 years. If the soil is highly pervious, downward seepage can result in salinization of freshwater aquifers. In this case, the confinement area must be lined to prevent seepage. When sediment is disposed of outside

the immediate farm area, it should be confined to an earthen containment area where soils are saline to prevent runoff. Overflow or seepage of saline soil and water from the confinement area must not cause harm in adjacent areas. Once sediment is leached of salt by rainfall, it can be disposed of by using as construction fill or for other purposes."

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GSSI Component

Where appropriate (e.g. land-based freshwater ponds supplied with groundwater and all culture systems where water resources are limiting) the

Guidance

This requirement is based on Paragraph 47 of the Technical Guidelines on Aquaculture Certification state "Measures should be adopted to promote efficient water management and use, as well as proper management of effluents to reduce impacts on surrounding land, and water resources should be adopted." GSSI recognizes that standards for efficient water management and use are not common in many current aquaculture standards. Generally it is expected that this Essential Component will only apply to aquaculture facilities that use land-based freshwater ponds supplied with groundwater and all culture systems where water resources are limiting. An

C.8.02 Water Use

standard requires that the aquaculture facility has appropriate management measures for efficient water use. exemption for all other production systems is expected. This can also be "not applicable" for standards that do not cover relevant production systems.

Management measures may include a general promotion or awareness of efficient water use or actions that may lead to more efficient use. Where groundwater is used the standard is expected to require that the aquaculture facility establish, implement and maintain an appropriate system to prevent aquifer drawdown and negative impacts on freshwater resources and the surrounding environment caused by the facilities operations. Verification that the system is operational and fit for purpose is expected.

Conclusion	References
BAP Farm Standard 3.0 is in alignment because it includes the following clauses:	BAP Farm
3.21: If a farm extracts groundwater, water levels in nearby wells shall be monitored at least annually during the	Standard v3.1
dry season to establish that aquaculture does not result in reducing the water table below historical levels of normal seasonal variation.	
of normal seasonal variation.	
3.22: Use of water from wells, lakes, streams, springs or other natural sources shall not cause ecological damage or land subsidence in surrounding areas.	
3.19: Farm operations shall not cause vegetation at the farm perimeter to die off.	
Guidelines state, p31:	
"Excessive pumping of groundwater from freshwater aquifers should be avoided and	
freshwater from wells should not be used to dilute salinity in grow-out ponds"	
The standard also covers the calculation of a water use index, p 63:	

C.8.02 Water Use

"Water Use Index - Although not recommended, it is possible to comply with numerical water quality criteria by increasing the

amount of water passing through a farm to dilute the concentrations of tested variables. Compliance with the water use index assures that farms meet water quality criteria through good management rather than diluting effluents before they are released into natural waters. A water use index shall be estimated using the following equation.

Water use index (m3

/kg fish or shrimp) = Annual effluent volume (m3

) ÷ Annual fish or shrimp production (kg)

C.8.03 Water Qu	ality and the second of the
GSSI Component	Guidance
The standard	Appropriate measures are expected to include.
requires, where	1. Monitoring and recording of effluent or receiving water quality, and which may including key parameters that need to be
appropriate,	addressed include, where applicable:
management	i) Nutrients – Nitrate/Nitrogen (impacts on seawater)
measures for	ii) Nutrients – Phosphate/Phosphorous (impacts on freshwater)
effluents in order	iii) Dissolved oxygen
to reduce adverse	iv) Salinity
impacts on the	v) Suspended Solids
water quality of	vi) pH
water bodies	
receiving	2. Defined, aquaculture appropriate, maximum reference points (e.g., general concentration limits or aquaculture facility-
effluents.	specific limits) or mandatory systems (e.g., presence of a suitable filter) are defined to prevent pollution

C.8.03 Water Quality

Monitoring of the systems effluents against appropriate criteria is required.

3. Where reference points are exceeded, the scheme either refuses certification or that mitigation methods are employed and monitored to meet a time bound goal to come into compliance.

Verification is expected to include a review of evidence that the system is operational and fit for purpose, including visual inspection of the site. Where effluent concentration limits are used for compliance, independent verification of conformance is also expected.

"Where appropriate" is expected to include standards that cover production systems that release effluent that has the potential to impact water quality, e.g., fed/intensive aquaculture in ponds and raceways. An exception for marine cage aquaculture and on or offbottom shellfish culture is expected.

Conclusion	References
BAP Farm Standard 3.0 is in alignment because Pillar 3 Section C, p28, covers Effluent Management.	• <u>BAP Farm</u>
	<u>Standard</u>
3.3 Effluent Compliance Options	<u>v3.1</u>
3.3.1: Effluent water quality from ponds, flow-through and recirculating aquaculture systems shall comply with BAP Effluent	
Water Quality Criteria (Appendix B - parameters listed below) or applicable regulations if they are equivalent or more	
rigorous.	
pH (standard pH units)	
Total suspended solids (mg/L)	
Soluble phosphorus (mg/L)	
Total phosphorus (mg/L)	
Total ammonia nitrogen (mg/L)	
Nitrate-N (mg/L)	
5-day biochemical oxygen demand (mg/L)	
Dissolved oxygen	

C.8.03 Water Quality

Chloride (mg/L)

- 3.3.2: Farms that can demonstrate that water quality at the edge of the mixing zone (samples taken nearby and down-current of discharge) and outside the mixing zone (samples taken nearby and up current of discharge) does not deteriorate.
 3.3.3: Farms that use source water with individual water quality variables that exceed limits established as BAP Effluent Water
- 3.3.3: Farms that use source water with individual water quality variables that exceed limits established as BAP Effluent Water Quality Criteria. In this case, concentrations of those variables shall reflect no deterioration between intake and discharge of the relevant variable. For variables of source water that do not exceed BAP Effluent Water Quality Criteria, compliance with these effluent criteria is required. Values of influent water quality variables shall be recorded.
- 3.3.4: Farms that demonstrate water reuse, only occasional water exchange and no intentional discharge of effluents into natural water bodies during grow-out, such that less than 1% of the culture water volume is exchanged daily on an annual basis and discharged to a receiving watershed.
- 3.3.5: Farms that undertake a formal Environmental Impact Assessment, conducted by a qualified third party, that includes a favorable assessment of assimilative capacity of the receiving water body and an Environmental Management Plan.
- 3.3.6: Farms that operate within a freshwater irrigation system such that effluent water is exclusively destined to irrigate agricultural crops.
- 3.4: Records and summaries of the volume of farm intake water use shall be maintained and available.
- 3.5: The farm shall take effective measures to control erosion and other impacts caused by culture unit outfalls.
- 3.6: If ponds are constructed on permeable soil, measures (such as the use of pond liners) shall be taken to control seepage and avoid contamination of aquifers, lakes, streams and other natural bodies of freshwater.
- 3.7: For inland brackishwater ponds, quarterly monitoring of neighboring well and surface water shall show that chloride levels are not increasing due to farm operations.
- 3.8: If a farm produces more than 20 mt of aquatic animals per hectare per crop, the farm shall maintain sufficient sedimentation basin capacity or implement other technical or engineering solutions to capture at least 50% of the biosolids produced from feeding.
- 3.9: Any accumulated sludge removed from ponds, reservoirs or sedimentation basins shall be confined within the farm property, consolidated and used locally for landfill or agriculture, or some other technical or engineering solution applied to

C.8.03 Water Quality

reduce sludge volume (e.g. biogas digestor). Collected sludge/sediment shall not be placed in sensitive wetland or mangrove areas, or in public water bodies.

3.10: Removed sediment shall be properly contained and located to prevent the salinization of soil and groundwater and not cause other ecological nuisances.

3.11: If sulfite is used during shrimp harvest, solutions shall be deactivated or neutralized, for example by 48- hour retention, prior to release into natural water bodies.

C.9 EVIDENCE OF ALIGNMENT

C 9 01 Legal Compiance

The standard requires (evidence of) compliance with all local and national laws and regulations relevant to aquaculture, especially concerning: - application of chemicals and veterinary drugs - feed, feed ingredients and fertilizers - habitat and biodiversity (including Environmental Impact Assessment (EIA) where required) - seed sourcing at both source and destination - Escapes and releases - water use, water quality and waste discharge BAP Farm Standard 3.0 is in alignment because this is covered in the following clauses: Conclusion BAP Farm Standard 3.0 is in alignment because this is covered in the following clauses: - BAP Farm shall have current and valid documents to prove compliance with applicable local and national	C.9.01 Legal Complance		
regulations relevant to aquaculture, especially concerning: - application of chemicals and veterinary drugs - feed, feed ingredients and fertilizers - habitat and biodiversity (including Environmental Impact Assessment (EIA) where required) - seed sourcing at both source and destination - Escapes and releases - water use, water quality and waste discharge Conclusion BAP Farm Standard 3.0 is in alignment becuase this is covered in the following clauses: - BAP Farm shall have current and valid documents to prove legal land and water use by the farm. provided by the aquaculture facility to support compliance with relevant laws. For feed, its ingredients & fertilizers, verification is expected to include a review of evidence (e.g., documentation, self-declaration by the feed manufacturer). For seed sourcing this could include international laws (e.g., CITES, OIE and ICES import guidelines) and laws governing introductions and transfers of live aquatic animals. Conclusion 8 References - BAP Farm Standard 2.1: The farm shall have current and valid documents to prove legal land and water use by the farm. 2.2: The farm shall have current and valid documents to prove all business and operating licenses have been acquired.	GSSI Component	Guidance	
- application of chemicals and veterinary drugs - feed, feed ingredients and fertilizers - habitat and biodiversity (including Environmental Impact Assessment (EIA) where required) - seed sourcing at both source and destination - Escapes and releases - water use, water quality and waste discharge Conclusion BAP Farm Standard 3.0 is in alignment becuase this is covered in the following clauses: - BAP Farm shall have current and valid documents to prove all business and operating licenses have been acquired. compliance with relevant laws. For feed, its ingredients & fertilizers, verification is expected to include a review of evidence (e.g., documentation, self-declaration by the feed manufacturer). For seed sourcing this could include international laws (e.g., CITES, OIE and ICES import guidelines) and laws governing introductions and transfers of live aquatic animals. References • BAP Farm Standard 2.1: The farm shall have current and valid documents to prove legal land and water use by the farm. 2.2: The farm shall have current and valid documents to prove all business and operating licenses have been acquired.	The standard requires (evidence of) compliance with all local and national laws and	Verification is expected to include a review of evidence	
- feed, feed ingredients and fertilizers - habitat and biodiversity (including Environmental Impact Assessment (EIA) where required) - seed sourcing at both source and destination - Escapes and releases - water use, water quality and waste discharge BAP Farm Standard 3.0 is in alignment because this is covered in the following clauses: Conclusion BAP Farm shall have current and valid documents to prove legal land and water use by the farm. fertilizers, verification is expected to include a review of evidence (e.g., documentation, self-declaration by the feed manufacturer). For seed sourcing this could include international laws (e.g., CITES, OIE and ICES import guidelines) and laws governing introductions and transfers of live aquatic animals. References BAP Farm Standard 3.0 is in alignment because this is covered in the following clauses: BAP Farm Standard 2.1: The farm shall have current and valid documents to prove legal land and water use by the farm. 2.2: The farm shall have current and valid documents to prove all business and operating licenses have been acquired.	regulations relevant to aquaculture, especially concerning:	provided by the aquaculture facility to	support
- habitat and biodiversity (including Environmental Impact Assessment (EIA) where required) - seed sourcing at both source and destination - Escapes and releases - water use, water quality and waste discharge Conclusion BAP Farm Standard 3.0 is in alignment becuase this is covered in the following clauses: PAP Farm shall have current and valid documents to prove legal land and water use by the farm. 2.1: The farm shall have current and valid documents to prove all business and operating licenses have been acquired.	- application of chemicals and veterinary drugs	compliance with relevant laws. For feed	d, its ingredients &
required) - seed sourcing at both source and destination - Escapes and releases - water use, water quality and waste discharge Conclusion BAP Farm Standard 3.0 is in alignment becuase this is covered in the following clauses: - BAP Farm shall have current and valid documents to prove legal land and water use by the farm. 2.1: The farm shall have current and valid documents to prove all business and operating licenses have been acquired.	- feed, feed ingredients and fertilizers	fertilizers, verification is expected to inc	clude a review of
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- Escapes and releases - water use, water quality and waste discharge Conclusion BAP Farm Standard 3.0 is in alignment becuase this is covered in the following clauses: 2.1: The farm shall have current and valid documents to prove legal land and water use by the farm. 2.2: The farm shall have current and valid documents to prove all business and operating licenses have been acquired.	required)	feed manufacturer).	
- water use, water quality and waste discharge Governing introductions and transfers of live aquatic animals. Conclusion BAP Farm Standard 3.0 is in alignment becuase this is covered in the following clauses: BAP Farm Standard 3.0 is in alignment becuase this is covered in the following clauses: BAP Farm Standard 3.1 The farm shall have current and valid documents to prove legal land and water use by the farm. 2.2: The farm shall have current and valid documents to prove all business and operating licenses have been acquired.	- seed sourcing at both source and destination	=	
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BAP Farm Standard 3.0 is in alignment becuase this is covered in the following clauses: • BAP Farm Standard 3.0 is in alignment becuase this is covered in the following clauses: • BAP Farm Standard Standard Standard Standard Standard Water use by the farm. 2.1: The farm shall have current and valid documents to prove all business and operating licenses have been acquired.	- water use, water quality and waste discharge	governing introductions and transfers	of live aquatic
BAP Farm Standard 3.0 is in alignment becuase this is covered in the following clauses: 2.1: The farm shall have current and valid documents to prove legal land and water use by the farm. 2.2: The farm shall have current and valid documents to prove all business and operating licenses have been acquired.		animals.	
2.1: The farm shall have current and valid documents to prove legal land and water use by the farm. 2.2: The farm shall have current and valid documents to prove all business and operating licenses have been acquired.	Conclusion		References
2.1: The farm shall have current and valid documents to prove legal land and water use by the farm. 2.2: The farm shall have current and valid documents to prove all business and operating licenses have been acquired.	BAP Farm Standard 3.0 is in alignment becuase this is covered in the following clauses:		• <u>BAP Farm</u>
2.2: The farm shall have current and valid documents to prove all business and operating licenses have been acquired.			<u>Standard</u>
acquired.	2.1: The farm shall have current and valid documents to prove legal land and water use by the farm.		<u>v3.1</u>
acquired.			
2.3: The farm shall have current and valid documents to prove compliance with applicable local and national	·	ng licenses have been	
· · · · · · · · · · · · · · · · · · ·	2.3: The farm shall have current and valid documents to prove compliance with applic	able local and national	
environmental regulations for farm siting, construction, operation and liability for environmental damage.	environmental regulations for farm siting, construction, operation and liability for envir	ronmental damage.	

C.9.01 Legal Compiance

Corresponding Guidelines state:

"Implementation - Laws, regulations, licenses and permits regarding the operation and resource use of farms vary significantly from

place to place. Among other requirements, they can call for:

- business licenses
- aquaculture licenses
- · land deeds, leases or concession agreements
- land use taxes
- construction or habitat modification permits
- water use permits
- protection of mangroves or other sensitive habitats
- effluent or waste discharge permits
- adherence to veterinary and aquatic animal health regulations
- use of therapeutics and antimicrobial agents
- permits related to non-native species
- introductions or movements of seed (fingerlings, juveniles, post-larvae)
- use of genetically modified or bioengineered organisms
- predator control permits
- well operation permits
- landfill operation permits
- disposal of mortalities
- adherence to environmental regulations (e.g., water quality monitoring)
- environmental impact assessments
- bonds for potential environmental damage."

C.9.01 Legal Compiance

Additional specific clauses and guidance:

1.2: Use of any treatment with antimicrobial agents shall be based only on recommendations and authorizations overseen by a qualified aquatic animal health specialist or veterinarian and only to treat diagnosed diseases, supported by antimicrobial agent sensitivity testing conducted as soon as possible, in accordance with instructions on product labels and national regulations, as part of an Animal Health Management Plan

1.10: Farms shall present evidence, such as product testing and evaluation results, that any nutritional supplements, pond additives or farm-made feeds used, manufactured, or prepared on the farm do not contain unsafe levels of contaminants and contain only substances permitted by the appropriate regulatory authorities.

1.11: Any use of antifouling agents must be legally permitted and applied using protocols that prevent contamination of farmed aquatic animals.

3.3.1: Effluent water quality from ponds, flow-through and recirculating aquaculture systems shall comply with BAP Effluent Water Quality Criteria (Appendix B) or applicable regulations if they are equivalent or more rigorous.

3.28: Monitoring of sediment conditions shall be undertaken within 30 days of the peak sustained feeding period during the production cycle and shall be conducted according to the requirements of the farm's operating permits or its own Sediment Monitoring Plan in countries or regions where sediment monitoring is not required, and as specified in the implementation guidance.

3.31: For established farms (after first production cycle), the farm shall provide sediment monitoring data for the most recent production cycle to show that the farm meets or exceeds the sediment quality criteria specified in its operating permits and/or its own Sediment Monitoring Plan at current operating levels.

3.33: The results of sediment monitoring shall be reported to and reviewed and accepted by the appropriate regulators. Where regulatory approval is conditional upon implementing a program of remedial action, this shall have been implemented and completed.

3.45: If government regulations control the use or importation of any of the species or stocks farmed, relevant permits shall be made available for inspection, even if imported fry were purchased from an intermediary.

C.9.01 Legal Compiance

3.47: Where the species farmed is not native, not escaped and subsequently established in the wild, or not already farmed, further documents shall be provided to demonstrate that regulatory approval for farming is based on the 2005 ICES Code of Practice on Introductions and Transfers of Marine Organisms or, for freshwater species, the Codes of Practice and Manual of Procedures for Consideration of Introduction and Transfers of Marine and Freshwater Organisms, FAO 1988.

3.48: Farms that produce genetically modified or bioengineered aquatic animals shall comply with all regulations in producing and consuming countries.

3.62: Where applicable, government permits for predator control shall be made available for review

3.73: Solid wastes shall be disposed of in ways that avoid environmental contamination and odor problems and comply with local regulations.

3.76: Mortalities from acute die-offs or euthanized diseased animals shall be removed from culture units promptly and disposed of responsibly by rendering, incineration, sterilization, composting, biogas production or ensiling. Disposal by burial is also permitted, with the assistance of a competent contractor if needed and in accordance with applicable regulations. p14: Any antifouling agents used must be legally permitted and applied using protocols that prevent contamination of farmed aquatic animals. Farms using authorized antifoulant treatments must retain a copy of permits and the relevant laws or regulations on file

p14: All chemicals used during transport shall be approved by government regulatory authorities for application to aquatic animals.

p31: Use of water from irrigation systems shall be in accordance with regulations and effluents shall be returned to the irrigation system.

p33: New farms shall not be constructed in legally protected areas, particularly IUCN Protected Area Categories I through IV. p34: Constructed wetlands must be wholly within farm boundaries, or the farm must have the necessary permits for off-site land use.

p39: Farms shall provide documents that describe local standards for benthic impacts under cage farms. Farm permits and/or local regulations usually define an allowed "sediment impact zone," "allowable zone of effect" or "footprint of deposition," and prescribe monitoring protocols to evaluate this area.

C.9.01 Legal Compiance

p44: Farms importing a new species for the first time should be scrutinized with extra vigilance to demonstrate that legal channels were followed

p44: During an audit, documentation of compliance with government regulations (i.e. permits) relating to the importation of aquatic animal seed (fry, fingerlings or postlarvae) and any associated health certificates shall be available for review. The farm should demonstrate awareness of the relevant national and local laws and regulations regarding introductions and transfers of live aquatic animals. The farm should establish a link to the domestic competent authority (veterinary health authority or other government regulatory body) to verify international importation requirements and follow the International Health Certificate protocol defined by the OIE. Government regulations differ by country and the certification body is not expected to maintain complete records of the requirements in every country. However, auditors should become familiar with relevant regulations and importation procedures in countries where they regularly perform audits. Farms importing a new species for the first time should be scrutinized with extra vigilance to demonstrate that legal channels were followed. p44: For intentional introductions of non-native species, farms shall demonstrate regulatory approval that is based on the 2005 ICES Code of Practice on Introductions of Marine Organisms or the Codes of Practice and Manual of Procedures for Consideration of Introduction and Transfers of Marine and Freshwater Organisms (FAO 1988).

p45: Should genetically modified fish or crustaceans be commercialized in the future, producers shall comply with all regulations in producing and consuming countries regarding such organisms.

p48: Farms shall have a written Wildlife Interaction Plan (WIP) that includes provisions stipulated in local laws and the farms' operating permits, as well as the following requirements, if not stipulated in local laws.

p49: Procedures that state that legally approved lethal methods shall only be used after all non-lethal methods are attempted

p49: At marine net pen sites, the farm may only use acoustic harassment devices to control predators if independent expert opinion verifies that their use will not harm endangered, protected or threatened species or any cetaceans, and if they are legally approved and/or permitted for use.

p49: At marine net pen sites, the WIP shall include documentation to show that any acoustic harassment devices used are approved by regulators through a review of environmental impacts with specific reference to endangered, protected, threatened or cetacean species in the area.

C.9.01 Legal Compiance

p49: Requirements for the Wildlife Interaction Plan

- At marine net pen sites, the WIP shall include documentation to show that any acoustic harassment devices used are approved by regulators through a review of environmental impacts with specific reference to endangered, protected, threatened or cetacean species in the area. Such devices shall not be deployed if the review indicates they can adversely affect these species
- Documentation that any active, non-lethal wildlife deterrent measures used by the farm are approved by government regulators.
- Reporting procedures in the event that control measures cause the accidental death of wildlife and proposed actions to prevent reoccurrence.
- Procedures that state that legally approved lethal methods shall only be used after all non-lethal methods are attempted.
- Prohibition of deliberate lethal controls on species classified as endangered or critically endangered, except under exceptional circumstances, such as risk to human life, and then only after specific written authorization is obtained from regulators.
- Procedures for regulatory authorization, implementation and reporting of lethal control measures when these are deemed necessary.
- p53: Pesticide applications may be necessary and these should be documented and done using only legally approved chemicals and safe application methods by trained workers.
- p53: Solid wastes should be disposed of responsibly in a well-designed and legally-operated sanitary landfill.
 p56: Disease control procedures that will be followed in the event of disease outbreaks. The procedures should consider a broad range of options, including vaccination, quarantine, therapeutic treatments and treatment types (e.g. medicated feed, baths or dips, etc.) and humane slaughter (euthanasia). The steps followed shall include reporting to the Competent Authority if the disease is listed by the OIE or is required by local regulations.

SECTION C.

AQUACULTURE
CERTIFICATION
STANDARDS

- MOLLUSK STANDARD

C.1 EVIDENCE OF ALIGNMENT

C.1.01 Antimicrobial Usage

GSSI Component

The standard requires that the decision to treat with antimicrobial agents, and their subsequent application, is consistent with the Principles for Responsible & Prudent Use of Antimicrobial Agents in Aquatic Animals and other guidance of the OIE Aquatic Animal Health Code i.e., by the aquatic animal health professional or other relevant competent authority and in response to a diagnosed disease; see Articles 6.2.7 and 6.2.8 of the 2015 Aquatic Animal Health Code).

Guidance

The standard is expected to prohibit prophylactic usage for growth promotion and require that all antimicrobials are used in response to a diagnosed disease (i.e., by the aquatic animal health professional or other relevant competent authority) and the audit is expected to include a review of suitable evidence (e.g., records of disease testing etc. prescriptions for treatments).

The audit is expected to include a review of evidence (such as written records or through interviews) to ensure consistency with OIE guidelines (2015) Article 6.2.7 "The veterinarian or other aquatic animal health professional authorized to prescribe veterinary medicines should indicate precisely to the aquatic animal producer the treatment regime, including the dose, the treatment intervals, the duration of the treatment, the withdrawal period and the amount of antimicrobial agents to be delivered, depending on the dosage and the number of aquatic animals to be treated. The use of antimicrobial agents extra-label/off-label may be permitted in appropriate circumstances in conformity with the relevant legislation" and Article 6.2.8 "Aquatic animal producers should use antimicrobial agents only on the prescription of a veterinarian or other aquatic animal health professional authorized to prescribe veterinary medicines, and follow directions on the dosage, method of application, and withdrawal period."

Conclusion

This component is not applicable to the BAP Mollusk Farm standard Issue 1.1 because antimicrobial treatments are not used in the types of mollusk farms covered in the defined scope. The scope of the standard is specified on page 1:

References

BAP Mollusk Farm
 Standard v1

C.1.01 Antimicrobial Usage

"The following Best Aquaculture Practices standards and guidelines apply to the culture of molluscan shellfish, including all species of bivalves, such as clams, cockles, geoducks, oysters, scallops, and mussels, but excluding grazing gastropods (whelks, abalone) for which the BAP Farm Standard applies instead. They also apply to other species, such as holothurian echinoderms, if they are reared in open waters and rely exclusively on natural productivity for their sustenance.

Culture methods can include direct sowing onto the seabed, or containerized or attached to structures on or above the seabed, both intertidally and subtidally. Shallow and deep water systems of over 5 meters depth may suspend mollusks from longlines, rafts or other floating structures. However, the scope of this standard does not include intensive or nursery culture systems that use

raceways, ponds or tanks, on shore or floating, for which the BAP Farm Standard or the BAP Hatchery and Nursery Standard apply

On page 21, Section 9, with regard to biosecurity and disease management, the only use of chemical inputs relates to "non-medicinal chemicals for treatment of fouling (e.g., brine, lime, acetic acid, formic acid)."

C.1.02 Biosecurity		
GSSI Component	Guidance	
The standard requires that workers with	The audit is expected to include a review of evidence that relevant workers have been appropriately	
responsibilities in aquatic animal	trained and aware of their responsibilities. Examples of suitable evidence could include suitable	
husbandry have been adequately	training or appropriate qualifications, and interviews with staff. The training of workers may be a	
trained and are aware of their	component in a broader management system e.g., a health management plan.	

C.1.02 Biosecurity		
responsibilities in aquatic animal health management practices.		
Conclusion		References
The BAP Mollusk Farm Standard 1.1 is in alignment be	cause it includes:	• BAP Mollusk Farm
		Standard v1
9.1: The applicant shall designate a trained member	of staff with relevant experience in shellfish health and	
biosecurity to oversee the development and updati	ng of a Shellfish Health Management Plan (SHMP).	
	mployees are kept updated on any changes or amendments	
to the SHMP and that new staff members undergo a within the cultivation site.	n induction appropriate to their activities and responsibilitie	S
·	nce with all legal requirements for disease testing, shellfish nbound and outbound transports) and reporting of notifiable rganisms.	•
9.8: The applicant shall train cultivation site staff in a procedures.	applying biosecurity, monitoring and health management	
With regard to the translocation of seed mollusks fro	om hatchery- or wild derived stocks and avoiding the	
importation or spread of alien invasive or pest spec	ies:	
5.6 : The applicant shall train staff in applying monit	oring procedures.	
With regard to protecting stock from predators:		

C.1.02 Biosecurity

7.8: Farm employees shall be familiar with the provisions of the WIP (Wildlife Interaction Plan) and trained in aspects of it that they may be called upon to implement. Specific members of staff designated to carry out lethal control measures on vertebrate predators shall be trained in humane slaughter methods

With regard to all chemical usage:

8.2: Cultivation site staff shall be familiar with the MSHWDP (Materials Storage Handling and Waste Disposal Plan) and trained in aspects of it they may be required to implement.

C.1.03 Biosecurity		
GSSI Component	Guidance	
The standard requires that aquatic animals are kept under farming conditions suitable for the species being raised.	The objective of this requirement is to verify that the species is being farmed in the proper environment to maintain its health. Due to the very broad nature of this Essential Component, specific guidance cannot be provided. Expected evidence could include requirements for farm siting (including permitting for the farm site and species), aquatic health plan maintenance, assurance or monitoring aquatic animal health, on-farm water quality and temperature monitoring, etc.	
Conclusion		References
	in alignment because it specifies, in Section 4, that the farmer must not nd it details the checks on growth rate or meat yield needed to verify that ses are:	BAP Mollusk Farm Standard v1
	f local regulation or scientific evidence that cultivation operations do not	

C.1.03 Biosecurity

cultivation operations, based on regulatory limits or prior research as specified in the implementation requirements. The supporting evidence shall be provided to and verified by auditor or an agreed independent reviewer.

Or

- 4.2.1: For established cultivation sites, the applicant shall provide evidence of responsible practices in setting stocking densities appropriate to local conditions conditions, including biological measurements of growth rate and/or meat yield, during a period of at least three culture cycles prior to application, or for as long as the cultivation site has been in operation, if for less than three cycles.
- 4.2.2: The applicant shall conduct regular sampling of shell length and tissue weight, and/or condition index or other relevant growth variables at farm sites, and this value shall not be less than 70 percent of the respective metric at a reference site for a minimum of three culture cycles prior to application or for as long as the site has been in operation.
- 4.2.3: The applicant shall produce a management plan that describes the corrective or collaborative actions to be taken when production carrying capacity at the farm or ecosystem level is exceeded."

In addition

6.1: Applicants for BAP certification shall produce a background report that describes hydrographic and benthic conditions

at the cultivation site and notes any local standards for benthic impacts underneath and adjacent to mollusk cultivation

areas.

C.1.03 Biosecurity	
9.1: The applicant shall designate a trained member of staff with relevant experience in shellfish health and	
biosecurity to	
oversee the development and updating of a Shellfish Health Management Plan (SHMP)	
9.3: The applicant shall have written biosecurity and health management plans and monitoring procedures consistent with the	
implementation requirements.	
9.8: The applicant shall train cultivation site staff in applying biosecurity, monitoring and health management procedures.	

C.1.04 Biosecurity		
GSSI Component	Guidance	
The standard requires the aquaculture facility to establish, implement and maintain appropriate procedures to respond to disease outbreaks, which includes the ability to quarantine the aquatic animal where feasible.	It is expected that disease response procedures would be a component of the aquatic animal health management system. Feasibility of quarantine depends on a combination of species, culture system and production environment. In cases where quarantine is applicable, a review of suitable evidence is expected to demonstrate and verify the ability to contain diseased aquatic animals.	
Conclusion		References
The BAP Mollusk Farm Standard Issue 1.1 is in alignment because it requires that documented procedures be applied in response to disease outbreaks. This is addressed in auditable clauses 9.5-6 and 9.9-12:		 BAP Mollusk Farm Standard V1

C.1.04 Biosecurity

Note: The scope of the BAP Mollusk Farm standard is exclusively open-water mollusk farm systems for which quarantining is not applicable/feasible.

- 9.5: The applicant shall have proof of the implementation of written procedures for the control of disease in shellfish that include monitoring for endemic diseases, as well as parasites, pests and fouling organisms.
- 9.6: The applicant shall have written procedures for handling mass mortality, including the removal of dead stock.
- 9.9: Observations by cultivation site staff of abnormal mortality levels or disease indicators, and resulting actions concerning disease diagnosis and treatment shall be reported to the designated staff member and recorded.
- 9.10: The applicant shall have proof of the implementation of procedures for the sanitary disposal of dead shellfish under normal and abnormal mortality levels.
- 9.11: The applicant shall have proof of the implementation of procedures for removing and disposing of fouling organisms, including the use and disposal of chemical treatments.
- 9.12: The applicant shall record data on disease outbreaks and actions taken so this information can be made available to auditors.

C.1.05 Biosecurity

GSSI Component

Guidance

C.1.05 Biosecurity

The standard requires the aquaculture facility to establish, implement and maintain appropriate procedures and/or systems for the early detection of aquatic animal health issues, which include routine monitoring of stocks and the environment.

Appropriate procedures are expected to include general health/ behavioral inspections or testing for specific diseases with suitable monitoring (e.g., regular and including a suitable range of parameters, and of sufficient sample size to identify or anticipate disease outbreaks expediently, as well as increased surveillance when potential issues are identified.) Environmental monitoring is expected to include detection of unfavorable environmental quality factors that could adversely affect the health of the aquatic animal (e.g., water temperature and quality).

Verification is expected and could include reviews of written records and monitoring results to ensure procedures and/or systems are operational is also expected. This could also be captured in an aquatic health management plan.

Conclusion References

The BAP Mollusk Farm Standard Issue 1.1 is in alignment because it requires routine monitoring/observations for health issues, as specified in the auditable clauses 9.3-5 and 9.9:

9.1 : The applicant shall designate a trained member of staff with relevant experience in shellfish health and biosecurity to oversee the development, implementation and updating of a Shellfish Health Management Plan (SHMP) consistent with the implementation guidelines.

The Implementation guidelines, p20, specify that the SHMP shall cover:

- Monitoring for any signs of disease or unexplained high mortality levels.
- Monitoring of environmental factors, such as temperature and water quality, that may impact shellfish health.

• BAP Mollusk Farm Standard

C.1.05 Biosecurity
9.3: The applicant shall have written biosecurity and health management plans and monitoring procedures consistent with the implementation requirements.
9.4: The trained staff member shall ensure compliance with all legal requirements for disease testing, shellfish movements (including zoosanitary regulations for inbound and outbound transports) and reporting of notifiable diseases, alien invasive species, pests and fouling organisms.
9.5: The applicant shall have proof of the implementation of written procedures for the control of disease in shellfish that include monitoring for endemic diseases, as well as parasites, pests and fouling organisms
9.9: Observations by cultivation site staff of abnormal mortality levels or disease indicators, and resulting actions concerning disease diagnosis and treatment shall be reported to the designated staff member and recorded.

C.1.06 Biosecurity			
GSSI Component	Guidance		
The standard requires that mortalities and moribund aquatic animals are routinely collected, where collection is a feasible practice.	GSSI expects this Essential Component to be applied where collection is a feasible management practice (e.g., finfish grow out). Examples where this is not suitable aquatic animals may be too small to effectively collect (e.g., shrimp farming). Reconumbers of, and reason for, mortalities is expected.	ould include where	
Conclusion		References	
The BAP Mollusk Farm Standard Issue 1.1 is in alignment because it requires routine removal of dead stock as specified in auditable clauses 9.6 and 9.10:		BAP Mollusk Farm Standard v1	

C.1.06 Biosecurity

9.6: The applicant shall have written procedures for handling mass mortality, including the removal of dead stock

9.10: The applicant shall have proof of the implementation of procedures for the sanitary disposal of dead shellfish under normal and abnormal mortality levels.

Clause 9.11 is also relevant

9.11: The applicant shall have proof of the implementation of written procedures for removing and disposing of fouling organisms. These procedures shall include the use and disposal of any chemical treatments, which shall be applied in accordance with the instructions of the manufacturer and in compliance with any existing local and national regulations.

C.1.07 Biosecurity		
GSSI Component	Guidance	
The standard requires the aquaculture facility to have operational fish health	It is expected that the standard will contain sufficient elements	
management practices. Evidence must be shown that these address the and/ or audit of culture practices for an operational progr		
following elements (where relevant to the species, scale, and production	relative to the scale, species, and production systems covered	
system covered by the Standard's scope): 1. Effective biosecurity	by the standard's scope, including a focus on disease	
2. Identification and use of suitable available vaccines	prevention (e.g. the use of vaccines). The content of the	
3. Introductions and transfers of farmed animals (where relevant, which is	measures are expected to be overseen (but not necessarily full	
overseen by an aquatic animal health professional.	time employment) of an aquatic animal health professional.	
Conclusion	References	

C.1.07 Biosecurity

The BAP Mollusk Farm Standard Issue 1.1 is in alignment because it requires that a designated and trained professional with relevant experience in shellfish health oversees the Shellfish Health Management Plan. The responsibilities of this professional cover biosecurity too:

- BAP Mollusk Farm Standard v1
- 9.1: The applicant shall designate a trained member of staff with relevant experience in shellfish health and biosecurity to oversee the development and updating of a Shellfish Health Management Plan (SHMP).
- 9.4: The trained staff member shall ensure compliance with all legal requirements for disease testing, shellfish movements (including zoosanitary regulations for inbound and outbound transports) and reporting of notifiable diseases, alien invasive species, pests and fouling organisms.
- 9.5: The applicant shall have proof of the implementation of written procedures for the control of disease in shellfish that include monitoring for endemic diseases, as well as parasites, pests and fouling organisms.

C.1.08 Off-farm Disease Transmission		
GSSI Component	Guidance	
The standard requires the aquaculture	Given the nature of this requirement, the standard may appear as a general requirement; however	
facility to establish and implement	verification that practices are employed is expected. Relevant examples can be found in Articles 4.7.7	
procedures for the disposal of		

C.1.08 Off-farm Disease Transmission		
mortalities using appropriate methods	and 4.7.8 of the Aquatic Animal Health Code 2015 (see	
that prevent the spread of disease.	www.oie.int/index.php?id=171&L=0&htmfile=chapitre_aquatic_animal_waste.htm).	
Conclusion		References
The BAP Mollusk Farm Standard Issue 1.1 is in alignment because it requires routine removal and sanitary disposal of dead		• <u>BAP</u>
stock as specified in auditable clauses 9.6 and 9.10:		<u>Mollusk</u>
		<u>Farm</u>
9.6: The applicant shall have written procedures for handling mass mortality, including the removal of dead stock		<u>Standard</u>
		<u>v1</u>
9.10: The applicant shall have proof of the implementation of procedures for the sanitary disposal of dead shellfish under		
normal and abnormal mortality levels.		

C.1.09 Off-farm Disease	Transmission
GSSI Component	Guidance
The standard requires the aquaculture facility to establish, implement and maintain appropriate procedures and/or systems to reduce the likelihood of	Appropriate procedures or systems are expected to address both on farm disease and parasite transfer (such as the ability to quarantine diseased stocks, separating equipment) as well as between the facility and natural fauna (such as disinfection of effluents for diseased stocks, fallowing). The approach taken would be expected to be relevant to the species, production system, scale of production, and legal requirements. Can be "not applicable" with suitable justification provided by the scheme.
disease and parasite transmission within the aquaculture facility and	Where pathogens or parasites are a known concern (for example, sea lice on farmed salmon); Appropriate procedures or systems are expected to include specific requirements or actions defined in the standard or specified by the aquaculture facility through a suitable risk assessment or other evidence such as local or national regulations. Appropriate management measures in these cases could include treatment trigger levels of parasite

C.1.09 Off-farm Disease	Transmission	
between it and natural	numbers on the farm-facility or siting requirements that require that the aquaculture facility is located at suitable	
aquatic fauna.	distances from wild populations.	
	Varification that the property of the property	
Openalisation	Verification that the management measures are suitable and employed is expected.	Defenses
Conclusion The PARMelly of Favore Steered		References
	rd Issue 1.1 is in alignment because it requires that procedures be implemented to reduce	BAP Mollusk Farms Standard
-	ites to natural aquatic fauna. The requirements cover: disease monitoring and testing and es, invasives, pests and fouling organisms; control of alien invasives; actions in response to	<u>Farm Standard</u> <u>v1</u>
	infected animals; procedures for removing and disposing of fouling organisms. The	<u>VI</u>
relevant clauses being:	infected drifficis, procedures for removing and disposing of foding organisms. The	
relevant clauses being.		
9.4: The trained staff membe	r shall ensure compliance with all legal requirements for disease testing, shellfish	
_	nitary regulations for inbound and outbound transports) and reporting of notifiable	
	ies, pests and fouling organisms.	
•	proof of the implementation of written procedures for the control of disease in shellfish that	
include monitoring for enden	nic diseases, as well as parasites, pests and fouling organisms.	
9.7: The applicant shall have	proof of the implementation of written procedures for the control of alien invasive species	
that include monitoring for a	ny previously unknown marine species in or on mollusk stocks.	
•	on site staff of abnormal mortality levels or disease indicators, and resulting actions	
concerning disease diagnosi	s and treatment shall be reported to the designated staff member and recorded.	
0.00 -1		
	proof of the implementation of procedures for the sanitary disposal of dead shellfish under	
normal and abnormal morta	iity ieveis.	

C.1.09 Off-farm Disease Transmission

9.11: The applicant shall have proof of the implementation of procedures for removing and disposing of fouling organisms, including the use and disposal of chemical treatments.

C.1.10 Record Keeping		
GSSI Component	Guidance	
The standard requires the aquaculture facility to maintain records on veterinary drug and chemical usage and the rationale for their use.	Verification that suitable records are maintained is expected. Suitable records are expected to include type, concentration, and dosage, method of administration and withdrawal times of chemicals and veterinary drugs and the rationale for their use.	
Conclusion		References
The BAP Mollusk Farm Standard Issue 1.1 is in alignment because it specifies, with regard to chemicals: 9.11: The applicant shall have proof of the implementation of procedures for removing and disposing of fouling organisms, including the use and disposal of chemical treatments. 9.12: The applicant shall record data on disease outbreaks and actions taken so this information can be made available to		• <u>BAP</u> <u>Mollusk</u> <u>Farm</u> <u>Standard</u> <u>v1</u>
auditors. Section 12 covers record keeping and includes chemical usage and rationale for use: 12.4: The facility shall keep complete and accurate records concerning chemical use at the facility including rationale for use.		

C.1.10 Record Keeping

The use of veterinary drugs is not applicable to the open water culture systems that the BAP Mollusk Standard applies to and Implementation Guidance on p20 gives the context:

There are currently no therapeutic treatments for mollusk diseases or parasites. Alien invasive species are often very difficult to eradicate after introduction, as are other pests and fouling organisms. Therefore, prevention rather than cure is the primary driver underpinning successful Shellfish Health Management Plans (SHMPs).

On page 16, Section 9, with regard to biosecurity and disease management, the use of chemical inputs only relates to "non-medicinal chemicals for treatment of fouling (e.g., brine, lime, acetic acid, formic acid)."

C.2.01 Chemical Usage			
GSSI Component	Guidance		
The standard requires the establishment, implementation and maintenance of an appropriate system for the application of chemicals and veterinary drugs.	An appropriate system could conform to the relevant sections of Article 6.2.7 and 6.2.8 of the Aquatic Animal Health Code (2015) (www.oie.int/index.php?id=171&L=0&htmfile=chapitre_antibio_resp_prudent_use.htm) or other suitable reference. The system is expected to ensure that the application of the product follows the instructions of the manufacturer or other competent authority. Verification that the system is operational is also expected.		
Conclusion		References	
The BAP Mollusk Farm Standard Issue 1.1 is in alignment because its requirements cover procedures for chemical usage. Section 7 requires a Wildlife Interaction Plan (WIP) that covers appropriate chemical usage: 7.2 : Local rules notwithstanding, the applicant shall have a written Wildlife Interaction Plan consistent with the implementation requirements above and that complies with the procedural, performance and reporting requirements therein.		BAP Mollusk Farm Standard v1	
With the required components of the WIP including, p16:			
Formal Environmental Impact Assessment for any application of chemical herbicides and pesticides – typically			
	rtaken where negative effects are determined.		
Procedures for any chemical appli	Procedures for any chemical application based on the instructions of the manufacturer or other competent authority.		

C.2.01 Chemical Usage

In Section 9:

9.11: The applicant shall have proof of the implementation of procedures for removing and disposing of fouling organisms, including the use and disposal of chemical treatments.

9.12: The applicant shall record data on disease outbreaks and actions taken so this information can be made available to auditors.

On page 20, Section 9, with regard to Biosecurity and Disease Management, the use of chemical inputs only relates to "non-medicinal chemicals for treatment of fouling (e.g., brine, lime, acetic acid, formic acid "Hence the tighter controls appropriate for veterinary drugs are not applicable for this standard.

In Section 8, chemical usage is formalised via Material Safety Data Sheets:

8.4: Material Safety Data Sheets shall be available for all hazardous materials at their location of use. The applicant shall demonstrate that all applicable guidance on the MSDS sheet (e.g., safe use, safety equipment and disposal) is followed.

C.2.02 Chemical Usage	
GSSI Component	Guidance
The standard requires appropriate	It is expected that the standard will require all chemicals used by the aquaculture facility and that
controls for all chemicals, incl. veterinary	will enter the environment are at least used according to the manufacturer's guidance (such as on
drugs, that enter the environment during	label requirements or Safety Data Sheets (SDS) or, in the case of veterinary drugs, the guidance of

C.2.02 Chemical Usage

or after use (whether already covered by GSSI Essential Components or not) in order to minimize adverse impacts on environmental quality. Manufacturer's guidance or equivalent directions should be followed, and where appropriate, relevant examples of chemicals that pose a high risk of adverse impacts to environmental quality should be specifically defined by the standard

the aquatic animal health professional to prevent adverse impacts upon the environment. Chemicals that pose a high risk of adverse impacts to environmental quality, examples of which should be specifically defined by the standard (e.g., copper-based anti-foulant treatments in marine cage aquaculture or anti-parasite or anti-microbe bath treatments), accepting that perceptions regarding high risk and the chemicals involved are subject to rapid change, or identified through a risk based self-assessment by the farmer (e.g., an environmental risk assessment)—or through reference to a recognized relevant classification system (e.g. the UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS)). It is expected that the standard or the risk-assessment will define any necessary additional requirements to minimize the impacts (e.g., EQS limits for copper residues in the benthic environment).

Conclusion	References
The BAP Mollusk Farm Standard Issue 1.1 is in alignment because it includes appropriate controls for chemicals that have a	• <u>BAP</u>
high risk	<u>Mollusk</u>
of environmental impact.	<u>Farm</u>
	<u>Standard</u>
Note that the use of veterinary drugs is not applicable to the open water culture systems that the BAP Mollusk Standard	<u>v1</u>
applies to and Implementation Guidance on p20 gives the context:	
There are currently no therapeutic treatments for mollusk diseases or parasites. Alien invasive species are often very difficult	
to eradicate after introduction, as are other pests and fouling organisms. Therefore, prevention rather than cure is the	
primary driver underpinning successful Shellfish Health Management Plans (SHMPs).	
Regarding chemicals:	

C.2.02 Chemical Usage

8.9: If any cultivation site equipment or vessels is/are treated with copper or other toxicant-based antifouling materials, and/or their process washing has the ability to produce contaminants, cleaning procedures shall collect, treat and dispose of wash water in a manner that does not result in environmental contamination or in accordance with approved in-water cleaning standards in the relevant jurisdiction, which have been developed following biosecurity and environmental risk assessments.

Additionally, the standard requires 1. compliance with Safety Data Sheets for all chemicals; 2. a Shellfish Heath Management Plan that requires best (FAO defined) practices for the use of chemicals, and; 3. a Wildlife Interaction Plan (WIP) that includes a formal impact assessment for any chemical applications. These provisions are found in Sections 8,9 and 7 of the Standard.

8.4: Material Safety Data Sheets shall be available for all hazardous materials at their location of use. The applicant shall demonstrate that all applicable guidance on the MSDS sheet (e.g., safe use, safety equipment and disposal) is followed.

Section 9 specifies that a Shellfish Health Management Plan is required:

9.1 : The applicant shall designate a trained member of staff with relevant experience in shellfish health and biosecurity to oversee the development, implementation and updating of a Shellfish Health Management Plan (SHMP) consistent with the implementation guidelines.

And the corresponding Guidelines indicate what must go into this plan:

"- written procedures for cultivation site staff based on current guidelines for best practices on the use and disposal of any non-medicinal chemicals for treatment of fouling (e.g., brine, lime, acetic acid, formic acid)."

And the FAO reference for best practices with regard to environmental impacts is given as: Towards Safe and Effective Use of Chemicals in Coastal Aquaculture. Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection

C.2.02 Chemical Usage

Reports and Studies No. 65 Food and Agriculture Organization of the United Nations – 1997 ftp://ftp.fao.org/docrep/fao/003/w6435e/w6435e00.pdf

Chemical usage is also addressed in Section 7, through Clause 7.2 and the contents of the Wildlife Interaction Plan.

7.2: Local rules notwithstanding, the applicant shall have a written Wildlife Interaction Plan consistent with the implementation requirements above and that complies with the procedural, performance and reporting requirements therein.

And the Implementation Guidelines for the Wildlife Interaction Plan specify: "The WIP shall include but not be limited to:

- Formal Environmental Impact Assessment for any application of chemical herbicides and pesticides typically covered in permits with mitigation undertaken where negative effects are determined.
- Procedures for any chemical application, based on the instructions of the manufacturer or other competent authority.

C.3.01 Maintaining Good Culture and Hygienic Conditions			
GSSI Component	Guidance		
The standard requires	This is a general Essential Component that covers a range of potential issues depending on the type of production		
that the aquaculture	system, species being cultured, and the local environment, and as such there is a need for flexibility in how		
facility and its daily	consistency is achieved. It is expected that the following issues would be addressed and the systems	verified to be	
operations ensure that	operational:		
good culture and	good culture and - Appropriate storage of chemicals and fuel (e.g., stored in a lockable, labeled facility, limited access by personnel,		
hygienic conditions are	leakage prevention - all based on Safety Data Sheets (SDS) (see figure 4.14 of the A Guide to The Globe	ally Harmonized	
maintained. Relevant	System of Classification and Labeling of Chemicals (GHS), available at:		
aspects include proper	www.osha.gov/dsg/hazcom/ghsguideoct05.pdf)		
management of all	- Appropriate storage of feed (e.g., stored separately from sources of contamination, accurately labeled, keeping		
chemicals, fuels and	fuels and medicated and nonmedicated feed separated.)		
feeds including their safe	fe - Appropriate pest control (e.g., prevent contamination of feed, chemicals by rodents or insects etc.)		
storage	- Domestic sewage control/disposal to avoid local contamination		
	- General farm waste (e.g., empty feed bags, household rubbish, food containers etc.).		
Conclusion		References	
The BAP Mollusk Farm Stan	dard Issue 1.1 is in alignment because Section 8 contains 10 auditable clauses that comprehensively	• <u>BAP</u>	
addresses sanitary condit	addresses sanitary conditions at the culture site.		
		<u>Farm</u>	
Section 8 is titled 'Storage and Disposal of Supplies' and its intent is summarised on page 13: Fuel, lubricants and chemicals <u>Standard</u>			
shall be stored and disposed of in a safe and responsible manner. Paper, plastic, shells and other refuse shall be disposed of in <u>v1</u>			

C.3.01 Maintaining Good Culture and Hygienic Conditions

a sanitary and responsible way. Human waste and cleaning process water shall be disposed of in a sanitary and responsible way.

- 8.1: The applicant shall have a written Material Storage, Handling and Waste Disposal Plan (MSHWD) that meets the BAP requirements for proper handling and disposal, as outlined in the implementation requirements.
- 8.2: Cultivation site staff shall be familiar with the MSHWDP and trained in aspects of it they may be required to implement.
- 8.3: An inventory shall be kept of all hazardous materials or wastes that are stored on or disposed of by the cultivation site.
- 8.4: Material Safety Data Sheets shall be available for all hazardous materials at their location of use. The applicant shall demonstrate that all applicable guidance on the MSDS sheet (e.g., safe use, safety equipment and disposal) is followed.
- 8.5: Fuel, lubricants and chemicals shall be labeled, and stored and disposed of in a safe and responsible manner, and marked with warning signs.
- 8.6: Precautions shall be taken to prevent spills, fires and explosions, and procedures and supplies shall be readily available to manage chemical and fuel spills or leaks.
- 8.7: Garbage from housing and food waste shall be retained in watertight receptacles with covers to protect contents from insects, rodents and other animals.
- 8.8: Garbage and other solid waste shall be disposed of to comply with local regulations and avoid environmental contamination.

C.3.01 Maintaining Good Culture and Hygienic Conditions

8.9: If any cultivation site equipment or vessels is/are treated with copper or other toxicant-based antifouling materials, and/or their process washing has the ability to produce contaminants, cleaning procedures shall collect, treat and dispose of wash water in a manner that does not result in environmental contamination or in accordance with approved in-water cleaning standards in the relevant jurisdiction, which have been developed following biosecurity and environmental risk assessments.

8.10: The applicant shall demonstrate that best management practices have been implemented to prevent derelict gear (e.g., proper installation and regular inspections of infrastructure) and that there are policies to locate, retrieve and properly dispose of derelict gear.

C.3.02 General Environmental Management

GSSI Component

The standard requires that aquaculture facility infrastructure is appropriately maintained in order to prevent negative environmental impacts, whether from construction, operation or decommissioning (e.g., including the requirement for derelict equipment and

Guidance

Given the wide variety of production systems in aquaculture specific guidance cannot be provided and flexibility by the evaluator is required using a risk-based approach. Examples could include the requirement for derelict or damaged gear in shellfish or cage aquaculture to be collected and disposed of responsibly, or for that waste from pond construction is not placed in mangrove forests in shrimp farming. It is expected that specific requirements or risk based management systems would be required where appropriate, along with suitable verification. These requirements may also be included in other Standards, such as sensitive habitat protection or escape prevention.

C.3.02 General Environmental Management

materials to be collected and disposed of responsibly.)

Conclusion

The BAP Mollusk Farm Standard Issue 1.1 is in alignment because Section 8 contains auditable clauses that comprehensively address sanitary conditions at the culture site. It includes:

8.10: The applicant shall demonstrate that best management practices have been implemented to prevent derelict gear (e.g., proper installation and regular inspections of infrastructure) and that there are policies to locate, retrieve and properly dispose of derelict gear.

And guidance on p18 states: An environmentally friendly approach shall be taken to dispose of waste material, including synthetic waste (e.g., polypropylene rope, flats, marker poles, nets, cages, trays), concrete dead weights, etc.

These wastes may be stored prior to disposal at a land base

from which the cultivation site is supplied, as well as

transported on boats and barges to and from the cultivation site. Safe, responsible transport, storage, handling and disposal of these materials are necessary at all times

CCC302 also refers to infrastructure operation and derelict materials (as well as derelict infrastructure) for which further clauses from Section 8 are relevant:

8.2: Cultivation site staff shall be familiar with the MSHWDP (Materials Storage, Handling and Waste Disposal Plan) and trained in aspects of it they may be required to implement.

BAP Mollusk Farm
Standard v1

References

C.3.02 General Environmental Management

8.3: An inventory shall be kept of all hazardous materials or wastes that are stored on or disposed of by the cultivation site.

8.8: Garbage and other solid waste shall be disposed of to comply with local regulations and avoid environmental contamination.

8.9: If any cultivation site equipment or vessels is/are treated with copper or other toxicant-based antifouling materials, and/ or their process washing has the ability to produce contaminants, cleaning procedures shall collect, treat and dispose of wash water in a manner that does not result in environmental contamination or in accordance with approved in-water cleaning standards in the relevant jurisdiction, which have been developed following biosecurity and environmental risk assessments.

C.4.01 Environmental Considerations of Feed Ingredients		
GSSI Component	Guidance	
The standard requires the aquaculture facility to sources feed from a manufacturer that can trace aquatic feed ingredients including fish meal and fish oil (>1% inclusion) to the species and, at least, to the country of origin.	Verification is expected to include a review of evidence documentation, self-declaration by the feed manufacture is expected to apply to other relevant marine feed ingrestrill, and squid) and to whole fish and fishery byproducts	urer). The standard dients (e.g., algae,
Conclusion		References
The BAP Mollusk Farm Standard Issue 1.1 is in alignment because this requirement is not applicable. The scope of the standard specifically excludes fed systems. The scope of the standard is specified on page 1:		BAP Mollusk Farm Standard v1
"The following Best Aquaculture Practices standards and guidelines apply to the culture of molluscan shellfish, including all species of bivalves, such as clams, cockles, geoducks, oysters, scallops, and mussels, but excluding grazing gastropods (whelks, abalone) for which the BAP Farm Standard applies instead. They also apply to other species, such as holothurian echinoderms, if they are reared in open waters and rely exclusively on natural productivity for their sustenance.		
Culture methods can include direct sowing onto the seabed, or containerized or attached to structures on or above the seabed, both intertidally and subtidally. Shallow and deep water systems of over 5 meters depth may suspend mollusks from longlines, rafts or other floating structures. However, the scope of this standard does not include intensive or nursery culture systems that use		

C.4.01 Environmental Considerations of Feed Ingredients

raceways, ponds or tanks, on shore or floating, for which the BAP Farm Standard or the BAP Hatchery and Nursery Standard apply."

C.4.02 Environmental Considerations of Feed Ingredients

GSSI Component

The standard requires the aquaculture facility to source feed from a manufacturer who produces feed that excludes fishmeal and fish oil from endangered species and is validated as such.

Verification is expected to include a review of evidence (e.g., documentation, self-declaration by the feed manufacturer). The standard is expected to apply to other relevant marine feed ingredients (e.g., algae, krill, and squid) and to whole fish and fishery byproducts.

Endangered species are expected to be defined in the Standard, with reference to relevant national listings (e.g., Vietnam's Red Data Book) and/or global listing organizations such as CITES (Appendix 1), IUCN Red List (Categories Critically Endangered (CR), Endangered (EN), Vulnerable (VU)). See www.iucnredlist.org and www.cities.org for more information.

Conclusion

References

The BAP Mollusk Farm Standard Issue 1.1 is in alignment because this requirement is not applicable. The scope of the standard specifically excludes fed systems.

The scope of the standard is specified on page 1:

"The following Best Aquaculture Practices standards and guidelines apply to the culture of molluscan shellfish, including all species of bivalves, such as clams, cockles, geoducks, oysters, scallops, and mussels, but excluding grazing gastropods (whelks, abalone) for which the BAP Farm Standard applies instead. They also apply to other species, such as holothurian echinoderms, if they are reared in open waters and rely exclusively on natural productivity for their sustenance.

• <u>BAP</u>
<u>Mollusk</u>
<u>Farm</u>
<u>Standard</u>
<u>V1</u>

C.4.02 Environmental Considerations of Feed Ingredients

Culture methods can include direct sowing onto the seabed, or containerized or attached to structures on or above the seabed, both intertidally and subtidally. Shallow and deep water systems of over 5 meters depth may suspend mollusks from longlines, rafts or other floating structures. However, the scope of this standard does not include intensive or nursery culture systems that use

raceways, ponds or tanks, on shore or floating, for which the BAP Farm Standard or the BAP Hatchery and Nursery Standard apply."

C.4.03 Environmental Considerations of Feed Ingredients		
GSSI Component	Guidance	
The standard requires the aquaculture facility to source feed from a manufacturer that prohibits the use of fishmeal and fish oil from illegal, unreported, and unregulated fishing (I.U.U.).	Verification is expected to include a review of evidence (e.g., documentation, self-declaration by the feed manufacturer). The standard is expected to apply to other relevant marine feed ingredients (e.g., algae, krill, and squid) and to whole fish and fishery byproducts.	
Conclusion		References
The BAP Mollusk Farm Standard Issue 1.1 is in alignment because this requirement is not applicable. The scope of the standard specifically excludes fed systems. The scope of the standard is specified on page 1:		 BAP Mollusk Farm Standard v1
"The following Best Aquaculture Practices standards and guidelines apply to the culture of molluscan shellfish, including all species of bivalves, such as clams, cockles, geoducks, oysters, scallops, and mussels, but excluding grazing gastropods (whelks, abalone) for which the BAP Farm Standard applies instead. They also apply to other species, such as		

C.4.03 Environmental Considerations of Feed Ingredients

holothurian echinoderms, if they are reared in open waters and rely exclusively on natural productivity for their sustenance.

Culture methods can include direct sowing onto the seabed, or containerized or attached to structures on or above the seabed, both intertidally and subtidally. Shallow and deep water systems of over 5 meters depth may suspend mollusks from longlines, rafts or other floating structures. However, the scope of this standard does not include intensive or nursery culture systems that use

raceways, ponds or tanks, on shore or floating, for which the BAP Farm Standard or the BAP Hatchery and Nursery Standard apply."

C.4.04 Environmental Considerations of Feed Ingredients

GSSI Component

The standard requires that the aquaculture facility to source feed from a manufacturer that has a written policy which includes assessment of source fishery status and identification of improvement needs and work plan to deliver improvements. The policy must include a commitment and timeline to source aquaculture and fishery products from responsible/best practice sources, such as those certified a standard benchmarked at minimum consistent with relevant FAO's ecolabelling guidelines or by identified independent risk assessment.

Guidance

Verification is expected to include a review of evidence (e.g., documentation, self-declaration by the feed manufacturer). The standard is expected to apply to other relevant marine feed ingredients (e.g., algae, krill, and squid) and to whole fish and fishery byproducts.

Conclusion

The BAP Mollusk Farm Standard Issue 1.1 is in alignment because this requirement is not applicable. The scope of the standard specifically excludes fed systems.

References

BAP Mollusk
 Farm Standard
 v1

C.4.04 Environmental Considerations of Feed Ingredients

The scope of the standard is specified on page 1:

"The following Best Aquaculture Practices standards and guidelines apply to the culture of molluscan shellfish, including all species of bivalves, such as clams, cockles, geoducks, oysters, scallops, and mussels, but excluding grazing gastropods (whelks, abalone) for which the BAP Farm Standard applies instead. They also apply to other species, such as holothurian echinoderms, if they are reared in open waters and rely exclusively on natural productivity for their sustenance.

Culture methods can include direct sowing onto the seabed, or containerized or attached to structures on or above the seabed, both intertidally and subtidally. Shallow and deep water systems of over 5 meters depth may suspend mollusks from longlines, rafts or other floating structures. However, the scope of this standard does not include intensive or nursery culture systems that use

raceways, ponds or tanks, on shore or floating, for which the BAP Farm Standard or the BAP Hatchery and Nursery Standard apply."

C.4.05 Feed Biosecurity		
GSSI	Guidance	
Component		
The	0% of feed at any time during production (under the scope of certification) may contain "whole fish" or "wet fish", which includes	
standard	any form of uncooked wet fish (whole or chopped or frozen etc.), which includes direct feed, supplemental feeding, or on-farm	
	made applications. Alternatives would be to require 100% use of commercial dry pelleted feeds.	

C.4.05 Feed	d Biosecurity	
prohibits the use of raw fish as a direct feed source in grow-out.	Verification is expected to include a suitable review of evidence, such as feed use records, visual observation in aquaculture industries where this is common practice. A non-applicable (N/A) designation is only acceptable where 100% of production under the scope of the star species, production intensity and production systems covered) uses entirely commercial dry pelleted feeds	ndard (including
Conclusion		References
standard spe	isk Farm Standard Issue 1.1 is in alignment because this requirement is not applicable. The scope of the cifically excludes fed systems. the standard is specified on page 1:	• <u>BAP Mollusk</u> <u>Farm Standard</u> <u>v1</u>
"The following Best Aquaculture Practices standards and guidelines apply to the culture of molluscan shellfish, including all species of bivalves, such as clams, cockles, geoducks, oysters, scallops, and mussels, but excluding grazing gastropods (whelks, abalone) for which the BAP Farm Standard applies instead. They also apply to other species, such as holothurian echinoderms, if they are reared in open waters and rely exclusively on natural productivity for their sustenance.		
seabed, both from longline nursery cultu	ods can include direct sowing onto the seabed, or containerized or attached to structures on or above the intertidally and subtidally. Shallow and deep water systems of over 5 meters depth may suspend mollusks s, rafts or other floating structures. However, the scope of this standard does not include intensive or re systems that use nds or tanks, on shore or floating, for which the BAP Farm Standard or the BAP Hatchery and Nursery bly."	

C.4.06 Feed Biosecurity		
GSSI Component	Guidance	
The standards prohibits aquatic feed protein from the same species and genus as the species being farmed.	Verification is expected to include a review of evidence (e.g., documentation, self-defeed manufacturer).	eclaration by the
Conclusion		References
The BAP Mollusk Farm Standard Issue 1.1 is specifically excludes fed systems.	n alignment because this requirement is not applicable. The scope of the standard	• <u>BAP</u> <u>Mollusk</u> Farm
The scope of the standard is specified on page 1:		<u>Standard</u> v1
"The following Best Aquaculture Practices standards and guidelines apply to the culture of molluscan shellfish, including all species of bivalves, such as clams, cockles, geoducks, oysters, scallops, and mussels, but excluding grazing gastropods (whelks, abalone) for which the BAP Farm Standard applies instead. They also apply to other species, such as holothurian echinoderms, if they are reared in open waters and rely exclusively on natural productivity for their sustenance.		
seabed, both intertidally and subtidally. St longlines, rafts or other floating structures systems that use	g onto the seabed, or containerized or attached to structures on or above the nallow and deep water systems of over 5 meters depth may suspend mollusks from . However, the scope of this standard does not include intensive or nursery culture ting, for which the BAP Farm Standard or the BAP Hatchery and Nursery Standard	

C.4.07 Feeding Efficiency		
GSSI Component	Guidance	
Where applicable, the standard requires that the aquaculture facility has suitable measures in place to ensure that feed is used efficiently at the individual production unit level.	Suitable measures are expected to be part of a wider feed management system measurement of FCR (Feed Conversion Ratio) and FIFO (Fish In Fish Out ratio) as records of visual feed response and staff training. Verification that the measure fit for purpose is also expected.	s well as documented
Conclusion		References
The BAP Mollusk Farm Standard Issue 1.2 is standard specifically excludes fed system The scope of the standard is specified on p		• BAP Mollusk Farm Standard <u>v1</u>
"The following Best Aquaculture Practices standards and guidelines apply to the culture of molluscan shellfish, including all species of bivalves, such as clams, cockles, geoducks, oysters, scallops, and mussels, but excluding grazing gastropods (whelks, abalone) for which the BAP Farm Standard applies instead. They also apply to other species, such as holothurian echinoderms, if they are reared in open waters and rely exclusively on natural productivity for their sustenance.		
seabed, both intertidally and subtidally. She from longlines, rafts or other floating structures ystems that use	g onto the seabed, or containerized or attached to structures on or above the nallow and deep water systems of over 5 meters depth may suspend mollusks tures. However, the scope of this standard does not include intensive or ting, for which the BAP Farm Standard or the BAP Hatchery and Nursery	

C.4.08 Record Keeping		
GSSI Component	Guidance	
The standard requires that appropriate records are kept on all feed use. At a minimum this must include: feed source, feed Batch/Lot/ID number, date of purchase, and feed conversion ratio (FCR) MT	Appropriate records are expected to include those stated in the component, and, w feed inclusion percentages of fishmeal and fish oil or a fish in: fish out ratio. Appropriate to be kept for each individual production unit. Verification of appropriate and suitable documentation from feed manufacturers is also expected.	iate records are
Conclusion		References
specifically excludes fed systems.	in alignment because this requirement is not applicable. The scope of the standard	• <u>BAP</u> <u>Mollusk</u> <u>Farm</u>
The scope of the standard is specified on page 1:		<u>Standard</u> <u>v1</u>
species of bivalves, such as clams, cockle (whelks, abalone) for which the BAP Farm	standards and guidelines apply to the culture of molluscan shellfish, including all s, geoducks, oysters, scallops, and mussels, but excluding grazing gastropods Standard applies instead. They also apply to other species, such as holothurian aters and rely exclusively on natural productivity for their sustenance.	
	g onto the seabed, or containerized or attached to structures on or above the nallow and deep water systems of over 5 meters depth may suspend mollusks from	
•	. However, the scope of this standard does not include intensive or nursery culture	
raceways, ponds or tanks, on shore or floa apply."	ting, for which the BAP Farm Standard or the BAP Hatchery and Nursery Standard	

C.5 EVIDENCE OF ALIGNMENT

C.5.01 Benthic Habitats

GSSI Component

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

Guidance

Appropriate measures for marine cage production systems are expected to consider biological, chemical and physical impacts and additional chemical residues resulting from culture practices and should use appropriate sampling methods. Where relevant, they should conform to ISO 16665. The use of systems combining suitable allowable zones of effect and environmental quality standards (EQS) of effect are expected. Verification that the measures are operational and fit for purpose is expected. Evidence of the prevention of adverse impacts could include comparisons with baseline conditions, reference locations, or standardized limits with a suitable justification for their use. Where adverse impacts are detected it is expected that appropriate mitigation measures/ remedial action for the identified adverse impacts on the surrounding natural ecosystem are applied. Sanctions that address situations where EQS' are exceeded and there is no effective remediation within a suitable timeframe could include withholding certification. While generally recognized as a marine cage issue, benthic impacts can also occur in freshwater cage systems. The degree of management measures should reflect the degree of potential impacts relative to the environment, production system, species, and size of production.

Conclusion

physical nature.

The BAP Mollusk Farm Standard Issue 1.2 is in alignment because it includes a whole section (Section 6 on Sediment Effects) on the management of benthic impacts with 8 auditable clauses as follows:

6.1: Applicants for BAP certification shall produce a background report that describes hydrographic and benthic conditions at the cultivation site and notes any local standards for benthic impacts underneath and adjacent to mollusk cultivation areas.

References

• BAP Mollusk Farm Standard v1

C.5.01 Benthic Habitats

- 6.2: In countries or regions where sediment monitoring is required with respect to mollusk cultivation, applicants shall demonstrate a history of compliance for two years or two production cycles for established farms, whichever is longer, with any statutory monitoring schemes or best practice initiatives deemed appropriate by local or national regulators.
- 6.3: In countries or regions where sediment monitoring is not required, and where the background site report identified the potential for significant local impacts, applicants shall nominate an independent individual or company with demonstrated expertise in sediment sampling and analysis to design a sediment sampling and analysis program appropriate to the cultivation site conditions and to conduct sediment monitoring. The program shall define appropriate environmental quality standards and actions to mitigate impacts if these are exceeded.
- 6.4: In countries or regions where sediment monitoring is not required, and where the background site report identified the potential for significant local impacts, applicants shall conduct sediment sampling at time intervals and at a spatial scale appropriate both to the cultivation and harvesting methods, and the local geography of the cultivation site according to the sediment-sampling program recommended by the individual or company in Standard 6.3.
- 6.5: Monitoring of sediment conditions shall be undertaken according to the requirements of the cultivation site's operating permits or its own plan in countries or regions where sediment monitoring is not required, and as specified in the implementation requirements.
- 6.6: Sediment sampling and analysis performed as part of any monitoring program shall be conducted using methods that conform to generally accepted international standards.
- 6.7: The applicant shall adopt any suitable husbandry measures or local best practices available to mitigate potential negative sediment impacts from mollusk cultivation as assessed by and agreed to by local or national regulators, as appropriate.

C.5.01 Benthic Habitats

6.8: In cases where significant adverse impacts are identified by the sediment-monitoring program, the applicant shall adopt corrective actions.

C.5.02 Predator Control

GSSI Component

The standard prohibits the use of any lethal predator control techniques on endangered species. Exceptions for worker safety and where euthanization is an act of mercy are acceptable and expected.

Guidance

Verification of the predator controls used, appropriate record keeping, and details of the endangered species in the region of the aquaculture facility are expected. Examples of supporting evidence of non-use could include interview, appropriate signage, and mortality records. Exceptions for worker safety and where euthanization is an act of mercy are acceptable and expected.

Endangered species are expected to be defined in the standard, with reference to relevant national listings (e.g., Vietnam's Red Data Book) and/or global listing organizations such as CITES (Appendix I), IUCN Red List (Categories Critically Endangered (CR), Endangered (EN), Vulnerable (VU)). See www.iucnredlist.org and www.cities.org for more information.

The BAP Mollusk Farm Standard Issue 1.2 is in alignment because Section 7 includes these 2 clauses: 7.5: The facility shall maintain a list of species that occur within the vicinity of the farm that are classified as endangered or threatened under regional laws and/or the IUCN Red List. 7.6: Except in exceptional circumstances, such as risk to human life, no controls other than non-lethal exclusion shall be applied to predator species listed as endangered or critically endangered on the IUCN Red List or protected by local or

national laws.

C.5.03 Sensitive Habitat and Biodiversity		
GSSI Component	Guidance	
The standard requires that in areas where damage of sensitive habitats has occurred previously, and where restoration is possible and effective; restoration efforts will or have resulted in a meaningful amount of restored habitat; either through direct on-farm restoration or by an off-farm offsetting approach. Grandfathering of historical losses is allowed.	It is expected that the standard will define sensitive habitat in conscope and an appropriate date to be used prior to which legal im "grandfathered in" and provide supporting evidence for the date the aquaculture facility is expected to include whether restoration what degree (evidence could include maps, aerial photos, satellit government certification etc.) and whether that the active restor (i.e., will it be successful and restore a suitable area of sensitive has	pacts can be . Verification at n is necessary, to te images, ation is suitable
Conclusion		References
The BAP Mollusk Farm Standard Issue 1.2 is in alignment because Section 10 deals with Ecologically Sensitive Areas (ESAs) and mitigation in cases of habitat loss:		• <u>BAP</u> <u>Mollusk</u> <u>Farm</u>
10.1: When the site plan shows an ESA has been damaged by facility construction and/or operation since 1999, the loss shall have been only for allowable purposes.		<u>Standard</u> <u>v1</u>
(allowable purposes is defined on p 17: "• If culture operations require access to water across an ecologically sensitive area, this shall only be allowed for the installation of inlet and outlet canals, pump stations and docks.")		

O E 02 Consitive Habitat and Disdiversity

C.5.03 Sensitive Habitat and Biodiversity

10.2: If net loss of ecologically sensitive area occurred on facility property since 1999, the loss shall have been mitigated by restoring an area three times as large or by an equivalent donation to restoration projects.

10.3: For facilities constructed before 1999 and where an ESA was damaged but not restored, the applicant shall propose a plan, subject to local regulations, that within five years from the date of initial BAP certification shall restore the damaged area, mitigate the damage by restoring an equal area of similar habitat or make a donation of equivalent value to other restoration projects. Alternatively, the applicant shall provide an explanation of the extenuating circumstances regarding the damage for consideration of exemption from this standard.

10.4: Operation of the facility shall not lead to erosion or coastal deterioration, or cause other ecosystem damage that will not recover within the natural life cycle of the major fauna or flora damaged.

10.5: Unless specific permits apply, facility operations shall not alter the hydrological conditions of the surrounding watershed, and the normal flow of brackish water to mangroves or freshwater to wetlands shall not be altered.

In addition to the audit clauses. Section 10 also states:

Mollusk culture operations shall protect and conserve ecologically sensitive areas with environmental attributes worthy of retention or special care. Adverse impacts upon wetland and intertidal areas removed or modified for allowed purposes shall be mitigated.

Reasons for Standard

Nearshore culture systems can involve the modification of coastal habitats. Examples include the construction of ponds for oyster conditioning in France, modifications of intertidal areas to create clam habitat and efforts to gain access to waterways or "harrowing" of oyster beds. Coastal environments can include ecologically sensitive areas that have special environmental attributes worthy of retention or special care. These areas, which can include, but are not limited to, mangrove and wetland areas and sensitive shoreline habitat, are critical to the maintenance of productive and diverse plant and wildlife populations.

C.5.03 Sensitive Habitat and Biodiversity

Culture facilities use different rearing methods and can be built in ecologically sensitive areas and adjacent to natural water bodies. This can potentially harm sensitive areas in various ways.

Implementation

The BAP standards seek to prevent damage, if possible, or mitigate damage where prevention is not possible. In all cases, culture facilities shall employ appropriate construction and operation methods to protect the natural resources they use. Ecologically sensitive areas shall be identified and protected during construction. Facilities shall be designed and operated to prevent erosion or sedimentation due to effluent discharge, water flow or flooding that result from culture operations and facility construction.

- If culture operations require access to water across an ecologically sensitive area, this shall only be allowed for the installation of inlet and outlet canals, pump stations and docks.
- Ecologically Sensitive Areas (ESAs) damaged by construction or operations since 1999 shall be mitigated by restoration of an area of similar habitat three times the size of the area damaged or by a donation of equivalent value to other restoration projects. This practice is only allowable if local regulations permit it.
- In cases where ESAs were damaged before 1999, the facility shall be the subject of a five-year restoration or mitigation plan. To be considered for a possible exemption, the facility shall explain the extenuating circumstances regarding the damage.

C.6.01 Record Keeping		
GSSI Component	Guidance	
The standard requires the establishment, implementation and maintenance of an appropriate record	An appropriate records system may include source of the seed, date of purchase, stocking density, vaccination record of the seed, and stocked seed batch identification.	
keeping system for all seed that is	Verification is expected to include a review of evidence that the system is operation	nal and fit for
intentionally stocked.	purpose.	
Conclusion		References
The BAP Mollusk Farm Standard Issue 1.2 is	The BAP Mollusk Farm Standard Issue 1.2 is in alignment because record keeping for seed is addressed in Sections 5, 9 and 12:	
5.3: The applicant shall maintain current,	accurate records of all seed mollusk movements into and out of the cultivation site	<u>Farm</u>
to ensure full traceability and to demonstr	rate compliance with any regulations related to the transport of hatchery-	<u>Standard</u>
produced seed and the wild harvest or collection of broodstock or seed.		
As regards assigning responsibility for relevant record keeping, Clause 9.4 applies:		
9.4: The trained staff member shall ensure compliance with all legal requirements for disease testing, shellfish movements (including zoosanitary regulations for inbound and outbound transports) and reporting of notifiable diseases, alien invasive		
species, pests and fouling organisms.		
12.5: The facility shall maintain complete and accurate records of the sources and numbers of seed stocked, and stocking dates and feeds used for each culture unit.		

C.6.02 Wild Seed

GSSI Component

The standard requires that where the deliberate use of wild seed is justifiable, it is collected in a manner that:

- that the collection of seed is not detrimental to the status of the wild target and non-target populations, nor that of the wider ecosystem. This requires a documented management approach that ensures those wild populations are not overfished and not subject to recruitment overfishing or other impacts that are likely to be irreversible or very slowly reversible, and avoids, minimizes or mitigates fishing impacts on essential habitats and on habitats that are highly vulnerable to damage by the fishing gear;
- Avoids the use of environmentally damaging collection practices;

Guidance

Expected examples of "justifiable use" include where there is a lack of commercially-available hatchery-raised seed, inability/lack of technology to hatchery-raised the farmed species, or passive collection of mollusks. Justification could be offered at the standard or aquaculture facility level. Verification is expected to include the need to provide suitable evidence by the aquaculture facility (e.g., a summary report written by a credible 3rd party on the source fishery, a self-certification by the appropriate management authority, a 3rd party fishery certification that verifies suitable compliance). A documented management 251ulfil251hh is expected to follow Component D.3.01 where the standard requires the existence of documented management approaches or other management framework covering the unit of certification and the stock under consideration, including management measures consistent with achieving management objectives for the stock under consideration. Expected outcomes of the management approach are described in the Guidance of D.6.01 Target Stock Status, D.6.05 Non-Target Catches, D.6.06 Endangered Species, and D.6.07 Habitat, respectively. Definitions of terms related to wild fisheries can be found in Section D terms of the Glossary.

Examples of environmentally damaging collection practices include blast, poison, and Muro-ami fishing practices.

C.6.02 Wild Seed

And ensures that the source fishery is

regulated by an appropriate authority. Conclusion References The BAP Mollusk Farm Standard Issue 1.2 is in alignment because this aspect is covered in Section 5 which requires: BAP Mollusk 5.9: If wild mollusk seed is used in preference to hatchery seed, valid justifications shall be provided. Farm Standard : The designated staff member shall ensure compliance with all legal requirements including those for: shellfish 5.2 movements; source fishery regulation by an appropriate authority, and; reporting of any notifiable alien invasive or pest species. (See also Section 9.) 5.10: For the collection of wild seed, in the absence of appropriately targeted regulations, a control plan shall be drawn up and implemented to minimize any detrimental impacts on wild target and non-target mollusk populations and on the wider ecosystem. The plan shall encompass any environmentally damaging collection practices. Section 5 also states: "The collection of wild mollusk larvae, seed or juveniles, or the purchase of seed or stock for growout from third parties whose seed is sourced from wild stocks shall be carried out with the aim of ensuring that the level of removal of wild seed is sustainable, and the collection or harvest method is environmentally sensitive. In order for a cultivation site to prove that its mollusk seed supply originates from a sustainable source or is free from alien invasive species, diseases or parasites, it is important that any seed movements into or leaving the cultivation site have

• The name and contact details of the harvester or producer of the mollusk broodstock or seed.

sufficient documentation to describe or fulfill the following:

• The geographic location of the mollusk stocks or facility from which the broodstock, seed or juvenile mollusks were produced.

C.6.02 Wild Seed

- The name, reference or any other identification mark of any vessels used in harvesting wild mollusks, together with relevant contact details.
- A description of the type of collection method used in harvesting the wild broodstock or seed mollusks.
- A copy of any regulatory documentation required under applicable national legislation concerning the harvest or collection of wild mollusks.
- A copy of any regulatory documentation showing that seed has been transported and imported as required under applicable national legislation concerning hatchery-produced seed."

The BAP Mollusk Farm Standard is in also alignment because Section 5 includes clause 5.9:

5.9: If wild mollusk seed is used in preference to hatchery seed, valid justifications shall be provided.

And the Implementation guidance has been expanded regarding valid justifications:

Implementation:

Many species are now being produced from hatchery seed, and this is expected to increase in the future. The aim of the BAP program is to promote hatchery-based aquaculture while ensuring that the movement of hatchery stocks does not transmit diseases or pests or have negative impacts on the genetics of wild populations. If wild mollusk seed is used in preference to hatchery seed, this must be for justifiable reasons. For example if there is no local availability of hatchery seed, if there are significant disease or genetic impact risks associated with bringing in hatchery seed, or if the supplies of wild seed are derived from demonstrably sustainable, wild stocks.

.GSSI Component	Guidance	
The standard requires that hatchery- raised seed are free from relevant/important pathogens before stocking for grow-out.	Relevant/important pathogens are expected to include those identified by the aqua professional and sources such as the OIE/ transboundary disease lists (See Chapter Animal Health Code 2015 http://www.oie.int/en/international-standard-setting/aqua online/).	1.3 of the Aquatic
	Verification of suitable measures is expected to include reviews of disease-testing r disease tested for, and the results (including ISO 23893-1:2007), and the vaccination This could form part of the aquatic animal health management plan.	
Conclusion		References
The BAP Mollusk Farm Standard Issue 1.2 i	s in alignment because this aspect is adressed by auditable clauses in Section 5:	• BAP
	·	Mollusk
, •	e applicant will provide documentation that hatchery-produced seed from other	Mollusk Farm
oceanographic bioregions comes from f	e applicant will provide documentation that hatchery-produced seed from other acilities with health-monitoring programs that take into consideration enzootic f-listed pathogens; and the seed can be demonstrated to be of equivalent or higher	Mollusk
oceanographic bioregions comes from f pathogens, notifiable organisms and OIE health status than that of the receiving of 5.5: The applicant shall have written pro-	e applicant will provide documentation that hatchery-produced seed from other acilities with health-monitoring programs that take into consideration enzootic f-listed pathogens; and the seed can be demonstrated to be of equivalent or higher	<u>Mollusk</u> <u>Farm</u> Standare
oceanographic bioregions comes from f pathogens, notifiable organisms and OIE health status than that of the receiving of 5.5: The applicant shall have written pro-	e applicant will provide documentation that hatchery-produced seed from other acilities with health-monitoring programs that take into consideration enzootic f-listed pathogens; and the seed can be demonstrated to be of equivalent or higher area. Cedures and proof of their implementation for the control of alien invasive species sly unknown marine species in or on mollusk stocks. (See also Section 9.)	<u>Mollusk</u> <u>Farm</u> Standare
oceanographic bioregions comes from f pathogens, notifiable organisms and OIE health status than that of the receiving of 5.5: The applicant shall have written pro- that includes monitoring for any previous 5.6: The applicant shall train staff in apply 5.7: Seedstock shall not be accepted on s	e applicant will provide documentation that hatchery-produced seed from other acilities with health-monitoring programs that take into consideration enzootic f-listed pathogens; and the seed can be demonstrated to be of equivalent or higher area. Cedures and proof of their implementation for the control of alien invasive species sly unknown marine species in or on mollusk stocks. (See also Section 9.)	<u>Mollusk</u> <u>Farm</u> Standar

C.6.03 Hatchery Seed

These aspects are also addressed in Section 9 and via the Shellfish Health Management Plan.

9.8: The applicant shall train cultivation site staff in applying biosecurity, monitoring and health management procedures. Guidance p. 20: The Shellfish Health Management Plan should include, but not be limited to, written biosecurity and health management procedures and training of staff in the practice of these procedures commensurate with their level of work responsibilities, and cover:

- Careful selection of seed or adult mollusks during translocation or importation with regard to the presence of alien invasive species and other pest or fouling organisms specified in applicable national legislation, and with regard to OIE-listed diseases and parasites.
- Reporting procedures for possible disease outbreaks or increased mortality levels in mollusk stocks, including reporting to regulatory authorities of OIE reportable diseases.
- Monitoring for observations of previously unknown pest or fouling marine species in/on stocks of mollusks brought into the cultivation site
- An alert status that defines extra precautions, containment, checks on shellfish and increased vigilance if an occurrence of infectious disease is known or suspected in the region. Accurate recording of all shellfish movements and transfers to, from and within the cultivation site, with due regard to applicable national shellfish movement legislation.

C.7 EVIDENCE OF ALIGNMENT

C.7.01 Escapes			
GSSI Component	Guidance		
The standard requires that the	An appropriate system is expected to be based on an evaluation of the likelihood of events and the		
aquaculture facility establishes,	magnitude of impacts on surrounding environment (where risk assessments are used they met use a		
implements, and maintains an	suitable scientific method and taking into consideration, siting, culture practices, local environmental		
appropriate system to minimize the	conditions, including extreme events, and other relevant uncertainties) according to the		
unintentional release or escape of	precautionary approach and possible impacts on surrounding natural ecosystems, including fauna,		
cultured species. This should include monitoring and management of the	flora, and habitat. Specific requirements stated in the standard are acceptable.		
physical facilities and practices	Verification is expected to include a review of evidence of an operational and fit for purpose system.		
	The monitoring of the management practices could include but are not limited to:		
	i) Measures for escape detection		
	ii) Monitoring for and record keeping of escapes events iii) Suitable training of employees		
	iv) Incident management and infrastructure, including response or recapture measures. v) Regular monitoring and maintenance of the culture system		
	vi) Regular review and failure analysis		
	vii) containment infrastructure Relative to the		
	species being farmed and the production system individual elements can be "Not Applicable" with		
	these considerations).		
Conclusion	References		

C.7.01 Escapes

The BAP Mollusk Farm Standard Issue 1.2 is in alignment because issues that may arise from 'escapes' of cultivated mollusks are dealt with through controls on the movement of seed or hatchery stocks and environmental impacts, as detailed above. To a great extent this component is not applicable to the BAP Mollusk Farm standard because in typical open-water mollusk culture systems, the farm stocks could be described as already 'escaped'.

• BAP Mollusk Farm Standard v1

C.7.02 Genetically Modified Organisms

GSSI Component

Guidance

In the case where the culture of GMO organisms is permitted, the standard requires a suitable evaluation of the risk of environmental impacts.

A suitable evaluation is expected to have been performed using an appropriate scientific method that assesses the likelihood of events and the magnitude of impacts, and take into account relevant uncertainties according to the precautionary approach. The evaluation should consider the possible impacts on genetic diversity, aquatic communities and ecosystems. Where ICES Code of Practice on the Introductions and Transfers of Marine Organisms 2005 is relevant, consistency with these requirements on genetically modified organisms (GMO) is also expected. Verification is expected to include a review of supporting evidence.

Conclusion

References

C.7.02 Genetically Modified Organisms

The BAP Mollusk Farm Standard Issue 1.2 is in alignment because, in the absence of commercialised transgenic mollusks, this concern is hardly applicable. In relation to genetic concerns in general, the standard does require:

5.8: Where legislation does not apply, the applicant shall document efforts to address genetic concerns particular to the species and geographic regions where the seed will be planted.

For clarity on GMOs, Section 5 of the standard states:

"Due to potential negative impacts on wild populations, if transgenic (GMO) seed are commercialized in the future they will not be permitted by this standard."

BAP
 Mollusk
 Farm
 Standard
 v1

C.8 EVIDENCE OF ALIGNMENT

C.8.01 Salinization			
GSSI Component	Guidance		
The standard requires that the aquaculture facility establishes,	An exemption for standards that do not cover land-based saline water systems is expected.		
implements, and maintains an appropriate system that addresses the impact of salinization of freshwater	Appropriate measures are expected to be based on risk assessments or standardized requirements. Controls could include relevant monitoring of freshwater resources (e.g., groundwater resources, local water bodies, local soils) for salinity changes and measures such as pond-linings, limiting		
resources and the surrounding environment by the aquaculture facility.	groundwater use and other control techniques. The standard is expected to prohibit the aquaculture facility to contributing to changing freshwater resources and the surrounding environment to saline conditions. Verification is expected to include a review of evidence that the system is operational and fit for purpose, such as a visual inspection of the site.		
Conclusion			
This component is not applicable to the BAP Mollusk Farm Standard Issue 1.2 because it does not cover the type of land- • BAP Mol			
based saline culture systems that could salinize freshwater resources. The scope is defined on page 1:		<u>Farm</u>	
		Standard v1	
"The following Best Aquaculture Practices standards and guidelines apply to the culture of molluscan shellfish, including all			
species of bivalves, such as clams, cockles, geoducks, oysters, scallops, and mussels, but excluding grazing gastropods			
(whelks, abalone)for which the BAP Farm Standard applies instead. They also apply to other species, such as holothurian			
echinoderms, if they are reared in open waters and rely exclusively on natural productivity for their sustenance.			
Culture methods can include direct sowing onto the seabed, or containerized or attached to structures on or above the			
seabed, both intertidally and subtidally. Shallow and deep water systems of over 5 meters depth may suspend mollusks			

C.8.01 Salinization

from longlines, rafts or other floating structures. However, the scope of this standard does not include intensive or nursery culture systems that use

raceways, ponds or tanks, on shore or floating, for which the BAP Farm Standard or the BAP Hatchery and Nursery Standard apply."

C.8.02 Water Use

GSSI Component

Where appropriate (e.g. land-based freshwater ponds supplied with groundwater and all culture systems where water resources are limiting) the standard requires that the aquaculture facility has appropriate management measures for efficient water use.

Guidance

This requirement is based on Paragraph 47 of the Technical Guidelines on Aquaculture Certification state "Measures should be adopted to promote efficient water management and use, as well as proper management of effluents to reduce impacts on surrounding land, and water resources should be adopted." GSSI recognizes that standards for efficient water management and use are not common in many current aquaculture standards. Generally it is expected that this Essential Component will only apply to aquaculture facilities that use land-based freshwater ponds supplied with groundwater and all culture systems where water resources are limiting. An exemption for all other production systems is expected. This can also be "not applicable" for standards that do not cover relevant production systems.

Management measures may include a general promotion or awareness of efficient water use or actions that may lead to more efficient use. Where groundwater is used the standard is expected to require that the aquaculture facility establish, implement and maintain an appropriate system to prevent aquifer drawdown and negative impacts on freshwater resources and the surrounding environment caused by the facilities operations. Verification that the system is operational and fit for purpose is expected.

Conclusion

References

C.8.02 Water Use

This component is not applicable to the BAP Mollusk Farm Standard Issue 1.2 because it does not cover the type of land-based saline culture systems that could salinize freshwater resources. The scope is defined on page 1:

"The following Best Aquaculture Practices standards and guidelines apply to the culture of molluscan shellfish, including all species of bivalves, such as clams, cockles, geoducks, oysters, scallops, and mussels, but excluding grazing gastropods (whelks, abalone) for which the BAP Farm Standard applies instead. They also apply to other species, such as holothurian echinoderms, if they are reared in open waters and rely exclusively on natural productivity for their sustenance.

Culture methods can include direct sowing onto the seabed, or containerized or attached to structures on or above the seabed, both intertidally and subtidally. Shallow and deep water systems of over 5 meters depth may suspend mollusks from longlines, rafts or other floating structures. However, the scope of this standard does not include intensive or nursery culture systems that use raceways, ponds or tanks, on shore or floating, for which the BAP Farm Standard or the BAP Hatchery and Nursery Standard apply."

BAP Mollusk Farm Standard v1

C.8.03 Water Quality	
GSSI	Guidance
Component	
The standard	Appropriate measures are expected to include.
requires, where	1. Monitoring and recording of effluent or receiving water quality, and which may including key parameters that need to be
appropriate,	addressed include, where applicable:
management	i) Nutrients – Nitrate/Nitrogen (impacts on seawater)

measures for	ii) Nutrients – Phosphate/Phosphorous (impacts on freshwater)		
effluents in	iii) Dissolved oxygen		
order to	iv) Salinity		
reduce	v) Suspended Solids		
adverse	vi) pH		
impacts on the			
water quality	2. Defined, aquaculture appropriate, maximum reference points (e.g., general concentration limits c	or aquaculture facility-	
of water bodies	specific limits) or mandatory systems (e.g., presence of a suitable filter) are defined to prevent pollution		
receiving	3. Where reference points are exceeded, the scheme either refuses certification or that mitigation methods are employed and		
effluents.	monitored to meet a time bound goal to come into compliance.		
Monitoring of			
the systems	Verification is expected to include a review of evidence that the system is operational and fit for pu	rpose, including visual	
effluents	inspection of the site. Where effluent concentration limits are used for compliance, independent verification of conformance is		
against	also expected.		
appropriate			
criteria is	"Where appropriate" is expected to include standards that cover production systems that release e	effluent that has the	
required.	potential to impact water quality, e.g., fed/intensive aquaculture in ponds and raceways. An excepti	ion for marine cage	
	aquaculture and on or offbottom shellfish culture is expected.		
Conclusion		References	
This component	is not applicable to the BAP Mollusk Farm Standard Issue 1.2 because any effluent impacts	• BAP Mollusk Farm	
generated by m	generated by mollusks are dealt with via sediment impacts, as detailed in Section 6 of the Standard. Standard v1		

C.8.03 Water Quality

C.9 EVIDENCE OF ALIGNMENT

C.9.01 Legal Compliance		
GSSI Component	Guidance	
The standard requires (evidence of) compliance with all local and national laws and regulations relevant to aquaculture, especially concerning: - application of chemicals and veterinary drugs - feed, feed ingredients and fertilizers - habitat and biodiversity (including Environmental Impact Assessment (EIA)	Verification is expected to include a review of evidence provided by the aquaculture facility to support compliance with relevant laws. For feed, its ingredients & fertilizers, verification is expected to include a review of evidence (e.g., documentation, self-declaration by the feed	
where required)	manufacturer).	
- seed sourcing at both source and destination - Escapes and releases	For seed sourcing this could include international laws (e.g., CITES, OIE and ICES import guidelines) and laws governing	
- water use, water quality and waste discharge	introductions and transfers of live aquatic animals.	
Conclusion		References
The BAP Mollusk Farm Standard Issue 1.2 is in alignment because Section 1 requires compliance with all legal requirements:		• <u>BAP</u> <u>Mollusk</u>
1.1: Current documents shall be available to prove legal land, seabed and/or water use, where applicable.		<u>Farm</u> <u>Standard</u>
1.2: Current documents shall be available to prove all business and operating licenses have been acquired.		
1.3: Current documents shall be available to prove compliance with applicable environmental regulations for construction and operation.		
1.4: Where applicable, current documents shall be available to prove compliance wit	h laws protecting the resources of	

C.9.01 Legal Compliance

indigenous peoples and/or independent agreements the applicant may have made with them.

1.5: Where applicable, current documents shall be available to show compliance with the cultivation site's own regional industry codes of practice, if they exist.

Section 1 also specifies, in its Implementation Guidelines on p3:

"The BAP program requires compliance with applicable business-related laws and environmental, social and food safety regulations, including those concerning protection of sensitive habitats, effluents, operation of landfills and predator control"

And listed legal requirements in Section 1 include "permits for chemical use"

As regards assigning responsibility for ensuring compliance with laws dealing with invasive species:

9.4: The trained staff member shall ensure compliance with all legal requirements for disease testing, shellfish movements (including zoosanitary regulations for inbound and outbound transports) and reporting of notifiable diseases, alien invasive species, pests and fouling organisms.

Other clauses and guidance related to legal compliance include:

- 2.1: The applicant shall demonstrate that the aquaculture facility does not prevent legal access to traditional fishing areas and other established public resources, except as permitted by law.
- 4.1: The applicant shall provide evidence of local regulation or scientific evidence that cultivation operations do not and will not exceed the production carrying capacity of the water body, alone or in combination with other cultivation operations, based on regulatory limits or prior research as specified in the implementation requirements. The supporting evidence shall be provided to and verified by auditor or an agreed independent reviewer.

C.9.01 Legal Compliance

- 5.2: The designated staff member shall ensure compliance with all legal requirements for shellfish movements and reporting of any notifiable alien invasive or pest species. (See also Section 9.)
- 5.3: The applicant shall maintain current, accurate records of all seed mollusk movements into and out of the cultivation site to ensure full traceability and to demonstrate compliance with any regulations related to the transport of hatchery produced seed and the wild harvest or collection of broodstock or seed.
- 6.2: In countries or regions where sediment monitoring is required with respect to mollusk cultivation, applicants shall demonstrate a history of compliance for two years or two production cycles for established farms, whichever is longer, with any statutory monitoring schemes or best practice initiatives deemed appropriate by local or national regulators.
- 6.7: The applicant shall adopt any suitable husbandry measures or local best practices available to mitigate potential negative sediment impacts from mollusk cultivation as assessed by and agreed to by local or national regulators, as appropriate
- 7.1: If the mollusk cultivation site operates in a jurisdiction with government regulations related to interactions with wildlife and predator control, the applicant shall comply with the regulations. Proof of compliance may include a certification and/or official letter from the governing body.
- 7.12 : Documents shall be available to show that any active but non-lethal deterrent measures used are approved by regulators through a review of environmental impacts with specific reference to endangered, protected or cetacean species in the area. Such devices shall not be deployed if the review shows they can adversely affect these species
- 8.8: Garbage and other solid waste shall be disposed of to comply with local regulations and avoid environmental contamination
- 9.11: The applicant shall have proof of the implementation of written procedures for removing and disposing of fouling organisms. These procedures shall include the use and disposal of any chemical treatments, which shall be applied in accordance with the instructions of the manufacturer and in compliance with any existing local and national regulations.
- 11.1: Documentation shall be available that demonstrates participation in and compliance with the host country's national classification/regulatory program.

Guidance p12:

C.9.01 Legal Compliance

it is important that any seed movements into or leaving the cultivation site have sufficient documentation to describe or fulfil the following:

- A copy of any regulatory documentation required under applicable national legislation concerning the harvest or collection of wild mollusks.
- A copy of any regulatory documentation showing that seed has been transported and imported as required under applicable national legislation concerning hatchery-produced seed.

