

Scope: Applicable to Flounders (species in the genus Paralichthys), Halibut (species in the genus Hippoglossus), and Turbot (species in the genus Scophthalmus)

Please refer to the ASC Flatfish standards v1.0 document for additional clarification, guidance, and rationales
This document is a non normative document and shall be used as a guidance document only.

PRINCIPLE 1: COMPLY WITH ALL APPLICABLE NATIONAL LAWS AND LOCAL REGULATIONS

Implementation guidance:

In order to ensure compliance with these standards, auditors will need to review a range of documentation and relevant correspondence related to farm siting and operation. It is probable that some of the information will need to be generated by the headquarters of the company owning the operation, while other information will relate specifically to the site.

Criterion 1.1 Compliance with all applicable local, national legal and regulatory requirements

		Compliance Criteria (Required Client Actions):
1.1.1	<p>Indicator: Documents demonstrating compliance with all relevant local and national laws and regulations.</p> <p>Requirement: Yes.</p> <p>Applicability: All.</p>	a. Maintain digital or hard copies of applicable land and water use laws. Provide the audit team with a summary of applicable laws and permit requirements along with contact details for relevant staff.
		b. Maintain original (or certified copies of) lease agreements, land titles and concession permit(s) on file as applicable.
		c. Keep records of inspections for compliance with national and local laws and regulations (where such inspections are legally required in the country of operation).
1.1.2	<p>Indicator: Documents demonstrating compliance with all tax laws.</p> <p>Requirement: Yes.</p> <p>Applicability: All.</p>	a. Provide a certificate of tax clearance or tax law conformity from local Revenue authority; OR Maintain records of tax payments to appropriate authorities (e.g. land use tax, water use tax, revenue tax). Note that CABs will not disclose confidential tax information unless client is required to or chooses to make it public.
		b. Demonstrate that the farm ensures compliance with tax laws appropriate to its size and scale. Large-scale producers should for instance use the services of a qualified and knowledgeable tax professional such as a chartered Public Accountant to manage overall compliance with taxation law. Small-scale producers should show tax receipts.
		c. If tax is paid by a parent company legally then the farm should present information to this effect.
1.1.3	<p>Indicator: Documents demonstrating compliance with all labor laws and regulations.</p> <p>Requirement: Yes.</p> <p>Applicability: All.</p>	a. Demonstrate how the farm conforms with the requirements of national and regional/local labor codes and employment law
		b. Keep records of farm inspections for compliance with national labor laws and codes (only if such inspections are legally required in the country of operation).
1.1.4	<p>Indicator: Documents demonstrating compliance with regulations and permits concerning water quality impacts.</p> <p>Requirement: Yes.</p>	a. Obtain permits for discharge water where applicable.
		b. Maintain records of monitoring and compliance with discharge laws and/or regulations as required.

	<p>Applicability: All.</p>	<p>c. Maintain records of monitoring and compliance with waste and pollution laws/regulations.</p>
<p>PRINCIPLE 2: CONSERVE NATURAL HABITAT, LOCAL BIODIVERSITY AND ECOSYSTEM STRUCTURE AND FUNCTION</p>		
<p>Criterion 2.1 Benthic biodiversity and benthic effects</p>	<p>Compliance Criteria (Required Client Actions):</p>	
<p>Guidance to Clients and CABs on Criterion 2.1 – Benthic Impact assessment and monitoring A minimum of three benthic samples shall be taken at the edge of the AZE downstream from the predominant current and if control sites are needed, three samples shall be collected 100-1000m from the edge of the cage array with similar water depth and substratum as found on the farm (see ISO 12878:2012 for benthic sampling methodology). Samples should be taken during peak biomass. All collected samples must be analyzed by an accredited laboratory (e.g. ISO 17025) and the sampling methodology must be approved by the laboratory conducting the analysis. Allowable Zone of Effect (AZE) is defined under this standard as 25 meters. For farm sites where a site-specific AZE has been defined using a robust and credible modeling system such as the SEPA AUTODEPOMOD and verified through monitoring, the site-specific AZE shall be used. Significance is measured at 95% confidence interval.</p>		
<p>2.1.1</p>	<p>Indicator: Redox potential or total 'free' sulphide levels in sediment immediately outside of the Allowable Zone of Effect (AZE)^[1] attributed to farm operations</p> <p>Requirement: Redox potential > 0 millivolts (mV) OR Sulphide ≤ 1,500 microMoles/l OR No significant difference^[2] in redox potential or total 'free' sulphide levels in sediment at the edge of the AZE in comparison to control sites</p> <p>Applicability: All farms</p>	<p>Note: Under Indicator 2.1.1, farms can choose to measure redox potential (Option #1) or sulphide concentration (Option #2). Farms do not have to demonstrate that they meet both threshold values.</p> <p>a. Prepare a map of the farm showing boundary of AZE and GPS locations of all sediment-sampling stations. If the farm uses a site-specific AZE, provide justification for its selection to the CAB.</p> <p>b. If benthos throughout the full AZE is hard bottom, provide evidence to the CAB and request an exemption from 2.1.1c-f, 2.1.2, 2.1.3 and 2.1.4.</p> <p>c. Inform the CAB of which indicator the farm has selected for evaluating and monitoring benthic impact.</p> <p>d. Collect sediment samples using an appropriate methodology and sampling regime, following the guidance in the Flatfish Standard (i.e. using appropriate AZE, sampling stations and methodology).</p> <p>e. For option #1, measure and record redox potential (mV) in surficial sediment samples taken from immediately outside the AZE as well as at an un-impacted control site using an appropriate, nationally or internationally recognized testing method.</p> <p>f. For option #2, measure and record sulphide concentration (uM) in surficial sediment samples taken from immediately outside the AZE as well as at an un-impacted control site using an appropriate, nationally or internationally recognized testing method.</p>

		g. For option #3, measure and record sulphide concentration (uM) or redox potential in surficial sediment samples taken from immediately outside the AZE as well as at an un-impacted control site using an appropriate, nationally or internationally recognized testing method.
Footnote	[1] Allowable Zone of Effect (AZE) is defined under this Standard as 25 meters. For farm sites where a site-specific AZE has been defined using a robust and credible modeling system such as the SEPA AUTODEPOMOD and verified through monitoring, the site-specific AZE shall be used.	
Footnote	[2] Significance measured at a 95% confidence interval.	
2.1.2	<p>Indicator: Benthic faunal index score (choosing a suitable benthic index to the composition of the benthos being sampled)</p> <p>Requirement: AZTI Marine Biotic Index (AMBI^[3]) score \leq 3.3, or Shannon-Wiener Index score $>$ 3, or Benthic Quality Index (BQI) score \geq 15, or Infaunal Trophic Index (ITI) score \geq 25 or BENTIX^[4] score \geq 3.5 or No significant change in benthic faunal index scores at the edge of the AZE in comparison to control site</p> <p>Applicability: All farms</p>	<p>a. Prepare a map showing the AZE and sediment collections stations (see 2.1.1).</p> <p>b. Inform the CAB whether the farm chose option #1, #2, #3, #4, #5, or #6 to demonstrate compliance with the requirement.</p> <p>c. Collect sediment samples in accordance with sampling strategy.</p> <p>d. For option #1, measure, calculate and record AZTI Marine Biotic Index [5] score of sediment samples using the required method.</p> <p>e. For option #2, measure, calculate and record Shannon-Wiener Index score of sediment samples using the required method.</p> <p>f. For option #3, measure, calculate and record Benthic Quality Index (BQI) score of sediment samples using the required method.</p> <p>g. For option #4, measure, calculate and record Infaunal Trophic Index (ITI) score of sediment samples using the required method.</p> <p>h. For option #5, measure, calculate and record BENTIX score of sediment samples using the required method.</p> <p>i. For option #6, measure and record benthic faunal index scores of samples taken from immediately outside the AZE as well as at an un-impacted control site using an appropriate, nationally or internationally recognized testing method.</p>
Footnote	[3] http://www.azti.es/en/ambi-azti-marine-biotic-index.html	
Footnote	[4] Simboura, N., & Zenetos, A. (2002). Benthic indicators to use in Ecological Quality classification of Mediterranean soft bottom marine ecosystems, including a new Biotic Index. Mediterranean Marine Science, 3(2), 77-111	
2.1.3	<p>Indicator: For farms that use copper nets or copper-treated nets, evidence of testing for copper levels in the sediment immediately outside of the AZE</p> <p>Requirement: Yes</p> <p>Applicability: All farms that use copper or copper treated nets</p>	<p>a Collect samples for copper levels in sediment immediately outside AZE.</p>

2.1.4	<p>Indicator: Evidence that copper (Cu) levels^[5] are < 34 mg Cu/kg dry sediment weight OR In instances where the copper in the sediment exceeds 34 mg Cu/kg dry sediment weight, demonstration that the Cu concentration is not significantly different compared to background concentrations as measured at three reference sites in the water body</p> <p>Requirement: Yes</p> <p>Applicability: All farms that use copper or copper treated nets</p>	a. Measure and record copper levels in samples taken from immediately outside the AZE.
Footnote	[5] The testing for copper required under 2.1.4 is only applicable to farms that use copper-based nets or copper-treated nets. The same benthic sampling methodology used in 2.1.2 shall be applied, where the sample taken outside the AZE shall not differ significantly ⁴ with the values found at the reference sites.	
Criterion 2.2 Water quality in and near the site of operation		Compliance Criteria (Required Client Actions):
2.2.1	<p>Indicator: Weekly average percent saturation^[6] of dissolved oxygen (DO)^[7] on farm (Appendix 1-2)</p> <p>Requirement: ≥70%^[8]</p> <p>Applicability: All farms</p>	<p>Instruction to Clients for Indicator 2.2.1 - Monitoring Average Weekly Percent Saturation of Dissolved Oxygen Averaged weekly readings from within the cages shall be taken based on one daily measurement. Percent saturation is the amount of oxygen dissolved in the water sample compared to the maximum amount that could be present at the same temperature and salinity.</p> <p>a. Monitor and record on-farm percent saturation of DO at a minimum of once daily using a calibrated oxygen meter or equivalent method. For first audits, farm records must cover ≥ 6 months.</p> <p>b. Provide a written justification for any missed samples or deviations in sampling time.</p> <p>c. Calculate weekly average percent saturation based on data.</p> <p>d. If any weekly average DO values are < 70%, or approaching that level, monitor and record DO at a reference site and compare to on-farm levels.</p> <p>e. Arrange for auditor to witness DO monitoring and calibration while on site.</p>
Footnote	[6] Saturation percentage (or percent saturation): Percent saturation is the amount of oxygen dissolved in the water sample compared to the maximum amount that could be present at the same temperature and salinity.	
Footnote	[7] Averaged weekly readings from within the cages taken from two daily measurement (preferably around 6am and 3pm).	
Footnote	[8] Should a farm not meet the minimum 70 percent weekly average saturation requirement; the farm must demonstrate consistency of percent saturation with a reference site. The reference site shall be at least 500 meters from the edge of the net pen array, in a location that is understood to follow similar patterns in upwelling to the farm site and is not influenced by nutrient inputs from anthropogenic causes including aquaculture, agricultural runoff or nutrient releases from coastal communities.	

2.2.2	<p>Indicator: Maximum percentage of weekly samples from 2.2.1 that fall under 2 mg/liter DO (Appendix 1-2)</p> <p>Requirement: 5%</p> <p>Applicability: All</p>	a. Calculate the percentage of on-farm samples taken for 2.2.1a that fall under 2 mg/l DO.
2.2.3	<p>Indicator: Quarterly monitoring of TAN, NO₃, and TP levels on the farm and at a reference site^[9] (Appendix 1-3)</p> <p>Requirement: Yes</p> <p>Applicability: All farms</p>	a. Develop, implement, and document a quarterly monitoring plan for Total Ammonia Nitrogen, NO ₃ , total P.
Footnote	[9] TAN (Total Ammonia Nitrogen = total NH ₃ + total NH ₄ ⁺), TP (Total Phosphorus)	
2.2.4	<p>Indicator: Evidence that the type of biocides used in net antifouling are approved according to legislation in the European Union, the United States, Australia, or Japan</p> <p>Requirement: Yes</p> <p>Applicability: All farms</p>	<p>a. Identify all biocides used by the farm in net antifouling.</p> <p>b. Compile documentary evidence to show that each chemical used in 4.7.5a is approved according to legislation in one or more of the following jurisdictions: the European Union, the United States, Australia, or Japan.</p>
2.2.5	<p>Indicator: Evidence that all chemicals used on the farm that are discharged to effluent are recorded and quantified</p> <p>Requirement: Yes</p> <p>Applicability: All farms</p>	a. Provide records of all chemicals used on the farm
2.2.6	<p>Indicator: Annual median concentration of total suspended solids in effluent compared to influent measured in the outflow or in the receiving water beyond zone of initial dilution</p> <p>Requirement: <5 mg/L</p> <p>Applicability: All farms</p>	<p>a. Collect watersamples of the effluent ,or receiving water beyond mixing zone.</p> <p>b. Calculate the median of concentration of total suspended solids in the watersamples and check if the samples are <5 mg/L.</p>

2.2.7	<p>Indicator: Annual median concentration of total ammonia nitrogen in effluent or receiving water beyond mixing zone^[10]</p> <p>Requirement: <0.6 mg/L</p> <p>Applicability: All farms</p>	<p>a. Collect watersamples of the effluent ,or receiving water beyond mixing zone.</p> <p>b. Calculate the median of concentration of total ammonia nitrogen in the watersamples and check if the samples are <0.6 mg/L.</p>
Footnote	<p>[10] The mixing zone as defined by the local regulatory authority, or if that does not exist, then the zone of initial dilution as defined in the California Ocean Plan (SWRCB, 2009). The California Ocean Plan defines initial dilution as the process that results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge. If the concentrations of ammonia and suspended solids in the effluent comply with the recommended Standard, effluent sampling is all that is required. Otherwise, a dilution study is necessary to estimate concentrations at the edge of a mixing zone, under conditions of minimal dilution. A dilution factor should then be applied to the effluent concentration to estimate concentration at the edge of the mixing zone. Where a mixing zone has been defined by a local authority, the defined mixing zone will apply. Otherwise the mixing zone should be the zone of initial dilution as defined in the California Ocean Plan (SWRCB, 2009).</p>	
<i>Criterion 2.3 Interaction with critical or sensitive habitats and species</i>		Compliance Criteria (Required Client Actions):
2.3.1	<p>Indicator: The farm shall assess the farm's (potential) impacts on biodiversity and nearby ecosystems that contains at a minimum the components outlined in Appendix 1 (see Standard).</p> <p>Requirement: Yes.</p> <p>Applicability: All.</p>	<p>a. Collect documentation that allows an interpretation of the farms location in the context of biodiversity and ecosystems that may be at risk from under assessment farm related impacts.</p> <p>b. Complete a detailed risk assessment for potential impacts of the farm on critical, sensitive and protected habitats and species. Demonstrate how the farm has strategies and programmes in place that are designed to minimise or eliminate negative impacts on species and habitats.</p> <p>c. Collect independent evidence that confirms the level of interaction and/or impact of the farm on critical, sensitive or protected habitats and species. Evidence can include stakeholder submission.</p>

2.3.2	<p>Indicator: Allowance for the farm to be sited in a protected area or High Conservation Value Areas^[11] (HCVAs)</p> <p>Requirement: None</p> <p>Applicability: All.</p>	<p>Instruction to Clients for Indicator 2.3.2 - Exceptions to Requirements that Farms are not sited within Protected Areas or HCVAs</p> <p>The following exceptions shall be made for Indicator 2.3.2:</p> <p>Exception #1: For protected areas classified by the International Union for the Conservation of Nature (IUCN) as Category V or VI (these are areas preserved primarily for their landscapes or for sustainable resource management).</p> <p>Exception #2: For HCVAs if the farm can demonstrate that its environmental impacts are compatible with the conservation objectives of the HCVA designation. The burden of proof would be placed on the farm to demonstrate that it is not negatively impacting the core reason an area has been identified as a HCVA.</p> <p>Exception #3: For farms located in a protected area if it was designated as such after the farm was already in operation and provided the farm can demonstrate that its environmental impacts are compatible with the conservation objectives of the protected area and it is in compliance with any relevant conditions or regulations placed on the farm as a result of the formation/designation of the protected area. The burden of proof would be placed on the farm to demonstrate that it is not negatively impacting the core reason an area has been protected.</p>
		<p>NOTE: The guidelines on collecting spatial data for ASC can be found on https://www.asc-aqua.org/resources/for-farms/gis-portal/</p>
		<p>a. Provide Geographical Information System (GIS) files according to ASC guidelines (see note above) showing the boundaries of the farm relative to nearby protected areas or High Conservation Value Areas (HCVAs) as defined above (see also 1.1.1a).</p>
		<p>b. If the farm is <u>not</u> sited in a protected area or High Conservation Value Area as defined above, prepare a declaration attesting to this fact. In this case, the requirements of 2.3.2c-d do not apply.</p>
		<p>c. If the farm <u>is</u> sited in a protected area or HCVA, review the scope of applicability of Indicator 2.3.2 (see Instructions above) to determine if your farm is allowed an exception to the requirements. If yes, inform the CAB which exception (#1, #2, or #3) is allowed and provide supporting evidence.</p>
<p>d. If the farm is sited in a protected area or HCVA and the exceptions provided for Indicator 2.3.2 <u>do not apply</u>, then the farm does not comply with the requirement and is ineligible for ASC certification.</p>		
Footnote	<p>[11] Protected area: “A clearly defined geographical space, recognized, dedicated and managed through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values</p> <p>High Conservation Value Areas (HCVA): Natural habitats where conservation values are considered to be of outstanding significance or critical importance. HCVA are designated through a multi-stakeholder approach that provides a systematic basis for identifying critical conservation values—both social and environmental—and for planning ecosystem management in order to ensure that these high conservation values are maintained or enhanced (http://www.hcvnetwork.org/).</p>	

2.3.3	<p>Indicator: Allowance for siting in mangrove ecosystems [12] and other natural wetlands [13],</p> <p>Requirement: None for farms built (with or without permits) after May 1999, except for pumping stations and inlet/outlet canals provided they have been permitted by authorities and an equivalent area is rehabilitated as compensation.</p> <p>For farms built or permitted before May 1999, farmers are required to compensate/offset impacts via rehabilitation of at least 50% of the affected ecosystem [14].</p> <p>Applicability: All</p>	<p>Instruction to Clients on Indicator 2.3.3 Any mangrove removal must be compensated by allowing the natural regrowth or reforestation in an equivalent area, using indigenous species adapted to the specific hydrological conditions of the farm site. When reforestation, plantings shall be done to create forests with similar relative composition and must include 80% of tree species that were in the original communities. Removal of natural wetlands must also be compensated by creating areas that possess similar ecological characteristics.</p> <p>a. Provide a declaration that identifies the year of farm construction, specify dates of any subsequent farm expansions and specify date and reason of any mangrove or wetland conversion conducted after May 1999. Additionally, auditor should use land use maps of the area before and after 1999. These documents are usually available at the local government offices (Planning department). Satellite images before and after 1999 are also admissible when available.</p> <p>b. For farms having converted mangrove/natural wetland ecosystems prior to May 1999, provide location and description (including surface area) of the area being rehabilitated. If natural regeneration has started in cleared areas and if propagules are establishing well, then this should be counted as "rehabilitation". Under these circumstances, regrowth is even more valuable than attempted rehabilitation that may or may not take successfully.</p> <p>Recommend that auditors should be provided with evidences of the conditions of the affected area that demonstrate rehabilitation</p> <p>c. For farms having converted mangrove/natural wetland ecosystems to construct pumping stations or inlet/outlet canals, provide location and description (including surface area) of the area being rehabilitated.</p>
Footnote	<p>[12] Mangrove Ecosystems: Mangrove forests are among the world's most productive ecosystems. These are often called 'tidal forests', 'coastal woodlands' or 'oceanic rainforests'. Mangroves are woody plants that grow in tropical and subtropical latitudes along the land-sea interface, bays, estuaries, lagoons, backwaters, and in the rivers, reaching upstream up to the point where the water still remains saline (Qasim, 1998). These plants and their associated organisms (microbes, fungi, other plants and animals), constitute the 'mangrove forest community' or 'mangal' (See Tomlinson PB (1986) The Botany of Mangroves. Cambridge, UK: Cambridge University Press. 413 p. for full list of true and associate mangrove plant species) The mangal and its associated abiotic factors constitute the mangrove ecosystem (Kathiresan and Bingham, 2001).</p>	
Footnote	<p>[13] Natural Wetland: For the purpose of this Standard, natural wetlands are non-artificial (i.e. not human made) areas of marsh, fen, peatland or water, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres. They may incorporate riparian and coastal zones adjacent to the wetlands, and islands or bodies of marine water deeper than six metres at low tide lying within the wetlands'. Ramsar Wetland Definition (Ramsar, Iran, 1971), Classification and Criteria for Internationally Important Wetlands. Under the Convention on Wetlands, 'wetlands' are defined by Articles 1.1 and 2.1).</p>	
Footnote	<p>[14] Consideration of local government programs for restoration and their effectiveness is advised. Mangrove areas preserved within the farm can be considered as part of the compensation (e.g. if a farm has 2ha, but they kept 1ha with mangroves inside the farm, they can be considered in compliance).</p>	
Criterion 2.4 Interaction with wildlife, including predators		Compliance Criteria (Required Client Actions):
2.4.1	<p>Indicator: Use of submerged acoustic deterrent devices (ADDs)</p> <p>Requirement: Not allowed</p>	<p>a. Prepare a written statement affirming that the farm's management is committed to not using submerged acoustic deterrent devices (ADDs) or submerged acoustic harassment devices (AHDs) for control of marine pests and/or predators.</p>

	Applicability: All	b. Compile documentary evidence to show that no submerged ADDs or AHDs are used on the farm (e.g. predator and pest control procedure and evidence of implementation).
2.4.2	Indicator: Number of mortalities ^[15] of endangered or red-listed ^[16] animals in the farm lease area and adjacent areas due to farm operations, personnel or associates over the previous 2 years Requirement: 0. Applicability: All.	a. Provide a list of endangered and red-listed animals occurring in the farm lease area and surrounding areas. b. Produce a documented record of the farm's impact on biodiversity and nearby ecosystems. Detail species/habitats, spatial/temporal aspects, type of interaction and outcome. c. Establish list of predators and pests requiring control. Identify clearly the permitted mitigation/control procedures and records that must be kept.
Footnote	[15] Mortalities: includes animals intentionally killed through lethal action as well as accidental deaths through entanglement or other means.	
Footnote	[16] Species listed as endangered or critically endangered by the IUCN or on a national endangered species list.	
2.4.3	Indicator: Allowance for intentional lethal action against predators/wildlife on the farm site. Requirement: None, unless human safety is immediately threatened. Applicability: All.	a. Maintain a log of predator control events that allows for verification of adherence to ASC requirements regarding predator control.
2.4.4	Indicator: All lethal incidents are recorded and categorized ^[17] and reported to ASC. Requirement: Yes Applicability: All	a. Record all mortalities, species and time of the event.
Footnote	[17] Categorized by the reason of incident	
2.4.5	Indicator: In the event of any lethal incident, evidence that an assessment of the probability of lethal incident(s) has been undertaken and demonstration of concrete steps taken by the farm to reduce the risk of future incidences Requirement: Yes. Applicability: All.	a. Carry out documented review of lethal incidents and revise risk assessment and procedures (see 2.3.1) if necessary / as appropriate. b. Demonstrate through revision of procedures that management of predators is continually being reviewed with a view to eliminating the need for lethal management.
Criterion 2.5 Pond Effluents ^[18] <i>*Criterion 2.5 is applicable for pond systems</i>		Compliance Criteria (Required Client Actions):
Footnote	[18] Applicable to pond culture systems only. Samples should be taken at the point source 2 hours after feeding, at least once per month. Farm must accumulate 6 months of data before initial site visit/farm audit.	
2.5.1	Indicator: Biological oxygen demand (BOD) Requirement: ≤ 30 mg/l average and no higher than 50 mg/l Applicability: All	a. Provide records that the samples are taken two hours after feeding, at least once per month.

		b Demonstrate the BOD is in average ≤ 30 mg/l and no higher than 50 mg/l
2.5.2	<p>Indicator: Total suspended solids</p> <p>Requirement: ≤ 30 mg/l average and no higher than 50 mg/l</p> <p>Applicability: All</p>	<p>a. Provide records that the samples are taken two hours after feeding, at least once per month.</p> <p>b Demonstrate the suspended solids are in average ≤ 30 mg/l and no higher than 50 mg/l</p>
2.5.3	<p>Indicator: Total Ammonia Nitrogen</p> <p>Requirement: ≤ 1 mg/l average and no higher than 1.5 mg/l</p> <p>Applicability: All</p>	<p>a. Provide records that the samples are taken two hours after feeding, at least once per month.</p> <p>b Demonstrate the total Ammonia Nitrogen are in average ≤ 1 mg/l average and no higher than 1.5 mg/l</p>
<p><i>Criterion 2.6 Sludge Disposal and Salinisation of Freshwater and Soil Resources</i> <i>*Criterion 2.6.4 is applicable for pond systems</i></p>		Compliance Criteria (Required Client Actions):
2.6.1	<p>Indicator: Evidence that sludge is not discharged directly into receiving waters or natural ecosystems [19]</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>a. Provide a detailed sludge management plan (also see 3.5.1). The plan will ensure that no sludge in any form is discharged directly into receiving waters or natural ecosystems.</p> <p>b. Maintain records of sludge disposal to show volume or weight and condition (i.e. fresh or dried) when disposed. For first audits, farm records must cover ≥ 3 months.</p> <p>c. If sludge is transferred (e.g. for agricultural use), obtain a declaration from the receiving party that specifies the sludge volume, delivery date, and expected use. The party shall declare that the sludge will not be discharged directly into receiving waters or natural ecosystems.</p> <p>d. If a sludge repository is used, provide a map showing its location within the farm or documents showing legal access to the repository (either ownership or a statement from the owner of right of use).</p>

2.6.2	<p>Indicator: Specific conductance or chloride concentration of sludge prior to disposal outside the farm</p> <p>Requirement: The specific conductance or chloride concentration values must not exceed those of the soil in the disposal area.</p> <p>Applicability: All farms</p>	<p>Instruction to Client on Indicator 2.6.2 The procedure for measuring chloride or specific conductance in soils is derived from the method used by Boyd et al. (2006) for aquaculture pond soil. Soil samples must be taken by forcing a core sampler (a 1-inch PVC tube would suffice but a professional soil sampler can also be used) into the ground with a hammer to a depth of 20cm. Samples must be dried (either by placing them in thin layers on plastic sheets and exposing them to the air in a warm, well-ventilated place, or in an oven at 60°C) and then pulverized and mixed (using a mortar or a mechanical soil crusher). Then the measurement involves taking a 20g sample of dry soil and placing it in a glass container, adding 40 mL of distilled water and shaking the mixture by hand for five minutes. The specific conductance can be measured directly in the solution or the solution can be filtered and the chloride concentration measured. Multiply measurement-specific conductance values by two to adjust for the dilution (40 mL of water for 20g of soil). Specific conductance values over 1,500 µS/cm or chloride concentrations above 300 mg/L indicate that the soil is saline. Farmers should begin generating monitoring data prior to the audit. Net increase is defined as an increase of 25% or more from initial values submitted during the initial certification audit.</p> <p>a. Maintain- records for every six months of specific conductance measured in sludge prior to disposal, and specific conductance or chloride concentration in the soil at the disposal site.</p> <p>b. Arrange for a specific conductance measurement to be taken in presence of the auditor</p>
2.6.3	<p>Indicator: Allowance for discharging saline water to natural freshwater bodies [20].</p> <p>Requirement: None</p> <p>Applicability: Farms located in or connected to natural freshwater bodies</p>	<p>a. Provide description of water management in the farm, specifying intake and discharge water bodies. Description shall include a written explanation of how the farm avoids intrusion of brackish or saltwater into freshwater aquifer areas.</p>
2.6.4	<p>Indicator: Water-specific conductance or chloride concentration in freshwater wells used by the farm or located on adjacent properties [21].</p> <p>Requirement: For all freshwater wells (identified prior to full assessment), specific conductance may not exceed 1,500 mhos per centimetre and/or chloride concentration may not exceed 300 milligrams per litre[22].</p> <p>Applicability: All well water. This criteria applies only to well water and does not apply to surface water. Farms located near freshwater wells or abstracting freshwater from the ground.</p>	<p>Instruction to Client on Indicator 2.6.4 The intent of this performance indicator is to assure that fresh groundwater and natural aquifers are not being impacted by shrimp farming. In order for farms to be eligible for certification, all freshwater wells, either located on the farm or adjacent properties, or any well exploited by the farm whatever its distance from the farm is, must be identified on the farm map (PI ***), and records giving either conductance or salinity chloride concentration values for all. Wells shall be available for the first audit. Wells that are identified as "freshwater" prior to full assessment, are those that have specific conductance values below 1500 µS/cm and/or salinity chloride concentration less than 300 mg/L. Farms will be required to provide records demonstrate ongoing conductance/salinity testing taken every 6 months, with one set of tests during the dry season and one during the wet season. Ongoing monitoring must demonstrate that the freshwater status of wells is maintained. Conductance shall be measured using a conductivity meter or chloride (not chlorine) tests if salinity levels are <2 parts per thousand. If a well is not available on the property, the closest well within 1km can be monitored (exempt if no well is within 1 km of farm). Conductance shall be measured using a conductivity meter or chloride (not chlorine) tests. Note that considerations related to surface water (vs groundwater in wells) can be found in 2.5.1.</p> <p>a. Maintain monthly records of specific conductance measured in a freshwater well on, or in proximity to the farm (within 1km radius or the closest well), or any well used by the farm whatever its distance from the farm is. Continue at least every six months after the first audit at periods of highest and lowest values, as determined during the initial monthly monitoring.</p> <p>b. Arrange for a specific conductance measurement to be taken in presence of the auditor.</p>

		c. . If water in freshwater wells exceeds conductance/salinity limits given by the requirement and such increase was due to a phenomenon outside the control of the farmer, provide evidence.
2.6.5	<p>Indicator: Soil-specific conductance or chloride concentration in adjacent land ecosystems and agricultural fields [22].</p> <p>Requirement: No net increase when compared to the first year of monitoring</p> <p>Applicability: All farms</p>	<p>Instruction to Client on Indicator 2.6.5 The procedure for measuring chloride or specific conductance in soils is derived from the method used by Boyd et al. (2006) for aquaculture pond soil. Soil samples must be taken by forcing a core sampler (a 1-inch PVC tube would suffice but a professional soil sampler can also be used) into the ground with a hammer to a depth of 20cm. Samples must be dried (either by placing them in thin layers on plastic sheets and exposing them to the air in a warm, well-ventilated place, or in an oven at 60°C) and then pulverized and mixed (using a mortar or a mechanical soil crusher). Then the measurement involves taking a 20g sample of dry soil and placing it in a glass container, adding 40 mL of distilled water and shaking the mixture by hand for five minutes. The specific conductance can be measured directly in the solution or the solution can be filtered and the chloride concentration measured. Multiply measurement-specific conductance values by two to adjust for the dilution (40 mL of water for 20g of soil). Specific conductance values over 1,500 µS/cm or chloride concentrations above 300 mg/L indicate that the soil is saline. Farmers should begin generating monitoring data prior to the audit. Net increase is defined as an increase of 25% or more from initial values submitted during the initial certification audit.</p> <p>a. Maintain- records for every six months of specific conductance measured in in adjacent land ecosystems and agricultural fields.</p> <p>b. Arrange for a specific conductance measurement to be taken in presence of the auditor</p> <p>c. If specific conductance has shown a net increase since the year of first monitoring. Provide evidence from an independent official organization (government agency, university) that such increase was due to a phenomenon outside the control of the farmer.</p>
Footnote	[19] Proper disposal includes delivery to a regulated or dedicated landfill or farmers may re-use the sludge. Evidence of the re-use needs to be available for the audit process. Examples of re-use methods allowed by the Standards are, as fertilizer or soil conditioner for the production of agriculture crops as landfill and other construction-related uses.	
Footnote	[20] Surface freshwater bodies adjacent to farm property or receiving waters discharged from the farm. Freshwater is characterised by a specific conductance of less than 1,500 µmhos per centimetre and a chloride concentration of less than 300 milligrams per litre. These values correspond to salinity inferior to 1 ppt. Farms that can demonstrate that surrounding waters and soils have a salinity of 2 and above using a hand-held refractometer will not be required to provide measurements of conductance or chloride concentration. Water bodies displaying freshwater conditions only during the peak rainy season are considered as brackish water bodies under these Standards.	
Footnote	[21] Exceptions are made if it can be demonstrated that seawater intrusion or other phenomenon outside the control of the farmer is responsible for the increase.	
Footnote	[22] Specific conductance or chloride concentration must be monitored at a frequency adapted to possible fluctuations because of natural factors such as rain regime, and comparisons with first-year values.	
Footnote	[23] Soil salinity must be measured 25 metres within adjacent land ecosystems and agricultural fields every six months. If salt contamination is detected at the 25-metre station, the monitoring could be extended further out as necessary. No progressive increase of specific conductance or chloride concentration should be observed over the years when compared to the first year of monitoring.	
PRINCIPLE 3: PROTECT THE HEALTH AND GENETIC INTEGRITY OF WILD POPULATIONS		
<i>Criterion 3.1 Culture of non-native species</i>		Compliance Criteria (Required Client Actions):

3.1.1	<p>Indicator: Culture of a non-native species^[23].</p> <p>Requirement: None, unless commercial^[24] farming of the species already occurs in the region at the time of first publication of the ASC Flatfish Standard, or a closed land-based production system with de minimis^[25] risk of escapes and/or pest and pathogen transfer to wild populations is used</p> <p>Applicability: All.</p>	<p>a. Confirm to the CAB that the farm only produces native species.</p> <p>b. If non-native species, provide verifiable evidence that the farming of the species already occurs in the region at the time of first publication of the ASC Flatfish Standard.</p> <p>c. If the farm cannot provide evidence for 3.1.1b, provide documented evidence that the production system is closed to the natural environment and for each of the following:</p> <ol style="list-style-type: none"> 1) non-native species are separated from wild fish by effective physical barriers that are in place and well maintained; 2) barriers ensure there are no escapes of reared fish specimens that might survive and subsequently reproduce; and 3) barriers ensure there are no escapes of biological material that might survive and subsequently reproduce (e.g. UV or other effective treatment) by treating effluent water prior to it exiting the system to the natural environment.
Footnote	[23] Includes non-native species for parasite control or other on- farm management purposes.	
Footnote	[24] Commercial: if a species is cultured as part of a permitted research trial, it will not be considered an existing commercial operation. Generally, research trials will contain no more than one pen of an experimental species.	
Footnote	[25] The cultured fish must not become established as a result of escapes.	
Criterion 3.2	<i>Introduction of transgenic species</i>	Compliance Criteria (Required Client Actions):
3.2.1	<p>Indicator: Culture of transgenic^[26] fish</p> <p>Requirement: Not permitted</p> <p>Applicability: All.</p>	<p>a. Prepare a declaration stating that the farm does not use transgenic stock.</p> <p>b. Maintain records for the origin of all cultured stocks including stocking date, supplier details, and contact person(s) for stock purchases.</p> <p>c. Ensure stock purchase/origin documentation clearly identifies genetic status and whether stock is transgenic or not.</p>
Footnote	[26] Transgenic: An organism, with the exception of human beings, in which the genetic material has been altered in a way that does not occur naturally by mating and/or natural recombination. Source: EFSA.	
Criterion 3.3	<i>Escapes</i>	Compliance Criteria (Required Client Actions):
		<p>a. Prepare a Escape Prevention and Management Plan that includes a detailed farm operations risk assessment and submit it to the CAB prior to the first audit. The plan should explicitly detail what maintenance procedures are critical and important in the context of avoiding escapes, including but not limited to farm equipment maintenance and frequency of net inspections.</p>

<p>3.3.1</p>	<p>Indicator: Evidence of a well-designed, maintained and managed culture system, infrastructure and farm management^[27] to minimize escapes during grow- out and harvest.</p> <p>Requirement: Yes.</p> <p>Applicability: All.</p>	<p>b. If the farm operates an open net pen system, ensure the plan (3.3.1a):</p> <p>1) clearly identifies the important and crucial issues in the context of minimizing escape events; and 2) sets out clear procedures for ensuring:</p> <ul style="list-style-type: none"> • net strength testing; • use of appropriate net mesh size; • net traceability; • system robustness; • predator management; • record keeping; • reporting risk events (e.g. holes, infrastructure issues, handling errors); • staff training to cover all of the above areas; and • staff training on escape prevention and counting technologies. <p>c. If the farm operates a closed system, ensure the plan (3.3.1a):</p> <p>1) clearly identifies the important and critical issues in the context of minimizing escape events; and 2) sets out clear procedures for ensuring:</p> <ul style="list-style-type: none"> • system robustness; • predator management; • record keeping; • reporting risk events (e.g. holes, infrastructure issues, handling errors); • staff training to cover all of the above areas; and • staff training on escape prevention and counting technologies. <p>d. Maintain records as specified in the plan.</p> <p>e. Train staff on escape prevention planning and management as per the farm's plan.</p>
<p>Footnote</p>	<p>[27] Proper farm management regarding escape prevention includes, but is not minimized to:</p> <p>1) assessing potential factors that can result in fish escapes (e.g. siting related to marine navigation, nets with appropriate net strength – including resistance to net biting from farmed fish and predators, net testing and maintenance, nets with appropriate net mesh size, appropriate mooring and cage-system robustness – including protection against floating debris and forecastable weather events, fish handling/transport procedures),</p> <p>2) assessing the risks for the listed risk factors (under 1) and developing Standard Operating Procedures (SOP) for</p> <p>3) training staff to be aware of the (potential) risks and to follow escape prevention SOP to minimize escape risk(s)</p> <p>4) record keeping and implementing corrective actions were identified</p> <p>5) reviewing the escape prevention management system on a yearly basis, or when escape events occur, and revise where and when needed.</p>	
<p>3.3.2</p>	<p>Indicator: The farm shall count all fish at every stocking, grading and harvest event with a counting accuracy of ≥98%^[28]</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>a. Maintain records of accuracy of the counting technology used by the farm at times of stocking and harvest. Records include copies of spec sheets for counting machines and common estimates of error for hand-counts.</p> <p>b. If counting takes place off site (e.g. hatchery), obtain and maintain documents from the supplier showing the accuracy of the counting method used (as above).</p>

		c. During audits, arrange for the auditor to witness calibration of counting machines (if used by the farm).
Footnote	[28] Accuracy of the counting technology (taken from manufacturer spec sheets) shall be validated and documented (e.g. frequency of hand counts)	
3.3.3	<p>Indicator: Total amount of known escapes^[29] allowed per production cycle (calendar year)</p> <p>Requirement: 4%^[30] of stocked count based on ≥98% counting accuracy</p> <p>Applicability: All.</p>	<p>a. Maintain detailed records of all incidences of confirmed or suspected escapes (specifying date, cause, and estimated number of escapees), mortalities, stocking count, harvest count (recovered fish).</p> <p>b. Aggregate cumulative escapes and cumulative stocking counts in the most recent production cycle (calendar year)</p>
Footnote	[29] Total amount of known escapes are all fish known to have escaped e.g. through handling errors.	
Footnote	[30] An exception (>4%) to this Standard may be made for an escape event that is clearly documented as being outside the farm's control. Only 1 exception is allowed in a 9-year period and this time window starts at the beginning of the production cycle (Calendar year) for which the farm is applying for initial certification. The farmer must demonstrate that there was no reasonable way to predict and/or mitigate the event that caused the escape.	
3.3.4	<p>Indicator: Total amount of unexplained loss^[31] per production cycle</p> <p>Requirement: 2% of stocked count based on ≥98% counting accuracy</p> <p>Applicability: All.</p>	<p>a. Maintain detailed records of all incidences of confirmed or suspected escapes (specifying date, cause, and estimated number of escapees), mortalities, stocking count, harvest count (recovered fish).</p> <p>b. Calculate the total unexplained loss = stocking count - harvest count - mortality count - known escapes (see indicator 3.3.3).</p>
Footnote	[31] Calculated at the end of the production cycle (calendar year) as: Unexplained loss = Stocking count – harvest count – mortality count – known escapes (see indicator 3.3.3). Stocking count and harvest count numbers must be based on ≥98% counting accuracy.	
3.3.5	<p>Indicator: Number of known escapes and unexplained losses are documented and made public as well as reported to ASC on an annual basis.</p> <p>Requirement: Yes</p> <p>Applicability: All.</p>	<p>a. The results from 3.3.4a are publicly available. Keep records of when and where escape records were made public (e.g. date posted to a company website) for all production cycles (calendar year).</p>
Criterion 3.4 Source of fingerlings/seed stock^[32]		Compliance Criteria (Required Client Actions):
Footnote	[32] This Standard defines seed/fingerling as entering an ASC certified farm to be ≤ 10g unless they come from an ASC certified farm/facility. A farm seeking certification would need to demonstrate through documentation that its fingerling or seed suppliers have met ASC requirements.	
3.4.1	<p>Indicator: Source of fingerlings</p> <p>Requirement: Hatchery only</p> <p>Applicability: All.</p>	<p>a. Provide details of the source of all fingerlings. Provide supporting documentation including purchase orders, invoices, delivery notes etc. that attest to the origin of fingerlings.</p>

3.4.2	<p>Indicator: Traceability of all hatchery purchased fingerlings to their source.</p> <p>Requirement: Yes.</p> <p>Applicability: All.</p>	<p>a. Provide supporting documentation including purchase orders, transit/movement authorisations, invoices, delivery notes, stocking records etc. that attest to the origin of all stock present on the farm.</p>
3.4.3	<p>Indicator: The fingerling supplier has a documented fish health and bio-security protocol or a comparable 3rd party certificate</p> <p>Requirement: Yes.</p> <p>Applicability: All.</p>	<p>a. Obtain a copy of the fingerling supplier's fish health management plan and bio-security protocol for the identification and monitoring of fish disease and parasites.</p> <p>b. Obtain internationally/nationally recognized 3rd party certificate for fish health and bio-security from fingerling suppliers.</p>
3.4.4	<p>Indicator: The receiving facility^[33] has a documented bio-security protocol, including quarantining, with respect to purchased fingerlings</p> <p>Requirement: Yes.</p> <p>Applicability: All.</p>	<p>a. Prepare a bio-security protocol for receiving purchased fingerlings that includes provisions for identification of fish disease and parasites and potential quarantining procedures. This plan may be part of a more comprehensive fish health management document.</p>
Footnote	<p>[33] The receiving facility includes private and/or government-run quarantine facility</p>	
3.4.5	<p>Indicator: All trans-national imported fingerlings must be accompanied by documentation required by importing countries (e.g. health certificate)</p> <p>Requirement: Yes.</p> <p>Applicability: All.</p>	<p>a. If fingerlings are purchased from international sources, all required documentation relating to health and bio-security (e.g. health certificates) must be retained and made available to the ASC auditor.</p>
3.4.6	<p>Indicator: The farm shall not release deformed fish into the wild and will dispose them in a responsible manner.</p> <p>Requirement: Yes.</p> <p>Applicability: All.</p>	<p>a. Provide evidence that deformed fish are disposed in a responsible manner(e.g receipt from waste compagny,</p>
<i>Criterion 3.5 Broodstock Management</i>		Compliance Criteria (Required Client Actions):

3.5.1	<p>Indicator: Allowance to use wild harvested broodstock of IUCN red-listed species classified as Endangered or Critically Endangered, for fingerling production.</p> <p>Requirement: No.</p> <p>Applicability: All.</p>	<p>a. If broodstock is an IUCN red-listed species classified as Endangered or Critically Endangered, provide evidence that the broodstock originated from a hatchery.</p>
3.5.2	<p>Indicator: Documented procedures are in place to limit non-controlled spawning of broodstock and evidence that these procedures are being followed</p> <p>Requirement: Yes.</p> <p>Applicability: All.</p>	<p>a. Provide the documented procedures and evidence that procedures are followed</p> <hr/> <p>b. Ensure that the procedures involve measures to prohibit the uncontrolled spawning of broodstock (e.g broodstock is single seks)</p>

PRINCIPLE 4: USE RESOURCES IN AN ENVIRONMENTALLY EFFICIENT AND RESPONSIBLE MANNER

Criterion 4.1 Traceability of raw materials in feed **Compliance Criteria (Required Client Actions):**

Instruction to Clients for Indicators 4.1.1 through 4.4.2 - Sourcing of Responsibly Produced Feed

Farms must show that all feeds used by the farm are produced in compliance with the requirements of Indicators 4.1.1 through 4.4.4. To do so, farms must obtain documentary evidence that the feed producers (see note 1) are audited at regular intervals by an independent auditing firm or a conformity assessment body against a recognized standard which substantially incorporate requirements for traceability. Acceptable certification schemes include GlobalGAP or other schemes that have been acknowledged by the ASC (see 4.1.1c below). Results from these audits shall demonstrate that feed producers have robust information systems and information handling processes to allow the feed producers to be able to bring forward accurate information about their production and supply chains. Declarations from the feed producer that are provided to the farm to demonstrate compliance with these indicators must be supported by the audits. Farms must also show that all of their feed producers are duly informed of the requirements of the ASC Flatfish Standard relating to sourcing of responsibly produced Sea Bass/Sea Bream feed (see 4.1.1b below).

In addition to the above, farms must also show that their feed suppliers comply with the more detailed requirements for traceability and ingredient sourcing that are specified under indicators 4.1.1 through 4.4.2. The ASC Sea Bass/Sea Bream Standard allows farms to use one of two different methods to demonstrate compliance of feed producers:

Method #1: Farms may choose to source feed from feed producers who used only those ingredients allowed under the ASC Flatfish Standards during the production of a given batch of feed. For example, the farm may request its feed supplier to produce a batch of feed according to farm specifications. Audits of the feed producer will independently verify that manufacturing processes are in compliance with ASC requirements.

Method #2: Farms may choose to source feed from feed producers who demonstrate compliance using a "mass-balance" method. In this method, feed producers show that the balance of all ingredients (both amount and type) used during a given feed production period meets ASC requirements. However, mixing of ingredients into the general silos and production lines is allowed during manufacturing. Audits of the feed producer will independently verify that manufacturing processes are in compliance with ASC requirements. The mass balance method can be applied, for example, to integrated feed production companies that handle all steps of feed manufacturing (purchasing of raw materials, processing to finished feed, and sales) under the management of a single legal entity.

Note 1: The term "feed producer" is used here to identify the organization that produces the fish feed (i.e. it is the "feed manufacturer"). In most cases, the organization supplying feed to a farm (i.e. the feed supplier) will be the same organization that produced the feed, but there may be instances where feed suppliers are not directly responsible for feed production. Regardless of whether the farm sources feeds directly from a feed producer or indirectly through an intermediary organization, it remains the farm's obligation to show evidence that all feeds used are in compliance with requirements.

4.1.1	<p>Indicator: Evidence of traceability, demonstrated by the feed producer, of all fishmeal and fish oil ingredients^[25]</p> <p>Requirement: Yes.</p> <p>Applicability: All.</p>	<p>a. Maintain detailed records of all feed suppliers and purchases including contact information and purchase and delivery records.</p> <p>b. Inform each feed supplier in writing of ASC requirements pertaining to production of Sea Bass/Sea Bream feeds and send them a copy of the ASC FlatfishStandard.</p> <p>c. For each feed producer used by the farm, confirm that an audit of the producer was recently done by an audit firm or CAB against an ASC-acknowledged certification scheme. Obtain a copy of the most recent audit report for each feed producer.</p> <p>d. For each feed producer, determine whether the farm will use method #1 or method #2 (see Instructions above) to show compliance of feed producers. Inform the CAB in writing.</p> <p>e. Obtain declaration from feed supplier(s) stating that the company can assure traceability of all fishmeal and fish oil ingredients in the feed.</p>
Footnote	<p>[25] Traceability should be at a level of detail that permits the feed producer to demonstrate compliance with the requirements in this document. This Standard also assumes that the feed producer will make available to the farm a list of the FMFO- ingredients, the inclusion rates of FMFO, and the sources of each FMFO-ingredient.</p>	
<p><i>Criterion 4.2 Use of wild fish for feed</i></p>		<p>Compliance Criteria (Required Client Actions):</p>
4.2.1	<p>Indicator: Fishmeal Forage Fish Dependency Ratio (FFDRm) for grow-out (calculated using formulas in Appendix 2 (see standard)</p> <p>Requirement:-(a) FFDRm Halibut ≤2.45 (now), 2.2 (3 years), 2.0 (6 years) (b) FFDRm Turbot ≤3.21 (now), 2.8 (3 years), 2.5 (6 years) (c) FFDRm Flounder ≤2.18 (now), 1.9 (3 years), 1.6 (6 years)</p> <p>Applicability: All.</p>	<p>Instruction to Clients for Indicator 4.2.1, 4.2.2 - Calculation of FFDRm and FFDRo Farms must calculate the Fishmeal Forage Fish Dependency Ratio (FFDRm) and Fish Oil Forage Fish Dependency Ratio (FFDRo) according to formula presented in Appendix 2 using data from the most recent complete production cycle (Calendar year). Farms must also show that they have maintained sufficient information in order to make an accurate calculation of FFDRm and FFDRo as outlined below. For first audits, farms may be exempted from compliance with Indicator 4.2.1 and 4.2.2 for the most recent complete production cycle if the farm can satisfactorily demonstrate to the auditor that:</p> <ul style="list-style-type: none"> - the client understands how to accurately calculate FFDRm and FFDRo; - the client maintains all information needed to accurately calculate FFDRm and FFDRo (i.e. all feed specs for > 6 months) for the current production cycle - the client can show how feed used for the current production cycle will ensure that the farm will meet requirements at harvest. <p>a. Maintain a detailed inventory of the feed used including:</p> <ul style="list-style-type: none"> - Quantities used of each formulation (kg); - Percentage of fishmeal in each formulation used; - Source (fishery) of fishmeal in each formulation used; - Percentage of fishmeal in each formulation derived from trimmings; and - Supporting documentation and signed declaration from feed supplier. <p>b. For FFDRm calculation, exclude fishmeal derived from rendering of seafood by-products (e.g. the "trimmings" from a human consumption fishery).</p> <p>c. Calculate eFCR using formula in Appendix 2 (see standard).</p> <p>d. Calculate FFDRm using formulas in Appendix 2(see standard).</p>
	<p>Indicator: Fish Oil Forage Fish Dependency Ratio (FFDRo) for grow-</p>	<p>a. Maintain a detailed inventory of the feed used as specified in 4.2.1a.</p>

4.2.2	<p>out (calculated using formulas in Appendix 2 (see standard))</p> <p>Requirement: (a) FFDRm Halibut ≤4.0 (now), 3.5 (3 years), 3.0 (6 years) (b) FFDRm Turbot ≤3.78 (now), 3.4 (3 years), 3.0 (6 years) (c) FFDRm Flounder ≤2.64 (now), 2.2 (3 years), 2.0 (6 years)</p> <p>Applicability: All.</p>	<p>b. For FFDRo exclude fish oil derived from rendering of seafood by-products (e.g. the "trimmings" from a human consumption fishery.)</p> <p>c. Calculate FFDRo using formulas in Appendix 2 (see standard) and using the eFCR calculated under 4.2.1c.</p>
<i>Criterion 4.3 Responsible origin of marine raw materials</i>		Compliance Criteria (Required Client Actions):
4.3.1	<p>Indicator: Timeframe for at least 90% fishmeal or fish oil used in feed to come from fisheries^[26] certified under an ISEAL member's accredited certification whose primary goal is to promote ecological sustainability</p> <p>Requirement: (see note above)</p> <p>Applicability: All.</p>	<p>Note: In November 2016 ASC published an Interim Solution for ASC Marine Feed Ingredients, which will replace indicators 4.3.1 and 4.3.2 of this Standard. This solution applies to all ASC's Standards, which have indicators for marine raw material origin, including this ASC Flatfish Standard. This interim solution will apply until the ASC Feed Standard will be available or until further official and public notice by ASC</p> <p>a. Prepare a policy stating the company's support of efforts to shift feed manufacturers purchases of fishmeal and fish oil to fisheries certified under a scheme that is an ISEAL member and has guidelines that specifically promote responsible environmental management of small pelagic fisheries.</p> <p>b. Prepare a letter stating the farm's intent to source feed containing fishmeal and fish oil originating from fisheries certified under the type of certification scheme noted in 4.3.1a.</p>
Footnote	[26] This requirement applies to fishmeal and fish oil from forage fisheries and not to by-products or trimmings used in feed nor to non-fish EPA/DHA-sources (e.g. EPA/DHA produce by algae).	
4.3.2	<p>Indicator: Prior to achieving 4.3.1 the fishmeal or fish oil used in feed must have a FishSource stock health score of 6.0 or higher or show evidence of being engaged in a credible and time bound fisheries improvement project (FIP)</p> <p>Requirement: (see note above)</p> <p>Applicability: All</p>	<p>Instruction to Clients for Indicator 4.3.2 - FishSource Score of Fish Used in Feed To determine FishSource scores of the fish species used as feed ingredients, do the following: -go to http://www.fishsource.org/ - type the species into the search function box and choose the accurate fishery -confirm that the search identifies the correct fishery then scroll down or click on the link from the menu on the left reads "Scores"</p> <p>For first audits, farms must have scoring records that cover all feeds purchased during the previous 6-month period.</p> <p>Note: Indicator 4.3.2 applies to fishmeal and oil from forage fisheries, pelagic fisheries, or fisheries where the catch is directly reduced (including krill) and not to by-products or trimmings used in feed.</p> <p>a. Record FishSource score for each species from which fishmeal or fish oil was derived and used as a feed ingredient (all species listed in 4.2.1a).</p> <p>b. Confirm that each stock health score ≥ 6.</p>

		<p>c. If the species is not on the website it means that a FishSource assessment is not available. Client can then take one or both of the following actions:</p> <ol style="list-style-type: none"> 1. Contact FishSource via Sustainable Fisheries Partnerships to identify the species as a priority for assessment. 2. Contract a qualified independent third party to conduct the assessment using the FishSource methodology and provide the assessment and details on the third party qualifications to the CAB for review.
4.3.3	<p>Indicator: Feed containing fishmeal and/or fish oil originating from by-products^[27] or trimmings from fish species which are categorized as vulnerable, endangered or critically endangered, according to the IUCN Red List of Threatened Species^[28]</p> <p>Requirement: None</p> <p>Applicability: All</p>	<p>a. Compile and maintain, consistent with 4.2.1a and 4.2.2a, a list of the fishery of origin for all fishmeal and fish oil originating from by-products and trimmings.</p> <p>b. Obtain a declaration from the feed supplier stating that no fishmeal or fish oil originating from IUU catch was used to produce the feed.</p> <p>c. Obtain from the feed supplier declaration that the meal or oil did not originate from a species categorized as vulnerable, endangered or critically endangered, according to the IUCN Red List of Threatened Species and explaining how they are able to demonstrate this (i.e. through other certification scheme or through their independent audit).</p> <p>d. If meal or oil originated from a species listed as “vulnerable” by IUCN, obtain documentary evidence to support the exception as outlined in.</p>
Footnote	[27] Trimmings are defined as by-products when fish are processed for human consumption or if whole fish is rejected for use of human consumption because the quality at the time of landing does not meet official regulations with regard to fish suitable for human consumption.	
Footnote	[28] International Union for the Conservation of Nature (IUCN) reference at http://www.iucnredlist.org/static/introduction .	
4.3.4	<p>Indicator: Feed ingredients which come from other fish from the same genus</p> <p>Requirement: None</p> <p>Applicability: All</p>	<p>a. Obtain from feed producers and/or suppliers declarations that the fishmeal and/or fish oil does not originate from fish of the same genus as that under cultivation.</p> <p>b. Obtain documentary evidence that feed manufacturer operates procedures to ensure that no raw material in a diet originates from the same genus as the fish for which the diet is intended. This includes all fishmeal and fish oil (including bulk fish and waste/trimmings/byproduct) that may be used.</p>
Criterion 4.4 Source of non-marine raw materials in feed		Compliance Criteria (Required Client Actions):
4.4.1	<p>Indicator: Presence and evidence of traceability and a responsible sourcing policy for the feed manufacturer for feed ingredients which comply with internationally recognized moratoriums and local laws^[29]</p>	<p>a. Compile and maintain a list of all feed suppliers with contact information. (See also 4.1.1a)</p> <p>b. Obtain from each feed manufacturer a copy of the manufacturer's responsible sourcing policy for feed ingredients showing how the company complies with recognized crop moratoriums and local laws.</p>

	<p>Requirement: Yes.</p> <p>Applicability: All.</p>	c. Confirm that third party audits of feed suppliers (4.1.1c) show evidence that supplier's responsible sourcing policies are implemented.
Footnote	[29] Specifically, the policy shall include that vegetable ingredients, or products derived from vegetable ingredients, must not come from the Amazon Biome as geographically defined by the Brazilian Soya Moratorium	
4.4.2	<p>Indicator: Documentation of the use of transgenic^[30] plant raw materials, or raw materials derived from genetically modified plants, in the feed</p> <p>Requirement: Yes.</p> <p>Applicability: All.</p>	a. Obtain from feed supplier(s) a declaration detailing the content of soya and other plant raw materials in feed and whether it is transgenic.
Footnote	[30] Transgenic: An organism, with the exception of human beings, in which the genetic material has been altered in a way that does not occur naturally by mating and/or natural recombination. Source: EFSA.	
4.4.3	<p>Indicator: Percent of non-marine ingredients from sources certified by an ISEAL Member's certification scheme that addresses environmental and social sustainability</p> <p>Requirement: 80% for soy and palm oil within 5 years following the date of the publication of the ASC Flatfish Standard</p> <p>Applicability: All.</p>	<p>a. Obtain documentation that indicates the relative quantities of non-marine ingredients used in feed manufacture that is certified under an ISEAL member's accredited certification.</p> <p>b. For non-conforming farms, prepare a declaration stating the farm's intent to source feed that contains non-marine ingredients certified under an ISEAL member standard that addresses both environmental and social sustainability.</p> <p>c. If audit >5years after publication of the standards, provide documentation that confirms that requirement for at least 80% of non-marine ingredients used in feed comes from ISEAL member certifications that address both environmental and social sustainability.</p>
<i>Criterion 4.5 Waste management/pollution control</i>		Compliance Criteria (Required Client Actions):
4.5.1	<p>Indicator: Evidence that non-biological waste (including net pens) from grow-out site is either disposed of properly or recycled.</p> <p>Requirement: Yes.</p> <p>Applicability: All.</p>	<p>a. Provide a description of the most common production waste materials and how the farm ensures these waste materials are properly disposed of. (see also 4.5.1c)</p> <p>b. Provide a description of the types of waste materials that are recycled by the farm. (See also 4.5.1d)</p> <p>c. Inform the CAB of any infractions or fines for improper waste disposal received during the previous 12 months and corrective actions taken..</p> <p>d. Maintain records of disposal of waste materials including old nets and cage equipment.</p>

4.5.2	<p>Indicator: Evidence of appropriate storage and/or disposal of biological waste</p> <p>Requirement: Yes.</p> <p>Applicability: All.</p>	<p>a. Develop procedure that ensures proper disposal of all biological waste.</p> <p>b. Maintain records to show how the farm disposes of dead fish and other forms of biological waste.</p>
4.5.3	<p>Indicator: Evidence of appropriate storage and/or disposal of chemical and hydrocarbon wastes</p> <p>Requirement: Yes.</p> <p>Applicability: All.</p>	<p>a. Ensure that the disposal and storage of chemical and hydrocarbon wastes are done according to local law and Material Safety Data Sheets (MSDS). Farms shall maintain an inventory of all chemicals used or located on site.</p>
4.5.4	<p>Indicator: Spill prevention and response plan for chemicals/hydrocarbons originating from farming operations</p> <p>Requirement: Yes.</p> <p>Applicability: All.</p>	<p>a. Prepare a prevention and response plan spills of chemical and hydrocarbon waste. The plan shall outline the preventative maintenance of equipment exist and in place for the avoidance of fuel spills from vehicles, winches, cranes, and mechanical equipment on land and water.</p>
4.5.5	<p>Indicator: For any farm that cleans nets on-land, evidence that net-cleaning sites have effluent treatment^[31]</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>a. If nets are cleaned on-land, obtain documentary evidence from each net-cleaning facility that effluent treatment is in place.</p> <p>b. Obtain evidence that effluent treatment used at the cleaning site is an appropriate technology to capture of copper in effluents.</p>
Footnote	[31] Treatment must have appropriate technologies in place to capture copper if the farm uses copper-treated nets.	
<i>Criterion 4.6 Energy consumption and greenhouse gas emissions on farms</i>		Compliance Criteria (Required Client Actions):
4.6.1	<p>Indicator: Presence of an energy use assessment verifying the energy consumption on the farm and representing the production cycle (calendar year), as outlined in Appendix 3</p> <p>Requirement: Within two years of the initial audit (measured in kilojoule/t fish/production cycle)</p> <p>Applicability: All</p>	<p>Instruction to Clients for Indicator 4.6.1 - Energy Use Assessment</p> <p>Indicator 4.6.1 requires that farms must have an assessment to verify energy consumption. The scope of this requirement is restricted to operational energy use for the farm site(s) that is applying for certification. Boundaries for operational energy use should correspond to the sources of Scope 1 and Scope 2 emissions (see Appendix 3). Energy use corresponding to Scope 3 emissions (i.e. the energy used to fabricate materials that are purchased by the farm) is not required. However the ASC encourages companies to integrate energy use assessments across the board in the company.</p> <p>Quantities of energy (fuel and electricity) are converted to kilojoules. Verification is done by internal or external assessment following either the GHG Protocol Corporate Standard or ISO 14064-1 (see Appendix 3 in the standard for more details).</p> <p>a. Maintain records for energy consumption by source (fuel, electricity) on the farm throughout each production cycle (calendar year).</p> <p>b. Calculate the farm's total energy consumption in kilojoules (kj) during the last production cycle (calendar year).</p>

	<p>Applicability: All</p>	<p>c. Calculate the total weight of fish in tons (t) produced during the last production cycle (calendar year).</p> <p>d. Using results from 4.6.1b and 4.6.1c, calculate energy consumption on the farm as required, reported as kilojoule/mt fish/production cycle.</p> <p>e. Ensure that the farm has undergone an energy use assessment that was done in compliance with requirements of Appendix 3(see standard).</p>
<p>4.6.2</p>	<p>Indicator: Records of greenhouse gas (GHG^[32]) emissions^[33] on farm and evidence of an annual GHG assessment, as outlined in Appendix 3(see standard)</p> <p>Requirement: Yes, within two years of the initial audit</p> <p>Applicability: All</p>	<p>Instruction to Clients for Indicator 4.6.2 - Annual GHG Assessment Indicator 4.6.2 requires that farms must have an annual Greenhouse Gas (GHG) assessment. Detailed instructions are presented in Appendix 3 and references therein. The scope of this requirement is restricted to operational boundaries for the farm site(s) that is applying for certification. However the ASC encourages companies to integrate GHG accounting practices across the board in the company. Verification may be done by internal or external assessment following either the GHG Protocol Corporate Standard or ISO 14064-1 (see Appendix 3 for more details).</p> <p>a. Maintain records of greenhouse gas emissions on the farm.</p> <p>b. At least annually, calculate all scope 1 and scope 2 GHG emissions in compliance with Appendix 3 (see standard).</p> <p>c. For GHG calculations, select the emission factors which are best suited to the farm's operation. Document the source of those emissions factors.</p> <p>d. For GHG calculations involving conversion of non-CO₂ gases to CO₂ equivalents, specify the Global Warming Potential (GWP) used and its source.</p>
<p>Footnote</p>	<p>[32] For the purposes of this Standard, GHGs are defined as the six gases listed in the Kyoto Protocol: carbon dioxide (CO₂); methane (CH₄); nitrous oxide (N₂O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and sulphur hexafluoride (SF₆).</p>	
<p>Footnote</p>	<p>[33] GHG emissions must be recorded using recognized methods, standards and records as outlined in Appendix 3 (see standard).</p>	
	<p>Indicator: Documentation of GHG emissions of the feed^[34] used during the previous production cycle reported (calendar year) to ASC as outlined in Appendix 3</p>	<p>Instruction to Clients for Indicator 4.6.3 - GHG Emissions of Feed Indicator 4.6.3 requires that farms document the greenhouse gas emissions (GHG) associated with any feeds used during fish production. Farms will need to obtain this information from their feed supplier(s) and thereafter maintain a continuous record of Feed GHG emissions throughout all production cycles (calendar year). This requirement takes effect on June 13, 2015 and it will apply across the entire previous production cycle. Therefore the ASC advises farms to inform their feed supplier(s) about this requirement long before the effective date. Specifically, the ASC recommends that...</p> <ul style="list-style-type: none"> - the farm provides its feed suppliers with detailed information about the requirements including a copy of the methodology outlined in Appendix 3 (see standard); - the farm explain what analyses must be done by feed suppliers; and - the farm explains to feed suppliers what documentary evidence will be required by the farm to demonstrate compliance. <p>Note1: Farms may calculate GHG emissions of feed using the average raw material composition used to produce the fish (by weight) rather than using feed composition on a lot-by-lot basis.</p> <p>Note2: Feed supplier's calculations must include Scope 1, Scope 2, and Scope 3 GHG emissions as specified in Appendix 3, subsection 2.</p>

4.6.3	<p>ASC, as outlined in Appendix 3</p> <p>Requirement: Yes, within three years of the initial audit</p> <p>Applicability: All</p>	<p>a. Obtain from feed supplier(s) a declaration detailing the GHG emissions of the feed (per kg feed).</p> <p>b. Multiply the GHG emissions per unit feed by the total amount of feed from each supplier used in the most recent completed production cycle (calendar year).</p> <p>c. If client has more than one feed supplier, calculate the total sum of emissions from feed by summing the GHG emissions of feed from each supplier.</p> <p>d. Submit GHG emissions of feed to ASC as per Appendix 3 (see standard) for each production cycle (calendar year).</p>
Footnote	<p>[34] GHG emissions from feed can be given based on the average raw material composition used to produce the fish (by weight) and not as documentation linked to each single product used during the production cycle (calendar year). Feed manufacturer is responsible for calculating GHG emissions per unit feed. Farm site then shall use that information to calculate GHG emissions for the volume of feed they used in the prior production cycle (calendar year).</p>	
4.6.4	<p>Indicator: Evidence of a documented strategy to reduce GHG per unit of production (measured in kilojoule/t fish produced)</p> <p>Requirement: Yes, within three years of the initial audit</p> <p>Applicability: All</p>	<p>a. Prepare a strategy to reduce GHG per unit of production based on energy use and GHG assessments completed during the certification period.</p>
<p>PRINCIPLE 5: MANAGE DISEASE AND PARASITES IN AN ENVIRONMENTALLY RESPONSIBLE MANNER</p>		
<p><i>Criterion 5.1 Fish Health Management</i></p>		<p>Compliance Criteria (Required Client Actions):</p>
5.1.1	<p>Indicator: Evidence of a veterinary approved Fish Health Management Plan (FHMP)^[35]</p> <p>Requirement: Yes.</p> <p>Applicability: All.</p>	<p>a. Prepare a fish health management plan that incorporates components related to identification and monitoring of fish disease and parasites. This plan may be part of a more comprehensive farm planning document.</p> <p>b. Ensure that documentation is available to verify that the fish health management plan includes mandatory procedures for either:</p> <ul style="list-style-type: none"> i) vaccination against diseases that present a risk in the region and for which an effective and commercially viable vaccine exists; OR ii) veterinarian-approved alternative fish health management strategies. <p>c. Ensure that the farm's current fish health management plan was reviewed and approved by the farm's designated veterinarian.</p>
Footnote	<p>[35] A FHMP contains at a minimum the following elements: 1) listing (potential)diseases/parasites occurring in the region and (potential) means for these diseases/parasites to enter the farm, 2) identification of actions to reduce the risk of diseases entering the farm as well as spreading within the farm once established, 3) development of SOP's and training staff to implement the identified actions under 2), 4) monitoring and evaluation of the FHMP on a yearly basis, or after a disease/parasite event.</p>	

5.1.2	<p>Indicator: Farm maintains a fish health management record keeping system</p> <p>Requirement: Yes</p> <p>Applicability: All.</p>	a. Maintain a record keeping system to monitor all diseases /parasites and treatments on the farm.
Criterion 5.2 Chemicals and treatments		Compliance Criteria (Required Client Actions):
5.2.1	<p>Indicator: Use of therapeutic treatments that are listed as critically important for human medicine by the World Health Organization^[36]</p> <p>Requirement: Not permitted.</p> <p>Applicability: All.</p>	<p>a. Maintain a current version of the WHO list of antimicrobials critically and highly important for human health.</p> <p>b. Maintain a list of therapeutants the use of which in finfish aquaculture are banned by law.</p> <p>c. If the farm has used antibiotics listed as critically important to human health and/or has used therapeutants that are banned in finfish culture to treat any fish during the current production cycle (calendar year), inform the CAB prior to scheduling audit.</p> <p>d. If yes to 5.2.1c, request an exemption to the requirement of 5.2.1 from the CAB in order to certify only that portion of production that complies with the indicator. Prior to the audit, provide the CAB with records sufficient to establish details of treatment, which holding facilities were treated, and how the farm will ensure full traceability and separation of treated fish through and post-harvest.</p>
Footnote	[36] WHO Critical Microbials for Human Medicine, 5th edition, 2016. http://www.who.int/foodsafety/areas_work/antimicrobial-resistance/cia/en/	
5.2.2	<p>Indicator: Prophylactic use of chemical antimicrobial treatments.</p> <p>Requirement: Not permitted.</p> <p>Applicability: All.</p>	<p>a. Maintain records for all purchases of chemical antimicrobials (invoices, prescriptions) for the current and prior production cycles (calendar year).</p> <p>b. Maintain a detailed log of all medication-related events (see also 5.2.1a and 5.2.3).</p> <p>c. Calculate the total amount (g) and treatments (#) of chemical antimicrobials used during the current and preceding production cycles (calendar year).</p>

5.2.3	<p>Indicator: On-farm documentation that includes, at a minimum, detailed information on all chemicals^[37] and therapeutants used during the most recent production cycle, the amounts used (including grams per kg of fish produced), the dates used, which group of fish were treated and against which diseases, proof of proper dosing, and all disease and pathogens detected on the site</p> <p>Requirement: Yes.</p> <p>Applicability: All.</p>	<p>a. Maintain comprehensive documentation on all chemicals and therapeutants used on the farm that includes the amounts used (including grams per kg of fish produced), the dates used, the retention time, which group of fish were treated and against which diseases, proof of proper dosing, and all disease and pathogens detected on the site.</p>
Footnote	[37] Chemicals used for the treatment of fish	
5.2.4	<p>Indicator: Allowable farm level anti-parasiticide treatment (bath), not including freshwater or hydrogen peroxide</p> <p>Requirement: None</p> <p>Applicability: All.</p>	<p>a. Identify permitted anti-parasiticides that may be applied to stock during the farming procedure in the fish health management plan. Provide Material Data Safety Sheets for all anti-parasiticide products that are used. Other than freshwater, formaldehyde and hydrogen peroxide only one prescribed anti-parasiticide treatment is allowed.</p> <p>b. Make available records relating to all chemical, veterinary and therapeutant suppliers. Include Invoices, laboratory testing results as well as prescriptions and treatment records.</p>
5.2.5	<p>Indicator: Number of treatments^[38] of antibiotics over the most recent production cycle (calendar year)</p> <p>Requirement: ≤ 3</p> <p>Applicability: All</p>	<p>Note: for the purposes of Indicator 5.2.5, "treatment" means a single course of medication given to address a specific disease issue and that may last a number of days and be applied in one or more pens (or cages).</p> <p>a. Maintain records of all treatments of antibiotics (see 5.2.1a). For first audits, farm records must cover the current and immediately prior production cycles (calendar year) in a verifiable statement.</p> <p>b. Calculate the total number of treatments of antibiotics over the most recent production cycle (calendar year) and supply a verifiable statement of this calculation.</p>
Footnote	[38] A treatment is a single course medication given to address a specific disease issue and that may last a number of days.	
Criterion 5.3 Survival of farmed fish		Compliance Criteria (Required Client Actions):
5.3.1	<p>Indicator: All recovered mortalities are removed and disposed of in a responsible manner</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>a. Maintain records of mortality removals to show that dead fish are removed regularly and disposed of in a responsible manner.</p> <p>b. Collect documentation to show that disposal methods are in line with practices recommended by fish health managers and/or relevant legal authorities.</p> <p>c. For any exceptional mortality event where dead fish were not collected for post-mortem analysis, keep a written justification.</p>

5.3.2	<p>Indicator: Classification of mortalities</p> <p>Requirement: All recovered mortalities are recorded and classified by cause of death</p> <p>Applicability: All</p>	<p>a. Maintain detailed records for all mortalities and post-mortem analyses including:</p> <ul style="list-style-type: none"> - date of mortality and date of post-mortem analysis; - total number of mortalities and number receiving post-mortem analysis; - name of the person or lab conducting the post-mortem analyses; - qualifications of the individual (e.g. veterinarian, fish health manager); - cause of mortality (specify disease or pathogen) where known; and - classification as 'unexplained' when cause of mortality is unknown. <p>b. For each mortality event, ensure that post-mortem analyses are done on a statistically relevant number of fish and keep a record of the results.</p> <p>c. If on-site diagnosis is inconclusive and disease is suspected or results are inconclusive over a 1-2 week period, ensure that fish are sent to an off-site laboratory for diagnosis and keep a record of the results.</p>
5.3.3	<p>Indicator: When unexplained mortalities exceed $\geq 0.5\%$ / per day, samples are submitted for analysis by a veterinarian or designated fish health expert</p> <p>Requirement: Yes</p> <p>Applicability: All.</p>	<p>a. Maintain records of unexplained mortalities and responses triggered when unexplained mortalities exceeds 0.5% per day.</p>
5.3.4	<p>Indicator: Evidence of a farm specific mortalities reduction program that includes defined annual targets for reductions in mortalities and reductions in unexplained mortalities.</p> <p>Requirement: Yes.</p> <p>Applicability: All.</p>	<p>Note: Farms have the option to integrate their farm-specific mortality reduction program into the farm's fish health management plan (5.1.1).</p> <p>a. Use records in 5.3.2 to assemble a time-series dataset on farm-specific mortalities rates and unexplained mortality rates.</p> <p>b. Use the data in 5.3.2 and advice from the veterinarian and/or fish health manager to develop a mortalities-reduction program that defines annual targets for reductions in total mortality and unexplained mortality.</p> <p>c. Ensure that farm management communicates with the veterinarian, fish health manager, and staff about annual targets and planned actions to meet targets.</p>
PRINCIPLE 6: DEVELOP AND OPERATE FARMS IN A SOCIALLY RESPONSIBLE MANNER		
6.1	<p><i>6.1 Freedom of association and collective bargaining</i>^[39]</p>	Compliance Criteria (Required Client Actions):
Footnote	[39] Bargain collectively: A voluntary negotiation between employers and organizations of workers in order to establish the terms and conditions of employment by means of collective (written) agreements.	
6.1.1	<p>Indicator: Evidence that workers have access to trade unions (if they exist) and union representative(s) chosen by themselves without managerial interference.</p>	<p>a. Workers have the freedom to join any trade union, free of any form of interference from employers or competing organizations set up or backed by the employer. Farms shall prepare documentation to demonstrate to the auditor that domestic regulation fully meets these criteria.</p> <p>b. Union representatives (or worker representatives) are chosen by workers without managerial interference. ILO specifically prohibits "acts which are designated to promote the establishment of worker organizations or to support worker organizations under the control or employers or employers' organizations."</p>

	<p>Requirement: Yes</p> <p>Applicability: All</p>	<p>c. Trade union representatives (or worker representatives) have access to their members in the workplace at reasonable times on the premises.</p> <p>d. Be advised that workers and union representatives (if they exist) will be interviewed to confirm the above.</p>
6.1.2	<p>Indicator: Evidence that workers are free to form organizations, including unions, to advocate for and protect their rights.</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>a. Employment contract explicitly states the worker's right of freedom of association.</p> <p>b. Employer communicates that workers are free to form organizations to advocate for and protect work rights (e.g. farm policies on Freedom of Association).</p> <p>c. Be advised that workers will be interviewed to confirm the above.</p>
6.1.3	<p>Indicator: Evidence that workers are free and able to bargain collectively for their rights.</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>a. Local trade union, or where none exists a reputable civil-society organization, confirms no outstanding cases against the farm site management for violations of employees' freedom of association and collective bargaining rights.</p> <p>b. Employer has explicitly communicated a commitment to ensure the collective bargaining rights of all workers.</p> <p>c. There is documentary evidence that workers are free and able to bargain collectively (e.g. collective bargaining agreements, meeting minutes, or complaint resolutions).</p>
Criterion 6.2 Child labor		Compliance Criteria (Required Client Actions):
6.2.1	<p>Indicator: Number of incidences of child^[40] labor^[41]</p> <p>Requirement: None</p> <p>Applicability: All except as noted 6.2.1a</p>	<p>a. In most countries, the law states that minimum age for employment is 15 years. There are two possible exceptions: - in developing countries where the legal minimum age may be set to 14 years or - in countries where the legal minimum age is set higher than 15 years, in which case the legal minimum age of the country is followed. If the farm operates in a country where the legal minimum ages is not 15, then the employer shall maintain documentation attesting to this fact.</p> <p>b. Minimum age of permanent workers is 15 or older (except in countries as noted above).</p> <p>c. Employer maintains age records for employees that are sufficient to demonstrate compliance.</p>
Footnote	[40] Child: Any person under 15 years of age. A higher age would apply if the minimum age law of an area stipulates a higher age for work or mandatory schooling. Minimum age may be 14 if the country allows it under the developing country exceptions in ILO convention 138.	
Footnote	[41] Child Labor: Any work by a child younger than the age specified in the definition of a child.	
6.2.2	<p>Indicator: Percentage of young workers^[42] that are protected</p> <p>Requirement: 100%</p> <p>Applicability: All</p>	<p>a. Young workers are appropriately identified in company policies & training programs, and job descriptions are available for all young workers at the site.</p> <p>b. All young workers (from age 15 to less than 18) are identified and their ages are confirmed with copies of IDs.</p> <p>c. Daily records of working hours (i.e. timesheets) are available for all young workers.</p> <p>d. For young workers, the combined daily transportation time and school time and work time does not exceed 10 hours.</p> <p>e. Young workers are not exposed to hazards and do not perform hazardous work. Work on floating cages in poor weather conditions shall be considered hazardous.</p> <p>f. Be advised that the site will be inspected and young workers will be interviewed to confirm compliance.</p>

Footnote	[42] Young Worker: Any worker between the age of a child, as defined above, and under the age of 18.	
Criterion 6.3 Forced, bonded or compulsory labor		Compliance Criteria (Required Client Actions):
6.3.1	<p>Indicator: Number of incidences of forced^[43], bonded^[44] or compulsory labor</p> <p>Requirement: None</p> <p>Applicability: All</p>	<p>a. Contracts are clearly stated and understood by employees. Contracts do not lead to workers being indebted (i.e. no 'pay to work' schemes through labor contractors or training credit programs).</p> <p>b. Employees are free to leave workplace and manage their own time.</p> <p>c. Employer does not withhold employee's original identity documents.</p> <p>d. Employer does not withhold any part of workers' salaries, benefits, property or documents in order to oblige them to continue working for employer.</p> <p>e. Employees are not to be obligated to stay in job to repay debt.</p> <p>f. Maintain payroll records and be advised that workers will be interviewed to confirm the above.</p>
Footnote	[43] Forced (Compulsory) labor: All work or service that is extracted from any person under the menace of any penalty for which a person has not offered himself/herself voluntarily or for which such work or service is demanded as a repayment of debt. "Penalty" can imply monetary sanctions, physical punishment, or the loss of rights and privileges or restriction of movement (e.g., withholding of identity documents).	
Footnote	[44] Bonded labor: When a person is forced by the employer or creditor to work to repay a financial debt to the crediting agency.	
Criterion 6.4 Discrimination ^[45]		Compliance Criteria (Required Client Actions):
Footnote	[45] Discrimination: Any distinction, exclusion or preference that has the effect of nullifying or impairing equality of opportunity or treatment. Not every distinction, exclusion or preference constitutes discrimination. For instance, a merit- or performance- based pay increase or bonus is not by itself discriminatory. Positive discrimination in favor of people from certain underrepresented groups may be legal in some countries.	
6.4.1	<p>Indicator: Evidence of comprehensive^[46] and proactive anti-discrimination policies, procedures and practices</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>a. Employer has written anti-discrimination policy in place, stating that the company does not engage in or support discrimination in hiring, remuneration, access to training, promotion, termination or retirement based on race, caste, national origin, religion, disability, gender, sexual orientation, union membership, political affiliation, age or any other condition that may give rise to discrimination.</p> <p>b. Employer has clear and transparent company procedures that outline how to raise, file, and respond to discrimination complaints.</p> <p>c. Employer respects the principle of equal pay for equal work and equal access to job opportunities, promotions and raises.</p> <p>d. All managers and supervisors receive training on diversity and non-discrimination. All personnel receive non-discrimination training. Internal or external training acceptable if proven effective.</p>
Footnote	[46] Employers shall have written anti-discrimination policies stating that the company does not engage in or support discrimination in hiring, remuneration, access to training, promotion, termination or retirement based on race, caste, national origin, religion, disability, gender, sexual orientation, union membership, political affiliation, age or any other condition that may give rise to discrimination.	
6.4.2	<p>Indicator: Number of incidences of discrimination</p> <p>Requirement: None</p> <p>Applicability: All</p>	<p>a. Employer maintains a record of all discrimination complaints. These records do not show evidence for discrimination.</p> <p>b. Be advised that worker testimonies will be used to confirm that the company does not interfere with the rights of personnel to observe tenets or practices, or to meet needs related to race, caste, national origin, religion, disability, gender, sexual orientation, union membership, political affiliation or any other condition that may give rise to discrimination.</p>
Criterion 6.5 Work environment health and safety		Compliance Criteria (Required Client Actions):
6.5.1	<p>Indicator: Percentage of workers trained in health and safety practices, procedures^[47] and policies on a yearly basis</p> <p>Requirement: 100%</p>	<p>a. Employer has documented practices, procedures (including emergency response procedures) and policies to protect employees from workplace hazards and to minimize risk of accident or injury. The information shall be available to employees.</p> <p>b. Employees know and understand emergency response procedures.</p>

	Applicability: All	c. Employer conducts health and safety training for all employees on a regular basis (once a year and immediately for all new employees), including training on potential hazards and risk minimization, Occupational Safety and Health (OSH) and effective use of PPE.
Footnote	[47] Health and safety training shall include emergency response procedures and practices.	
6.5.2	Indicator: Evidence that workers use Personal Protective Equipment (PPE) effectively Requirement: Yes Applicability: All	a. Employer maintains a list of all health and safety hazards (e.g. chemicals). b. Employer provides workers with PPE that is appropriate to known health and safety hazards. c. Employees receive annual training in the proper use of PPE (see 6.5.1c). For workers who participated in the initial training(s) previously an annual refreshment training may suffice, unless new PPE has been put to use. d. Be advised that workers will be interviewed to confirm the above.
6.5.3	Indicator: Presence of a health and safety risk assessment and evidence of preventive actions taken Requirement: Yes Applicability: All	a. Employer makes regular assessments of hazards and risks in the workplace. Risk assessments are reviewed and updated at least annually (see also 6.5.1a). b. Employees are trained in how to identify and prevent known hazards and risks (see also 6.5.1c). c. Health and safety procedures are adapted based on results from risk assessments (above) and changes are implemented to help prevent accidents.
6.5.4	Indicator: Evidence that all health- and safety-related accidents and violations are recorded and corrective actions are taken when necessary Requirement: Yes Applicability: All	a. Employer records all health- and safety-related accidents. b. Employer maintains complete documentation for all occupational health and safety violations and investigations. c. Employer implements corrective action plans in response to any accidents that occur. Plans are documented and they include an analysis of root cause, actions to address root cause, actions to remediate, and actions to prevent future accidents of similar nature. d. Employees working in departments where accidents have occurred can explain what analysis has been done and what steps were taken or improvements made.
6.5.5	Indicator: Evidence of employer responsibility and/or proof of insurance (accident or injury) for 100% of worker costs in a job-related accident or injury when not covered under national law Requirement: Yes Applicability: All	a. Employer maintains documentation to confirm that all personnel are provided sufficient insurance to cover costs related to occupational accidents or injuries (if not covered under national law). Equal insurance coverage must include temporary, migrant or foreign workers. Written contract of employer responsibility to cover accident costs is acceptable evidence in place of insurance.
6.5.6	Indicator: Evidence that all diving operations are conducted in a manner that protects the health and safety of divers Requirement: Yes	Note: If the farm outsources its diving operations to an independent company, the farm shall ensure that auditors have access to specified information sufficient to demonstrate compliance with Indicator 6.5.6. It is the farm's responsibility to obtain copies of relevant documentation (e.g. certificates) from the dive company. a. Employer keeps records of farm diving operations and a list of all personnel involved. In case an external service provider was hired, a statement that provider conformed to all relevant criteria must be made available to the auditor by this provider. All diving operations are logged using diving computers and records are kept electronically.

	Applicability: All	b. Employer ensures that a safety diver or a diving buddy is present during all dives.
		c. Employer maintains evidence of diver certification (e.g. copies of certificates) for each person involved in diving operations. Divers shall be certified through an accredited national or international organization for diver certification. Divers shall undergo periodical medical exams, which will include monitoring of all tissues affected by continuous diving (i.e. bones, cartilages).
Criterion 6.6 Wages		Compliance Criteria (Required Client Actions):
6.6.1	Indicator: The percentage of workers whose basic ^[48] wage (before overtime and bonuses) is below the minimum wage ^[49] Requirement: 0 (None) Applicability: All	a. Employer keeps documents to show the legal minimum wage in the country of operation. If there is no legal minimum wage in the country, the employer keeps documents to show the industry-standard minimum wage. b. Employer's records (e.g. payroll) confirm that worker's wages for a standard work week (≤ 48 hours) always meet or exceed the legal minimum wage. If there is no legal minimum wage, the employer's records must show how the current wage meets or exceeds industry standard. If wages are based on piece-rate or pay-per-production, the employer's records must show how workers can reasonably attain (within regular working hours) wages that meet or exceed the legal minimum wage. c. Maintain documentary evidence (e.g. payroll, timesheets, punch cards, production records, and/or utility records) and be advised that workers will be interviewed to confirm the above.
Footnote	[48] Basic wage: The wages paid for a standard working week (no more than 48 hours).	
Footnote	[49] If there is no legal minimum wage in a country, basic wages must meet the industry-standard minimum wage.	
6.6.2	Indicator: Evidence that the employer is working toward the payment of basic needs wage ^[50] Requirement: Yes Applicability: All	a. Proof of employer engagement with workers and their representative organizations, and the use of cost of living assessments from credible sources to assess basic needs wages. Includes review of any national basic needs wage recommendations from credible sources such as national universities or government. b. Employer has calculated the basic needs wage for farm workers and has compared it to the basic (i.e. current) wage for their farm workers. c. Employer demonstrates how they have taken steps toward paying a basic needs wage to their workers.
Footnote	[50] Basic needs wage: A wage that covers the basic needs of an individual or family, including housing, food and transport. This concept differs from a minimum wage, which is set by law and may or may not cover the basic needs of workers.	
6.6.3	Indicator: Evidence of transparency in wage-setting and rendering ^[51] Requirement: Yes Applicability: All	a. Wages and benefits are clearly articulated to workers and documented in contracts. b. The method for setting wages is clearly stated and understood by workers. c. Employer renders wages and benefits in a way that is convenient for the worker (e.g. cash, check, or electronic payment methods). Workers do not have to travel to collect benefits nor do they receive promissory notes, coupons or merchandise in lieu of payment. d. Be advised that workers will be interviewed to confirm the above.
Footnote	[51] Payments shall be rendered to workers in a convenient manner.	
Criterion 6.7 Contracts (labor) including subcontracting		Compliance Criteria (Required Client Actions):
6.7.1	Indicator: Percentage of workers who have contracts ^[52] Requirement: 100%	a. Employer maintains a record of all employment contracts. b. There is no evidence for labor-only contracting relationships or false apprenticeship schemes.

	Applicability: All	c. Be advised that workers will be interviewed to confirm the above.
Footnote	[52] Labor-only contracting relationships or false apprenticeship schemes are not acceptable. This includes revolving/consecutive labor contracts to deny benefit accrual or equitable remuneration. False Apprenticeship Scheme: The practice of hiring workers under apprenticeship terms without stipulating terms of the apprenticeship or wages under contract. It is a “false” apprenticeship if its purpose is to underpay people, avoid legal obligations or employ underage workers. Labor-only contracting arrangement: The practice of hiring workers without establishing a formal employment relationship for the purpose of avoiding payment of regular wages or the provision of legally required benefits, such as health and safety protections.	
6.7.2	Indicator: Evidence of a policy to ensure social compliance of its suppliers and contractors Requirement: Yes Applicability: All	a. Farm has a policy to ensure that all companies contracted to provide supplies or services (e.g. divers, cleaning, maintenance) have socially responsible practices and policies. b. Producing company has criteria for evaluating its suppliers and contractors. The company keeps a list of approved suppliers and contractors. c. Producing company keeps records of communications with suppliers and subcontractors that relate to compliance with 6.7.2.
Criterion 6.8 Conflict resolution		Compliance Criteria (Required Client Actions):
6.8.1	Indicator: Evidence of worker access to effective, fair and confidential grievance procedures Requirement: Yes Applicability: All	a. Employer has a clear labor conflict resolution policy for the presentation, treatment, and resolution of worker grievances in a confidential manner. b. Workers are familiar with the company's labor conflict policies and procedures. There is evidence that workers have fair access. c. Maintain documentary evidence (e.g. complaint or grievance filings, minutes from review meetings) and be advised that workers will be interviewed to confirm the above.
6.8.2	Indicator: Percentage of grievances handled that are addressed ^[53] within a 90-day timeframe Requirement: 100% Applicability: All	a. Employer maintains a record of all grievances, complaints and labor conflicts that are raised. b. Employer keeps a record of follow-up (i.e. corrective actions) and timeframe in which grievances are addressed. c. Maintain documentary evidence and be advised that workers will be interviewed to confirm that grievances are addressed within a 90-day timeframe.
Footnote	[53] Addressed: Acknowledged and received, moving through the company's process for grievances, corrective action taken when necessary.	
Criterion 6.9 Disciplinary practices		Compliance Criteria (Required Client Actions):
6.9.1	Indicator: Incidences of excessive or abusive disciplinary actions Requirement: None Applicability: All	a. Employer does not use threatening, humiliating or punishing disciplinary practices that negatively impact a worker's physical and mental health or dignity. b. Allegations of corporeal punishment, mental abuse, physical coercion, or verbal abuse will be investigated by auditors. c. Be advised that workers will be interviewed to confirm there is no evidence for excessive or abusive disciplinary actions.
6.9.2	Indicator: Evidence of a functioning disciplinary action policy whose aim is to improve the worker ^[54] Requirement: Yes Applicability: All	a. Employer has written policy for disciplinary action which explicitly states that its aim is to improve the worker. b. Maintain documentary evidence (e.g. worker evaluation reports) and be advised that workers will be interviewed to confirm that the disciplinary action policy is fair and effective.
Footnote	[54] If disciplinary action is required, progressive verbal and written warnings shall be engaged. The aim shall always be to improve the worker; dismissal shall be the last resort. Policies for bonuses, incentives, access to training and promotions are clearly stated and understood, and not used arbitrarily. Fines or basic wage deductions shall not be acceptable disciplinary practices.	
Criterion 6.10 Working hours and overtime		Compliance Criteria (Required Client Actions):

6.10.1	<p>Indicator: Incidences, violations or abuse of working hours^[55] and overtime laws</p> <p>Requirement: None</p> <p>Applicability: All</p>	<p>Note: Working hours, night work and rest periods for workers in agriculture should be in accordance with national laws and regulations or collective agreements (e.g. The Safety and Health in Agriculture Convention, 2001). Additional information can be found on the website of the International Labour Organization (www.ilo.org).</p>
		a. Employer has documentation showing the legal requirements for working hours and overtime in the region where the farm operates. If local legislation allows workers to exceed internationally accepted recommendations (48 regular hours, 12 hours overtime) then requirements of the international standards apply.
		b. Records (e.g. time sheets and payroll) show that farm workers do not exceed the number of working hours allowed under the law.
		c. If an employer requires employees to work shifts at the farm (e.g. 10 days on and six days off), the employer compensates workers with an equivalent time off in the calendar month and there is evidence that employees have agreed to this schedule (e.g. in the hiring contract).
		d. Be advised that workers will be interviewed to confirm there is no abuse of working hours and overtime laws.
Footnote	[55] In cases where local legislation on working hours and overtime exceed internationally accepted recommendations (48 regular hours, 12 hours overtime), the international standards will apply.	
6.10.2	<p>Indicator: Overtime is limited, voluntary,^[56] paid at a premium rates and restricted to exceptional circumstances</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	a. Payment records (e.g. payslips) show that workers are paid a premium rate for overtime hours.
		b. Overtime is limited and occurs in exceptional circumstances as evidenced by farm records (e.g. production records, time sheets, and other records of working hours).
		c. Be advised that workers will be interviewed to confirm that all overtime is voluntary except where there is a collective bargaining agreement which specifically allows for compulsory overtime.
Footnote	[56] Compulsory overtime is permitted if previously agreed to under a collective bargaining agreement.	
<i>Criterion 6.11 Living conditions for employees accommodated on the farm</i>		Compliance Criteria (Required Client Actions):
6.11.1	<p>Indicator: Farm employees accommodated on the farm have access to clean, sanitary, safe and suitable living conditions</p> <p>Requirement: Yes.</p> <p>Applicability: All.</p>	a. Provide evidence that potable/safe drinking water is always available for workers.
		b. Provide evidence that adequate sanitary facilities are available for workers.
		c. Provide evidence of safe, secure and quality accommodation sufficient to withstand local conditions in the event of storms or other natural events that could endanger lives.
		d. Provide evidence that accommodation provided is suitable to workers needs (and their family's), appropriate for their gender if accommodated on site also.
6.11.2	<p>Indicator: Existence of separate sanitary and toilet facilities for men and women; with the exception of work sites with fewer than 10 employees or where married couples are working and accommodated together</p> <p>Requirement: Yes.</p> <p>Applicability: All farms and accommodation and worksites except as permitted exclusions (6.11.2a).</p>	a. Provide separate and suitable sanitary and toilet facilities are available for men and women, with the possible exception of married couples being accommodated together.
PRINCIPLE 7: BE A GOOD NEIGHBOR AND CONSCIENTIOUS COASTAL CITIZEN		

Criterion 7.1 Community engagement and effective conflict resolution		Compliance Criteria (Required Client Actions):
7.1.1	Indicator: Evidence of regular and meaningful ^[57] consultation and engagement with community representatives and organizations Requirement: Yes. Applicability: All.	a. The farm engages in consultations with the local community at least twice every year (bi-annually). Note: farms with less than 6 employees consultations once every year is sufficient. This may include local authorities and/or elected community representatives.
		b. Consultations are meaningful. OPTIONAL: the farm may choose to use participatory Social Impact Assessment (pSIA) or an equivalent method for consultations.
		c. Consultations include participation by elected representatives from the local community who were asked to contribute to the agenda.
		d. Maintain records and documentary evidence (e.g. meeting agenda, minutes, report) to demonstrate that consultations comply with the above.
		e. Be advised that representatives from the local community and organizations may be interviewed to confirm the above.
Footnote	[57] Regular and meaningful: meetings shall be held at least bi-annually with elected representatives of affected communities. The agenda for the meetings should in part be set by the community representatives. Participatory Social Impact Assessment methods may be one option to consider here.	
7.1.2	Indicator: Presence and evidence of an effective ^[58] policy and mechanism for the presentation, treatment and resolution of complaints by community stakeholders and organizations Requirement: Yes. Applicability: All.	a. Farm policy provides a mechanism for presentation, treatment and resolution of grievances (i.e. complaints) lodged by stakeholders, community members, and organizations.
		b. The farm follows its policy for handling stakeholder grievances as evidenced by farm documentation (e.g. follow-up communications with stakeholders, reports to stakeholder describing corrective actions).
		c. The farm's mechanism for handling grievances is effective based on resolution of stakeholder complaints and community concerns (e.g. follow-up correspondence from stakeholders).
		d. Be advised that representatives from the local community, including complainants where applicable, may be interviewed to confirm the above.
Footnote	[58] Effective: in order to demonstrate that the mechanism is effective, evidence of resolutions of complaints can be given.	
7.1.3	Indicator: For new farms ^[59] , evidence of engagement and consultation with surrounding communities about potential social impacts from the farm. Requirement: Yes. Applicability: All new farms (see note).	a. Provide evidence to show whether or not the farm fits the definition of a 'new farm' as used here. If yes, proceed to 7.1.3b. If not, then Indicator 7.1.3 does not apply to the farm.
		b. Provide results of a participatory Social Impact Assessment (p-SIA) or equivalent methodology as evidence of the farm's engagement and consultation with surrounding communities about potential social impacts from the farm.
		c. Evidence provided in 7.1.3b should include minutes from community meetings and a log of communications with stakeholders. Consultations should address economic impacts, natural resource access and use, human health and safety issues, and changes to physical infrastructure and cultural issues, with a particular focus on impacts to indigenous people, where applicable.
Footnote	[59] A 'new farm' is defined as an aquaculture operation where construction was completed after the publication date of the ASC Seabass, Seabream, and Meagre Standard or a farm that underwent a significant expansion after said publication date.	
***** A farm seeking certification must have documentation from all of its fingerling suppliers to demonstrate compliance with the following requirements. *****		
SECTION 8: REQUIREMENTS FOR FINGERLING AND EGG SUPPLIERS		
		Compliance Criteria (Required Client Actions):
8.1	Indicator: Presence of documents issued by pertinent authorities proving compliance with local and national authorities on land and water use, effluent regulations and use of treatments. Requirement: Yes.	a. Obtain copies of supplier's business permit and land title deed. b. Obtain records from suppliers showing discharge permit requirements as required. c. Obtain records from suppliers showing treatments used on fingerlings and eggs.

	Applicability: All.	d. Maintain on-site copies of laws governing water use, land use, effluent regulations and chemical treatments for animals.
8.2	<p>Indicator: New introductions of exotic species from the date of publication of the Flatfish Standard, unless the hatchery/fingerling facility is a closed production system^[60].</p> <p>Requirement: None.</p> <p>Applicability: All.</p>	<p>Note: For the purposes of Indicator 8.2, a species is not considered exotic if it can be shown that the species is native to the area of farm operation or the species was established in the area of the farm prior to publication of the ASC Flatfish Standard. Also see Indicator 2.3.1.</p> <p>a. Obtain written evidence showing whether or not the fingerling and egg suppliers use closed production systems. If yes, then Indicator 8.2 does not apply.</p> <p>b. Obtain written evidence showing that the fingerling and egg suppliers do not produce an exotic species. If they do not, then Indicator 8.2 does not apply.</p> <p>c. If the supplier produces an exotic species, obtain written evidence that the species was widely commercially produced in the area before publication of the ASC Flatfish Standard.</p>
Footnote	[60] A closed production system is defined as a facility with recirculating water that is separated from the wild aquatic medium by effective physical barriers that are in place and well maintained to ensure no escapes of reared specimens or biological material that might survive and subsequently reproduce.	
8.3	<p>Indicator: Allowance for siting in National Protected Areas^[61].</p> <p>Requirement: None^{[62][63]}.</p> <p>Applicability: All</p>	<p>Instruction to Clients for Indicator 8.3 - Exceptions to Requirements that Suppliers (fingerlings) are not Sited in National Protected Areas.</p> <p>For the purposes of implementing Indicator 8.3, the ASC Flatfish Standard defines a protected area as “a clearly defined geographical space, recognized, dedicated and managed through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values.” The following exceptions shall be made for Indicator 8.3:</p> <p>Exception #1: An exception is made for protected areas that are classified by IUCN, or the International Union for Conservation of Nature, as Category V or VI. These are areas preserved primarily for their landscapes, or areas that include sustainable resource management.</p> <p>Exception #2: An exception is also made for farms located in protected areas that are designated as such after the farm already exists in that location. In these situations, the farm must demonstrate that its operation is compatible with the objectives of the newly protected area, and that it is in compliance with any relevant conditions placed on the farm as a result of the designation.</p> <p>Where a supplier is sited in a protected areas that does not have formal national recognition (e.g. within a regionally-designated protected area), the farm producer should provide the CAB with a rationale showing how the supplier’s operation is compatible with the objectives of that protected area (as in Exception #2 above).</p> <p>Note: If a supplier of fingerlings or eggs has previously undertaken an independent assessment of biodiversity impact as part of the regulatory permitting process, the farm may use such documents as evidence to demonstrate the supplier’s compliance with Indicator 8.3.</p> <p>a. Obtain from suppliers of fingerlings and eggs a map showing the location of the operation relative to nearby protected areas as defined federally/at the National level.</p>
Footnote	[61] A protected area is “A clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values.” Source: Dudley, N. (Editor) (2008), Guidelines for Applying Protected Area Management Categories, Gland, Switzerland: IUCN. X + 86pp.	
Footnote	[62] An exception is made for protected areas that are classified by IUCN, or the International Union for Conservation of Nature, as Category V or VI. These are areas preserved primarily for their landscapes, or areas that include sustainable resource management. Details can be found here: http://www.iucn.org/about/work/programmes/pa/pa_products/wcpa_categories/ .	
Footnote	[63] An exception is also made for farms located in protected areas that are designated as such after the farm already exists in that location. In these situations, the farm must demonstrate that its operation is compatible with the objectives of the newly protected area, and that it is in compliance with any relevant conditions placed on the farm as a result of the designation.	
	Indicator: Evidence that the egg and fingerling producer must have an equivalent or better health status than that of the grow-	a. Obtain a written statement from egg and fingerling producers detailing the applicable national and local disease regulations and guidance on disease management which the supplier follows.

8.4	<p>have an equivalent or better health status than that of the grow-out facility, and must follow all national and local (jurisdictional) guidance on disease management.</p> <p>Requirement: Yes.</p> <p>Applicability: All.</p>	<p>b. Prepare a letter informing egg and fingerling producers that they must evaluate eggs and fry using health status metrics developed by the farm's veterinary health professional.</p> <p>c. Maintains records of the farm's evaluations of the condition of eggs and fingerlings upon delivery.</p>
8.5	<p>Indicator: Evidence of disclosure to the grow-out farm of all chemical and antibiotic treatments on eggs and fry, including the reason for their use and the quantity used.</p> <p>Requirement: Yes.</p> <p>Applicability: All.</p>	<p>a. Prepare a letter informing egg and fry suppliers that they must disclose all chemical and antibiotic treatments on eggs and fry, along with stated rationale and the quantity used.</p> <p>b.Optional: Farm may conduct voluntary set tests on a subsample of fingerlings for each stocking event, to test for chemical and antibiotic use consistent with the supplier's declaration.</p>
8.6	<p>Indicator: Allowance for the use of therapeutic treatments, including antibiotics or other treatments, that are banned under European Union (EU) law or listed as critically important for human medicine by the World Health Organization^[64].</p> <p>Requirement: Not permitted.</p> <p>Applicability: All.</p>	<p>a. Inform fingerling suppliers in writing that the farm will not purchase from suppliers using any therapeutants or antibiotics that are banned under EU law or treated with anti-microbials defined as critically important by the WHO, unless otherwise stipulated in the ASC Flatfish standard.</p> <p>b. Compare any results from 8.6b to the farm's EU banned list and WHO critically important list to show that fingerling suppliers are in compliance.</p>
Footnote	[64] WHO Critical Microbials for Human Medicine, 5th edition, 2016. http://www.who.int/foodsafety/areas_work/antimicrobial-resistance/cia/en/	
8.7	<p>Indicator: Presence of a fish health management plan implemented in agreement with the facility's designated veterinarian or fish health specialist</p> <p>Requirement: Yes.</p> <p>Applicability: All.</p>	<p>a. For every supplier of fingerlings to the farm, obtain a copy of the supplier's Fish Health Management Plan (FHMP).</p> <p>b. Ensure that the fingerling supplier's FHMP is reviewed and updated at least annually with signatures by management indicating approval.</p> <p>c. Ensure that the fingerling supplier's designated veterinarian reviews and approves the FHMP annually and after each update of the FHMP, by signature.</p>
8.8	<p>Indicator: Evidence of company-level policies and procedures that demonstrate the company's commitment to each of the 8 key ILO labor issues described in Principle 6.</p> <p>Requirement: Yes.</p> <p>Applicability: All.</p>	<p>a. Obtain a copy of the supplier's company-level policies and procedures relating to key ILO labor issues.</p>
	<p>Indicator: Evidence of regular communication, engagement and consultation with surrounding communities</p>	<p>Note: see compliance criteria for Indicator 7.1.1</p>

8.9

Requirement: Yes

Applicability: All

a. Ensure that the farm obtains documentary evidence from fingerling suppliers of regular communications with surrounding community as described under 7.1.1.