

ASC (Aquaculture Stewardship Council) Farm Certification Audit Report

Certificate Holder: Japan Salmon Farm Inc.

Scope of Assessment: Imabetsu Branch

Certificate Code: ASC-AMITA-F-1008

Certificate issue date: 10 December 2019

Certificate expiry date: 9 December 2022

Form 3 – Public Disclosure Form

This form shall be submitted by the CAB no less than thirty (30) working days prior to any onsite audit. Any changes to this information shall be submitted to the ASC within five (5) days of the change and not later than 10 days before the planned audit. If later, a new announcement is submitted and another 30 days rule will apply.

The information on this form shall be public and should be posted on the ASC website within three (3) days of submission (except unannounced audits).

This form shall be written to be readable to the stakeholders and other interested parties.

This form should be translated into local languages when appropriate

PDF 1 Public Disclosure Form

PDF 1.1 Name of CAB

AMITA Corporation

PDF 1.2 Date of Submission

8th July 2019

PDF 1.3 CAB Contact Person

PDF 1.3.1 Name of Contact Person

Hitofumi Yamanoshita

PDF 1.3.2 Position in the CAB's
organisation

Scheme manager

PDF 1.3.3 Mailing address

3-2-4 Kudankita, Chiyoda-ku, Tokyo,
102-0073 Japan

PDF 1.3.4 Email address	ninsho@amita-net.co.jp
PDF 1.3.5 Phone number	+81-3-5215-8326
PDF 1.3.6 Other	-

PDF 1.4 ASC Name of Client

PDF 1.4.1 Name of the Client	Japan Salmon Farm Inc.
PDF 1.4.1.a Name of the unit of certification	Japan Salmon Farm Inc. Imabetsu Branch
PDF 1.4.2 Name of Contact Person	Mr. Kosuke Suzuki
PDF 1.4.3 Position in the client's organisation	Drector & Aquaculture dept manager
PDF 1.4.4 Mailing address	71-1 Imabetsu, Imabetsu-machi, Higashitsugaru-gun, Aomori 030- 1502, Japan
PDF 1.4.5 Email address	kosuke.s@japan-salmonfarm.com
PFD 1.4.6 Phone number	+81-174-31-0067

PDF 1.4.7 Other

-

PDF 1.5 Unit of Certification

- PDF 1.5.1 Single Site
- PDF 1.5.2 Multi-site
- PDF 1.5.2.a Ownership status
- PDF 1.5.3 Group certification

x

PDF 1.6 Sites to be audited

Site Name	GPS Coordinates	List all species per site and indicate if they are in the scope of the standard	Ownership status (owned/ subcontracted)	Date of planned audit and type of audit (Initial, SA1, SA2, recertification, etc.)	Status (new, in production/ following /in harvest)
Japan Salmon Farm Inc. Imabetsu Branch	41° 10' 57 N, 140° 28' 54 E	Oncorhynchus mykiss	owned	Initial	in production / in harvest

PDF 1.7 Species and Standards

Standard	Species (scientific name) produced	Included in scope (Yes/No)	ASC endorsed standard to be used	Version Number
Abalone 1.1				
Bivalve 1.1				
Freshwater Trout 1.1				
Pangasius 1.1				
Salmon 1.2	Oncorhynchus mykiss	Yes	Salmon	1.2
Shrimp 1.1				
Tilapia 1.2				
Seriola/Cobia 1.1				
Seabass/ bream and meagre v. 1.1				

PDF 1.8 Planned Stakeholder Consultation(s) and How Stakeholders can Become Involved

Name/organisation	Relevance for this audit	How to involve this stakeholder (in-person/ phone interview/input submission)	When stakeholder may be contacted	How this stakeholder will be contacted
Names are closed due to privacy	Staff	in-person	1st June 2019	in-person
	Suppliers	in-person	1st June 2019	in-person
	Maintenance companies	in-person	1st June 2019	in-person
	Local people	in-person	1st June 2019	in-person
	Local governments	in-person	1st June 2019	in-person
	Researchers	in-person	1st June 2019	in-person

PDF 1.9 Proposed Timeline

PDF 1.9.1	Contract Signed:	17th May. 2019
PDF 1.9.2	Start of audit:	2nd September 2019
PDF 1.9.3	Onsite Audit(s):	2nd to 3rd September 2019
PDF 1.9.4	Determination/Decision:	3rd November 2019

PDF 1.10 Audit Team

PDF 1.10.1

PDF 1.10.2

PDF 1.10.3

PDF 1.10.4

PDF 1.10.5

Column1	Name	ASC Registration
Lead Auditor	Naoya Ogawa	
Technical Experts	Akihiro Dazai	
Social Auditor	Naoya Ogawa	
Auditor Support	Wataru Koketsu	
Auditor Support	Chiko Tsukazaki	

ASC Audit Report – Opening

General Requirements

- C1** Audit reports shall be written in English and in the most common language spoken in the areas where the operation is located.
- C2** Audit reports may contain confidential annexes for commercially sensitive information.
 - C2.1** The CAB shall agree the content of any commercially sensitive information with the applicant, which can still be accessible by the ASC and the appointed accreditation body upon request as stipulated in the certification contract.
 - C2.2** The public report shall contain a clear overview of the items which are in the confidential annexes.
 - C2.3** Except for the annexes that contain commercially sensitive information all audit reports will be public.
- C3** The CAB is solely responsible for the content of all reports, including the content of any confidential annexes.
- C4 Reporting Deadlines for certification and re-certification audit reports (in working day)**
 - C4.1** Within thirty (30) days of the completing of the audit the CAB shall submit a draft report in English and the national or most common language spoken in the area where the operation is located.
 - C4.2** Within five (5) days the ASC should post the draft report to the ASC website.
 - C4.3** The CAB shall allow stakeholders and interested parties to comment on the report for fifteen (15) days.
 - C4.4** Within twenty (20) days of the close of comments, the CAB shall submit the final report to the ASC in English and the national or most common language spoken in the area where the operation is located.
 - C4.5** Within five (5) days the ASC should post the final report to the ASC website.
 - C4.6** Audit reports shall contain accurate and reproducible results.
- C5 Reporting Deadlines* for surveillance audit reports**
 - C5.1** Within ninety (90) days of the completing of the audit the CAB shall submit a final report in English and the national or most common language spoken in the area where the operation is located.
 - C5.2** Within five (5) days the ASC should post the final report to the ASC website.
 - C5.3** Audit reports shall contain accurate and reproducible results.

1 Title Page

1.1 Name of Applicant	Japan Salmon Farm Inc.
1.2 Report Title [e.g. Public Draft Certification Report/ Final certification report/ Surveillance report]	Public certification report
1.3 CAB name	AMITA Corporation
1.4 Name of Lead Auditor	Naoya Ogawa
1.5 Names and positions of report authors and reviewers	Report Author: Lead auditor Naoya Ogawa Report Reviewer: Hitofumi Yamanoshita
1.6 Client's Contact person: Name and Title	Mr. Kosuke Suzuki, Director & Aquaculture dept manager
1.7 Date	5/7/2019, 2/9-3/9/2019 Since the beginning of July was the final harvesting season, on-site audit including harvesting was conducted on July 5. The documents were not reviewed at the same time due to the illness of the person in charge, so the documents were reviewed on September 2 and 3.

2 Table of Contents

Cover
Form 3–Public Information Form
I. Audit Report–Opening
II. Audit template–Salmon 1.2
Summary of Findings–Salmon 1.2
III. Audit Report–Traceability
IV. Audit Report–Closing

3 Glossary

Terms and abbreviations that are specific to this audit report and that are not otherwise defined in the ASC glossary

none

4 Summary

A concise summary of the report and findings. The summary shall be written to be readable to the stakeholders and other interested parties.

4.1	A brief description of the scope of the audit (<i>including activities of the UoC being audited</i>)	The subject of the audit is a rainbow trout sea farm. The farm in Imabetsu Town, Aomori Prefecture, started test operations in 2017 and is currently gradually expanding in scale. In 2018, the plant operated with four cages with a diameter of 35m and a depth of 10m and two cages with a diameter of 25m and a depth of 6m.
4.2	A brief description of the operations of the unit of certification	In this farm, adult fish is produced after accepting smolts. The smolt is hatched and nurtured at the Fukaura Smolt Station owned by the company in Fukaura Town, Aomori Prefecture.
4.3	Type of unit of certification (<i>select only one type of unit of certification in the list</i>)	Single farm
4.4	Type of audit (<i>select all the types of audit that apply in the list</i>)	Initial

4.4.1 Number of sites included in the unit of certification

Initial audit – 09/2019

Surveillance audit 1 – mm/ yyyy

Surveillance audit 2 – mm/ yyyy

Recertification audit – mm/ yyyy

Owned by client

Subcontracted by client

1	

4.5 A summary of the major findings

No serious non-conformities were found during the audit. 19 minor non-conformities were pointed out.

4.6 The Audit determination

Japan Salmon Farm Inc., Imabetsu Branch is granted ASC Salmon certification for Rainbow trout (*Oncorhynchus mykiss*) grown with sea surface cage.

5 CAB Contact Information

5.1 CAB Name

AMITA Corporation

5.2 CAB Mailing Address

〒102-0073 2-4, Kudan Kita 3-chome, Chiyoda-ku, Tokyo

5.3 Email Address

ninsho@amita-net.co.jp

5.4 Other Contact Information

Tel: 03-5215-8326

6 Background on the Applicant

6.1 Information on the Public Disclosure Form (Form 3) except 1.2–1.3. All information updated as necessary to reflect the audit as conducted.	See Public Disclosure Form
6.2 A description of the unit of certification (<i>for initial audit</i>) / changes, if any (<i>for surveillance and recertification audits</i>)	<p>The subject of the review is a rainbow trout sea farm located in Imabetsu, Aomori Prefecture. Nippon Salmon Farm was established in June 2017 as a group company of Okamura Food Industry Co., Ltd., located in Aomori City, Aomori Prefecture. Currently, Fukaura Smolt Station (Nursery) and Fukaura Farm in Fukaura Town, Aomori Prefecture, and Imabetsu Farm in Imabetsu Town are engaged in aquaculture business. Imabetsu Farm started trial operation in 2017 and is currently gradually expanding its scale. In 2018, the plant operated with four cages with a diameter of 35m and a depth of 10m and two cages with a diameter of 25m and a depth of 6m. In the future, the scale and number of cage will be expanded.</p> <p>There are currently seven employees, but the company plans to increase the number of employees as the scale grows. In busy seasons such as harvesting work, local people are mainly employed as part-time workers.</p> <p>Smolts are accepted from Fukaura smolt station around November, acclimatizes it to seawater, and grows with sea surface cage. The grown fish will be landed and shipped in April. For rainbow trout, the water temperature in this area is too high to grow, so it will be landed by the end of June. From July to November, farming is not carried out, but preparations for the next farming, participation in necessary training for employees, and acquisition of qualifications are conducted. The smolt size is around 800g and the shipping size is about 2–4kg. The number of first smolt is about 11,000 in small cages and about 30,000 in large cages.</p>
6.3 Other certifications currently held by the unit of certification	None
6.4 Other certification(s) obtained by the UoC before this audit	None
6.5 Estimated annual production volumes of the unit of certification of the <u>current</u> year	Expected production volumes: 800 tons

6.6	Actual annual production volumes of the unit of certification of the previous year (mandatory for surveillance and recertification audits)	Not applicable for this audit.
6.7	Production system(s) employed within the unit of certification (select one or more in the list)	cage
6.8	Number of employees working at the unit of certification (see notes in comment to this cell)	7 employees Part-time workers are hired during the busy season. Max 6 people were hired in 2019.
6.9	Size, and/or number of ponds, pens (if multi site, per site)	4 cages with 35m x 10m , 4 cages with 2 cages with 25m x 6m.

7 Scope

7.1	The Standard(s) against which the audit was conducted, including version number	ASC Salmon Standard Version 1.2 ASC Certification and Accreditation Requirements Version 2.2
7.2	The species produced at the applicant farm (in English and Latin names)	Rainbow trout (<i>Oncorhynchus mykiss</i>)
7.3	A description of the scope of the audit including a description of whether the unit of certification covers all production or harvest areas (i.e. ponds) managed by the operation or located at the included sites, or whether only a sub-set of these are included in the unit of certification. If only a sub-set of production or harvest areas are included in the unit of certification these shall be clearly named.	All rainbow trout produced at the Imabetsu farm will be the scope. Acceptance of smolt, acclimatization to seawater, sea cage grow-out, harvesting, killing fish (Ikejime) and shipping by truck are the scope of the audit.

7.4	The names and addresses of any storage, processing, or distribution sites included in the operation (including subcontracted operations) that will potentially be handling certified products, up until the point where product enters further chain of custody.	There are no storage, processing and shipping facilities. They are squeezed and packed in containers, transported to a processing company of group company Okamura Food Industry Co., Ltd. in Aomori city, and processed into products. Okamura Food Industry Co., Ltd. has already obtained MSC / ASC CoC certification. (Certification number MSC-C-51492, ASC-C-02123)
7.5	Description of the receiving water body(ies).	<p>The farm is located on the sea surface in Imabetsu Town, Higashi-Tsugaru-gun, Aomori Prefecture. The location is shown on the website. https://www.japan-salmonfarm.com/business/asc.pdf</p> <p>The “Tsugaru Peninsula North Sea Area” in this area is designated as “Sea Area A”, which is the most stringent standard by the Ministry of the Environment. No fish farming has been done so far, and only this company is currently engaged in fish farming.</p>

8 Audit Plan

8.1	The names of the auditors and the dates when each of the following were undertaken or completed: conducting the audit, writing of the report, reviewing the report, and taking the certification decision.	<p>Naoya Ogawa-Lead Auditor Akihiro Dazai-Expert Wataru Koketsu-Examination Assistance Chiko Tsukazaki-Examination Assistance</p> <p>Conducting the Audit-July 5, 2019, September 2, and September 3, 2019 Writing of the report-October 15, 2019 Reviewing the report - October 17, 2019 Taking the certification decision- December 10, 2019</p>
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8.2 Previous Audits (if applicable):

	NC reference number	Standard clause reference	Closing deadline – status – closing date of each NC
8.2.1 Initial audit – 09/2019			
Surveillance audit 1 – mm/ yyyy			
Surveillance audit 2 – mm/ yyyy			
Recertification audit – mm/ yyyy			
Unannounced audit – mm/ yyyy			
NC close-out audit – mm/ yyyy			

Scope extention audit mm/ yyyy

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8.3 Audit plan as implemented including:

	Dates	Locations
8.3.1 Desk Reviews	15/6/2019	
8.3.2 Onsite audits	5/7,2/9,3/9/2019	Imabetsu Town, Higashi Tsugaru County, Aomori Prefecture
8.3.3 Stakeholder interviews and Community meetings	2/9,3/9/2019	Imabetsu Town, Higashi Tsugaru County, Aomori Prefecture
8.3.4 Draft report sent to client	18/10/2019	
8.3.5 Draft report sent to ASC	18/10/2019	
8.3.6 Final report sent to Client and ASC	10/12/2019	

8.4 Names and affiliations of individuals consulted or otherwise involved in the audit including: representatives of the client, employees, contractors, stakeholders and any observers that participated in the audit.

- Nippon Salmon Farm Co., Ltd.
Mr. Kosuke Suzuki, Director & Aquaculture dept Manager
Mr. Kensaburo Tanaka, Imabetsu Sea Farm manager
Mr. Yuki Tanaka
- Ryuhi Imabetsu Fishery Cooperative
- Aomori Prefectural Agriculture, Forestry and Fisheries Department Ajigasawa Fisheries Office
- Aomori Prefectural Industrial Technology Center
- Imabetsu Town Industrial Tourism Division
- Imabetsu Town Shinmachi Neighborhood Association
- Hirosaki University Regional Strategy Research Institute
- Aomori Koki Co., Ltd.
- Oga Industry Co., Ltd.

8.5 Stakeholder submissions, including written or other documented information and CAB written responses to each submission at different stages of the certification process (audit notification, during on-sit audit, public comment period)

Name of stakeholder (if permission given to make name public)	Relevance to be contacted	Date of contact	CAB responded Yes/No	Brief summary of points Raised	Use of comment by CAB	Response sent to stakeholder
Confidential	in case of identifying the individual	1/6, 2/9,2019	Yes	The technology from overseas has been introduced to enable cultivation with a small number of people..	Reflected	No
Confidential	in case of identifying the individual	1/6, 2/9,2019	Yes	nurturing young aquaculture managers. Everyone has skills and works with a sense of responsibility.	Reflected	No
Confidential	in case of identifying the individual	1/6, 2/9,2019	Yes	There is no impact on other fishery resources. It is necessary to continue the survey for a long time.	Reflected	No
Confidential	in case of identifying the individual	1/6, 2/9,2019	Yes	Consideration is given to hygiene management around the farm.	Reflected	No
Confidential	in case of identifying the individual	1/6, 2/9,2019	Yes	We actively employ local human resources and contribute to the creation of local jobs. We expect future expansion of the farm.	Reflected	No
Confidential	in case of identifying the individual	1/6, 2/9,2019	Yes	We are actively working to harmonize with local communities.	Reflected	No
Confidential	in case of identifying the individual	1/6, 2/9,2019	Yes	We work closely with local communities and respond flexibly even if problems occur regarding the farm.	Reflected	No
Confidential	in case of identifying the individual	1/6, 2/9,2019	Yes	There are no complaints from the community	Reflected	No

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AUDIT MANUAL - ASC Salmon Standard v1.1

Scope: species belonging to the genus *Salmo* and *Oncorhynchus*

INSTRUCTION TO FARMS/AUDITORS:

This audit manual was developed to accompany version 1.1 of the ASC Salmon Standard.

References in this Audit Manual to Appendices can be found in the ASC Salmon Standard document.

PRINCIPLE 1: COMPLY WITH ALL APPLICABLE NATIONAL LAWS AND LOCAL REGULATIONS						
Criterion 1.1 Compliance with all applicable local and national legal requirements and regulations						
		Compliance Criteria (Required Client Actions):	Audit evidence 1. Write down all audit evidence. Audit evidence (including evidence of conformity and nonconformity) should be recorded so that the audit can be repeated by a different audit team. 2. Replace explanatory text. 3. If you see any Compliance Criteria which is not listed below, please describe also in the cells below. A. Review compliance with applicable land and water use laws.	Evaluation (Per indicator, select one category in the drop-down menu)	Description of NC Provide an explanation of the reason(s) for the classification of any NCs or non-applicability	Value/Metric Provide values – if applicable for the respective Indicator
1.1.1	Indicator: Presence of documents demonstrating compliance with local and national regulations and requirements on land and water use Requirement: Yes Applicability: All	a. Maintain digital or hard copies of applicable land and water use laws. b. Maintain original (or legalised copies of) lease agreements, land titles, or concession permit on file as applicable. c. Keep records of inspections for compliance with national and local laws and regulations (if such inspections are legally required in the country of operation). d. Obtain permits and maps showing that the farm does not conflict with national preservation areas.	The client "Japan Salmon Farm, hereafter JSF" prepare links to the land and water surface laws. Fisheries Act, Fisheries Resource Protection Act, Sustainable Aquaculture Production Act, Natural Park Act, Natural Environment Conservation Act, etc. On 1 April 2019, demarcated fishery right were issued. No. 103 (Minmaya), No. 104 (Imabetsu). Confirmed demarcated fishery licenses and demarcated fishery rights exercise rules. For fishing ports, the fishery cooperatives have applied for and obtained permission from the prefecture. The place is used as a member. Imabetsu fishing port has 6 containers to store materials, and Hamana fishing port has 1 refrigerated container, and the "Imabetsu fishing port facility land use plan" has been submitted to Aomori Prefecture. Confirmed the fishery cooperative's occupancy permit (dated July 22, 1980) There was no inspection by the Japan Coast Guard at the time of fishing ground formation. There is no regular check by the government. Fishery divisions are displayed in the "Marine Status Display System" of the Japan Coast Guard. There is a Tsugaru quasi-national park in Imabetsu, but the farm is not designated as a quasi-national park. We confirmed the designated area map of Tsugaru National Monument.	Compliant		
1.1.2	Indicator: Presence of documents demonstrating compliance with all tax laws Requirement: Yes Applicability: All	a. 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. Maintain copies of tax laws for jurisdiction(s) where company operates. c. Register with national or local authorities as an "aquaculture activity".	JSF have various tax payment certificates. Checked the tax payment list and various tax payment records. The record of payment of corporate prefectural tax and corporate municipal tax for the first year was confirmed. The property tax record was kept at a group company. The original document was not showed, but we judged there was no problem. Accounting work is outsourced to a certified public accountant office. We checked outsourcing contract (August 1, 2017). AMITA confirmed a summary of the tax laws, corporate tax law, local corporate tax law, local tax law, etc.	Compliant		
1.1.3	Indicator: Presence of documents demonstrating compliance with all relevant national and local labor laws and regulations Requirement: Yes Applicability: All	a. Maintain copies of national labor codes and laws applicable to farm (scope is restricted to the farm sites within the unit certification.) 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).	JSF has been followed the Labor Standards Law, the Industrial Safety and Health Law, and the Labor Contract Law. JSF prepare a website link to the text. No inspections have been conducted on labor laws and regulations.	Compliant		

1.1.4	<p>Indicator: Presence of documents demonstrating compliance with regulations and permits concerning water quality impacts</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>a. Obtain permits for water quality impacts where applicable.</p> <p>b. Compile list of and comply with all discharge laws or regulations.</p> <p>c. Maintain records of monitoring and compliance with discharge laws and regulations as required.</p>	<p>Aquaculture facilities are exempted under the Water Pollution Control Law, and there are no other laws governing the quality of wastewater. There are no regulations regarding wastewater quality standards in Aomori and Imabetsu.</p> <p>In order to keep the fish in the fishing port at the time of landing, water containing blood flows out from the fishing port. Although there are no restrictions, water quality surveys were voluntarily conducted by themselves in a control zone that was far from the drain outlet. There were no significant differences for DO, total phosphorus, or total nitrogen. In a visual survey by diving, the blood did not settle, drifted on the surface, and spread with the flow of the tide. Although there are no regulations, drainage will increase as landings increase in the future, so future responses are under consideration.</p>	Compliant		
PRINCIPLE 2: CONSERVE NATURAL HABITAT, LOCAL BIODIVERSITY AND ECOSYSTEM FUNCTION						
Criterion 2.1 Benthic biodiversity and benthic effects [1]						
Footnote	[1] Closed production systems that can demonstrate that they collect and responsibly dispose of > 75% of solid nutrients from the production system are exempt from standards under Criterion 2.1. See Appendix VI for requirements on transparency for 2.1.1, 2.1.2 and 2.1.3.					
<p>Instruction to Clients and CABs on Criterion 2.1 – Modification of the Benthic Sampling Methodology</p> <p>For farms located in a jurisdiction where specific benthic sampling locations are required under law, clients may request to modify the benthic sampling methodology prescribed in Appendix I-1 to allow for sampling at different locations and/or changes in the total number of samples. Where modifications are sought, farms shall provide a full justification to the CAB for review. Requests for modification shall be supported by mapping of differences in sampling locations. In any event, the sampling locations must at a minimum include samples from the cage edge and samples taken from inside and outside of a defined AZE.</p> <p>CABs shall evaluate client requests to modify benthic methodology based on whether there is a risk that such changes would jeopardize the intent and rigor of the ASC Salmon Standard. If the CAB determines that proposed modifications are low risk, the CAB shall ensure that details of the modified benthic sampling methodology are fully described and justified in the audit report.</p>						
2.1.1	<p>Indicator: Redox potential or [2] sulphide levels in sediment outside of the Allowable Zone of Effect (AZE) [3], following the sampling methodology outlined in Appendix I-1</p> <p>Requirement: Redox potential > 0 mV or Sulphide ≤ 1,500 µM/L</p> <p>Applicability: All farms except as noted in [1]</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 (30 m) and GPS locations of all sediment collections stations. If the farm uses a site-specific AZE, provide justification [3] 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 and 2.1.3.</p> <p>c. Inform the CAB whether the farm chose option #1 or option #2 to demonstrate compliance with the requirements of the Standard.</p> <p>d. Collect sediment samples in accordance with the methodology in Appendix I-1 (i.e. at the time of peak cage biomass and at all required stations).</p> <p>e. For option #1, measure and record redox potential (mV) in sediment samples using an appropriate, nationally or internationally recognized testing method.</p> <p>f. For option #2, measure and record sulphide concentration (µM) using an appropriate, nationally or internationally recognized testing method.</p> <p>g. Submit test results to ASC as per Appendix VI at least once for each production cycle. If site has hard bottom and cannot complete tests, report this to ASC.</p>	<p>The range of AZE (30m from float) is mapped. It is set for the sacrifice place in 2017 and the future increase place.</p> <p>There is a sedimentary layer on the ocean floor.</p> <p>In accordance with ASC standards, nine survey points including the control zone were set and mud collected with a mud collector. The survey was conducted on April 12, 2019, when the biomass amount reached its maximum.</p> <p>Selected based on sulfide concentration.</p> <p>The survey was commissioned to a specialized research company (Shin Nihon Kankyo Chosa Co., Ltd.). As a result, the ASC reference value of 1500 µM / L was exceeded all around AZE. In the control group, it was 1000 µM / L or less.</p> <p>When the diving survey was conducted on January 20, 2019, no sediment was observed. When a diving survey was conducted on April 10, deposition was observed. Therefore, it is considered that the uneaten feed during this period has accumulated.</p> <p>A bottom quality improvement plan was created. First of all, observe the self-cleaning recovery for 2 months. If there is no improvement after that, we will try to stir the deposited layer. After that, the investigation is continued and the improvement situation is confirmed. If the situation does not improve immediately next fiscal year, they will move to the location of the fence.</p> <p>The maximum amount of feeding is 2% of the body weight, but we are considering reducing it a little and feeding slowly so as not to eat. For example, shifting system and feed twice a day.</p>	Minor	<p>The sulfur level of the sediment at the outer edge of AZE exceeded 1,500 µMol / L. An improvement plan has been created and the next aquaculture will take place where the sulfur level is below 1,500 µMol / L (this year or next).</p> <p>The system is already in place to ensure that the next season's aquaculture will meet the standards, so the minor is raised.</p>	1500 µM / L or more for all AZE outer edges
Footnote	[2] Farm sites can choose whether to use redox or sulphide. Farms do not have to demonstrate that they meet both.					
Footnote	[3] Allowable Zone of Effect (AZE) is defined under this standard as 30 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.					

2.1.2	<p>Indicator: Faunal index score indicating good [4] to high ecological quality in sediment outside the AZE, following the sampling methodology outlined in Appendix I-1</p> <p>Requirement: AZTI Marine Biotic Index (AMBI [5]) score ≤ 3.3, or Shannon-Wiener Index score > 3, or Benthic Quality Index (BQI) score ≥ 15, or Infaunal Trophic Index (ITI) score ≥ 25</p> <p>Applicability: All farms except as noted in [1]</p>	<p>Notes:</p> <ul style="list-style-type: none">Under Indicator 2.1.2, farms can choose one of four measurements to show compliance with the faunal index Requirement: AMBI (Option #1); Shannon-Wiener Index (Option #2); BQI (Option #3); or ITI (Option #4). Farms do not have to demonstrate that they meet all four threshold values.If a farm is exempt due to hard bottom benthos (see 2.1.1b), then 2.1.2 does not apply and this shall be noted in the audit report. <p>a. Prepare a map showing the AZE (30 m or site specific) and sediment collections stations (see 2.1.1).</p> <p>b. Inform the CAB whether the farm chose option #1, #2, #3, or #4 to demonstrate compliance with the requirement.</p> <p>c. Collect sediment samples in accordance with Appendix I-1 (see 2.1.1).</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. Retain documentary evidence to show how scores were obtained. If samples were analyzed and index calculated by an independent laboratory, obtain copies of results.</p> <p>i. Submit faunal index scores to ASC (Appendix VI) at least once for each production cycle.</p>	<p>In accordance with the bottom sediment survey in 2.1.1, the same company was commissioned to survey benthic animals. The Shannon-Wiener index was selected. The three AZE outer edges surveyed were 3.9, 4.2, and 5.0, respectively, which met the standard.</p>	Compliant		3.9, 4.2, 5.0 at 3 points on the outer edge of AZE
Footnote	[4] "Good" Ecological Quality Classification: The level of diversity and abundance of invertebrate taxa is slightly outside the range associated with the type-specific conditions. Most of the sensitive taxa of the type-specific communities are present.					
Footnote	[5] http://www.azti.es/en/ambi-azti-marine-biotic-index.html .					
2.1.3	<p>As a result of the benthic animal survey in 2.1.2, a total of 19 taxa were observed in AZE, but none of them was a contamination indicator species. "Bent benthic analysis results" were stored.</p>	<p>a. Document appropriate sediment sample collection as for 2.1.1a and 2.1.1c, or exemption as per 2.1.1b.</p> <p>b. For sediment samples taken within the AZE, determine abundance and taxonomic composition of macrofauna using an appropriate testing method.</p> <p>c. Identify all highly abundant taxa [6] and specify which ones (if any) are pollution indicator species.</p> <p>d. Retain documentary evidence to show how taxa were identified and how counts were obtained. If samples were analyzed by an independent lab, obtain copies of results.</p> <p>e. Submit counts of macrofaunal taxa to ASC (Appendix VI) at least once for each production cycle.</p>	<p>As a result of the benthic animal survey in 2.1.2, a total of 19 species were observed in AZE, but none of them was a contamination indicator species. "Bent benthic analysis results" were stored.</p>	Compliant		There are a total of 19 taxonomic major groups in AZE.
Footnote	[6] Highly abundant: Greater than 100 organisms per square meter (or equally high to reference site(s) if natural abundance is lower than this level).					
2.1.4	<p>Indicator: Definition of a site-specific AZE based on a robust and credible [7] modeling system</p> <p>Requirement: Yes</p> <p>Applicability: All farms except as noted in [1]</p>	<p>a. Undertake an analysis to determine the site-specific AZE and depositional pattern.</p> <p>b. Maintain records to show how the analysis (in 2.1.4a) is robust and credible based on modeling using a multi-parameter approach [7].</p> <p>c. Maintain records to show that modeling results for the site-specific AZE have been verified with > 6 months of monitoring data.</p>	<p>"AZE and bottom sediment survey points" summarizes the discussion regarding AZE settings.</p> <p>A tidal meter was installed for one year to measure the flow direction and flow velocity. Between November and April when raising fish, the flow rate of 0.4 knots (about 20 cm / sec) or less was 95% or more. The food sedimentation rate was 10 cm / s.</p> <p>The depth of the fishery is about 20m, the diameter of the float is 35m, and the food is fed within a radius of 5m from the center of the float. Therefore, we concluded that the AZE value of 30m from float is appropriate.</p> <p>Even under observation by diving, it was observed that the influence of the float was about 30m from the float.</p>	Compliant		AZE is 30m from the outer edge of the float

Footnote	[7] Robust and credible: The SEPA AUTODEPOMOD modeling system is considered to be an example of a credible and robust system. The model must include a multi-parameter approach. Monitoring must be used to ground-truth the AZE proposed through the model.
<i>Criterion 2.2 Water quality in and near the site of operation [8]</i>	

		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
Footnote	[8] See Appendix VI for transparency requirements for 2.2.1, 2.2.2, 2.2.3 and 2.2.5.					
2.2.1	<p>Indicator: Weekly average percent saturation [9] of dissolved oxygen (DO) [10] on farm, calculated following methodology in Appendix I-4</p> <p>Requirement: ≥ 70% [11]</p> <p>Applicability: All farms except as noted in [11]</p>	<p>Instruction to Clients for Indicator 2.2.1 – Monitoring Average Weekly Percent Saturation of Dissolved Oxygen</p> <p>Appendix I-4 presents the required methodology that farms must follow for sampling the average weekly percent saturation of dissolved oxygen (DO). Key points of the method are as follows:</p> <ul style="list-style-type: none">measurements may be taken with a handheld oxygen meter or equivalent chemical method;equipment is calibrated according to manufacturer’s recommendations;measurements are taken at least twice daily: once in the morning (6 –9 am) and once in the afternoon (3–6 pm) as appropriate for the location and season;salinity and temperature must also be measured when DO is sampled;sampling should be done at 5 meters depth in water conditions that would be experienced by fish (e.g. at the downstream edge of a net pen array);each week, all DO measurements are used in the calculation of a weekly average percent saturation. <p>If monitoring deviates from prescribed sampling methodology, the farm shall provide the auditor with a written justification (e.g. when samples are missed due to bad weather). In limited and well-justified situations, farms may request that the CAB approve reduction of DO monitoring frequency to one sample per day.</p> <p>Exception [see footnote 12] If a farm does not meet the minimum 70 percent weekly average saturation requirement, the farm must demonstrate the 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. For any such exceptions, the auditor shall fully document in the audit report how the farm has demonstrated consistency with the reference site.</p> <p>Note 1: <i>Percent saturation</i> 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 twice daily using a calibrated oxygen meter or equivalent method. For first audits, farm records must cover ≥ 6 months.</p>	<p>Since feeding was performed once every day, DO was measured with a DO meter at that time. Measurements were taken at around 10 am before feeding.</p> <p>Measurement started from the 1st week of November 2018.</p> <p>Measurement was performed after calibration every morning. The frequency of inspection of the machine itself was not confirmed.</p> <p>The weekly averages were all around 100%, and no week was below 70%. Measurement data was stored.</p> <p>Report will be sent to ASC in the future.</p>	Compliant		
	<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 (see Instructions).</p>					
	<p>e. Arrange for auditor to witness DO monitoring and calibration while on site.</p>					
	<p>f. Submit results from monitoring of average weekly DO as per Appendix VI to ASC at least once per year.</p>					
Footnote	[9] 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	[10] Averaged weekly from two daily measurements (proposed at 6 am and 3 pm).					
Footnote	[11] An exception to this standard shall be made for farms that can demonstrate consistency with a reference site in the same water body.					
2.2.2	<p>Indicator: Maximum percentage of weekly samples from 2.2.1 that fall under 2 mg/L DO</p> <p>Requirement: 5%</p> <p>Applicability: All</p>	<p>a. Calculate the percentage of on-farm samples taken for 2.2.1a that fall under 2 mg/L DO.</p>	<p>There were no cases where DO was less than 2 mg / L.</p> <p>Report will be sent to ASC in the future.</p>	Compliant		
	<p>b. Submit results from 2.2.2a as per Appendix VI to ASC at least once per year.</p>					
2.2.3	<p>Indicator: For jurisdictions that have national or regional coastal water quality targets [12], demonstration through third-party analysis that the farm is in an area recently [13] classified as having “good” or “very good” water quality [14]</p> <p>Requirement: Yes [15]</p>	<p>a. Inform the CAB whether relevant targets and classification systems are applicable in the jurisdiction. If applicable, proceed to “2.2.3.b”. If not applicable, take action as required under 2.2.4</p> <p>b. Compile a summary of relevant national or regional water quality targets and classifications, identifying the third-party responsible for the analysis and classification.</p>	<p>Based on the Basic Environment Law and Water Pollution Control Law, water areas of public water bodies nationwide are designated, and environmental standards for each type are established. The “Tsugaru Peninsula North Sea Area” of the water area is designated as “Sea Area A”, which has the strictest standards. The reference values for total nitrogen and total phosphorus are not set because they are not considered to be “sea areas that may cause significant growth of marine phytoplankton”. Chemical oxygen demand (COD) is measured annually by Aomori Prefecture and published on the Ministry of the Environment website. In both the latest 2017 results and previous results, the Tsugaru Peninsula north sea area met the COD standard of 2 mg / L or less.</p> <p>https://www.env.go.jp/water/suiki/index.html</p> <p>In addition, client commissioned a specialized research company in 2.1.1 to conduct</p>	Compliant		

	Applicability: All farms except as noted in [15]	c. Identify the most recent classification of water quality for the area in which the farm operates.	detailed water quality surveys twice. Although there is no specification of the reference value of the sea area for total nitrogen and total phosphorus, it was compared with sea area 1, which is the strictest reference value in the designated area. As a result, all the criteria of COD2mg / L or less, total nitrogen 0.2mg / L or less, total phosphorus 0.02mg / L or less were satisfied at the 4 sites surveyed and 1 control zone.				
Footnote	[12] Related to nutrients (e.g., N, P, chlorophyll A).						
Footnote	[13] Within the two years prior to the audit.						
Footnote	[14] Classifications of “good” and “very good” are used in the EU Water Framework Directive. Equivalent classification from other water quality monitoring systems in other jurisdictions are acceptable.						
Footnote	[15] Closed production systems that can demonstrate the collection and responsible disposal of > 75% of solid nutrients as well as > 50% of dissolved nutrients (through biofiltration, settling and/or other technologies) are exempt from standards 2.2.3 and 2.2.4.						
2.2.4	Indicator: For jurisdictions without national or regional coastal water quality targets, evidence of monitoring of nitrogen and phosphorous [16] levels on farm and at a reference site, following methodology in Appendix I-5 Requirement: Consistency with reference site Applicability: All farms except as noted in [16]	a. Develop, implement, and document a weekly monitoring plan for N, NH4, NO3, total P, and ortho-P in compliance with Appendix I-5. For first audits, farm records must cover ≥ 6 months. b. Calibrate all equipment according to the manufacturer’s recommendations. c. Submit data on N and P to ASC as per Appendix VI at least once per year.	2.2.4 is not applicable because it falls under 2.2.3. However, JSF purchased a portable absorptiometer and voluntarily monitored nitrogen and phosphorus every week according to I-5. As a result, there was no significant difference from the results of the survey conducted by entrusting to the specialized research company.	N/A			
Footnote	[16] Farms shall monitor total N, NH4, NO3, total P and Ortho-P in the water column. Results shall be submitted to the ASC database. Methods such as a Hach kit are acceptable.						
2.2.5	Indicator: Demonstration of calculation of biochemical oxygen demand (BOD [17]) of the farm on a production cycle basis Requirement: Yes Applicability: All	Instruction to Clients for Indicator 2.2.5 – Calculating Biochemical Oxygen Demand Biochemical Oxygen Demand (BOD) can be calculated based on cumulative inputs of N and C to the environment over the course of the production cycle. BOD = ((total N in feed – total N in fish)*4.57) + ((total C in feed – total C in fish)*2.67). • A farm may deduct N or C that is captured, filtered or absorbed through approaches such as IMTA or through direct collection of nutrient wasted. In this equation, “fish” refers to harvested fish. In this case, farm must submit breakdown of N & C captured/filtered/absorbed to ASC along with method used to estimate nutrient reduction. • Reference for calculation methodology: Boyd C. 2009. Estimating mechanical aeration requirement in shrimp ponds from the oxygen demand of feed. In: Proceedings of the World Aquaculture Society Meeting; Sept 25–29, 2009; VeraCruz, Mexico. And: Global Aquaculture Performance Index BOD calculation methodology available at http://web.uvic.ca/~gapi/explore-gapi/bod.html . Note 1: Calculation requires a full production cycle of data and is required beginning with the production cycle first undergoing certification. If it is the first audit for the farm, the client is required to demonstrate to the CAB that data is being collected and an understanding of the calculations. Note 2: Farms may seek an exemption to Indicator 2.2.5 if: the farm collects BOD samples at least once every two weeks, samples are independently analyzed by an accredited laboratory, and the farm can show that BOD monitoring results do not deviate significantly from calculated annual BOD load.	a. Collect data throughout the course of the production cycle and calculate BOD according to formula in the instruction box. b. Submit calculated BOD as per Appendix VI to ASC for each production cycle.	The harvested fish was sent to the Okamura food industry, a group company that processes the fish, and stored, but because intestines were removed, the nitrogen and carbon content of the entire fish could not be measured. For this reason, data on the same fish species of an affiliated company in Denmark was obtained and the BOD was calculated. Feed data was calculated using values received from feed companies. As a result, BOD was 1,067,104 O2 / kg in the previous production cycle. In the next term, JSF plan to measure the nitrogen and carbon content of the whole fish and calculate the BOD.	Minor	The nitrogen and carbon content of the whole fish could not be measured. For this reason, data on the same fish species of an affiliated company in Denmark was obtained and the BOD was calculated. Minor is raised since the BOD had been calculated and they plan to measure it again in the next fiscal year.	1,067,104 O2/kg
Footnote	[17] BOD calculated as: ((total N in feed – total N in fish)*4.57) + ((total C in feed – total C in fish)*2.67). A farm may deduct N or C that is captured, filtered or absorbed through approaches such as IMTA or through direct collection of nutrient wasted. In this equation, “fish” refers to harvested fish. Reference for calculation methodology: Boyd C. 2009. Estimating mechanical aeration requirement in shrimp ponds from the oxygen demand of feed. In: Proceedings of the World Aquaculture Society Meeting; Sept 25–29, 2009; VeraCruz, Mexico. And: Global Aquaculture Performance Index BOD calculation methodology available at http://web.uvic.ca/~gapi/explore-gapi/bod.html .						
2.2.6	Indicator: Appropriate controls are in place that maintain good culture and hygienic conditions on the farm which extends to all chemicals, including veterinary drugs, thereby ensuring that adverse impacts on environmental quality are minimised. Requirement: Yes	a. Document control systems in good culture and hygiene that includes all appropriate elements. b. Apply the systems ensuring that staff are aware, qualified and trained to properly implement them.	A system to maintain a good aquaculture environment and sanitation environment has been established by complying with ASC standards in general. The “Environmentally-friendly aquaculture management policy” has been prepared, and the procedure manuals corresponding to each standard have been prepared. Employees confirmed through interviews that they understood their responsibilities. In particular, for aquatic drugs, the usage is calculated according to the OTC instructions in the “Drug Use / Inventory Records”. Since OTC is mixed with the feed, diffusion to the outside is minimized. It is administered only immediately after habituation, and gives little food with a small float, so there is almost no outflow. The amount used is calculated at the office and the employees feed. Put 20kg of food in a tray and mix with moisture. Feed every other day after all water has been fed. Therefore, no moisture remains on the	Compliant			

	Applicability: All		Feed every other day after all water has been fed. Therefore, no moisture remains on the tray. After mixing the chemicals, the tray is not washed because it continues to be used to continuously feed the food with water only. Since the reagent is treated as industrial waste, it does not flow into the natural environment.			
Criterion 2.3 Nutrient release from production						
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
2.3.1	Indicator: Percentage of fines [18] in the feed at point of entry to the farm [20] (calculated following methodology in Appendix I-2) Requirement: < 1% by weight of the feed Applicability: All farms except as noted in [19]	Note: The methodology given in Appendix I-2 is used to determine the fines (dust and small fragments) in finished product of fish feed which has a diameter of 3 mm or more.				
		a. Determine and document a schedule and location for quarterly testing of feed. If testing prior to delivery to farm site, document rationale behind not testing on site.	The feed was sampled according to ASC criteria. It was measured for each bait diameter and packing method. As a result, in all samples, the fine particles were 0.04% to 0.08%, which was well below 1%, and there was no problem. In the future, it will be measured once every quarter.		Compliant	
		b. If using a sieving machine, calibrate equipment according to manufacturer's recommendations.				
		c. Conduct test according to detailed methodology in Appendix I-2 and record results for the pooled sample for each quarter. For first audits, farms must have test results from the last 3 months.				
Footnote	[18] Fines: Dust and fragments in the feed. Particles that separate from feed with a diameter of 5 mm or less when sieved through a 1 mm sieve, or particles that separate from feed with a diameter greater than 5 mm when sieved through a 2.36 mm sieve. To be measured at farm gate (e.g., from feed bags after they are delivered to farm).					
Footnote	[19] To be measured every quarter or every three months. Samples that are measured shall be chosen randomly. Feed may be sampled immediately prior to delivery to farm for sites with no feed storage where it is not possible to sample on farm. Closed production systems that can demonstrate the collection and responsible disposal of > 75% of solid nutrients and > 50% of dissolved nutrients (through biofiltration, settling and/or other technologies) are exempt.					
Criterion 2.4 Interaction with critical or sensitive habitats and species						
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
2.4.1	Indicator: Evidence of an assessment of the farm's potential impacts on biodiversity and nearby ecosystems that contains at a minimum the components outlined in Appendix I-3 Requirement: Yes Applicability: All	Note: If a farm has previously undertaken an independent assessment of biodiversity impact (e.g. as part of the regulatory permitting process), the farm may use such documents as evidence to demonstrate compliance with Indicator 2.4.1 as long as all components in Appendix I-3 are explicitly covered.				
		a. Perform (or contract to have performed) a documented assessment of the farm's potential impact on biodiversity and nearby ecosystems. The assessment must address all components outlined in Appendix I-3.	JSF owns the Aomori Red Data Book (2010 edition). Marine life is not designated as a valuable species. There were no precious species or their habitats that could be affected by farms in other species such as birds. AMITA interviewed employees of the environmental research company in 2.1.1, but there was no information on precious species in the region regarding birds. As mentioned above, there was some evidence that there would be no species or natural environment applicable to Attachment I-3. However, potential impact assessments on biodiversity and ecosystems have not been compiled. Moreover, there were few experts who interviewed, and there was a lack of specialized information.		Minor	Some evidence had been prepared that there would be no species or natural environment corresponding to Attachment I-3. However, potential impact assessments on biodiversity and ecosystems have not been compiled. Moreover, there were few experts who interviewed, and there was a lack of specialized information. The current evidence and field observations suggest that the farm is unlikely to affect biodiversity and rare species, so minor is raised for the lack of interviews and no documentation of the assessments.
		b. If the assessment (2.4.1a) identifies potential impact(s) of the farm on biodiversity or nearby critical, sensitive or protected habitats or species, prepare plan to address those potential impacts.				
		c. Keep records to show how the farm implements plan(s) from 2.4.1b to minimize potential impacts to critical or sensitive habitats and species.				

2.4.2	<p>Indicator: Allowance for the farm to be sited in a protected area [20] or High Conservation Value Areas [21] (HCVAs)</p> <p>Requirement: None [22]</p> <p>Applicability: All farms except as noted in [22]</p>	<p>Instruction to Clients for Indicator 2.4.2 – Exceptions to Requirements that Farms are not sited within Protected Areas or HCVAs</p> <p>The following exceptions shall be made for Indicator 2.4.2:</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>Definitions</p> <p><u>Protected area:</u> “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><u>High Conservation Value Areas (HCVA):</u> 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</p>			
		<p>a. Provide a map showing the location 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 2.4.2c–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 2.4.2 (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 2.4.2 <u>do not apply</u>, then the farm does not comply with the requirement and is ineligible for ASC certification.</p>	<p>Imabetsu town has a designated Tsugaru quasi-national park, but the farm is outside the designated quasi-national park. A designated map of Tsugaru Quasi-National Park was presented and confirmed. There are no other protected areas designated or protected.</p>	Compliant	
Footnote	[20] 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.” Source: Dudley, N. (Editor) (2008), Guidelines for Applying Protected Area Management Categories, Gland, Switzerland: IUCN. x + 86pp.				
Footnote	[21] 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/).				
Footnote	<p>[22] The following exceptions shall be made for Standard 2.4.2:</p> <ul style="list-style-type: none">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).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.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.				
Criterion 2.5 Interaction with wildlife, including predators [23]					
	Compliance Criteria (Required Client Actions):		Auditor Evaluation (Required CAB Actions):		
Footnote	[23] See Appendix VI for transparency requirements for 2.5.2, 2.5.5 and 2.5.6.				
	<p>Indicator: Number of days in the production cycle when acoustic deterrent devices (ADDs) or acoustic</p>	<p>a. Compile documentary evidence to show that no ADDs or AHDs have been used by the</p>			

2.5.1	When acoustic deterrent devices (ADDs) or acoustic harassment devices (AHDs) were used	farm.	No acoustic repellent device is used. It was also confirmed by an on-site examination. It is declared that it will not be used in the “Environmentally-friendly farm management policy”. The policy not to use it on the website is disclosed. https://www.japan-salmonfarm.com/business/asc.pdf	Compliant		
	Requirement: 0 Applicability: All	—				
2.5.2	Indicator: Number of mortalities [25] of endangered or red-listed [26] marine mammals or birds on the farm Requirement: 0 (zero) Applicability: All	a. Prepare a list of all predator control devices and their locations. b. Maintain a record of all predator incidents. c. Maintain a record of all mortalities of marine mammals and birds on the farm identifying the species, date, and apparent cause of death. d. Maintain an up-to-date list of endangered or red-listed marine mammals and birds in the area (see 2.4.1) —	There have been zero deaths of marine mammals or birds, including endangered or redlisted species. In the unlikely event that a wild animal dies, it will be recorded in the “Wild Animal Death Number Checklist”. There is a record of zero since November 2017.	Compliant		
Footnote	[25] Mortalities: Includes animals intentionally killed through lethal action as well as accidental deaths through entanglement or other means.					
Footnote	[26] Species listed as endangered or critically endangered by the IUCN or on a national endangered species list.					

2.5.3	<p>Indicator: Evidence that the following steps were taken prior to lethal action [27] against a predator:</p> <p>1. All other avenues were pursued prior to using lethal action</p> <p>2. Approval was given from a senior manager above the farm manager</p> <p>3. Explicit permission was granted to take lethal action against the specific animal from the relevant regulatory authority</p> <p>Requirement: Yes [28]</p> <p>Applicability: All except cases where human safety is endangered as noted in [28]</p>	<p>a. Provide a list of all lethal actions that the farm took against predators during the previous 12-month period. Note: "lethal action" is an action taken to deliberately kill an animal, including marine mammals and birds.</p> <p>b. For each lethal action identified in 2.5.4a, keep record of the following:</p> <p>1) a rationale showing how the farm pursued all other reasonable avenues prior to using lethal action;</p> <p>2) approval from a senior manager above the farm manager of the lethal action;</p> <p>3) where applicable, explicit permission was granted by the relevant regulatory authority to take lethal action against the animal.</p> <p>c. Provide documentary evidence that steps 1–3 above (in 2.5.4b) were taken prior to killing the animal. If human safety was endangered and urgent action necessary, provide documentary evidence as outlined in [28].</p>	<p>JSF are not killing harmful animals. AMITA confirmed by interviews with managers and interested parties.</p> <p>"Environmentally-friendly farm management policy" also declares that all organisms will not be killed. A policy that is not implemented on the website is also disclosed.</p> <p>https://www.japan-salmonfarm.com/business/asc.pdf</p>	Compliant		
Footnote	[27] Lethal action: Action taken to deliberately kill an animal, including marine mammals and birds.					
Footnote	[28] Exception to these conditions may be made for a rare situation where human safety is endangered. Should this be required, post-incident approval from a senior manager should be made and relevant authorities must be informed.					
<p align="center">Instruction to Clients and CABs on Indicators 2.5.4, 2.5.5, and 2.5.6 – Clarification about the ASC Definition of "Lethal Incident"</p> <p>The ASC Salmon Standard has defined "Lethal incident" to include all lethal actions as well as entanglements or other accidental mortalities of non-salmonids [footnote 29]. For the purpose of assisting farms and auditors with understanding how to evaluate compliance with Indicators 2.5.4, 2.5.5, and 2.5.6, ASC has clarified this definition further:</p> <p align="center">Total number of lethal Incidents = sum of all non-salmonid deaths arising from all lethal actions taken by the farm during a given time period</p> <p>There should be a 1:1 relationship between the number of animal deaths and the number of lethal incidents reported by the farm. For example, if a farm has taken one (1) lethal action in past last two years and that single lethal action resulted in killing three (3) birds, it is considered three (3) lethal incidents within a two year period.</p> <p align="center">The term "non-salmonid" was intended to cover any predatory animals which are likely to try to feed upon farmed salmon. In practice these animals will usually be seals or birds.</p>						
2.5.4	<p>Indicator: Evidence that information about any lethal incidents [30] on the farm has been made easily publicly available [29]</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>a. For all lethal actions (see 2.5.3), keep records showing that the farm made the information available within 30 days of occurrence.</p> <p>a. For all lethal actions (see 2.5.3), keep records showing that the farm made the information available within 30 days of occurrence.</p> <p>b. Ensure that information about all lethal actions listed in 2.5.4a are made easily publicly available (e.g. on a website).</p>	<p>Until now, no wildlife deaths accidents have occurred.</p> <p>Since November 2017, the fact that the number is zero has been disclosed on the company website.</p> <p>https://www.japan-salmonfarm.com/business/asc.pdf</p>	Compliant		
Footnote	[29] Posting results on a public website is an example of "easily publicly available." Shall be made available within 30 days of the incident and see Appendix VI for transparency requirements.					
2.5.5	<p>Indicator: Maximum number of lethal incidents [30] on the farm over the prior two years</p> <p>Requirement: < 9 lethal incidents [31], with no more than two of the incidents being marine mammals</p> <p>Applicability: All</p>	<p>a. Maintain log of lethal incidents (see 2.5.3a) for a minimum of two years. For first audit, > 6 months of data are required.</p> <p>b. Calculate the total number of lethal incidents and the number of incidents involving marine mammals during the previous two year period.</p> <p>c. Send ASC the farm's data for all lethal incidents [30] of any species other than the salmon being farmed (e.g. lethal incidents involving predators such as birds or marine mammals). Data must be sent to ASC on an ongoing basis (i.e. at least once per year and for each production cycle).</p>	<p>Until now, no wildlife deaths accidents have occurred.</p> <p>Since November 2017, the fact that the number is zero has been published on the company website.</p> <p>https://www.japan-salmonfarm.com/business/asc.pdf</p> <p>Report will be sent to ASC in the future.</p>	Compliant		
Footnote	[30] Lethal incident: Includes all lethal actions as well as entanglements or other accidental mortalities of non-salmonids.					
Footnote	[31] Standard 2.5.6 applicable to incidents related to non-endangered and non-red-listed species. This standard complements, and does not contradict, 2.5.3.					
2.5.6	<p>Indicator: In the event of a lethal incident, evidence that an assessment of the risk of lethal incident(s) has been undertaken and demonstration of concrete steps taken by the farm to reduce the risk of future incidences</p>	<p>a. Keep records showing that the farm undertakes an assessment of risk following each lethal incident and how those risk assessments are used to identify concrete steps the farm takes to reduce the risk of future incidents.</p>	<p>Until now, no wildlife deaths accidents have occurred.</p> <p>Since the ceiling mesh used in the next production cycle from November 2019 will be</p>	Compliant		

	Requirement: Yes Applicability: All	b. Provide documentary evidence that the farm implements those steps identified in 2.5.6a to reduce the risk of future lethal incidents.	finer, the risk of bird catching and death will be smaller.			
PRINCIPLE 3: PROTECT THE HEALTH AND GENETIC INTEGRITY OF WILD POPULATIONS						
Criterion 3.1 Introduced or amplified parasites and pathogens [34, 35]						
	Compliance Criteria (Required Client Actions):		Auditor Evaluation (Required CAB Actions):			
Footnote	[32] Farm sites for which there is no release of water that may contain pathogens into the natural (freshwater or marine) environment are exempt from the standards under Criterion 3.1.					
Footnote	[33] See Appendix VI for transparency requirements for 3.1.1, 3.1.3, 3.1.4, 3.1.6 and 3.1.7.					
Instruction to Clients and CABs on Exemptions to Criterion 3.1 According to footnote [32], farm sites for which there is no release of water that may contain pathogens into the natural (freshwater or marine) environment are exempt from the requirements under Criterion 3.1. More specifically, farms are only eligible for exemption from Criterion 3.1 if it can be shown that either of the following holds: 1) the farm does not release any water to the natural environment; or 2) any effluent released by the farm to the natural environment has been effectively treated to kill pathogens (e.g. UV and/or chemical treatment of water with testing demonstrating efficacy). Auditors shall fully document the rationale for any such exemptions in the audit report.						
3.1.1	Indicator: Participation in an Area-Based Management (ABM) scheme for managing disease and resistance to treatments that includes coordination of stocking, fallowing, therapeutic treatments and information-sharing. Detailed requirements are in Appendix II-1. Requirement: Yes Applicability: All except farms that release no water as noted in [32]	a. Keep record of farm’s participation in an ABM scheme. b. Submit to the CAB a description of how the ABM (3.1.1a) coordinates management of disease and resistance to treatments, including: – coordination of stocking; – fallowing; – therapeutic treatments; and – information sharing. c. Provide the CAB access to documentation which is sufficient for the auditor to evaluate the ABM’s compliance with all requirements in Appendix II-1, including definition of area, minimum % participation in the scheme, components, and coordination requirements. d. Submit dates of fallowing period(s) as per Appendix VI to ASC at least once per year.	There is no regional-based management system: ABM (Area-Based Management) in this region. JSF is the only fish farm in the region. Data, during non-farming period is taken with following Appendix VI, will be sent ASC in future	Compliant		
3.1.2	Indicator: A demonstrated commitment [34] to collaborate with NGOs, academics and governments on areas of mutually agreed research to measure possible impacts on wild stocks Requirement: Yes Applicability: All except farms that release no water as noted in [32]	Note: Indicator 3.1.2 requires that farms demonstrate a commitment to collaborate with NGOs, academics and governments on areas of mutually agreed research to measure possible impacts on wild stocks. If the farm does not receive any requests to collaborate on such research projects, the farm may demonstrate compliance by showing evidence of commitment through other proactive means such as published policy statements or directed outreach to relevant organizations. a. Retain records to show how the farm and/or its operating company has communicated with external groups (NGOs, academics, governments) to agree on and collaborate towards areas of research to measure impacts on wild stocks, including records of requests for research support and collaboration and responses to those requests. b. Provide non-financial support to research activities in 3.1.2a by either: – providing researchers with access to farm-level data; – granting researchers direct access to farm sites; or – facilitating research activities in some equivalent way. c. When the farm and/or its operating company denies a request to collaborate on a research project, ensure that there is a written justification for rejecting the proposal. d. Maintain records from research collaborations (e.g. communications with researchers) to show that the farm has supported the research activities identified in 3.1.2a.	Until now, there has been no request for cooperation from outside organizations for the measurement of potential effects on wild-type populations. The policy is to actively cooperate if requested to cooperate in the survey. In addition, since JSF are the first fish farmer in Imabetsu, JSF will continue to cooperate with the local community to share data and information.	Compliant		
Footnote	[34] Commitment: At a minimum, a farm and/or its operating company must demonstrate this commitment through providing farm-level data to researchers, granting researchers access to sites, or other similar non-financial support for research activities.					

3.1.3	<p>Indicator: Establishment and annual review of a maximum sea lice load for the entire ABM and for the individual farm as outlined in Appendix II-2</p> <p>Requirement: Yes</p> <p>Applicability: All except farms that release no water as noted in [32]</p>	<p>a. Keep records to show that a maximum sea lice load has been set for: – the entire ABM; and – the individual farm.</p> <p>b. Maintain evidence that the established maximum sea lice load (3.1.3a) is reviewed annually as outlined in Appendix II-2, incorporating feedback from the monitoring of wild salmon where applicable (See 3.1.6).</p> <p>c. Provide the CAB access to documentation which is sufficient for the auditor to evaluate whether the ABM has set (3.1.3a) and annually reviewed (3.1.3b) maximum sea lice load in compliance with requirements in Appendix II-2.</p> <p>d. Submit the maximum sea lice load for the ABM to ASC as per Appendix VI at least once per year.</p>	<p>JSF interviewed the person in charge of Fisheries Promotion Section, Fisheries Bureau, Agriculture, Forestry and Fisheries Department, Aomori Prefecture.</p> <p>In the region, wild-type salmon has never been a problem, so there is no need for monitoring and there are no acceptable standards for the region.</p> <p>Therefore, the acceptance standard of salmon lice on this farm was tentatively set to 0.1 lice / 1fish (10 lice / 100 fish).</p> <p>It will be reviewed every year in the future.</p> <p>Report will be sent to ASC in the future.</p>	Compliant		
3.1.4	<p>Indicator: Frequent [35] on-farm testing for sea lice, with test results made easily publicly available [36] within seven days of testing</p> <p>Requirement: Yes</p> <p>Applicability: All except farms that release no water as noted in [32]</p>	<p>a. Prepare an annual schedule for testing sea lice that identifies timeframes of routine testing frequency (at a minimum, monthly) and for high-frequency testing (weekly) due to sensitive periods for wild salmonids (e.g. during and immediately prior to outmigration of juveniles).</p> <p>b. Maintain records of results of on-farm testing for sea lice. If farm deviates from schedule due to weather [35] maintain documentation of event and rationale.</p> <p>c. Document the methodology used for testing sea lice ('testing' includes both counting and identifying sea lice). The method must follow national or international norms, follows accepted minimum sample size, use random sampling, and record the species and life-stage of the sea lice. If farm uses a closed production system and would like to use an alternate method (i.e. video), farm shall provide the CAB with details on the method and efficacy of the method.</p> <p>d. Make the testing results from 3.1.4b easily publicly available (e.g. posted to the company's website) within seven days of testing. If requested, provide stakeholders access to hardcopies of test results.</p> <p>e. Keep records of when and where test results were made public.</p> <p>f. Submit test results to ASC (Appendix VI) at least once per year.</p>	<p>"The inspection method of the salmon lice" is under establishment.</p> <p>From November to March, both sides of the fish is checked when measuring the fish. Fish body measurement is conducted at least once a month. Also, during the landing period from April to June, 100 or more individuals are randomly sampled from the individuals at the time of landing. Last season, the set standard value of 10/100 was clear. The test results are published on the company website.</p> <p>https://www.japan-salmonfarm.com/business/asc.pdf</p> <p>Last season, the results were posted together after the end of the season, but in the future it will be published within 7 days after the test.</p>	Compliant		
Footnote	[35] Testing must be weekly during and immediately prior to sensitive periods for wild salmonids, such as outmigration of wild juvenile salmon. Testing must be at least monthly during the rest of the year, unless water temperature is so cold that it would jeopardize farmed fish health to test for lice (below 4 degrees C). Within closed production systems, alternative methods for monitoring sea lice, such as video monitoring, may be used.					
Footnote	[36] Posting results on a public website is an example of "easily publicly available."					

3.1.5	<p>Indicator: In areas with wild salmonids [37], evidence of data [38] and the farm’s understanding of that data, around salmonid migration routes, migration timing and stock productivity in major waterways within 50 kilometers of the farm</p> <p>Requirement: Yes</p> <p>Applicability: All farms operating in areas with wild salmonids except farms that release no water as noted in [32]</p>	<p>Instruction to Clients for Indicator 3.1.5 – Evidence for Wild Salmonid Health and Migration</p> <p>In writing this indicator, the SAD Steering Committee concluded that relevant data sets on wild salmonid health and migration are publicly available in the vast majority of, if not all, jurisdictions with wild salmonids. The information is likely to come from government sources or from research institutions. Therefore farms are not responsible for conducting this research themselves. However farms must demonstrate that they are aware of this basic information in their region, as such information is needed to make management decisions related to minimizing potential impact on those wild stocks.</p> <p>This Indicator requires collection and understanding of general data for the major watersheds within approximately 50 km of the farm. A farm does not need to demonstrate that there is data for every small river or tributary or subpopulation. Information should relate to the wild fish stock level, which implies that the population is more or less isolated from other stocks of the same species and hence self-sustaining. A “conservation unit” under the Canadian Wild Salmon Policy is an example of an appropriate fish stock-level definition. However, it must be recognized that each jurisdiction may have slight differences in how a wild salmonid stock is defined in the region.</p> <p>For purposes of these standards, “areas with wild salmonids” are defined as areas within 75 kilometers of a wild salmonid migration route or habitat. This definition is expected to encompass all, or nearly all, of salmon-growing areas in the northern hemisphere [39]. Potentially affected species in these areas are salmonids (i.e. including all trout species). Where a species is not natural to a region (e.g. Atlantic or Pacific Salmon in Chile) the areas are not considered as “areas with wild salmonids” even if salmon have escaped from farms and established themselves as a reproducing species in “the wild”.</p> <p>Farms do not need to conduct research on migration routes, timing and the health of wild stocks under this standard if general information is already available. Farms must demonstrate an understanding of this information at the general level for salmonid populations in their region, as such information is needed to make management decisions related to minimizing potential impact on those stocks. Such “evidence” would consist of, for example, peer review studies; publicly available government monitoring and reporting.</p>									
		<table><tr><td>a. Identify all salmonid species that naturally occur within 75 km of the farm through literature search or by consulting with a reputable authority. If the farm is not in an area with wild salmonids, then 3.1.5b and c do not apply.</td><td rowspan="4"><p>As salmonid fish, the region is home to natural chum salmon, cherry salmon, and trout. There is a lot of data on the migration route and timing of chum salmon. It is said that cherry salmon will descend from March to April, spend about a year in the Sea of Okhotsk, and return from January to May. Amemus descends in spring and goes up in autumn. The details of migration are unknown, but they are thought to be migrating along the coast.</p><p>Since each fishery cooperative manages rivers with fishing rights, Aomori Prefecture does not monitor salmonids. Therefore, we interviewed the fishery cooperative. Upstream of natural salmon trout has been confirmed in major rivers (Imabetsu River and Masukawa River) within 50 km from the farm. Of these, the species that can affect the quantity in large quantities is considered to be cherry salmon. The cherry salmon run up and the down to sea from April to June. This period is considered to be the period most susceptible to pathogens.</p></td></tr><tr><td>b. For species listed in 3.1.5a, compile best available information on migration routes, migration timing (range of months for juvenile outmigration and returning salmon), life history timing for coastal resident salmonids, and stock productivity over time in major waterways within 50 km of the farm.</td></tr><tr><td>c. From data in 3.1.5b, identify any sensitive periods for wild salmonids (e.g. periods of outmigration of juveniles) within 50 km of the farm.</td></tr><tr><td>–</td></tr></table>	a. Identify all salmonid species that naturally occur within 75 km of the farm through literature search or by consulting with a reputable authority. If the farm is not in an area with wild salmonids, then 3.1.5b and c do not apply.	<p>As salmonid fish, the region is home to natural chum salmon, cherry salmon, and trout. There is a lot of data on the migration route and timing of chum salmon. It is said that cherry salmon will descend from March to April, spend about a year in the Sea of Okhotsk, and return from January to May. Amemus descends in spring and goes up in autumn. The details of migration are unknown, but they are thought to be migrating along the coast.</p> <p>Since each fishery cooperative manages rivers with fishing rights, Aomori Prefecture does not monitor salmonids. Therefore, we interviewed the fishery cooperative. Upstream of natural salmon trout has been confirmed in major rivers (Imabetsu River and Masukawa River) within 50 km from the farm. Of these, the species that can affect the quantity in large quantities is considered to be cherry salmon. The cherry salmon run up and the down to sea from April to June. This period is considered to be the period most susceptible to pathogens.</p>	b. For species listed in 3.1.5a, compile best available information on migration routes, migration timing (range of months for juvenile outmigration and returning salmon), life history timing for coastal resident salmonids, and stock productivity over time in major waterways within 50 km of the farm.	c. From data in 3.1.5b, identify any sensitive periods for wild salmonids (e.g. periods of outmigration of juveniles) within 50 km of the farm.	–	Compliant			
a. Identify all salmonid species that naturally occur within 75 km of the farm through literature search or by consulting with a reputable authority. If the farm is not in an area with wild salmonids, then 3.1.5b and c do not apply.	<p>As salmonid fish, the region is home to natural chum salmon, cherry salmon, and trout. There is a lot of data on the migration route and timing of chum salmon. It is said that cherry salmon will descend from March to April, spend about a year in the Sea of Okhotsk, and return from January to May. Amemus descends in spring and goes up in autumn. The details of migration are unknown, but they are thought to be migrating along the coast.</p> <p>Since each fishery cooperative manages rivers with fishing rights, Aomori Prefecture does not monitor salmonids. Therefore, we interviewed the fishery cooperative. Upstream of natural salmon trout has been confirmed in major rivers (Imabetsu River and Masukawa River) within 50 km from the farm. Of these, the species that can affect the quantity in large quantities is considered to be cherry salmon. The cherry salmon run up and the down to sea from April to June. This period is considered to be the period most susceptible to pathogens.</p>										
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–											
Footnote	[37] For purposes of these standards, “areas with wild salmonids” are defined as areas within 75 kilometers of a wild salmonid migration route or habitat. This definition is expected to encompass all, or nearly all, of salmon-growing areas in the northern hemisphere.										
Footnote	[38] Farms do not need to conduct research on migration routes, timing and the health of wild stocks under this standard if general information is already available. Farms must demonstrate an understanding of this information at the general level for salmonid populations in their region, as such information is needed to make management decisions related to minimizing potential impact on those stocks.										
3.1.6	<p>Indicator: In areas of wild salmonids, monitoring of sea lice levels on wild out-migrating salmon juveniles or on coastal sea trout or Arctic char, with results made publicly available. See requirements in Appendix III-1.</p> <p>Requirement: Yes</p> <p>Applicability: All farms operating in areas with wild salmonids except farms that release no water as noted in [32]</p>	<table><tr><td>a. Inform the CAB if the farm operates in an area of wild salmonids. If not, then Indicator 3.1.6 does not apply.</td><td rowspan="5"><p>JSF interviewed the Aomori Prefectural Water Surface Test Station.</p><p>In Aomori Prefecture, the number of salmon lice occurring in natural salmonids is not zero, but it is not high, and it is not a problem level. The prefecture does not investigate because there is no impact on product value. Therefore, there is no salmon lice monitoring system for wild salmonids in this region. In the future, it will be necessary to monitor some salmon lice, such as observing the salmon in the local fish market. Report will be sent to ASC in the future.</p></td></tr><tr><td>b. Keep records to show the farm participates in monitoring of sea lice on wild salmonids.</td></tr><tr><td>c. Provide the CAB access to documentation which is sufficient for the auditor to evaluate whether the methodology used for monitoring of sea lice on wild salmonids is in compliance with the requirements in Appendix III-1.</td></tr><tr><td>d. Make the results from 3.1.6b easily publicly available (e.g. posted to the company's website) within eight weeks of completion of monitoring.</td></tr><tr><td>e. Submit to ASC the results from monitoring of sea lice levels on wild salmonids as per Appendix VI.</td></tr></table>	a. Inform the CAB if the farm operates in an area of wild salmonids. If not, then Indicator 3.1.6 does not apply.	<p>JSF interviewed the Aomori Prefectural Water Surface Test Station.</p> <p>In Aomori Prefecture, the number of salmon lice occurring in natural salmonids is not zero, but it is not high, and it is not a problem level. The prefecture does not investigate because there is no impact on product value. Therefore, there is no salmon lice monitoring system for wild salmonids in this region. In the future, it will be necessary to monitor some salmon lice, such as observing the salmon in the local fish market. Report will be sent to ASC in the future.</p>	b. Keep records to show the farm participates in monitoring of sea lice on wild salmonids.	c. Provide the CAB access to documentation which is sufficient for the auditor to evaluate whether the methodology used for monitoring of sea lice on wild salmonids is in compliance with the requirements in Appendix III-1.	d. Make the results from 3.1.6b easily publicly available (e.g. posted to the company's website) within eight weeks of completion of monitoring.	e. Submit to ASC the results from monitoring of sea lice levels on wild salmonids as per Appendix VI.	Minor	<p>There is no salmon monitoring system for wild salmonids in the region.</p> <p>In this region, salmon lice is not the problematic level, and monitoring is less important, so minor is raised.</p>	
a. Inform the CAB if the farm operates in an area of wild salmonids. If not, then Indicator 3.1.6 does not apply.	<p>JSF interviewed the Aomori Prefectural Water Surface Test Station.</p> <p>In Aomori Prefecture, the number of salmon lice occurring in natural salmonids is not zero, but it is not high, and it is not a problem level. The prefecture does not investigate because there is no impact on product value. Therefore, there is no salmon lice monitoring system for wild salmonids in this region. In the future, it will be necessary to monitor some salmon lice, such as observing the salmon in the local fish market. Report will be sent to ASC in the future.</p>										
b. Keep records to show the farm participates in monitoring of sea lice on wild salmonids.											
c. Provide the CAB access to documentation which is sufficient for the auditor to evaluate whether the methodology used for monitoring of sea lice on wild salmonids is in compliance with the requirements in Appendix III-1.											
d. Make the results from 3.1.6b easily publicly available (e.g. posted to the company's website) within eight weeks of completion of monitoring.											
e. Submit to ASC the results from monitoring of sea lice levels on wild salmonids as per Appendix VI.											

3.1.7	<p>Indicator: In areas of wild salmonids, maximum on-farm lice levels during sensitive periods for wild fish [39]. See detailed requirements in Appendix II, subsection 2.</p> <p>Requirement: 0.1 mature female lice per farmed fish</p> <p>Applicability: All farms operating in areas with wild salmonids except farms that release no water as noted in [32]</p>	<p>a. Inform the CAB if the farm operates in an area of wild salmonids. If not, then Indicator 3.1.7 does not apply.</p> <p>b. Establish the sensitive periods [39] of wild salmonids in the area where the farm operates. Sensitive periods for migrating salmonids is during juvenile outmigration and approximately one month before.</p> <p>c. Maintain detailed records of monitoring on-farm lice levels (see 3.1.4) during sensitive periods as per Appendix II-2.</p> <p>d. Provide the CAB with evidence there is a 'feedback loop' between the targets for on-farm lice levels and the results of monitoring of lice levels on wild salmonids (Appendix II-2).</p>	The cherry salmon run up and the down to sea from April to June. This period is considered to be the period most susceptible to pathogens. There is no salmon lice monitoring system for wild salmonids in the region, and the maximum allowable number of salmon lice during delicate periods is unknown. Provisionally, the acceptable standard for salmon lice on this farm was set at 0.1 lice / 1 fsihs (10 lice / 100 fish).	Compliant		
Footnote	[39] Sensitive periods for migrating salmonids is during juvenile outmigration and approximately one month before.					
Criterion 3.2 Introduction of non-native species						
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
3.2.1	<p>Indicator: If a non-native species is being produced, demonstration that the species was widely commercially produced in the area by the date of publication of the ASC Salmon standard</p> <p>Requirement: Yes [40]</p> <p>Applicability: All farms except as noted in [40]</p>	<p>Note: For the purposes of Indicator 3.2.1, "area" is defined as a contiguous body of water with the bio-chemical and temperature profile required to support the farmed species' life and reproduction (e.g. the Northern Atlantic Coast of the U.S. and Canada). Appendix II-1A elaborates further on this definition: "The boundaries of an area should be defined, taking into account the zone in which key cumulative impacts on wild populations may occur, water movement and other relevant aspects of ecosystem structure and function." The intent is that the area relates to the spatial extent that is likely to be put at risk from the non-native salmon. Areas will only rarely coincide with the boundaries of countries.</p> <p>a. Inform the CAB if the farm produces a non-native species. If not, then Indicator 3.2.1 does not apply.</p> <p>b. Provide documentary evidence that the non-native species was widely commercially produced in the area before June 13, 2012.</p> <p>c. If the farm cannot provide evidence for 3.2.1b, provide documentary evidence that the farm uses only 100% sterile fish that includes details on accuracy of sterility effectiveness.</p> <p>d. If the farm cannot provide evidence for 3.2.1b or 3.2.1c, provide documented evidence that the production system is closed to the natural environment and for each of the following: 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 [40]; and 3) barriers ensure there are no escapes of biological material [40] that might survive and subsequently reproduce (e.g. UV or other effective treatment of any effluent water exiting the system to the natural environment).</p> <p>–</p>	Rainbow trout is an exotic species. On the sea surface in Aomori Prefecture, "Kaikyo Salmon" in Mutsu City has been farmed since 1989. In addition, rainbow trout has been cultured on the inland surface since 1979. Materials showing the amount of aquaculture that provided evidence for each were submitted.	Compliant		
Footnote	[40] Exceptions shall be made for production systems that use 100 percent sterile fish or systems that demonstrate separation from the wild 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.					

3.2.2	<p>Indicator: If a non-native species is being produced, evidence of scientific research [41] completed within the past five years that investigates the risk of establishment of the species within the farm’s jurisdiction and these results submitted to ASC for review [42]</p> <p>Requirement: Yes</p> <p>Applicability: All [43]</p>	<p>Instruction to Clients for Indicator 3.2.2 – Exceptions to Allow Production of Non-Native Species</p> <p>Farms have had five years to demonstrate compliance with this standard from the time of publication of the ASC Salmon Standard (i.e. full compliance by June 13, 2017). Farms are exempt from this standard if they are in a jurisdiction where the non-native species became established prior to farming activities in the area and the following three conditions are met: eradication would be impossible or have detrimental environmental effects; the introduction took place prior to 1993 (when the Convention on Biological Diversity (CBD) was ratified); the species is fully self-sustaining.</p> <p>Note: For the purposes of Indicator 3.2.2, “jurisdiction” is defined the same as “area” in 3.2.1.</p>				
		<p>a. Inform the ASC of the species in production (Appendix VI).</p> <p>b. Inform the CAB if the farm produces a non-native species. If not, then Indicator 3.2.2 does not apply.</p> <p>c. If yes to 3.2.2b, provide evidence of scientific research completed within the past five years that investigates the risk of establishment of the species within the farm’s jurisdiction. Alternatively, the farm may request an exemption to 3.2.2c (see below).</p> <p>d. If applicable, submit to the CAB a request for exemption that shows how the farm meets all three conditions specified in instruction box above.</p> <p>e. Submit evidence from 3.2.2c to ASC for review.</p>	<p>Rainbow trout is an exotic species. On the sea surface in Aomori Prefecture, “Kaikyo Salmon” has been cultivated since 1989. Inland water culture has also been conducted since 1979. For Kaikyo salmon, there have been cases where float completely destroyed and escaped in the past. Aomori Prefecture and other organizations are not investigating whether rainbow trout is naturally breeding in the ocean or river. It has been reported that rivers have settled in several places in Japan, but rainbow trout cultivated on the surface of the sea cannot grow at the sea water temperature of the region in the summer, so the risk of colonization in the ocean is considered low. However, the investigation (consideration) of rainbow trout settlement risk based on scientific knowledge was not completed. It is necessary to scientifically evaluate the establishment risk with reference to past catch data. It is necessary to submit the results to ASC.</p>	Minor	<p>The investigation of rainbow trout settlement risk based on scientific knowledge was not completed.</p> <p>Since the settlement risk is considered low based on the evidence at the present stage, the point that the investigation (consideration) has not been completed is raised as minor.</p>	
Footnote	[41] The research must at a minimum include multi-year monitoring for non-native farmed species, use credible methodologies and analysis, and undergo peer review.					
Footnote	[42] If the review demonstrates there is increased risk, the ASC will consider prohibiting the certification of farming of non-native salmon in that jurisdiction under this standard. In the event that the risk tools demonstrate “high” risks, the SAD expects that the ASC will prohibit the certification of farming of non-native salmon in that jurisdiction. The ASC intends to bring this evidence into future revision of the standard and those results taken forward into the revision process.					
Footnote	[43] Farms are exempt from this standard if they are in a jurisdiction where the non-native species became established prior to farming activities in the area and the following three conditions are met: eradication would be impossible or have detrimental environmental effects; the introduction took place prior to 1993 (when the Convention on Biological Diversity (CBD) was ratified); the species is fully self-sustaining.					
3.2.3	<p>Indicator: Use of non-native species for sea lice control for on-farm management purposes</p> <p>Requirement: None</p> <p>Applicability: All</p>	<p>a. Inform the CAB if the farm uses fish (e.g. cleaner fish or wrasse) for the control of sea lice.</p> <p>b. Maintain records (e.g. invoices) to show the species name and origin of all fish used by the farm for purposes of sea lice control.</p> <p>c. Collect documentary evidence or first hand accounts as evidence that the species used is not non-native to the region.</p>	<p>Exotic fish species are not used for the purpose of managing salmon lice.</p>	Compliant		
Criterion 3.3 Introduction of transgenic species						
		<p>Compliance Criteria (Required Client Actions):</p>	<p>Auditor Evaluation (Required CAB Actions):</p>			
3.3.1	<p>Indicator: Use of transgenic [44] salmon by the farm</p> <p>Requirement: None</p> <p>Applicability: All</p>	<p>a. Prepare a declaration stating that the farm does not use transgenic salmon.</p> <p>b. Maintain records for the origin of all cultured stocks including the supplier name, address and contact person(s) for stock purchases.</p> <p>c. Ensure purchase documents confirm that the culture stock is not transgenic.</p>	<p>The “Environment-friendly farm management policy” declares that genetically modified seedlings will not be used. It is posted on our website that it is not used. https://www.japan-salmonfarm.com/business/asc.pdf</p> <p>We have received a declaration from the fish farm where the fish eggs are purchased that they are not seedlings that have been genetically modified or introduced (as of February 1, 2017). The website of Hendrix Genetics, the parent company of Troutlodge, which collects fish eggs, explains that it does not use genetic recombination techniques. https://www.hendrix-genetics.com/en/animal-research/animal-selection/</p>	Compliant		
Footnote	[44] Transgenic: Containing genes altered by insertion of DNA from an unrelated organism. Taking genes from one species and inserting them into another species to get that trait expressed in the offspring (reference USDA).					

Criterion 3.4 Escapes [47]						
		Compliance Criteria (Required Client Actions):		Auditor Evaluation (Required CAB Actions):		
Footnote	[45] See Appendix VI for transparency requirements for 3.4.1, 3.4.2 and 3.4.3.					
3.4.1	<p>Indicator: Maximum number of escapees [46] in the most recent production cycle</p> <p>Requirement: 300 [47]</p> <p>Applicability: All farms except as noted in [47]</p>	<p>a. Maintain monitoring records of all incidences of confirmed or suspected escapes, specifying date, cause, and estimated number of escapees.</p> <p>b. Aggregate cumulative escapes in the most recent production cycle.</p> <p>c. Maintain the monitoring records described in 3.4.1a for at least 10 years beginning with the production cycle for which farm is first applying for certification (necessary for farms to be eligible to apply for the exception noted in [47]).</p> <p>d. If an escape episode occurs (i.e. an incident where > 300 fish escaped), the farm may request a rare exception to the Standard [47]. Requests must provide a full account of the episode and must document how the farm could not have predicted the events that caused the escape episode.</p> <p>e. Submit escape monitoring dataset to ASC as per Appendix VI on an ongoing basis (i.e. at least once per year and for each production cycle).</p>	<p>Two escape accidents occurred in the previous production cycle. It is recorded in the "Escape Management Sheet".</p> <ul style="list-style-type: none">• November 8th to 13th, 2018: A fish that had become accustomed and jumped off and escaped from a small float. Estimated 50 tails. The ceiling net was always stretched.• June 3, 2019: At the last time when transferring fish from a large float to a small float for landing, the net was accidentally lowered and escaped when it was driven while removing the float net. Estimated 100 fish. The procedure was changed to the procedure of removing the float net after all the fish in the float were gone after the last time. The total number of escapes in the previous production cycle was 150 fish. A report to ASC will be made in the future.	Compliant		150 fish
Footnote	[46] Farms shall report all escapes; the total aggregate number of escapees per production cycle must be less than 300 fish. Data on date of escape episode(s), number of fish escaped and cause of escape episode shall be reported as outlined in Appendix VI.					
Footnote	[47] A rare exception to this standard may be made for an escape event that is clearly documented as being outside the farm's control. Only one such exceptional episode is allowed in a 10-year period for the purposes of this standard. The 10-year period starts at the beginning of the production cycle for which the farm is applying for certification. The farmer must demonstrate that there was no reasonable way to predict the events that caused the episode. See auditing guidance for additional details.					
3.4.2	<p>Indicator: Accuracy [48] of the counting technology or counting method used for calculating stocking and harvest numbers</p> <p>Requirement: ≥ 98%</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. pre-smolt vaccination count), obtain and maintain documents from the supplier showing the accuracy of the counting method used (as above).</p> <p>c. During audits, arrange for the auditor to witness calibration of counting machines (if used by the farm).</p> <p>–</p> <p>e. Submit counting technology accuracy to ASC as per Appendix VI on an ongoing basis (i.e. at least once per year and for each production cycle).</p>	<p>The number of livelihoods is managed for each float number of Fukaura Smolt Station. It is divided according to size by grader before shipment. The whole weight is measured with the dip-net and divided by the fish weight measured in the sample to calculate the number of fish. Based on that number, the number of livelihoods is used. Live words record the number of dead fish every day. When landing, the number of fish is counted one by one, which is considered to be 100% accurate. The number of dead fish is subtracted from the number of fish received at the aquaculture farm now, and the final number of landing fish is compared. The error was 1.9% at the maximum in last season. As a result, the accuracy of the measurement at the time of live was over 98%. A report to ASC will be made in the future.</p>	Compliant		
Footnote	[48] Accuracy shall be determined by the spec sheet for counting machines and through common estimates of error for any hand-counts.					

3.4.3	<p>Indicator: Estimated unexplained loss [49] of farmed salmon is made publicly available</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>Instruction to Clients for Indicator 3.4.3 – Calculation of Estimated Unexplained Loss</p> <p>The Estimated Unexplained Loss (EUL) of fish is calculated at the end of each production cycle as follows:</p> <p>EUL = (stocking count) – (harvest count) – (mortalities) – (recorded escapes)</p> <p>Units for input variables are number of fish (i.e. counts) per production cycle. Where possible, farms should use the pre-smolt vaccination count as the stocking count. This formula is adapted from footnote 59 of the ASC Salmon Standard.</p>			
		<p>a. Maintain detailed records for mortalities, stocking count, harvest count, and escapes (as per 3.4.1).</p> <p>b. Calculate the estimated unexplained loss as described in the instructions (above) for the most recent full production cycle. For first audit, farm must demonstrate understanding of calculation and the requirement to disclose EUL after harvest of the current cycle.</p> <p>c. Make the results from 3.4.3b available publicly. Keep records of when and where results were made public (e.g. date posted to a company website) for all production cycles.</p> <p>d. Submit estimated unexplained loss to ASC as per Appendix VI for each production cycle.</p> <p>–</p>	<p>Observe float every day and record the number if drowned.</p> <p>After the final shipment, we compared the number of initial survival, the number of shipments, and the number of deaths.</p> <p>The accuracy of counting the number of fish at the time of insertion was more than 98%. Besides the 3.4.1 escape case, there was no decrease in the number of fish considered to be unknown loss.</p> <p>The error of less than 2% is estimated to be due to an error in the initial number of fish and the number of dead fish that could not be recovered along the way.</p> <p>If an unknown loss occurs, it will be announced on the website.</p> <p>A report to ASC will be made in the future.</p>	Compliant	
Footnote	[49] Calculated at the end of the production cycle as: Unexplained loss = Stocking count – harvest count – mortalities – other known escapes. Where possible, use of the pre-smolt vaccination count as the stocking count is preferred.				
3.4.4	<p>Indicator: Evidence of escape prevention planning and related employee training, including: net strength testing; appropriate net mesh size; net traceability; system robustness; predator management; record keeping and reporting of risk events (e.g., holes, infrastructure issues, handling errors, reporting and follow up of escape events); and worker training on escape prevention and counting technologies</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>a. Prepare an Escape Prevention Plan and submit it to the CAB before the first audit. This plan may be part of a more comprehensive farm planning document as long as it addresses all required elements of Indicator 3.4.4.</p> <p>b. If the farm operates an open (net pen) system, ensure the plan (3.4.4a) covers the following areas:</p> <ul style="list-style-type: none">– net strength testing;– appropriate net mesh size;– net traceability;– system robustness;– predator management;– record keeping;– reporting risk events (e.g. holes, infrastructure issues, handling errors);– planning of staff training to cover all of the above areas; and– planning of staff training on escape prevention and counting technologies. <p>c. If the farm operates a closed system, ensure the plan (3.4.4a) covers the following areas:</p> <ul style="list-style-type: none">– system robustness;– predator management;– record keeping;– reporting risk events (e.g. holes, infrastructure issues, handling errors);– planning of staff training to cover all of the above areas; and– planning of 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 as per the farm's plan.</p> <p>–</p>	<p>JSF created “Escape Prevention Plan”.</p> <p>There is a certificate of strength of ropes and nets for aquaculture. (October 12, 2017, August 6, 2019). Use high-strength dyneema (high-strength polyethylene) for large float. The production number or net number for each float is specified and can be traced. The mesh uses a 3cm square so that no escape occurs even if the mesh is missing. The float frame also uses circular float made of high-strength HDPE (high density polyethylene) pipe.</p> <p>Sealion may appear as a predator. Although it has not been confirmed so far, the possibility is not zero, so Dyneema is used.</p> <p>During breeding, check the float by feeding around the float frame during daily feeding and collecting dead fish.</p> <p>Maintenance of facilities is conducted during summer non-breeding period.</p> <p>In order to prevent escape when changing float, the procedure for fixing fishing gear is set in detail.</p> <p>The “Escape Prevention Plan” is shared with employees.</p> <p>Individuals that had previously escaped were landed 9 fish on a local net.</p>	Compliant	

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):			Auditor Evaluation (Required CAB Actions):				
<p>Instruction to Clients for Indicators 4.1.1 through 4.4.2 – Sourcing of Responsibly Produced Salmon Feeds</p> <p>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 Salmon Standard relating to sourcing of responsibly produced salmon feed (see 4.1.1b below).</p> <p>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 Salmon Standard allows farms to use one of two different methods to demonstrate compliance of feed producers:</p> <p>Method #1: Farms may choose to source feed from feed producers who used only those ingredients allowed under the ASC Salmon 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.</p> <p>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.</p> <p>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.</p>							
4.1.1	<p>Indicator: Evidence of traceability, demonstrated by the feed producer, of feed ingredients that make up more than 1% of the feed [50].</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 salmon feeds and send them a copy of the ASC Salmon Standard.</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 feed ingredients that make up more than 1% of the feed to a level of detail required by the ASC Salmon Standard [50].</p>	<p>ASC-compatible feed is currently only purchased from one feed company. Only fish fed this feed are eligible for this ASC certification. The feed company has a good understanding of the ASC salmon standards. All feed dates and quantities are recorded in the list. As an example, we confirmed invoices and invoices for March 2019 from a feed company. The receipt for delivery on March 7, 2019 was missing, but the delivery record and invoice were verified.</p> <p>Written testimony has been obtained that all feed ingredients are traceable (as of August 19, 2019).</p>		Compliant		
Footnote	[50] Traceability shall be at a level of detail that permits the feed producer to demonstrate compliance with the standards in this document (i.e., marine raw ingredients must be traced back to the fishery, soy to the region grown, etc.). Feed manufacturers will need to supply the farm with third-party documentation of the ingredients covered under this standard.						

Criterion 4.2 Use of wild fish for feed [51]						
		Compliance Criteria (Required Client Actions):		Auditor Evaluation (Required CAB Actions):		
Footnote [51] See Appendix VI for transparency requirements for 4.2.1 and 4.2.2.						
4.2.1	<p>Indicator: Fishmeal Forage Fish Dependency Ratio (FFDRm) for grow-out (calculated using formulas in Appendix IV– 1)</p> <p>Requirement: < 1.2</p> <p>Applicability: All</p>	<p>Instruction to Clients for Indicator 4.2.1 – Calculation of FFDRm</p> <p>Farms must calculate the Fishmeal Forage Fish Dependency Ratio (FFDRm) according to formula presented in Appendix IV–1 using data from the most recent complete production cycle. Farms must also show that they have maintained sufficient information in order to make an accurate calculation of FFDRm as outlined below. For first audits, farms may be exempted from compliance with Indicator 4.2.1 for the most recent complete production cycle (i.e. if the FFDRm of the most recent crop was > 1.2) 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;– the client maintains all information needed to accurately calculate FFDRm (i.e. all feed specs for > 6 months) for the current production cycle; and– the client can show how feed used for the current production cycle will ensure that the farm will meet requirements at harvest (i.e. FFDRm < 1.2).	<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 IV–1 (use this calculation also in 4.2.2 option #1).</p> <p>d. Calculate FFDRm using formulas in Appendix IV–1.</p> <p>e. Submit FFDRm to ASC as per Appendix VI for each production cycle.</p>	<p>The details of the feed are maintained by the feed company, and were presented by the feed company at the time of appraisal. The feed ingredient information is confidential in the feed company and is not included in this report.</p> <p>The ratio of fish meal and fish oil is given for each type of feed.</p> <p>The feed company always obtains the fish type certificate from the supplier when purchasing the raw materials. Therefore, the fishery that is the source of fish meal and fish oil is clearly recorded.</p> <p>The mixing ratio of fish meal and fish oil derived from by-products is recorded. Labels (indicating the mixing ratio of ingredients and attached to the feed bag) and feed ingredient content safety certificates (indicating the origin of the ingredients and entering the company) are issued for each feed type. Confirmed the label of feed currently used. By-products are excluded.</p> <p>The eFCR was calculated on the feed given in the previous production cycle after the smolt became over 200g. The eFCR was 1.97. *</p> <p>As a result of the calculation, FFDRm was 0.90. The calculation result was confirmed.</p> <p>A report to ASC will be made in the future.</p>	Compliant	<p>eFCR= 1.97</p> <p>FFDRm= 0.90</p>
4.2.2	<p>Indicator: Fish Oil Forage Fish Dependency Ratio (FFDRo) for grow-out (calculated using formulas in Appendix IV– 1), or, Maximum amount of EPA and DHA from direct marine sources [52] (calculated according to Appendix IV–2)</p> <p>Requirement: FFDRo < 2.52 or (EPA + DHA) < 30 g/kg feed</p> <p>Applicability: All</p>	<p>Note: Under Indicator 4.2.2, farms can choose to calculate FFDRo (Option #1) or EPA & DHA (Option #2). Farms do not have to demonstrate that they meet both threshold values. Client shall inform the CAB which option they will use.</p> <p>a. Maintain a detailed inventory of the feed used as specified in 4.2.1a.</p> <p>b. For FFDRo and EPA+DHA calculations (either option #1 or option #2), exclude fish oil derived from rendering of seafood by-products (e.g. the “trimmings” from a human consumption fishery.</p> <p>c. Inform the CAB whether the farm chose option #1 or option #2 to demonstrate compliance with the requirements of the Standard.</p> <p>d. For option #1, calculate FFDRo using formulas in Appendix IV–1 and using the eFCR calculated under 4.2.1c.</p> <p>e. For option #2, calculate amount of EPA + DHA using formulas in Appendix IV–2.</p> <p>f. Submit FFDRo or EPA & DHA to ASC as per Appendix VI for each production cycle.</p>	<p>FFDRo was Selected.</p> <p>As a result of calculation using the same data as 4.2.1, FFDRo was 0.97. The calculation result was confirmed.</p> <p>A report to ASC will be made in the future.</p>	Compliant	<p>FFDRo= 0.97</p>	
Footnote	[52] Calculation excludes DHA and EPA derived from fisheries by-products and trimmings. 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.					
Fishmeal and fish oil that are produced from trimmings can be excluded from the calculation as long as the origin of the trimmings is not any species that are classified as critically endangered, endangered or vulnerable in the IUCN Red List of Threatened Species (http://www.iucnredlist.org).						

Criterion 4.3 Source of marine raw materials						
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
4.3.1	<p>Indicator: Timeframe for all fishmeal and fish oil used in feed to come from fisheries [53] certified under a scheme that is an ISEAL member [54] and has guidelines that specifically promote responsible environmental management of small pelagic fisheries</p> <p>Requirement: Not required</p> <p>Applicability: N/A</p>					
Footnote	[53] This standard and standard 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.					
Footnote	[54] Meets ISEAL guidelines as demonstrated through full membership in the ISEAL Alliance, or equivalent as determined by the Technical Advisory Group of the ASC.					
4.3.2	<p>Indicator: Prior to achieving 4.3.1, the FishSource score [55] for the fishery(ies) from which all marine raw material in feed is derived</p> <p>Requirement: All individual scores ≥ 6, and biomass score ≥ 6</p> <p>Applicability: All</p>	<p>Instruction to Clients for Indicator 4.3.2 – FishSource Score of Fish Used in Feed</p> <p>To determine FishSource scores of the fish species used as feed ingredients, do the following:</p> <ul style="list-style-type: none">– 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>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>		Compliant		
		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).	The FishSource score is confirmed for all ingredients except for by-products. The material submitted by the feed company was confirmed. All scores were 6 points or more.			
		b. Confirm that each individual score ≥ 6 and the biomass score is ≥ 6.				
		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: 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.				
		–				
Footnote	[55] Or equivalent score using the same methodology. See Appendix IV–3 for explanation of FishSource scoring.					
4.3.3	<p>Indicator: Prior to achieving 4.3.1, demonstration of third-party verified chain of custody and traceability for the batches of fishmeal and fish oil which are in compliance with 4.3.2.</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>Instruction to Clients for Indicator 4.3.3 – Third-Party Verification of Traceability</p> <p>Indicator 4.3.3 requires that farms show that their feed producers can demonstrate chain of custody and traceability as verified through third-party audits. Farms may submit reports from audits of feed producers (see 4.1.1c) as evidence that traceability systems are in compliance. Alternatively, farms may show that their feed producers comply with traceability requirements of Indicator 4.3.3 by submitting evidence that suppliers, and the batches of fishmeal and oil, are certified to the International Fishmeal and Fish Oil Organization’s Global Standard for Responsible Supply or to the Marine Stewardship Council Chain of Custody Standard.</p> <p>For the first audit, a minimum of 6 months of data on feed is required and evidence shall relate to species used in said dataset.</p>		Compliant		
		a. Obtain from the feed supplier documentary evidence that the origin of all fishmeal and fish oil used in the feed is traceable via a third-party verified chain of custody or traceability program.	The feed company has obtained ISO9001 certification. In this, the traceability system is also audited, and no nonconformity has been pointed out.			
		b. Ensure evidence covers all the species used (as consistent with 4.3.2a, 4.2.1a, and 4.2.2a).				

4.3.4	<p>Indicator: Feed containing fishmeal and/or fish oil originating from by-products [56] or trimmings from IUU [57] catch or from fish species that are categorized as vulnerable, endangered or critically endangered, according to the IUCN Red List of Threatened Species [58], whole fish and fish meal from the same species and family as the species being farmed</p> <p>Requirement: None [59]</p> <p>Applicability: All except as noted in [59]</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 [58] 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 [59].</p>	<p>All fish are certified by feed ingredient suppliers, and the origin of by-products is clear. Each supplier receives a declaration from the supplier that they are not using fish from the IUU fishery or endangered species.</p> <p>The feed company’s management philosophy calls for the sustainable promotion of farmed fish. JSF have suppliers of feed ingredients sign the supplier code of conduct, which includes items that do not include IUU derived fish or endangered species.</p> <p>No fish or endangered species from the IUU fishery are used.</p>	Compliant		
4.3.5	<p>Indicator: Presence and evidence of a responsible sourcing policy for the feed manufacturer for marine ingredients that includes a commitment to continuous improvement of source fisheries</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>a. Request a link to a public policy from the feed manufacturer 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 and committing to continuous improvement of source 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 indicator 4.3.1.</p> <p>c. Compile a list of the origin of all fish products used as feed ingredients in all feed.</p>	<p>The feed company’s management philosophy calls for the sustainable promotion of farmed fish. There is a responsible procurement policy for detailed feed ingredients. In addition, JSF have suppliers of feed ingredients sign the Supplier Code of Conduct.</p>	Compliant		
Footnote	[56] 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	[57] IUU: Illegal, Unregulated and Unreported.					
Footnote	[58] The International Union for the Conservation of Nature reference can be found at http://www.iucnredlist.org/ .					
Footnote	[59] For species listed as “vulnerable” by IUCN, an exception is made if a regional population of the species has been assessed to be not vulnerable in a National Red List process that is managed explicitly in the same science-based way as IUCN. In cases where a National Red List doesn’t exist or isn’t managed in accordance with IUCN guidelines, an exception is allowed when an assessment is conducted using IUCN’s methodology and demonstrates that the population is not vulnerable.					
Criterion 4.4 Source of non-marine raw materials in feed						
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
4.4.1	<p>Indicator: Presence and evidence of a responsible sourcing policy for the feed manufacturer for feed ingredients that comply with recognized crop moratoriums [60] and local laws [61]</p> <p>Requirement: Yes</p> <p>Applicability: All</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>c. Confirm that third party audits of feed suppliers (4.1.1c) show evidence that supplier’s responsible sourcing policies are implemented.</p>	<p>The feed company’s management philosophy calls for the sustainable promotion of farmed fish. There is a responsible procurement policy for detailed feed ingredients. The supplier’s code of conduct that feed companies need to sign raw material suppliers also includes items related to “farm expansion and deforestation”. By signing this, JSF have built a system that prevents suppliers from supplying materials that fall under the international crop cultivation suspension order.</p>	Compliant		
Footnote	[60] Moratorium: A period of time in which there is a suspension of a specific activity until future events warrant a removal of the suspension or issues regarding the activity have been resolved. In this context, moratoriums may refer to suspension of the growth of defined agricultural crops in defined geographical regions.					
Footnote	[61] Specifically, the policy shall include that vegetable ingredients, or products derived from vegetable ingredients, must not come from areas of the Amazon Biome that were deforested after July 24, 2006, as geographically defined by the Brazilian Soy Moratorium. Should the Brazilian Soy Moratorium be lifted, this specific requirement shall be reconsidered.					

4.4.2	<p>Indicator: Percentage of soya or soya-derived ingredients in the feed that are certified by the Roundtable for Responsible Soy (RTRS) or equivalent [62]</p> <p>Requirement: 100%</p> <p>Applicability: All</p>	<p>a. Prepare a policy stating the company's support of efforts to shift feed manufacturers' purchases of soya to soya certified under the Roundtable for Responsible Soy (RTRS) or equivalent.</p> <p>b. Prepare a letter stating the farm's intent to source feed containing soya certified under the RTRS (or equivalent)</p> <p>c. Notify feed suppliers of the farm's intent (4.4.2b).</p> <p>d. Obtain and maintain declaration from feed supplier(s) detailing the origin of soya in the feed.</p> <p>e. Provide evidence that soya used in feed is certified by the Roundtable for Responsible Soy (RTRS) or equivalent [62]</p>	100% RTRS-certified soybean-derived ingredients are used for soybean-derived ingredients.	Compliant		
Footnote	[62] Any alternate certification scheme would have to be approved as equivalent by the Technical Advisory Group of the ASC.					
4.4.3	<p>Indicator: Evidence of disclosure to the buyer [63] of the salmon of inclusion of transgenic [64] plant raw material, or raw materials derived from transgenic plants, in the feed</p> <p>Requirement: Yes, for each individual raw material containing > 1% transgenic content [65]</p> <p>Applicability: All</p>	<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.</p> <p>b. Disclose to the buyer(s) a list of any transgenic plant raw material in the feed and maintain documentary evidence of this disclosure. For first audits, farm records of disclosures must cover > 6 months.</p> <p>c. Inform ASC whether feed contains transgenic ingredients (yes or no) as per Appendix VI for each production cycle.</p>	<p>Soybean meal, corn gluten meal, and rapeseed meal are only available for genetically modified insemination. Information on genetically engineered products that may be distributed in Japan is available on the Ministry of Agriculture, Forestry and Fisheries website.</p> <p>It has been reported that plant-derived raw materials in feed are non-separable by genetic recombination because the fish sold so far is only the group company Okamura Food Industry. Provide information whenever the number of customers increases. A report to ASC will be made in the future.</p>	Compliant		
Footnote	[63] The company or entity to which the farm or the producing company is directly selling its product. This standard requires disclosure by the feed company to the farm and by the farm to the buyer of their salmon.					
Footnote	[64] Transgenic: Containing genes altered by insertion of DNA from an unrelated organism. Taking genes from one species and inserting them into another species to get that trait expressed in the offspring.					
Footnote	[65] See Appendix VI for transparency requirement for 4.4.3.					
Criterion 4.5 Non-biological waste from production						
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
4.5.1	<p>Indicator: Presence and evidence of a functioning policy for proper and responsible [66] treatment of non-biological waste from production (e.g., disposal and recycling)</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>a. Prepare a policy stating the farm's commitment to proper and responsible treatment of non-biological waste from production. It must explain how the farm's policy is consistent with best practice in the area of operation.</p> <p>b. Prepare a declaration that the farm does not dump non-biological waste into the ocean.</p> <p>c. Provide a description of the most common production waste materials and how the farm ensures these waste materials are properly disposed of.</p> <p>d. Provide a description of the types of waste materials that are recycled by the farm.</p>	<p>JSF have the Ministry of the Environment's "Fishery Waste Disposal Guidelines". It is divided into general waste and industrial waste. Currently there is almost nothing to be discarded. It is about a paper bag for feed, wood left over from work, and waste.</p> <p>"Environmentally-friendly farm management policy" stipulates that waste should be handled properly and not dumped into the ocean.</p> <p>The paper bag for feed was outsourced to Sawada Cleaning as general waste. Other general waste is collected at the fishery cooperative, which is outsourced to Sawada Cleaning Co., Ltd. for disposal. The flexible container bag is transferred to the fishery cooperative because it wants to use it as a garbage bag for beach cleaning.</p> <p>Dead fish and chemicals are disposed of as industrial waste. Dead fish are outsourced to Ayame Service Co., Ltd. (contract date: October 31, 2018).</p> <p>For chemicals, the company is outsourced to Hachinohe Smelting Co., Ltd., with Toki Chemical Co., Ltd. as the window (contract date: May 25, 2019).</p> <p>The septic tank inspection of the office is contracted with Kamijo Sanitation Company (automatic extension for one year from June 30, 2018).</p> <p>There is no waste currently being recycled.</p>	Compliant		
Footnote	[66] Proper and responsible disposal will vary based on facilities available in the region and remoteness of farm sites. Disposal of non-biological waste shall be done in a manner consistent with best practice in the area. Dumping of non-biological waste into the ocean does not represent "proper and responsible" disposal.					

4.5.2	<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>	<p>The paper bag for feed was outsourced to Sawada Cleaning as general waste. There is a copy of the invoice when commissioned. July 5, 2019 and March 15 were confirmed. JSF anifestation (March 14, 2019, etc.) when JSF contracted Ayame Service Co., Ltd. to treat dead fish.</p> <p>Regarding chemicals, we confirmed the manifest (July 26, 2019) when JSF commissioned Hachinohe Smelting Co., Ltd. with Tooku Chemical Co., Ltd. as the window.</p> <p>Regarding the septic tank inspection at the office, the "Septic tank maintenance inspection report" by Kamijo Sanitation Company on August 8, 2019 was confirmed. Inappropriate disposal cases were not confirmed.</p> <p>Nets and float have just begun to be used, are highly durable, and are not planned to be discarded for the time being.</p>	Compliant		
Criterion 4.6 Energy consumption and greenhouse gas emissions on farms [67]						
	Compliance Criteria (Required Client Actions):		Auditor Evaluation (Required CAB Actions):			
Footnote	[67] See Appendix VI for transparency requirements for 4.6.1, 4.6.2 and 4.6.3.					
4.6.1	<p>Indicator: Presence of an energy use assessment verifying the energy consumption on the farm and representing the whole life cycle at sea, as outlined in Appendix V– 1</p> <p>Requirement: Yes, measured in kilojoule/t fish produced/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 V–1). 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 SAD Steering Committee encourages companies to integrate energy use assessments across the board in the company.</p> <p>For the purposes of calculating energy consumption, the duration of the production cycle is the entire life cycle "at sea" – it does not include freshwater smolt production stages. Farms that have integrated smolt rearing should break out the grow-out stage portion of energy consumption if possible. 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 V–1 for more details).</p> <p>a. Maintain records for energy consumption by source (fuel, electricity) on the farm throughout each production cycle.</p> <p>b. Calculate the farm's total energy consumption in kilojoules (kJ) during the last production cycle.</p> <p>c. Calculate the total weight of fish in metric tons (t) produced during the last production cycle.</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. Submit results of energy use calculations (4.6.1d) to ASC as per Appendix VI for each production cycle.</p> <p>f. Ensure that the farm has undergone an energy use assessment that was done in compliance with requirements of Appendix V–1.</p>	<p>It uses light oil (fishing boats, generators), gasoline (office vehicles, fork lifts), kerosene (heating), LP gas (hot water), and electricity. According to Attachment V–1, the amount of energy consumed per ton of production was calculated by collecting the usage from July 2018 to June 2019. The aquaculture is conducted from November to June, but energy for preparation is used from July to October, so it was included in the amount used. As a result, the energy consumption in the previous production cycle was 3,823,617 kJ / t.</p> <p>A report to ASC will be made in the future.</p>	Compliant		3,823,617 kJ/t

4.6.2	<p>Indicator: Records of greenhouse gas (GHG [68]) emissions [69] on farm and evidence of an annual GHG assessment, as outlined in Appendix V-1</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>Instruction to Clients for Indicator 4.6.2 – Annual GHG Assessment</p> <p>Indicator 4.6.2 requires that farms must have an annual Greenhouse Gas (GHG) assessment. Detailed instructions are presented in Appendix V-1 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 SAD Steering Committee 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 V-1 for more details).</p> <p>Note: 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>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 V-1.</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>e. Submit results of GHG calculations (4.6.2d) to ASC as per Appendix VI at least once per year.</p> <p>f. Ensure that the farm undergoes a GHG assessment as outlined in Appendix V-1 at least annually.</p>	<p>Scope 1 was calculated from light oil, gasoline, kerosene, and LP gas usage, and Scope 2 was calculated from electricity usage. For Scope 3, only GHG emissions related to feed were included. The emission factor is the value published by the Ministry of the Environment. https://ghg-santeikohyo.env.go.jp/calc</p> <p>As a result, GHG emissions in the previous production cycle were 209.27t-CO₂. A report to ASC will be made in the future.</p> <p>Although chlorofluorocarbons, which are greenhouse gases, are not emitted, appropriate management to prevent them from being released into the air is required by the Fluorocarbon Emission Control Law. Equipment that uses chlorofluorocarbons must be self-inspected at least once every three months. In addition, equipment with high output requires periodic inspection by a specialist. It is desirable to confirm the need for inspection of refrigerated containers in accordance with the CFC Emission Control Law.</p>	Compliant	
Footnote	[68] For the purposes of this standard, GHGs are defined as the six gases listed in the Kyoto Protocol: carbon dioxide (CO ₂); methane (CH ₄); nitrous oxide (N ₂ O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and sulphur hexafluoride (SF ₆).					
Footnote	[69] GHG emissions must be recorded using recognized methods, standards and records as outlined in Appendix V.					
4.6.3	<p>Indicator: Documentation of GHG emissions of the feed [70] used during the previous production cycle, as outlined in Appendix V, subsection 2</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>Instruction to Clients for Indicator 4.6.3 – GHG Emissions of Feed</p> <p>Indicator 4.6.3 requires that farms document the greenhouse gas emissions (GHG) associated with any feeds used during salmon 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. This requirement applies across the entire previous production cycle. Therefore farms should inform their feed supplier(s) and:</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 V, subsection 2;- 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 salmon (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 V, subsection 2.</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.</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 VI for each production cycle.</p>	<p>Received GHG emissions calculation results from a feed company. It was 1,383kg-CO₂ / feed.</p> <p>If we could multiple the amount of feed, the amount of feed-derived GHG emissions in the previous production cycle was 83.97t-CO₂. A report to ASC will be made in the future.</p>	Compliant	83.97 t-CO ₂
Footnote	[70] GHG emissions from feed can be given based on the average raw material composition used to produce the salmon (by weight) and not as documentation linked to each single product used during the production cycle. 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.					

Criterion 4.7 Non-therapeutic chemical inputs [71,72]						
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
Footnote	[71] Closed production systems that do not use nets and do not use antifoulants shall be considered exempt from standards under Criterion 4.7.					
Footnote	[72] See Appendix VI for transparency requirements for 4.7.1, 4.7.3 and 4.7.4.					
4.7.1	<p>Indicator: For farms that use copper-treated nets [73], evidence that nets are not cleaned [74] or treated in situ in the marine environment</p> <p>Requirement: Yes</p> <p>Applicability: All farms except as noted in [71]</p>	<p>a. Prepare a farm procedure for net cleaning and treatment that describes techniques, technologies, use of off-site facilities, and record keeping.</p> <p>b. Maintain records of antifoulants and other chemical treatments used on nets.</p> <p>c. Declare to the CAB whether copper-based treatments are used on nets.</p> <p>d. If copper-based treatments are used, maintain documentary evidence (see 4.7.1b) that farm policy and practice does not allow for heavy cleaning of copper-treated nets in situ.</p> <p>e. Inform ASC whether copper antifoulants are used on farm (yes or no) as per Appendix VI for each production cycle.</p>	<p>Currently, the copper treated net is used. The safety data sheet (SDS) of the antifouling agent "NTS-Copper" was confirmed. "Facility maintenance procedure" and "About antifouling agent" were prepared. Currently, the company borrows equipment from other companies and treats it with its own antifouling agent. In the future, JSF would like to find a contractor who can handle antifouling. The net is not washed with a high-pressure underwater washing machine, but is dried on land, and then rubbed with a scissors or brush to remove the deposits.</p>	Compliant		
Footnote	[73] Under the SAD, "copper-treated net" is defined as a net that has been treated with any copper-containing substance (such as a copper-based antifoulant) during the previous 18 months, or has not undergone thorough cleaning at a land-based facility since the last treatment. Farms that use nets that have, at some point prior in their lifespan, been treated with copper may still consider nets as untreated so long as sufficient time and cleaning has elapsed as in this definition. This will allow farms to move away from use of copper without immediately having to purchase all new nets.					
Footnote	[74] Light cleaning of nets is allowed. Intent of the standard is that, for example, the high-pressure underwater washers could not be used on copper treated nets under this standard because of the risk of copper flaking off during this type of heavy or more thorough cleaning.					
4.7.2	<p>Indicator: For any farm that cleans nets at on-land sites, evidence that net-cleaning sites have effluent treatment [75]</p> <p>Requirement: Yes</p> <p>Applicability: All farms except as noted in [71]</p>	<p>a. Declare to the CAB whether nets are cleaned on-land.</p> <p>b. If nets are cleaned on-land, obtain documentary evidence from each net-cleaning facility that effluent treatment is in place.</p> <p>c. If yes to 4.7.2b, obtain evidence that effluent treatment used at the cleaning site is an appropriate technology to capture of copper in effluents.</p>	<p>On land, the nets are not washed, but are completely dried by sun-drying and then rubbed with a scissors or brush to remove deposits. Deposits are fine seaweed, etc., which break down naturally. Since no wastewater is generated, no wastewater treatment facility is required. AMITA confirmed the place of sun drying and actual work.</p>	Compliant		
Footnote	[75] Treatment must have appropriate technologies in place to capture copper if the farm uses copper-treated nets.					
4.7.3	<p>Indicator: For farms that use copper nets or copper-treated nets, evidence of testing for copper level in the sediment outside of the AZE, following methodology in Appendix I-1</p> <p>Requirement: Yes</p> <p>Applicability: All farms except as noted in [71]</p>	<p>Note: If the benthos throughout and immediately outside the full AZE is hard bottom, provide evidence to the CAB and request an exemption from Indicator 4.7.3 (see 2.1.1c).</p> <p>a. Declare to the CAB whether the farm uses copper nets or copper-treated nets. (See also 4.7.1c). If "no", Indicator 4.7.3 does not apply.</p> <p>b. If "yes" in 4.7.3a, measure and record copper in sediment samples from the reference stations specified in 2.1.1d and 2.1.2c which lie outside the AZE.</p> <p>c. If "yes" in 4.7.3a, maintain records of testing methods, equipment, and laboratories used to test copper level in sediments from 4.7.3b.</p>	<p>The copper level was also measured during the bottom sediment survey.</p> <p>In line with the 2.1.1 bottom sediment survey, the same company was commissioned to investigate the bottom copper level. Records of inspection methods by the research company were kept.</p>	Compliant		

4.7.4	<p>Indicator: Evidence that copper levels [76] are < 34 mg Cu/kg dry sediment weight, or, in instances where the Cu in the sediment exceeds 34 mg Cu/kg dry sediment weight, demonstration that the Cu concentration falls within the range of background concentrations as measured at three reference sites in the water body</p> <p>Requirement: Yes</p> <p>Applicability: All farms except as noted in [71] and excluding those farms shown to be exempt from Indicator 4.7.3</p>	<p>a. Inform the CAB whether: 1) farm is exempt from Indicator 4.7.4 (as per 4.7.3a), or 2) Farm has conducted testing of copper levels in sediment.</p> <p>b. Provide evidence from measurements taken in 4.7.3b that copper levels are < 34 mg Cu/kg dry sediment weight.</p> <p>c. If copper levels in 4.7.4b are ≥ 34 mg Cu/kg dry sediment weight, provide evidence the farm tested copper levels in sediments from reference sites as described in Appendix I-1 (also see Indicators 2.1.1 and 2.1.2).</p> <p>d. Analyze results from 4.7.4c to show the background copper concentrations as measured at three reference sites in the water body.</p> <p>e. Submit data on copper levels in sediments to ASC as per Appendix VI for each production cycle.</p>	It was significantly lower than 34mg / kg at all points including the inside of AZE. A report to ASC will be made in the future.	Compliant		
Footnote	[76] According to testing required under 4.7.3. The standards related to testing of copper are only applicable to farms that use copper-based nets or copper-treated nets.					
4.7.5	<p>Indicator: Evidence that the type of biocides used in net antifouling are approved according to legislation in the European Union, or the United States, or Australia</p> <p>Requirement: Yes</p> <p>Applicability: All farms except as noted in [71]</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, or Australia.</p>	It uses an antifouling agent composed of copper, which is recognized in the EU.	Compliant		
PRINCIPLE 5: MANAGE DISEASE AND PARASITES IN AN ENVIRONMENTALLY RESPONSIBLE MANNER						
Criterion 5.1 Survival and health of farmed fish [77]						
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
Footnote	[77] See Appendix VI for transparency requirements for 5.1.4, 5.1.5 and 5.1.6.					
5.1.1	<p>Indicator: Evidence of a fish health management plan for the identification and monitoring of fish diseases, parasites and environmental conditions relevant for good fish health, including implementing corrective action when required</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 the farm's current fish health management plan was reviewed and approved by the farm's designated veterinarian [78].</p>	<p>A "health management plan" was created. Check for abnormalities through daily visual inspection and changes in the amount of food fed. Dead fish collect in float dead fish pools and are always raised during feeding. At the time of acclimatization (one month after entering the sea), report to the manager every day, and then report to the manager if the number of dead fish of 0.1% or more occurs in the normal period thereafter. Basically, all dead fish are dissected except when accustomed. Those that have decayed over time and cannot be dissected are recorded as unknown. If there are many dead fish whose cause is unknown even after dissection, send them to the Aomori Prefectural Industrial Technology Center's Water Research Institute for judgment. If there is a possibility of occurrence of IHN (OIE list publication), immediately send it to Aomori Prefectural Inland Water Research Institute for fish disease diagnosis. After that, follow the procedure of the health management plan, such as the total disposal of fish in the same float.</p> <p>In Aomori Prefecture, a veterinarian could not find a fish disease specialist. While discussing with the fishery specialist in charge of the Aomori Industrial Technology Center's Inland Water Research Institute (fish epidemiologist), he created a health management plan.</p>	Compliant		

5.1.2	<p>Indicator: Site visits by a designated veterinarian [78] at least four times a year, and by a fish health manager [79] at least once a month</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>a. Maintain records of visits by the designated veterinarian [78] and fish health managers [82]. If schedule cannot be met, a risk assessment must be provided.</p> <p>b. Maintain a current list of personnel who are employed as the farm's designated veterinarian(s) [78] and fish health manager(s) [79].</p> <p>c. Maintain records of the qualifications of persons identified in 5.1.2b.</p>	<p>In Aomori Prefecture, a veterinarian could not find a fish disease specialist. In addition, the expert (fish quarantine officer) of the Aomori Prefectural Industrial Technology Center's Water Surface Research Institute was unable to take on the role of a designated veterinarian because he was busy with his regular work. Therefore, no fish disease specialists who can visit the farm at least four times a year have been designated.</p> <p>The health manager is Mr. Suzuki.</p>	Minor	<p>No fish disease specialists are allowed to visit the farm at least four times a year</p> <p>In this region, the risk of fish disease is low, so it is not considered to be an important issue. Minor is raised.</p>	
Footnote	[78] A designated veterinarian is the professional responsible for health management on the farm who has the legal authority to diagnose disease and prescribe medication. In some countries such as Norway, a fish health biologist or other professional has equivalent professional qualifications and is equivalent to a veterinarian for purposes of these standards. This definition applies to all references to a veterinarian throughout the standards document.					
Footnote	[79] A fish health manager is someone with professional expertise in managing fish health, who may work for a farming company or for a veterinarian, but who does not necessarily have the authority to prescribe medicine.					
5.1.3	<p>Indicator: Percentage of dead fish removed and disposed of in a responsible manner</p> <p>Requirement: 100% [80]</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>	<p>Current moribund fish are sold to feed companies through collection and transportation companies. An industrial waste manifest is stored.</p> <p>In the unlikely event that a large number of moribunds occurred due to illness, there was no decision on how to remove and treat dead fish in a responsible manner. Measures are needed to prevent the disease from spreading.</p>	Minor	<p>In the unlikely event that a large number of moribunds occurred due to illness, there was no decision on how to remove and treat dead fish in a responsible manner.</p> <p>In this region, the risk of fish disease is low, so it is not considered to be an important issue. Minor is raised.</p>	
Footnote	[80] The SAD recognizes that not all mortality events will result in dead fish present for collection and removal. However, such situations are considered the exception rather than the norm.					
5.1.4	<p>Indicator: Percentage of mortalities that are recorded, classified and receive a post-mortem analysis</p> <p>Requirement: 100% [81]</p> <p>Applicability: All</p>	<p>Note: Farms are required to maintain mortality records from the current and two previous production cycles. For first audit, records for the current and prior production cycle are required.</p> <p>It is recommended that farms maintain a compiled set of records to demonstrate compliance with 5.1.3 – 5.1.6.</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 [78], fish health manager [79]); - cause of mortality (specify disease or pathogen) where known; and - classification as 'unexplained' when cause of mortality is unknown (see 5.1.6). <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 (5.1.4a).</p> <p>d. Using results from 5.1.3a–c, classify each mortality event and keep a record of those classifications.</p> <p>e. Provide additional evidence to show how farm records in 5.1.4a–d cover all mortalities from the current and previous two production cycles (as needed).</p> <p>f. Submit data on numbers and causes of mortalities to ASC as per Appendix VI on an ongoing basis (i.e. at least once per year and for each production cycle).</p>	<p>Basically, all dead fish are dissected except when accustomed. Those that have decayed over time and cannot be dissected are recorded as unknown. If there are many dead fish whose cause is unknown even after dissection, send them to the Aomori Prefectural Industrial Technology Center's Water Research Institute for judgment.</p> <p>All drowning numbers are recorded. The cause of death is classified and recorded. There has been no suspicion of illness so far, and there has been no case of requesting judgment from the Aomori Prefectural Water Research Institute. Each employee determines the cause of death on site. New employees are taught by OJT with experienced employees. Especially suspicious things are taken and taken home for further analysis. Each employee decides whether or not the fish disease. The criteria for judging the appearance of fish disease are documented and shared among employees, but since only Vibrio disease has actually been seen, the disease is accurately determined when other diseases occur. Whether it can be done is unknown. The name of the employee who determined the cause of death was not recorded.</p> <p>Report will be sent to ASC in the future.</p>	Minor	<p>Whether the disease can be accurately determined when the disease occurs is unknown. The name of the employee who determined the cause of death was not recorded.</p> <p>In this region, the risk of fish disease is low, so it is not considered to be an important issue. Minor is raised.</p>	

Footnote	[81] If on-site diagnosis is inconclusive, this standard requires off-site laboratory diagnosis. A qualified professional must conduct all diagnosis. One hundred percent of mortality events shall receive a post-mortem analysis, not necessarily every fish. A statistically relevant number of fish from the mortality event shall be analyzed.					
5.1.5	<p>Indicator: Maximum viral disease-related mortality [82] on farm during the most recent production cycle</p> <p>Requirement: ≤ 10%</p> <p>Applicability: All</p>	<p>a. Calculate the total number of mortalities that were diagnosed (see 5.1.4) as being related to viral disease.</p> <p>b. Combine the results from 5.1.5a with the total number of unspecified and unexplained mortalities from the most recent complete production cycle. Divide this by the total number of fish produced in the production cycle (x100) to calculate percent maximum viral disease-related mortality.</p> <p>c. Submit data on total mortality and viral disease-related mortality to ASC as per Appendix VI on an ongoing basis (i.e. at least once per year and for each production cycle).</p>	Until now, no viral diseases have occurred. Report will be sent to ASC in the future.	Compliant		
Footnote	[82] Viral disease-related mortality count shall include unspecified and unexplained mortality as it could be related to viral disease.					
5.1.6	<p>Indicator: Maximum unexplained mortality rate from each of the previous two production cycles, for farms with total mortality > 6%</p> <p>Requirement: ≤ 40% of total mortalities</p> <p>Applicability: All farms with > 6% total mortality in the most recent complete production cycle.</p>	<p>a. Use records in 5.1.4a to calculate the unexplained mortality rate (%) for the most recent full production cycle. If rate was ≤ 6%, then the requirement of 5.1.6 does not apply. If total mortality rate was > 6%, proceed to 5.1.6b.</p> <p>b. Calculate the unexplained mortality rate (%) for each of the two production cycles immediately prior to the current cycle. For first audit, calculation must cover one full production cycle immediately prior to the current cycle.</p> <p>c. Submit data on maximum unexplained mortality to ASC as per Appendix VI for each production cycle.</p>	Until now, no viral diseases have occurred. Report will be sent to ASC in the future.	N/A		
5.1.7	<p>Indicator: 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 5.1.4a to assemble a time-series dataset on farm-specific mortalities rates and unexplained mortality rates.</p> <p>b. Use the data in 5.1.7a 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>	Since most deaths are accustomed, JSF are considering reducing the death rate at that time. Until now, the water temperature in the port was measured and used as a guideline, but the water temperature in the port and the water temperature off the coast were sometimes different by more than 2 degrees. By starting habituation, JSF plan to reduce the mortality rate during habituation. Shared with employees at internal meetings. Confirmed internal meeting materials.	Compliant		
Criterion 5.2 Therapeutic treatments [83]						
Compliance Criteria (Required Client Actions):			Auditor Evaluation (Required CAB Actions):			
Footnote	[83] See Appendix VI for transparency requirements for 5.2.1, 5.2.5, 5.2.6 and 5.2.10.					
Instruction to Clients and CABs for Criterion 5.2 – Records Related to Therapeutic Treatments						
Indicator 5.2.1 requires that farms maintain detailed record of all chemical and therapeutant use. Those records maintained for compliance with 5.2.1, if all consolidated into a single place, can be used to demonstrate performance against subsequent Indicators (5.2.1 through 5.2.10) under Criterion 5.2.						
5.2.1	<p>Indicator: On-farm documentation that includes, at a minimum, detailed information on all chemicals [84] and therapeutants used during the most recent production cycle, the amounts used (including grams per ton 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 a detailed record of all chemical and therapeutant use that includes:</p> <ul style="list-style-type: none">name of the veterinarian prescribing treatment;product name and chemical name;reason for use (specific disease)date(s) of treatment;amount (g) of product used;dosage;t of fish treated;the WHO classification of antibiotics (also see note under 5.2.8); andthe supplier of the chemical or therapeutant. <p>b. If not already available, assemble records of chemical and therapeutant use to address all points in 5.2.1a for the previous two production cycles. For first audits, available records must cover one full production cycle immediately prior to the current cycle.</p>	About 1 week after acclimatization, OTC (oxytetracycline) was used because vibrio disease occurred due to the change in environment from freshwater to seawater. A usage record was kept daily. The amount used was calculated from the fish weight according to the instructions. The "Guidebook for the Use of Antibiotics for Fisheries" for Vibrio Disease was issued on November 9, 2018 by the director of the Water Research Institute at Amori Industrial Technology Center. The expiry date is one year, and it will be issued whenever it becomes necessary. A report to ASC will be made in the future.	Compliant		

		c. Submit information on therapeutic use (data from 5.2.1a) to ASC as per Appendix VI on an ongoing basis (i.e. at least once per year and for each production cycle).			
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Footnote	[84] Chemicals used for the treatment of fish.					
5.2.2	<p>Indicator: Allowance for use of therapeutic treatments that include antibiotics or chemicals that are banned [85] in any of the primary salmon producing or importing countries [86]</p> <p>Requirement: None</p> <p>Applicability: All</p>	<p>a. Prepare a list of therapeutants, including antibiotics and chemicals, that are proactively banned for use in food fish for the primary salmon producing and importing countries listed in [86].</p> <p>b. Maintain records of voluntary and/or mandatory chemical residue testing conducted or commissioned by the farm from the prior and current production cycles.</p> <p>–</p>	<p>The company possesses the “Use of Fishery Drugs (No. 32)” issued by the Ministry of Agriculture, Forestry and Fisheries, and knows the therapeutic agents that can be used in Japan. So far, only OTC has been used, and no antibiotics or chemicals prohibited in either major salmon producing or importing countries are used, but there is no list.</p>	Minor	<p>Antibiotics or chemicals prohibited in either major salmon producing or importing countries are not used, but there is no list.</p> <p>Since antibiotics and chemicals are not used, it is a matter of the list not present. Minor is raised.</p>	
Footnote	[85] “Banned” means proactively prohibited by a government entity because of concerns around the substance. A substance banned in any of the primary salmon-producing or importing countries, as defined here, cannot be used in any salmon farm certified under the SAD, regardless of country of production or destination of the product. The SAD recommends that ASC maintain a list of a banned therapeutants.					
Footnote	[86] For purposes of this standard, those countries are Norway, the UK, Canada, Chile, the United States, Japan and France.					
5.2.3	<p>Indicator: Percentage of medication events that are prescribed by a veterinarian</p> <p>Requirement: 100%</p> <p>Applicability: All</p>	<p>a. Obtain prescription for all therapeutant use in advance of application from the farm veterinarian (or equivalent, see [78] for definition of veterinarian).</p> <p>b. Maintain copies of all prescriptions and records of veterinarian responsible for all medication events. Records can be kept in conjunction with those for 5.2.1 and should be kept for the current and two prior production cycles.</p>	<p>Until now, OTC was used at the time of acclimatization. The “Guidebook for the Use of Antibiotics for Fisheries” for Vibrio Disease was issued on November 9, 2018 by the director of the Water Research Institute at Aomori Industrial Technology Center. The expiration date is one year.</p> <p>Vibrio disease is thought to be transmitted by rubbing the body surface or stress. JSF are devising ways to handle smolts, and are considering ways to avoid damaging and stressing fish. For this reason, it is planned not to use OTC in the future, but if it is to be used, the “Agricultural Technology Use Instructions for Fisheries” will also be issued from the Aomori Prefectural Industrial Technology Center’s Water Research Institute.</p>	Compliant		
5.2.4	<p>Indicator: Compliance with all withholding periods after treatments</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>a. Incorporate withholding periods into the farm’s fish health management plan (see 5.1.1a).</p> <p>b. Compile and maintain documentation on legally-required withholding periods for all treatments used on-farm. Withholding period is the time interval after the withdrawal of a drug from the treatment of the salmon before the salmon can be harvested for use as food.</p> <p>c. Show compliance with all withholding periods by providing treatment records (see 5.2.1a) and harvest dates for the most recent production cycle.</p>	<p>Until now, OTC has been used only when accustomed, so there was no problem with the drug withdrawal period. The policy is not to use drugs in the future.</p>	Compliant		
5.2.5	<p>Indicator: Maximum farm level cumulative parasiticide treatment index (PTI) score as calculated according to the formula in Appendix VII</p> <p>Requirement: PTI score ≤ 13</p> <p>Applicability: All</p>	<p>a. Using farm data for therapeutants usage (5.2.1a) and the formula presented in Appendix VII, calculate the cumulative parasiticide treatment index (PTI) score for the most recent production cycle. Calculation should be made and updated on an ongoing basis throughout the cycle by farm manager, fish health manager, and/or veterinarian.</p> <p>b. Provide the auditor with access to records showing how the farm calculated the PTI score.</p> <p>c. Submit data on farm level cumulative PTI score to ASC as per Appendix VI for each production cycle.</p>	<p>The anthelmintic is not used and will not be used in the future, so there is no need to calculate PTI.</p>	N/A		

5.2.6	<p>Indicator: For farms with a cumulative PTI ≥ 6 in the most recent production cycle, demonstration that parasiticide load [87] is at least 15% less than the average of the two previous production cycles</p> <p>Requirement: Yes</p> <p>Applicability: All farms with a cumulative PTI ≥ 6 in the most recent production cycle</p>	<p>a. Review PTI scores from 5.2.5a to determine if cumulative PTI ≥ 6 in the most recent production cycle. If yes, proceed to 5.2.6b; if no, Indicator 5.2.6 does not apply.</p> <p>b. Using results from 5.2.5 and the weight of fish treated (kg), calculate parasiticide load in the most recent production cycle [90].</p> <p>c. Calculate parasiticide load in the two previous production cycles as above (5.2.6b) and compute the average. Calculate the percent difference in parasiticide load between current cycle and average of two previous cycles. For first audit, calculation must cover one full production cycle immediately prior to the current cycle.</p> <p>d. As applicable, submit data to ASC on parasiticide load for the most recent production cycle and the two previous production cycles (Appendix VI).</p>	The anthelmintic is not used and will not be used in the future, so there is no need to calculate PTI.	N/A		
Footnote	[87] Parasiticide load = Sum (kg of fish treated x PTI). Reduction in load required regardless of whether production increases on the site. Farms that consolidate production across multiple sites within an ABM can calculate reduction based on the combined parasiticide load of the consolidated sites.					
5.2.7	<p>Indicator: Allowance for prophylactic use of antimicrobial treatments [88]</p> <p>Requirement: None</p> <p>Applicability: All</p>	<p>a. Maintain records for all purchases of antibiotics (invoices, prescriptions) for the current and prior production cycles.</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 antibiotics used during the current and prior production cycles (see also 5.2.9).</p>	Only OTC was used because initial symptoms of Vibrio's disease appeared at the time of adaptation. Past usage records are kept. Not used prophylactically. Policy not to use in the future.	Compliant		
Footnote	[88] The designated veterinarian must certify that a pathogen or disease is present before prescribing medication.					
5.2.8	<p>Indicator: Allowance for use of antibiotics listed as critically important for human medicine by the World Health Organization (WHO [89])</p> <p>Requirement: None [90]</p> <p>Applicability: All</p>	<p>Note 1: Farms have the option to certify only a portion of the fish or farm site when WHO-listed [89] antibiotics have been used at the production facility (see 5.2.8d). To pursue this option, farms must request an exemption from the CAB in advance of the audit and provide sufficient records giving details on which pens were treated and traceability of those treated fish.</p> <p>Note 2: It is recommended that the farm veterinarian review the WHO list [see 89] in detail and be aware that the list is meant to show examples of members of each class of drugs, and is not inclusive of all drugs.</p> <p>a. Maintain a current version of the WHO list of antimicrobials critically and highly important for human health [89].</p> <p>b. If the farm has <u>not</u> used any antibiotics listed as critically important (5.2.8a) in the current production cycle, inform the CAB and proceed to schedule the audit.</p> <p>c. If the farm <u>has</u> used antibiotics listed as critically important (5.2.8a) to treat any fish during the current production cycle, inform the CAB prior to scheduling audit.</p> <p>d. If yes to 5.2.8c, request an exemption from the CAB to certify only a portion of the farm. Prior to the audit, provide the CAB with records sufficient to establish details of treatment, which pens were treated, and how the farm will ensure full traceability and separation of treated fish through and post-harvest.</p>	JSF have WHO's "very important antibiotics in human medicine" list. OTC has confirmed that this is not the case.	Compliant		
Footnote	[89] The fifth edition of the WHO list of critically and highly important antimicrobials was released in 2009 and is available at: http://www.who.int/foodsafety/publications/antimicrobials-fifth/en/ .					
Footnote	[90] If the antibiotic treatment is applied to only a portion of the pens on a farm site, fish from pens that did not receive treatment are still eligible for certification.					
5.2.9	<p>Indicator: Number of treatments [91] of antibiotics over the most recent production cycle</p> <p>Requirement: ≤ 3</p> <p>Applicability: All</p>	<p>Note: for the purposes of Indicator 5.2.9, "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 in a verifiable statement.</p> <p>b. Calculate the total number of treatments of antibiotics over the most recent production cycle and supply a verifiable statement of this calculation.</p>	Until now, antibiotics have been used only once. Will not be used in the future.	Compliant		<p>Previous production cycle: 1 time</p> <p>Future: 0 times (planned)</p>

5.2.10	Indicator: If more than one antibiotic treatment is used in the most recent production cycle, demonstration that the antibiotic load [92] is at least 15% less than that of the average of the two previous production cycles Requirement: Yes [93] Applicability: All	Note: Indicator 5.2.10 requires that farms must demonstrate a reduction in load required, regardless of whether production increases on the site. Farms that consolidate production across multiple sites within an ABM can calculate reduction based on the combined antibiotic load of the consolidated sites.	Until now, antibiotics have been used only once. Will not be used in the future. Therefore 5.2.10 is not applicable.	N/A		
		a. Use results from 5.2.9b to show whether more than one antibiotic treatment was used in the most recent production cycle. If not, then the requirement of 5.2.10 does not apply. If yes, then proceed to 5.2.10b.				
		b. Calculate antibiotic load (antibiotic load = the sum of the total amount of active ingredient of antibiotic used in kg) for most recent production cycle and for the two previous production cycles. For first audit, calculation must cover one full production cycle immediately prior to the current cycle.				
		c. Provide the auditor with calculations showing that the antibiotic load of the most recent production cycle is at least 15% less than that of the average of the two previous production cycles.				
		d. Submit data on antibiotic load to ASC as per Appendix VI (if applicable) for each production cycle.				
Footnote	[92] Antibiotic load = the sum of the total amount of active ingredient of antibiotics used (kg).					
Footnote	[93] Reduction in load required, regardless of whether production increases on the site. Farms that consolidate production across multiple sites within an ABM can calculate reduction based on the combined antibiotic load of the consolidated sites.					
5.2.11	Indicator: Presence of documents demonstrating that the farm has provided buyers [94] of its salmon a list of all therapeutants used in production Requirement: Yes Applicability: All	a. Prepare a procedure which outlines how the farm provides buyers [94] of its salmon with a list of all therapeutants used in production (see 4.4.3b).	The fact that OTC was used was communicated to Okamura Food Industry, the group company of the customer. In the future, when another sales destination is created, if a drug is used, it is necessary to inform the usage history.	Compliant		
		b. Maintain records showing the farm has informed all buyers of its salmon about all therapeutants used in production.				
Footnote	[94] Buyer: The company or entity to which the farm or the producing company is directly selling its product.					
Criterion 5.3 Resistance of parasites, viruses and bacteria to medicinal treatments						
Compliance Criteria (Required Client Actions):			Auditor Evaluation (Required CAB Actions):			
5.3.1	Indicator: Bio-assay analysis to determine resistance when two applications of a treatment have not produced the expected effect Requirement: Yes Applicability: All	Instruction to Clients for Indicator 5.3.1 – Identifying the 'Expected Effect' of Medicinal Treatment Indicator 5.3.1 requires that farms identify treatments that have not produced the expected effect. The SAD Steering Committee recognizes that the “expected effect” will vary with health condition and type of medicinal treatment. Therefore farms and auditors will need to review the pre- and post-treatment condition of fish in order to understand and evaluate the impact of treatment. <u>Example: sea lice treatment with emamectin benzoate</u> The SAD SC recommends that a typical baseline for effectiveness of emamectin benzoate is a minimum of 90 percent reduction in abundance of lice on the farmed fish. To determine whether treatment has produced the expected effect, farm and auditor must review pre- and post-treatment lice counts. If the calculated percent reduction in lice is < 90% then the treatment did not produce the expected effect and a bio-assay should be performed to determine whether sea lice have developed resistance. Note: If field-based bio-assays for determining resistance are ineffective or unavailable, the farm shall have samples analyzed by an independent laboratory to determine resistance formation. The auditor shall record in the audit report why field-based bio-assays were deemed ineffective and shall include results from the laboratory analyses of resistance formation.			N/A	
		a. In addition to recording all therapeutic treatments (5.2.1a), keep a record of all cases where the farm uses two successive medicinal treatments.	OTC has not been used more than once because it was effective after a single dose. Therefore, 5.3.1 is not applicable.			
		b. Whenever the farm uses two successive treatments, keep records showing how the farm evaluates the observed effect of treatment against the expected effect of treatment.				
		c. For any result of 5.3.1b that did not produce the expected effect, ensure that a bio-assay analysis of resistance is conducted.				
		d. Keep a record of all results arising from 5.3.1c.				

5.3.2	<p>Indicator: When bio-assay tests determine resistance is forming, use of an alternative, permitted treatment, or an immediate harvest of all fish on the site</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>a. Review results of bio-assay tests (5.3.1d) for evidence that resistance has formed. If yes, proceed to 5.3.2b. If no, then Indicator 5.3.2 is not applicable.</p> <p>b. When bio-assay tests show evidence that resistance has formed, keep records showing that the farm took one of two actions: – used an alternative treatment (if permitted in the area of operation); or – immediately harvested all fish on site.</p>	Since 5.3.1 is not applicable, 5.3.2 is not applicable.	N/A		
<i>Criterion 5.4 Biosecurity management [95]</i>						
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
Footnote	[95] See Appendix VI for transparency requirements for 5.4.2 and 5.4.4.					
5.4.1	<p>Indicator: Evidence that all salmon on the site are a single-year class [96]</p> <p>Requirement: 100% [97]</p> <p>Applicability: All farms except as noted in [97]</p>	<p>a. Keep records of the start and end dates of periods when the site is fully fallow after harvest.</p> <p>b. Provide evidence of stocking dates (purchase receipts, delivery records) to show that there were no gaps > 6 months for smolt inputs for the current production cycle.</p> <p>–</p>	The smolts of the single age group of Fukaura Intermediate Farm are used. In this farm, seeds and seedlings are introduced in early November and all are harvested by the end of June, so the period from July to October is not during cultivation. Set-up date and last harvest date are recorded.	Compliant		
Footnote	[96] Gaps of up to six months between inputs of smolts derived from the same stripping are acceptable as long as there remains a period of time when the site is fully fallow after harvest.					
Footnote	<p>[97] Exception is allowed for:</p> <p>1) farm sites that have closed, contained production units where there is complete separation of water between units and no sharing of filtration systems or other systems that could spread disease, or,</p> <p>2) farm sites that have ≥95% water recirculation, a pre-entry disease screening protocol, dedicated quarantine capability and biosecurity measures for waste to ensure there is no discharge of live biological material to the natural environment (e.g. UV or other effective treatment of effluent) .</p>					
5.4.2	<p>Indicator: Evidence that if the farm suspects an unidentifiable transmissible agent, or if the farm experiences unexplained increased mortality, [98] the farm has:</p> <p>1. Reported the issue to the ABM and to the appropriate regulatory authority</p> <p>2. Increased monitoring and surveillance [99] on the farm and within the ABM</p> <p>3. Promptly [100] made findings publicly available</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>a. For mortality events logged in 5.1.4a, show evidence that the farm promptly evaluated each to determine whether it was a statistically significant increase over background mortality rate on a monthly basis [98]. The accepted level of significance (for example, $p < 0.05$) should be agreed between farm and CAB.</p> <p>b. For mortality events logged in 5.1.4a, record whether the farm did or did not suspect (yes or no) an unidentified transmissible agent.</p> <p>c. Proceed to 5.4.2d if, during the most recent production cycle, either: – results from 5.4.2a showed a statistically significant increase in unexplained mortalities; or – the answer to 5.4.2b was 'yes'. Otherwise, Indicator 5.4.2 is not applicable.</p> <p>d. If required, ensure that the farm takes and records the following steps: 1) Report the issue to the ABM and to the appropriate regulatory authority; 2) Increase monitoring and surveillance [99] on the farm and within the ABM; and 3) Promptly (within one month) make findings publicly available.</p> <p>e. As applicable, submit data to ASC as per Appendix VI about unidentified transmissible agents or unexplained increases in mortality. If applicable, then data are to be sent to ASC on an ongoing basis (i.e. at least once per year and for each production cycle).</p>	Not applicable as there are no cases of suspected existence of an unidentified source of infection or an increase in deaths of unknown cause. However, it is desirable to establish a procedure in case an emergency occurs in the future.	N/A		
Footnote	[98] Increased mortality: A statistically significant increase over background rate on a monthly basis.					
Footnote	[99] Primary aim of monitoring and surveillance is to investigate whether a new or adapted disease is present in the area.					
Footnote	[100] Within one month.					

5.4.3	<p>Indicator: Evidence of compliance [101] with the OIE Aquatic Animal Health Code [102]</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>Instruction to Clients for Indicator 5.4.3 – Compliance with the OIE Aquatic Animal Health Code</p> <p>Indicator 5.4.3 requires that farms show evidence of compliance with the OIE Aquatic Animal Health Code (see http://www.oie.int/index.php?id=171). Compliance is defined as farm practices consistent with the intentions of the Code. For purposes of the ASC Salmon Standard, this means that the farm must have written procedures stating how the farm will initiate an aggressive response to detection of an exotic OIE–notifiable disease on the farm [‘exotic’ = not previously found in the area or had been fully eradicated (area declared free of the pathogen)]. An aggressive response will involve, at a minimum, the following actions:</p> <ul style="list-style-type: none">– depopulation of the infected site;– implementation of quarantine zones (see note below)in accordance with guidelines from OIE for the specific pathogen; and– additional actions as required under Indicator 5.4.4. <p>To demonstrate compliance with Indicator 5.4.3, clients have the option to describe how farm practices are consistent with the intentions of the OIE Aquatic Animal Health Code by developing relevant policies and procedures and integrating them into the farm’s fish health management plan.</p> <p>Note: The Steering Committee recognizes that establishment of quarantine zones will likely incorporate mandatory depopulation of sites close to the infected site and affect some, though not necessarily all, of the ABM.</p>	<p>a. Maintain a current version of the OIE Aquatic Animal Health Code on site or ensure staff have access to the most current version.</p> <p>b. Develop policies and procedures as needed to ensure that farm practices remain consistent with the OIE Aquatic Animal Health Code (5.4.3a) and with actions required under indicator 5.4.4.</p> <p>–</p>	<p>The latest OIE Aquatic Animal Health Code can be found on the OIE website at any time. Prepares OIE disease list. OIE compliance is not a problem because it is cultivated according to Japanese regulations</p>	Compliant		
Footnote	<p>[101] Compliance is defined as farm practices consistent with the intentions of the Code, to be further outlined in auditing guidance. For purposes of this standard, this includes an aggressive response to detection of an exotic OIE–notifiable disease on the farm, which includes depopulating the infected site and implementation of quarantine zones in accordance with guidelines from OIE for the specific pathogen. Quarantine zones will likely incorporate mandatory depopulation of sites close to the infected site and affect some, though not necessarily all, of the ABM. Exotic signifies not previously found in the area or had been fully eradicated (area declared free of the pathogen).</p>						
Footnote	<p>[102] OIE 2011. Aquatic Animal Health Code. http://www.oie.int/index.php?id=171.</p>						
5.4.4	<p>Indicator: If an OIE–notifiable disease [103] is confirmed on the farm, evidence that:</p> <p>1. the farm has, at a minimum, immediately culled the pen(s) in which the disease was detected</p> <p>2. the farm immediately notified the other farms in the ABM [104]</p> <p>3. the farm and the ABM enhanced monitoring and conducted rigorous testing for the disease</p> <p>4. the farm promptly [105] made findings publicly available</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>a. Ensure that farm policies and procedures in 5.4.3a describe the four actions required under Indicator 5.4.4 in response to an OIE–notifiable disease on the farm.</p> <p>b. Inform the CAB if an OIE–notifiable disease has been confirmed on the farm during the current production cycle or the two previous production cycles. If yes, proceed to 5.4.4c. If no, then 5.4.4c and 5.4.4d do not apply.</p> <p>c. If an OIE–notifiable disease was confirmed on the farm (see 5.4.4b), then retain documentary evidence to show that the farm:</p> <p>1) immediately culled the pen(s) in which the disease was detected;</p> <p>2) immediately notified the other farms in the ABM [104]</p> <p>3) enhanced monitoring and conducted rigorous testing for the disease; and</p> <p>4) promptly (within one month) made findings publicly available.</p> <p>d. As applicable, submit data to ASC as per Appendix VI about any OIE–notifiable disease that was confirmed on the farm. If applicable, then data are to be sent to ASC on an ongoing basis (i.e. at least once per year and for each production cycle).</p> <p>–</p>	<p>There is no illness to report to OIE so far, so it is not applicable. It summarizes the contents of diseases that should be reported to OIE.</p>	N/A			
Footnote	<p>[103] At the time of publication of the final draft standards, OIE–notifiable diseases relevant to salmon aquaculture were: Epizootic haematopoietic necrosis, Infectious haematopoietic necrosis (IHN), Infectious salmon anemia (ISA), Viral hemorrhagic septicemia (VHS) and Gyrodactylus (Gyrodactylus salaris).</p>						
Footnote	<p>[104] This is in addition to any notifications to regulatory bodies required under law and the OIE Aquatic Animal Health Code.</p>						
Footnote	<p>[105] Within one month.</p>						

Social requirements in the standards shall be audited by an individual who is a lead auditor in conformity with SAAS Procedure 200 section 3.1.					
PRINCIPLE 6: DEVELOP AND OPERATE FARMS IN A SOCIALLY RESPONSIBLE MANNER					
6.1 Freedom of association and collective bargaining [106]					
Compliance Criteria					
Footnote	[106] 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>Requirement: Yes</p> <p>Applicability: All</p>	Not applicable because there is no labor union organized in our company.	N/A		
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>Employees' right to organize, collective bargaining, and collective action are guaranteed by Article 28 of the Japanese Constitution. In addition, "Corporate Policy on Social Responsibility" was prepared on August 1, 2018. In this, "employees are free to participate / activate unions". Mr. Suzuki, an administrator, confirmed in an interview that this policy was explained to employees. This policy is not currently in a state where any employee can confirm it at any time.</p> <p>In 2018, Ryuhi-Imabe Fishery Cooperative received a document about infringement of group rights and collective bargaining rights. Among these, we have obtained testimony that there are no cases where the right to organize or collective bargaining of our employees has been violated by management.</p>	Compliant		
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>Employees' right to organize, collective bargaining, and collective action are guaranteed by Article 28 of the Japanese Constitution. In addition, "Corporate Policy on Social Responsibility" was prepared on August 1, 2018. In this, "employees are free to participate / activate unions". Mr. Suzuki, the manager, confirmed in an interview that this policy was explained to employees. This policy is not currently in a state where any employee can confirm it at any time.</p> <p>In 2018, JSF received a document from Ryuhi-Imabetsu Fishery Cooperative Association regarding the infringement of group rights and collective bargaining rights. Among them, JSF have obtained testimony that there are no cases where the right to organize or collective bargaining of our employees has been violated by management. Although employees have never negotiated in a collective manner, Mr. Suzuki is a director and Mr. Tanaka is a worker representative. Since all employees work together, information can always be shared. Requests from employees are always informed to Mr. Suzuki. This was confirmed by interviewing employees.</p>	Compliant		
Criterion 6.2 Child labor					
Compliance Criteria					
6.2.1	<p>Indicator: Number of incidences of child [107] labor [108]</p> <p>Requirement: None</p> <p>Applicability: All except as noted in [107]</p>	<p>Article 56 of the Labor Standards Law clearly states that "the employer shall not use this until the end of the first 31st March after the day the child reaches 15 years of age". And comply with the Labor Standards Act. All the laws are published on the website, so you can always check on the website.</p> <p>"The corporate policy on social responsibility" states that "I will not let children and young people work and will not accept them".</p> <p>At the time of hiring, the age is confirmed by a resume or driver's license.</p> <p>No workers believed to be under 15 in the farm were identified.</p>	Compliant		
Footnote	[107] 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	[108] 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 [109] that are protected [110]</p> <p>Requirement: 100%</p> <p>Applicability: All</p>	<p>There are no young workers. "The corporate policy on social responsibility" states that "I will not let children and young people work and will not accept them". At the time of hiring, the age is confirmed by a resume or driver's license.</p> <p>No workers within the farm were deemed to be under 18 years of age.</p> <p>Although it is not young work, there is a possibility that high school students will be accepted as part-time jobs for work experience and extension in the future. In that case, JSF do not allow dangerous work or long working hours.</p>	Compliant		
Footnote	[109] Young Worker: Any worker between the age of a child, as defined above, and under the age of 18.				

Footnote

[110] Protected: Workers between 15 and 18 years of age will not be exposed to hazardous health and safety conditions; working hours shall not interfere with their education and the combined daily transportation time and school time, and work time shall not exceed 10 hours.

Footnote	[111] Hazard: The inherent potential to cause injury or damage to a person's health (e.g., unequipped to handle heavy machinery safely, and unprotected exposure to harmful chemicals).				
Footnote	[112] Hazardous work: Work that, by its nature or the circumstances in which it is carried out, is likely to harm the health, safety or morals of workers (e.g., heavy lifting disproportionate to a person's body size, operating heavy machinery, exposure to toxic chemicals).				
		Criterion 6.3 Forced, bonded or compulsory labor			
		Compliance Criteria			
6.3.1	<p>Indicator: Number of incidences of forced, [113] bonded [114] or compulsory labor</p> <p>Requirement: None</p> <p>Applicability: All</p>	<p>In the "corporate policy on social responsibility," JSF states, "I will not allow forced labor or slave labor."</p> <p>An "Employment Contract and Notification of Working Conditions" has been exchanged with all employees. Employment forms are divided into employees and part-time workers, but all the employment contracts use the same format, and it was confirmed that they did not include content that would impose a liability on workers.</p> <p>Employees are free to leave the workplace.</p> <p>The company has a copy of the driver's license and other qualifications, not the original.</p> <p>Employees are not restrained due to custody of assets or debts to the company.</p> <p>It was confirmed that there was no problem in interviews with employees.</p>	Compliant		
Footnote	[113] 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	[114] 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 [118]			
		Compliance Criteria			
Footnote	[115] 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 [116] and proactive anti-discrimination policies, procedures and practices</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>In the "corporate policy on social responsibility", JSF states "Prohibit discrimination against all human beings".</p> <p>"Company policy and approach to complaints" (complaint handling procedure) has been prepared. If you feel a complaint, you can always consult the administrator. A response mechanism is also defined. If it is difficult to consult within the company, it is more desirable to provide an outside consultation window.</p> <p>In interviews with employees, there was no opinion that they felt discrimination.</p>	Compliant		
Footnote	[116] 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>	There was no discrimination complaint from employees. In interviews with employees, there was no opinion that they felt discrimination.	Compliant		
		Criterion 6.5 Work environment health and safety			
		Compliance Criteria			
6.5.1	<p>Indicator: Percentage of workers trained in health and safety practices, procedures [117] and policies on a yearly basis</p> <p>Requirement: 100%</p> <p>Applicability: All</p>	<p>The "Occupational Health and Safety Basic Policy" (April 2019) has been prepared. Safety management system, patrol and self-inspection, safety and health education, response in the event of an accident or emergency are established.</p> <p>Since the antifouling agent is an organic solvent, JSF have prepared a "Handbook for Handling Dangerous Goods", Drug storage, use, display methods, procedures for handling accidents, etc. are defined. Net dyeing is done outdoors by borrowing facilities from other companies. A small amount of reagents for water quality surveys are also stored.</p> <p>Entrusted to an external specialized institution, safety and health training based on Article 60-2 of the Occupational Safety and Health Act is always conducted once a year.</p> <p>"Safety and health education implementation certificate" (July 15th 2019) is posted at the office. It was held on July 15th in 2019. The contents of the training (work accident occurrence status, equipment knowledge and inspection method, risk prediction activity training, identification of dangerous work, etc.) were confirmed. Although there was no participant list, the interview confirmed that all employees participated.</p>	Compliant		
Footnote	[117] Health and safety training shall include emergency response procedures and practices.				

6.5.2	<p>Indicator: Evidence that workers use Personal Protective Equipment (PPE) effectively</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>"Safety and Health Standards" stipulates safety protective equipment to be worn in each work. Purchased at the company and paid to employees. It was confirmed that everyone was wearing a helmet during the landing. He also takes safety equipment lectures during qualification training.</p>	Compliant		
6.5.3	<p>Indicator: Presence of a health and safety risk assessment and evidence of preventive actions taken</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>In the safety and health training conducted on July 15, 2019, JSF conducted risk assessment training and recorded the results of discussions in the risk assessment Danger Preparation activity table. Based on the contents, the "Safety and Health Standards" summarizes the work procedures, risks, dangerous parts, safety protective equipment, necessary qualifications, etc. for each work (feeding, building, net dyeing, diving, etc.). The procedure for harvesting is under construction. JSF will continue to conduct risk assessments and reflect them in the procedure manual.</p> <p>In order to reduce the risk of using organic solvents, we are testing anti-algae agents to see if other aqueous drugs that do not use organic solvents can be used.</p> <p>The ship is registered as a fishing boat and is registered by the Small Ship Inspection Organization. This registration is necessary for passengers, but it is registered because it requires higher safety standards than ordinary fishing boats. There are three ships, and another ship will be added this year.</p> <p>A check sheet for the equipment is being created. Checklists for small mobile cranes, slinging tools and overhead cranes. Until now, inspections have been carried out, but there was no mechanism for clearly recording them. It will be used in the future.</p>	Compliant		
6.5.4	<p>Indicator: Evidence that all health- and safety-related accidents and violations are recorded and corrective actions are taken when necessary</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>Two industrial accidents occurred from last year to this year. Details of the accident were recorded, and measures to prevent recurrence were taken. *</p> <ul style="list-style-type: none"> On June 18, 2019, he slipped his leg during the check of the landing float and bruised his left chest with the float. Because the suspension was unstable, JSF set up a foothold in the float. On June 11, 2018, when entering the inspection work by diving from outside to inside of the float, he slipped his foot and bruised his head with a float frame (polyethylene pipe). Since the undercarriage was slippery during diving work, the procedure was to remove the float net and not enter the float frame. <p>The content of the accident, the cause, and measures to prevent recurrence are shared by all employees. Since everyone is working together now, sharing is easy. Increase in the number of future employees, if the shift of, consider a system that can transmit the information to everyone.</p>	Compliant		
6.5.5	<p>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</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>All employees are covered by workers' compensation insurance. Workers' accident insurance is a national system, and it is stipulated in the Workers' Accident Compensation Insurance Act that workplaces that employ even one employee must join the worker's accident insurance. In addition to workmen's insurance, the company has additional insurance. It also has fishing boat insurance. AMITA confirmed the industrial accident insurance application record at the time of the accident.</p>	Compliant		
6.5.6	<p>Indicator: Evidence that all diving operations are conducted by divers who are certified</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>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.</p> <p>Diving work is done by three employees. Confirmed three divers' licenses. It is not done on a daily basis, and only performs diving work when necessary, such as for surveys and checking fish. There is no diving outsourcing to other companies. Always wear a dive computer. Survey frequency is about once every two months. Dive deep and about 20m deep. The diving at the time of confirmation of the fish is about 2 to 3m deep.</p> <p>I have a regular health checkup. Article 38 of the High Pressure Occupational Safety and Health Regulations stipulates that workers who are engaged in diving operations "always" must receive a special health check once every six months. The definition of "always" is not always clear, but the current diving work is not "always", so it has not received a special health checkup.</p>	Compliant		
Criterion 6.6 Wages					
Compliance Criteria					
6.6.1	<p>Indicator: The percentage of workers whose basic wage [118] (before overtime and bonuses) is below the minimum wage [119]</p> <p>Requirement: 0 (None)</p> <p>Applicability: All</p>	<p>The minimum wage in Aomori Prefecture is 762 yen (updated on October 1, 2019). Even at part-time jobs, the minimum self-sufficiency is set at 1000 yen, so there is no problem. Full-time employees' salary levels are even higher. Confirmed employment contract.</p>	Compliant		
Footnote	[118] Basic wage: The wages paid for a standard working week (no more than 48 hours).				

6.6.2	<p>Indicator: Evidence that the employer is working toward the payment of basic needs wage [120]</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>The minimum wage in Japan is determined by the local minimum wage council, which is composed of the same number of members from the public interest representative, worker representative, and employer representative for each prefecture. The labor bureau director has decided. The minimum wage by region is determined by comprehensively considering (1) workers' living expenses, (2) workers' wages, and (3) regular business wage-paying ability. In consideration of "living expenses", it is considered that workers should have a healthy and cultural minimum living. Therefore, in Japan, it is considered that the minimum wage is set to meet the living wage. Although it is difficult to calculate the daily salary specialized for this region, the hourly wage of 1,000 yen for part-time workers greatly exceeds the minimum wage, and the salary of full-time employees far exceeds that. It can be judged that the salary is sufficiently high.</p>	Compliant		
Footnote	[120] 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	<p>Indicator: Evidence of transparency in wage-setting and rendering [121]</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>The current wage is decided by the president at the time of joining the company. In addition, only the president evaluates salary increases. Therefore, the method of determining wages was not clearly documented. Currently, while consulting with social insurance laborers, JSF have decided on employee evaluation standards and salary raise standards, and JSF are also working on a management method for working hours. JSF will start operating a new personnel system as early as one year later. It is going to go. An "Employment Agreement and Notification of Working Conditions" has been exchanged with all employees, and the salary set at the time of joining the company is clearly stated. The salary is paid by bank transfer. In employee interviews, there was no opinion that there was a delay in paying salaries.</p>	Minor	<p>The method of determining wages was not clearly documented.</p> <p>There are no complaints from employees regarding wage setting methods, and since they are already working on it, minor is raised.</p>	
Footnote	[121] Payments shall be rendered to workers in a convenient manner.				
Criterion 6.7 Contracts (labor) including subcontracting					
Compliance Criteria					
6.7.1	<p>Indicator: Percentage of workers who have contracts [122]</p> <p>Requirement: 100%</p> <p>Applicability: All</p>	<p>Employment contracts have been signed with all employees, including part-time workers. Confirmed all contracts. It was confirmed through employment contracts and interviews with managers / employees that there was no contract or relationship with labor-only contracts, and illegal apprenticeship labor systems.</p>	Compliant		
Footnote	[122] 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	<p>Indicator: Evidence of a policy to ensure social compliance of its suppliers and contractors</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>In "Corporate Policy for Social Responsibility", "We only deal with suppliers of goods and services such as suppliers and subcontractors who have socially responsible policies as members of society." This policy is presented to business partners, and after confirming that the policy is not violated, the transaction is conducted. There is a list of suppliers. All current business partners confirmed this policy.</p>	Compliant		
Criterion 6.8 Conflict resolution					
Compliance Criteria					
6.8.1	<p>Indicator: Evidence of worker access to effective, fair and confidential grievance procedures</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>"Company policy and approach to complaints" (complaint handling procedure) has been prepared. If you feel a complaint, you can always consult the administrator. A response mechanism is also defined. If it is difficult to consult within the company, it is more desirable to provide an outside consultation window.</p>	Compliant		
6.8.2	<p>Indicator: Percentage of grievances handled that are addressed [123] within a 90-day timeframe</p> <p>Requirement: 100%</p> <p>Applicability: All</p>	<p>It was confirmed by interviews with managers and employees that there have been no complaints from employees.</p>	Compliant		
Footnote	[123] Addressed: Acknowledged and received, moving through the company's process for grievances, corrective action taken when necessary.				

Criterion 6.9 Disciplinary practices					
Compliance criteria					
6.9.1	Indicator: Incidences of excessive or abusive disciplinary actions Requirement: None Applicability: All	It was confirmed by interviews with managers and employees that disciplinary action has not occurred.	Compliant		
Footnote	[124] Mental Abuse: Characterized by the intentional use of power, including verbal abuse, isolation, sexual or racial harassment, intimidation or threat of physical force.				
6.9.2	Indicator: Evidence of a functioning disciplinary action policy whose aim is to improve the worker [125] Requirement: Yes Applicability: All	There are no disciplinary cases, but there is currently no disciplinary policy. JSF are currently working on a working rule, which will include disciplinary provisions.	Minor	There is currently no disciplinary policy. There are no examples of discipline so far, and since they are already working on the disciplinary policy, minor is raised.	
Footnote	[125] 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					
6.10.1	Indicator: Incidences, violations or abuse of working hours and overtime laws [126] Requirement: None Applicability: All	<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> <p>Working hours and overtime are stipulated in the Labor Standards Law, and the articles are published on the website and can be accessed at any time. The regular working hours are from 8:00 to 16:30 on the employment contract. It is a modified working hour system, and it is currently set from 7:30 to 16:00 so as not to inconvenience the driving of heavy machinery and the like due to the commuting time of the morning townspeople. There is no special labor shift due to the season. An interview with employees confirmed that no overtime work was imposed.</p>	Compliant		
Footnote	[126] 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	Indicator: Overtime is limited, voluntary [127], paid at a premium rate [128] and restricted to exceptional circumstances Requirement: Yes Applicability: All except as noted in [130]	Currently, no overtime hours are recorded for employees. Since all of them work together, when overtime occurs, the working hours on other days are shortened and adjusted. There was an explanation from the administrator that the basic salary was set a little higher in anticipation of overtime hours, but the details are not clear on the employment contract or salary details. JSF keep a record of my work days. The number of holidays is adjusted to the same number of days as the group company Okamura Food Industry. Sundays are basically closed except on duty. Recorded when paid leave is taken. When employee go to work on a holiday, he basically take a substitute holiday. When work is so busy that you can't get paid, you are paid a holiday allowance. The wage ledger confirmed that the holiday work allowance was paid as an extra wage. However, there were employees who worked for more than 10 consecutive days during the busy season due to lack of staff. No such arrangement was made in advance between the company and employees.	Minor	Currently, no overtime hours are recorded for employees. There was an explanation from the administrator that the basic salary was set a little higher in anticipation of overtime hours, but the details are not clear on the employment contract or salary details. In addition, there were employees who worked for more than 10 consecutive days during the busy season due to a lack of personnel and unable to take time off. No such arrangement was made in advance between the company and the class members. Overtime work was based on free will, and actual salary was set higher than industry standards. Minor is raised because it is a business management problem such as lack of clear records.	
Footnote	[127] Compulsory overtime is permitted if previously agreed to under a collective bargaining agreement.				
Footnote	[128] Premium rate: A rate of pay higher than the regular work week rate. Must comply with national laws/regulations and/or industry standards.				

Criterion 6.11 Education and training					
Compliance criteria					
6.11.1	<p>Indicator: Evidence that the company regularly performs training of staff in fish husbandry, general farm and fish escape management and health and safety procedures</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>In accordance with ASC standards, all employees share that they understand while doing business.</p> <p>New employees are trained at OJT about their work. The significance of water quality surveys is explained based on ASC standards.</p> <p>Study sessions on salmon lice and fish body measurements may be held. Although we have not decided on a schedule in advance, everyone finds opportunities to gather at the office and talks, so as a result, it is held several times a year. The study session has not been recorded.</p> <p>From July 26 to August 4, 2019, one employee went to a Danish affiliate for training. . Recorded in business trip report. There are also business trips to seafood shows. Although there is no summary of the training records of everyone, they are kept as individual records.</p> <p>JSF check the licenses required for each work and have all employees obtain them. Because there are many young employees who do not have a license, they are acquired in the off-season (around July and August) (vehicle construction machines, sling, small mobile cranes, fork lists, medium-sized vehicles, large special vehicles, etc.)). The company bears acquisition costs. We confirmed the invoice (as of July 2, 2019) from the training institution addressed to the company. While taking the course, it also includes a course on safety procedures and receives textbooks.</p>	Compliant		
Criterion 6.12 Corporate policies for social responsibility					
Compliance criteria					
6.12.1	<p>Indicator: Demonstration of company-level [129] policies in line with the standards under 6.1 to 6.11 above</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>The contents of the activities from 6.1 to 6.11 are not the activities of the separate branch office alone, but the policy is created at the corporate level of Japan Salmon Farm, approved by the manager, and implemented. Fukaura Smolt Station is also covered.</p>	Compliant		
Footnote	[129] Applies to the headquarters of the company in a region or country where the site applying for certification is located. The policy shall relate to all of the company’s operations in the region or country, including grow-out, smolt production and processing facilities.				
Social requirements in the standards shall be audited by an individual who is a lead auditor in conformity with SAAS Procedure 200 section 3.1.					
PRINCIPLE 7: BE A GOOD NEIGHBOR AND CONSCIENTIOUS CITIZEN					
Criterion 7.1 Community engagement					
Compliance Criteria					
7.1.1	<p>Indicator: Evidence of regular and meaningful [130] consultation and engagement with community representatives and organizations</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>As an organization related to fishery in the community, it will be a fishery cooperative. In Imabetsu, the Salmon Fishery Management Committee was established on April 24, 2019. Ryuhi Imabetsu Fishing Association and Japan Salmon Farm participated. JSF explained the current state of aquaculture and future plans with photos and data. The second was held on August 27, 2019. JSF explained the landing results, future plans, and hope of using the port. Ryuhi-Imabetsu Fishing Association's general meeting (February 21, 2019) also announced the establishment of parcel fishing rights.</p> <p>It is scheduled to start at the Minmaya Fishing Cooperative. “Aquaculture Management Committee” was held on April 15, 2019. On June 24, 2019, the “Application for Approval of Zone Fishery Rights Exercise” was submitted.</p> <p>Each agenda and minutes were confirmed.</p> <p>In addition, although it is not a discussion to be included in the minutes, the following exchanges of opinions are made with the people in the community at various places.</p> <p>The president frequently meets with Mayor Imabetsu to explain the business.</p> <p>On September 1st, 2019, there was a festival for praying for big catches, and the mayor attended, so we exchanged opinions at a social gathering.</p> <p>The fishermen eat the fish when landing.</p> <p>There are many opportunities to talk because the officials in the office often pass in front of the office.</p> <p>When regional adjustment is necessary, we often ask the union head of Ryuhi Imabetsu Fishery Cooperative to make adjustments.</p>	Compliant		
Footnote	[130] 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	<p>Indicator: Presence and evidence of an effective [131] policy and mechanism for the presentation, treatment and resolution of complaints by community stakeholders and organizations</p> <p>Requirement: Yes</p> <p>Applicability: All</p>	<p>“About our policy and mechanism for complaints” is being created. This includes a mechanism for accepting and responding to local complaints.</p> <p>Complaints from the local community may come to the fishery cooperative, which is the contact point for local fisheries.</p> <p>Although it is not a complaint from the fishery cooperative, JSF may receive various operational precautions and advice.</p> <p>Currently no complaints are received. In interviews with community officials, there was no opinion that the complaint was filed but not resolved.</p>	Compliant		
Footnote	[131] Effective: In order to demonstrate that the mechanism is effective, evidence of resolutions of complaints can be given.				
7.1.3	<p>Indicator: Evidence that the farm has posted visible notice [132] at the farm during times of therapeutic treatments and has, as part of consultation with communities under 7.1.1, communicated about potential health risks from treatments</p> <p>Requirement: Yes</p>	<p>About 1 week after acclimatization, OTC was used because Vibrio disease occurred due to environmental changes from freshwater to seawater. During use, a signboard stating “Prohibit access to non-related persons during the aquaculture test” was installed and access was prohibited. The policy is not to use drugs in the future. The fishery cooperative is also informed. In the unlikely event that it must be used, JSF will post a notice that is easier to understand and explain potential health risks.</p>	Compliant		

Criterion 7.2 Respect for indigenous and aboriginal cultures and traditional territories					
		Compliance Criteria			
<p style="text-align: center;">Instruction to Clients and CABs on Criterion 7.2 – Traditional Territories of Indigenous Groups</p> <p>The ASC Salmon Standard requires that farms must be respectful of the traditional territories of indigenous groups. The Indicators listed under Criterion 7.2 were designed to fulfill this purpose in a manner consistent with the United Nations Declaration on the Rights of Indigenous Peoples. In many locales, the territorial boundaries of indigenous groups have a defined legal status according to local or national law. In such cases, it is straightforward to know whether a farm is operating in close proximity to indigenous people. However, when boundaries of indigenous territories are undefined or unknown, there is no simple way to establish whether the farm is operating in close proximity to indigenous groups. Here ASC provides the following guidance.</p> <p>The intent behind the ASC Salmon Standard is that the farm will identify all neighboring groups who are potentially negatively impacted by the farm's activities. The actual physical distance between the farm and an indigenous group is less important than understanding whether the farm is having a detrimental impact upon its neighbors. Effective community consultations are one of the best ways to identify such impacts to neighbor groups. Through a transparent process of consultation, indigenous groups who are put under “stress” by the farm will identify themselves and voice their concerns about the nature of the farm's impacts. Continued consultations between farm and neighbors should create a forum where any key issue can be discussed and resolved.</p>					
7.2.1	<p>Indicator: Evidence that indigenous groups were consulted as required by relevant local and/or national laws and regulations</p> <p>Requirement: Yes</p> <p>Applicability: All farms that operate in indigenous territories or in proximity to indigenous or aboriginal people [133]</p>	Not applicable because there are no indigenous peoples in the area.	Compliant		
7.2.2	<p>Indicator: Evidence that the farm has undertaken proactive consultation with indigenous communities</p> <p>Requirement: Yes [133]</p> <p>Applicability: All farms that operate in indigenous territories or in proximity to indigenous or aboriginal people [133]</p>	Not applicable because there are no indigenous peoples in the area.	Compliant		
Footnote	[133] All standards related to indigenous rights only apply where relevant, based on proximity of indigenous territories.				
7.2.3	<p>Indicator: Evidence of a protocol agreement, or an active process [134] to establish a protocol agreement, with indigenous communities</p> <p>Requirement: Yes</p> <p>Applicability: All farms that operate in indigenous territories or in proximity to indigenous or aboriginal people [133]</p>	Not applicable because there are no indigenous peoples in the area.	Compliant		
Footnote	[134] To demonstrate an active process, a farm must show ongoing efforts to communicate with indigenous communities, an understanding of key community concerns and responsiveness to key community concerns through adaptive farm management and other actions.				
		Criterion 7.3 Access to resources			
		Compliance Criteria			
7.3.1	<p>Indicator: Changes undertaken restricting access to vital community resources [135] without community approval</p> <p>Requirement: None</p> <p>Applicability: All</p>	There are no resources that are considered critical to the region.	Compliant		
Footnote	[135] Vital community resources can include freshwater, land or other natural resources that communities rely on for their livelihood. If a farm site were to block, for example, a community 's sole access point to a needed freshwater resource, this would be unacceptable under the Dialogue standard.				
7.3.2	<p>Indicator: Evidence of assessments of company's impact on access to resources</p>	Sea cucumbers can be considered as a resource that the region has used so far. Sea cucumbers are being fished off the coast at a depth of 25m or more, and there is a demand for the farm to be located at a depth of 25m or less. In the future, when a new zone fishery right is established, it will be set in a place that does not affect the use of local resources, while also discussing with the fishery cooperative.	Compliant		

1.3.2	<p>Requirement: Yes</p> <p>Applicability: All</p>	<p>resources, while also discussing with the fishery cooperative.</p> <p>The plan is to expand the farms in the future, but in order not to have an impact, JSF plan to continue investigations and evaluations and confirm the presence or absence of the impact. Regarding the fact that the sediment sulfide exceeded the ASC standard value, we submitted a bottom quality improvement plan to the fishery cooperative and received approval from the fishery cooperative.</p>	Compliant	
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INDICATORS AND STANDARDS FOR SMOLT PRODUCTION						
A farm seeking certification must have documentation from all of its smolt suppliers to demonstrate compliance with the following standards. The requirements are, in general, a subset of the standards in Principles 1 through 7, focusing on the impacts that are most relevant for smolt facilities. In addition, specific standards are applied to open systems (net pens), and to closed and semi-closed systems (recirculation and flow-through). [136]						
Footnote	[136] The SAD SC proposes this approach to addressing environmental and social performance during the smolt phase of production. In the medium term, the SC anticipates a system to audit smolt production facilities on site. In the meantime, farms will need to work with their smolt suppliers to generate the necessary documentation to demonstrate compliance with the standards. The documentation will be reviewed as part of the audit at the grow-out facility.					
SECTION 8: STANDARDS FOR SUPPLIERS OF SMOLT		Standards related to Principle 1				
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
8.1	Indicator: Compliance with local and national regulations on water use and discharge, specifically providing permits related to water quality Requirement: Yes Applicability: All Smolt Producers	a. Identify all of the farm's smolt suppliers. For each supplier, identify the type of smolt production system used (e.g. open, semi or closed systems) and submit this information to ASC (Appendix VI). b. Where legal authorisation related to water quality are required, obtain copies of smolt suppliers' permits. c. Obtain records from smolt suppliers showing monitoring and compliance with discharge laws, regulations, and permit requirements as required. -	The smolt supplier is Fukaura Smolt Station (intermediate breeding ground) which is the company's facility in Fukaura Town. Here, smolts are raised from hatched eggs. This is a semi-closed system that uses river water and grows in outdoor facilities. Regarding the use of water, we have exchanged the "Contract for Omine River Intake" with Fukaura Town (June 10, 2015). There are no regulations or permits for water quality and drainage. A report to ASC will be made in the future.	Compliant		
8.2	Indicator: Compliance with labor laws and regulations Requirement: Yes Applicability: All Smolt Producers	a. Obtain declarations from smolt suppliers affirming compliance with labor laws and regulations. b. Keep records of supplier inspections for compliance with national labor laws and codes (only if such inspections are legally required in the country of operation; see 1.1.3a)	For the same company, compliance with labor laws is similar to Standard 1.1.3 and Principle 6 and is done under the company's structure. There is no inspection of compliance with labor laws.	Compliant		
		Standards related to Principle 2				
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
8.3	Indicator: Evidence of an assessment of the farm's potential impacts on biodiversity and nearby ecosystems that contains the same components as the assessment for grow-out facilities under 2.4.1 Requirement: Yes Applicability: All Smolt Producers	Note: If the smolt facility has previously undertaken an independent assessment of biodiversity impact (e.g. as part of the regulatory permitting process), the farm may obtain and use such documents as evidence to demonstrate compliance with Indicator 8.3 as long as all components are covered. a. Obtain from the smolt supplier(s) a documented assessment of the smolt site's potential impact on biodiversity and nearby ecosystems. The assessment must address all components outlined in Appendix I-3. b. Obtain from the smolt supplier(s) a declaration confirming they have developed and are implementing a plan to address potential impacts identified in the assessment.	Aomori Prefecture Red List is being prepared. In Fukaura Town, some evidence was prepared that there would be no species or natural environment corresponding to Attachment I-3. However, the results of potential impact assessments on biodiversity and ecosystems have not been compiled. Fukaura Smolt Station is located in the designated area of the Class 3 Special Area of the Tsugaru National Park, but the Class 3 Special Area of the National Park is not a protected area and there are no restrictions on aquaculture business.	Minor	In Fukaura Town, the potential impact assessment results on the biodiversity and ecosystems of the species corresponding to Attachment I-3 were not compiled. Based on the current evidence, it is considered unlikely that the farm will affect biodiversity and rare species. Minor is raised for the assessments not documented.	18.29kg/t

8.4	<p>Indicator: Maximum total amount of phosphorus released into the environment per metric ton (mt) of fish produced over a 12-month period (see Appendix VIII-1)</p> <p>Requirement: 4 kg/mt of fish produced over a 12-month period</p> <p>Applicability: All Smolt Producers</p>	<p>Instruction to Clients for Indicator 8.4 – Calculating Total Phosphorus Released per Ton of Fish Produced</p> <p>Farms must confirm that each of their smolt suppliers complies with the requirement of indicator 8.4. This specifies the maximum amount of phosphorus that a smolt production facility can release into the environment per metric ton (mt) of fish produced over a 12-month period. The requirement is set at 4 kg/mt. The calculation of total phosphorus released is made using a “mass balance” approach. Detailed instructions and formulas are given in Appendix VIII-1.</p> <p>If applicable, farms may take account of any physical removals of phosphorus in the form of sludge provided there is evidence to show:</p> <ul style="list-style-type: none">– the smolt supplier has records showing the total quantity of sludge removed from site over the relevant time period;– the supplier determined phosphorus concentration (% P) in removed sludge by sampling and analyzing representative batches; and– the sludge was properly disposed off site and in accordance with the farm’s biosolid management plan.					
		a. Obtain records from smolt suppliers showing amount and type of feeds used for smolt production during the past 12 months.	<p>Based on the feed company data, the amount of phosphorus in the feed was calculated from the feed.</p> <p>Smolt biomass is also recorded.</p> <p>From daily reports, the amount of dead and dead biomass was calculated. The amount of phosphorus in the fish is not available, and the values of Danish affiliates were used as a reference.</p> <p>Sludge is collected twice a year but is not included in the calculation because the amount of phosphorus was not measured.</p> <p>As a result, 18.29 kg / t of phosphorus was discharged.</p>	Minor	<p>Sludge is collected twice a year but is not included in the calculation because the amount of phosphorus was not measured.</p> <p>As a result, 18.29 kg / t of phosphorus was discharged.</p> <p>Actually, sludge is collected and the released phosphorus is expected to be within the standard value, so minor is raised.</p>	18.29kg/t	
		b. For all feeds used by the smolt suppliers (result from 8.4a), keep records showing phosphorus content as determined by chemical analysis or based on feed supplier declaration (Appendix VIII-1).					
		c. Using the equation from Appendix VIII-1 and results from 8.4a and b, calculate the total amount of phosphorus added as feed during the last 12 months of smolt production.					
		d. Obtain from smolt suppliers records for stocking, harvest and mortality which are sufficient to calculate the amount of biomass produced (formula in Appendix VIII-1) during the past 12 months.					
		e. Calculate the amount of phosphorus in fish biomass produced (result from 8.4d) using the formula in Appendix VIII-1.					
		f. If applicable, obtain records from smolt suppliers showing the total amount of P removed as sludge (formula in Appendix VIII-1) during the past 12 months.					
		g. Using the formula in Appendix VIII-1 and results from 8.4a-f (above), calculate total phosphorus released per ton of smolt produced and verify that the smolt supplier is in compliance with requirements.					
Standards related to Principle 3							
8.5	<p>Indicator: If a non-native species is being produced, the species shall have been widely commercially produced in the area prior to the publication of the ASC Salmon Standard</p> <p>Requirement: Yes [137]</p> <p>Applicability: All Smolt Producers except as noted in [137]</p>	Compliance Criteria (Required Client Actions):		Auditor Evaluation (Required CAB Actions):			
		a. Obtain written evidence showing whether the smolt supplier produces a non-native species or not. If not, then Indicator 8.5 does not apply.	<p>Rainbow trout is an exotic species. On the sea surface in Aomori Prefecture, “Kaikyo Salmon” has been cultivated since 1989. Inland water culture has also been conducted since 1979. There is production data from these years Until now.</p>	Compliant			
		b. Provide the farm with documentary evidence that the non-native species was widely commercially produced in the area before publication of the ASC Salmon Standard. (See definition of area under 3.2.1).					
		c. If the smolt supplier cannot provide the farm with evidence for 8.5b, provide documentary evidence that the farm uses only 100% sterile fish.					
		d. If the smolt supplier cannot provide the farm with evidence for 8.5b or 8.5c, provide documented evidence for each of the following: 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. Retain evidence as described in 8.5a-d necessary to show compliance of each facility supplying smolt to the farm.					

Footnote	[137] Exceptions shall be made for production systems that use 100 percent sterile fish or systems that demonstrate separation from the wild 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.					
8.6	<p>Indicator: Maximum number of escapees [138] in the most recent production cycle</p> <p>Requirement: 300 fish [139]</p> <p>Applicability: All Smolt Producers except as noted in [139]</p>	<p>a. Obtain documentary evidence to show that smolt suppliers maintained monitoring records of all incidences of confirmed or suspected escapes, specifying date, cause, and estimated number of escapees.</p> <p>b. Using smolt supplier records from 8.6a, determine the total number of fish that escaped. Verify that there were fewer than 300 escapees from the smolt production facility in the most recent production cycle.</p> <p>c. Inform smolt suppliers in writing that monitoring records described in 8.6a must be maintained for at least 10 years beginning with the production cycle for which the farm is first applying for certification (necessary for farms to be eligible to apply for the exception noted in [139]).</p> <p>d. If an escape episode occurs at the smolt production facility (i.e. an incident where > 300 fish escaped), the farm may request a rare exception to the Standard [139]. Requests must provide a full account of the episode and must document how the smolt producer could not have predicted the events that caused the escape episode.</p>	Since 2018, the escape fish management sheet has been recorded at Fukaura Smolt Station. The date, cause, and estimated number of escapes are recorded. One production cycle is currently two years, and the number of escapes from last year to the present is an estimated 280 fish.	Compliant		280 fish
Footnote	[138] Farms shall report all escapes; the total aggregated number of escapees per production cycle must be less than 300 fish.					
Footnote	[139] A rare exception to this standard may be made for an escape event that is clearly documented as being outside of the farm’s control. Only one such exceptional episode is allowed in a 10-year period for the purposes of this standard. The 10-year period starts at the beginning of the production cycle for which the farm is applying for certification. The farmer must demonstrate that there was no reasonable way to predict the events that caused the episode. Extreme weather (e.g., 100-year storms) or accidents caused by farms located near high-traffic waterways are not intended to be covered under this exception.					
8.7	<p>Indicator: Accuracy [140] of the counting technology or counting method used for calculating the number of fish</p> <p>Requirement: ≥98%</p> <p>Applicability: All Smolt Producers</p>	<p>a. Obtain records showing the accuracy of the counting technology used by smolt suppliers. Records must include copies of spec sheets for counting machines and common estimates of error for hand-counts.</p> <p>B. Review records to verify that accuracy of the smolt supplier’s counting technology or counting method is ≥ 98%.</p>	The number of fish is estimated from the weight, average individual weight, and number of dead fish at the time of fish eggs and every time the float is transferred. The difference between the final weighing before shipment and the weighing at shipment is calculated. Since the difference was 0.3%, the accuracy of the coefficient method is considered to be 98% or more.	Compliant		99.70%
Footnote	[140] Accuracy shall be determined by the spec sheet for counting machines and through common estimates of error for any hand counts.					
Standards related to Principle 4						
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
8.8	<p>Indicator: Evidence of a functioning policy for proper and responsible treatment of non-biological waste from production (e.g., disposal and recycling)</p> <p>Requirement: Yes</p> <p>Applicability: All Smolt Producers</p>	a. From each smolt supplier obtain a policy which states the supplier’s commitment to proper and responsible treatment of non-biological waste from production. It must explain how the supplier’s policy is consistent with best practice in the area of operation.	“Environmentally-friendly farm management policy” stipulates that waste should be handled properly and not dumped into the ocean. However, because there was no specific procedure for waste disposal in Fukaura, it was not possible to confirm whether responsible disposal was being performed.	Minor	<p>There was no specific procedure for waste disposal in Fukaura.</p> <p>Based on interviews with employees and interested parties, it was confirmed that the waste was actually disposed of properly. Minor is raised since it is a matter of documentation.</p>	
8.9	<p>Indicator: Presence of an energy-use assessment verifying the energy consumption at the smolt production facility (see Appendix V subsection 1 for guidance and required components of the records and assessment)</p> <p>Requirement: Yes, measured in kilojoule/mt fish/production cycle</p> <p>Applicability: All Smolt Producers</p>	<p>Note: see instructions for Indicator 4.6.1.</p> <p>a. Obtain records from the smolt supplier for energy consumption by source (fuel, electricity) at the supplier’s facility throughout each year.</p> <p>b. Confirm that the smolt supplier calculates total energy consumption in kilojoules (kJ) during the last year.</p> <p>c. Obtain records to show the smolt supplier calculated the total weight of fish in metric tons (mt) produced during the last year.</p> <p>d. Confirm that the smolt supplier used results from 8.9b and 8.9c to calculate energy consumption on the supplier’s facility as required and that the units are reported as kilojoule/mt fish/production cycle.</p>	Producer uses light oil, gasoline, kerosene, and electricity. According to Attachment V–1, the amount of energy consumed per ton of production was calculated by collecting the usage from Jan. 2018 to June 2019. As a result, the energy consumption in this period was 1,143,927.726 kJ / t. Recalculation will be done after getting more records of energy use.	Compliant		1,143,927.726KJ

		e. Obtain evidence to show that smolt supplier has undergone an energy use assessment in compliance with requirements of Appendix V-1. Can take the form of a declaration detailing a-e.			
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8.10	Indicator: Records of greenhouse gas (GHG [141]) emissions [142] at the smolt production facility and evidence of an annual GHG assessment (See Appendix V, subsection 1) Requirement: Yes Applicability: All Smolt Producers	Note: see instructions for Indicator 4.6.2.	Scope 1 was calculated from light oil, gasoline and kerosene usage, Scope 2 was calculated from electricity usage. The emission factor is the value published by the Ministry of the Environment. https://ghg-santeikohyo.env.go.jp/calc As a result, GHG emissions from Jan. 2018 to June 2019 were 125.31t–CO ₂ .	Compliant	125.31t–CO ₂
		a. Obtain records of greenhouse gas emissions from the smolt supplier's facility.			
		b. Confirm that, on at least an annual basis, the smolt supplier calculates all scope 1 and scope 2 GHG emissions in compliance with Appendix V–1.			
		c. For GHG calculations, confirm that the smolt supplier selects the emission factors which are best suited to the supplier's operation. Confirm that the supplier documents the source of the emissions factors.			
		d. For GHG calculations involving conversion of non-CO ₂ gases to CO ₂ equivalents, confirm that the smolt suppliers specify the Global Warming Potential (GWP) used and its source.			
		e. Obtain evidence to show that the smolt supplier has undergone a GHG assessment in compliance with requirements Appendix V–1 at least annually.			
Footnote	[141] For the purposes of this standard, GHGs are defined as the six gases listed in the Kyoto Protocol: carbon dioxide (CO ₂); methane (CH ₄); nitrous oxide (N ₂ O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and sulphur hexafluoride (SF ₆).				
Footnote	[142] GHG emissions must be recorded using recognized methods, standards and records as outlined in Appendix V.				
Standards related to Principle 5					
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):		
8.11	Indicator: Evidence of a fish health management plan, approved by the designated veterinarian, for the identification and monitoring of fish diseases and parasites Requirement: Yes Applicability: All Smolt Producers	a. Obtain a copy of the supplier's fish health management plan for the identification and monitoring of fish disease and parasites.	There is a health management plan for Fukaura Smolt Station.	Compliant	
		b. Keep documentary evidence to show that the smolt supplier's health plans were approved by the supplier's designated veterinarian.			
8.12	Indicator: Percentage of fish that are vaccinated for selected diseases that are known to present a significant risk in the region and for which an effective vaccine exists [143] Requirement: 100% Applicability: All Smolt Producers	a. Maintain a list of diseases that are known to present a significant risk in the region, developed by farm veterinarian and supported by scientific evidence.	There is a vaccination record (2018). As a countermeasure against Vibrio disease, Pishiback was inoculated. This is the only vaccine against Vibrio disease in Japan.	Compliant	
		b. Maintain a list of diseases for which effective vaccines exist for the region, developed by the farm veterinarian and supported by scientific evidence.			
		c. Obtain from the smolt supplier(s) a declaration detailing the vaccines the fish received.			
		d. Demonstrate, using the lists from 8.12a–c above, that all salmon on the farm received vaccination against all selected diseases known to present a significant risk in the regions for which an effective vaccine exists.			
Footnote	[143] The farm's designated veterinarian is responsible for undertaking and providing written documentation of the analysis of the diseases that pose a risk in the region and the vaccines that are effective. The veterinarian shall determine which vaccinations to use and demonstrate to the auditor that this decision is consistent with the analysis.				

8.13	<p>Indicator: Percentage of smolt groups [144] tested for select diseases of regional concern prior to entering the grow-out phase on farm</p> <p>Requirement: 100%</p> <p>Applicability: All Smolt Producers</p>	<p>Instruction to Clients for Indicator 8.13— Testing of Smolt for Select Diseases</p> <p>The farm is responsible for developing and maintaining a list of diseases of regional concern for which each smolt group should be tested. The list of diseases shall include diseases that originate in freshwater and are proven or suspected to occur in seawater (and for which seawater fish-to-fish transmission is a concern).</p> <p>The designated veterinarian <u>to the smolt supplier</u> is required to evaluate, based on scientific criteria and publicly available information, which diseases should be tested for. This analysis shall include an evaluation of whether clinical disease or a pathogen carrier state in fresh water is deemed to have a negative impact on the grow-out phase, thereby disqualifying a smolt group from being transferred. The analysis must be available to the CAB upon request.</p> <p>Note: A “smolt group” is defined as a population that shares disease risk, including environment, husbandry, and host factors that might contribute to sharing disease agents for each group.</p>					
		a. Obtain from the smolt supplier a list of diseases of regional concern for which smolt should be tested. List shall be supported by scientific analysis as described in the Instruction above.	In Aomori Prefecture, we confirmed the illness that could be transmitted to rainbow trout with the person in charge at the Water Research Institute in Aomori Industrial Technology Center.	Compliant			
		b. Obtain from the smolt supplier(s) a declaration and records confirming that each smolt group received by the farm has been tested for the diseases in the list (8.13a).	At the time of shipment from Fukaura Smolt Station, the presence or absence of disease is confirmed visually. If fish are infected with a disease, fish body surface and movement will change. Experience has shown that the presence of disease can be confirmed by this method.				
Footnote	[144] A smolt group is any population that shares disease risk, including environment, husbandry and host factors that might contribute to sharing disease agents for each group. Only diseases that are proven, or suspected, as occurring in seawater (and for which seawater fish-to-fish transmission is a concern) but originating in freshwater should be on the list of diseases tested. The designated veterinarian to the smolt farm is required to evaluate, based on scientific criteria and publicly available information, which diseases should be tested for. This analysis shall include an evaluation of whether clinical disease or a pathogen carrier state in fresh water is deemed to have a negative impact on the grow-out phase, thereby disqualifying a smolt group from being transferred. A written analysis must be available to the certifier on demand.						
8.14	<p>Indicator: Detailed information, provided by the designated veterinarian, of all chemicals and therapeutants used during the smolt production cycle, the amounts used (including grams per ton 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 Smolt Producers</p>	a. Obtain from the smolt supplier(s) a detailed record of all chemical and therapeutant use for the fish sold to the farm that is signed by their veterinarian and includes: – name of the veterinarian prescribing treatment; – product name and chemical name; – reason for use (specific disease) – date(s) of treatment; – amount (g) of product used; – dosage; – mt of fish treated; – the WHO classification of antibiotics (also see note under 5.2.8); and – the supplier of the chemical or therapeutant.	All drug usage records since 2016 are recorded. The product name, reason for use, date of use, amount used, etc. are recorded. JSF get permission from Aomori Prefecture for use. The following fishery drugs are stored at Fukaura Smolt Station. Isodine for fisheries Isolan Soda (Sulfisozol Sodium) Aquaphen (Florfenicol) OTC Basically, for smolts, chemicals use isolan soda only once and at most twice.	Compliant			
8.15	<p>Indicator: Allowance for use of therapeutic treatments that include antibiotics or chemicals that are banned [145] in any of the primary salmon producing or importing countries [146]</p> <p>Requirement: Yes</p> <p>Applicability: All Smolt Producers</p>	a. Provide to the smolt supplier the list (see 5.2.2a) of therapeutants, including antibiotics and chemicals, that are proactively banned for use in food fish for the primary salmon producing and importing countries listed in [146]. b. Inform smolt supplier that the treatments on the list cannot be used on fish sold to a farm with ASC certification. c. Compare therapeutant records from smolt supplier (8.14) to the list (8.15a) and confirm that no therapeutants appearing on the list (8.15a) were used on the smolt purchased by the farm.	There is no list of antibiotics or chemicals prohibited in either major salmon producing or importing countries.	Minor	There is no list of antibiotics or chemicals prohibited in either major salmon producing or importing countries. The prohibited antibiotics and chemicals are not used, Minor is raised since it is a matter of documentation.		
Footnote	[145] “Banned” means proactively prohibited by a government entity because of concerns around the substance.						
Footnote	[146] For purposes of this standard, those countries are Norway, the UK, Canada, Chile, the United States, Japan and France.						
8.16	<p>Indicator: Number of treatments of antibiotics over the most recent production cycle</p> <p>Requirement: ≤ 3</p> <p>Applicability: All Smolt Producers</p>	a. Obtain from the smolt supplier records of all treatments of antibiotics (see 8.14a). b. Calculate the total number of treatments of antibiotics from their most recent production cycle.	Antibiotic use during smolt is basically once and at most twice. All usage is recorded. It is desirable to make it easy to understand.	Compliant		2 times or less	

8.17	<p>Indicator: Allowance for use of antibiotics listed as critically important for human medicine by the WHO [147]</p> <p>Requirement: None [148]</p> <p>Applicability: All Smolt Producers</p>	<p>a. Provide to smolt supplier(s) a current version of the WHO list of antimicrobials critically and highly important for human health [147].</p> <p>b. Inform smolt supplier that the antibiotics on the WHO list (8.17a) cannot be used on fish sold to a farm with ASC certification.</p> <p>c. Compare smolt supplier's records for antibiotic usage (8.14, 8.15a) with the WHO list (8.17a) to confirm that no antibiotics listed as critically important for human medicine by the WHO were used on fish purchased by the farm.</p>	Maintains WHO's "very important antibiotics in human medicine" list. It has been confirmed that Fukaura Smolt Station uses antibiotics that do not fall under this category.	Compliant		
Footnote	[147] The 3rd edition of the WHO list of critically and highly important antimicrobials was released in 2009 and is available at: http://www.who.int/foodborne_disease/resistance/CIA_3.pdf .					
Footnote	[148] If the antibiotic treatment is applied to only a portion of the pens on a farm site, fish from pens that did not receive treatment are still eligible for certification.					
8.18	<p>Indicator: Evidence of compliance [149] with the OIE Aquatic Animal Health Code [150]</p> <p>Requirement: Yes</p> <p>Applicability: All Smolt Producers</p>	<p>Note: see instructions for Indicator 5.4.3 regarding evidence of compliance with the OIE Aquatic Animal Health Code.</p> <p>a. Provide the smolt supplier with a current version of the OIE Aquatic Animal Health Code (or inform the supplier how to access it from the internet).</p> <p>b. Inform the supplier that an ASC certified farm can only source smolt from a facility with policies and procedures that ensure that its smolt production practices are compliant with the OIE Aquatic Animal Health Code.</p> <p>c. Obtain a declaration from the supplier stating their intent to comply with the OIE code and copies of the smolt suppliers policies and procedures that are relevant to demonstrate compliance with the OIE Aquatic Animal Health Code.</p>	The latest OIE Aquatic Animal Health Code can be found on the OIE website at any time. Prepares OIE disease list. OIE compliance is not a problem because it is cultivated according to Japanese regulations.	Compliant		
Footnote	[149] Compliance is defined as farm practices consistent with the intentions of the Code, to be further outlined in auditing guidance. For purposes of this standard, this includes an aggressive response to detection of an exotic OIE-notifiable disease on the farm, which includes depopulating the infected site and implementation of quarantine zones in accordance with guidelines from OIE for the specific pathogen. Exotic signifies not previously found in the area or had been fully eradicated (area declared free of the pathogen).					
Footnote	[150] OIE 2011. Aquatic Animal Health Code, http://www.oie.int/index.php?id=171 .					
Standards related to Principle 6						
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
8.19	<p>Indicator: Evidence of company-level policies and procedures in line with the labor standards under 6.1 to 6.11</p> <p>Requirement: Yes</p> <p>Applicability: All Smolt Producers</p>	<p>a. Obtain copies of smolt supplier's company-level policies and procedures and a declaration of compliance with the labor standards under 6.1 to 6.11.</p> <p>b. Review the documentation and declaration from 8.19a to verify that smolt supplier's policies and procedures are in compliance with the requirements of labor standards under 6.1 to 6.11.</p>	Since the contents from 6.1 to 6.11 are company level initiatives, they are also applied to Fukaura Smolt Station.	Compliant		
Standards related to Principle 7						
		Compliance Criteria (Required Client Actions):	Auditor Evaluation (Required CAB Actions):			
8.20	<p>Indicator: Evidence of regular consultation and engagement with community representatives and organizations</p> <p>Requirement: Yes</p> <p>Applicability: All Smolt Producers</p>	<p>Instruction to Clients for Indicator 8.20 – Consultation and Engagement with Community Representatives</p> <p>Farms must comply with Indicator 7.1.1 which requires that farms engage in regular consultation and engagement with community representatives and organizations. Under Indicator 8.20, farms must show how each of their smolt suppliers complies with an equivalent requirement. Farms are obligated to maintain evidence that is sufficient to show their suppliers remain in full compliance. Evidence shall be documentary (e.g. meeting agenda, minutes, report) and will substantiate the following:</p> <ul style="list-style-type: none">– the smolt supplier engaged in "regular" consultations with the local community at least twice every year (bi-annually);– the supplier's consultations were effective (e.g. using participatory Social Impact Assessment (pSIA) or similar methods); and– the supplier's consultations included participation by elected representatives from the local community who were asked to contribute to the agenda.				
		<p>a. From each smolt supplier obtain documentary evidence of consultations and engagement with the community.</p> <p>b. Review documentation from 8.20a to verify that the smolt supplier's consultations and community engagement complied with requirements.</p>	In Fukaura Town, a contact coordination meeting has been held since the start of the project. All related fishermen's union leaders and local representatives are gathered to communicate the progress of the project. Records such as January 29, 2019 and July 16 were confirmed.	Compliant		

8.21	<p>Indicator: Evidence of a policy for the presentation, treatment and resolution of complaints by community stakeholders and organizations</p> <p>Requirement: Yes</p> <p>Applicability: All Smolt Producers</p>	a. Obtain a copy of the smolt supplier's policy for presentation, treatment and resolution of complaints by community stakeholders and organizations.	"Policy and mechanism for complaints" is being created. This includes a mechanism for accepting and responding to local complaints. This also applies to Fukaura Smolt Station.	Compliant		
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8.22	<p>Indicator: Where relevant, evidence that indigenous groups were consulted as required by relevant local and/or national laws and regulations</p> <p>Requirement: Yes</p> <p>Applicability: All Smolt Producers</p>	<p>a. Obtain documentary evidence showing that the smolt supplier does or does not operate in an indigenous territory (to include farms that operate in proximity to indigenous or aboriginal people (see Indicator 7.2.1). If not then the requirements of 8.22 do not apply.</p> <p>b. Obtain documentation to demonstrate that, as required by law in the jurisdiction: smolt supplier consulted with indigenous groups and retains documentary evidence (e.g. meeting minutes, summaries) to show how the process complies with 7.2.1b; OR smolt supplier confirms that government-to-government consultation occurred and obtains documentary evidence.</p>	Fukaura is not applicable because there are no indigenous people.	N/A		
8.23	<p>Indicator: Where relevant, evidence that the farm has undertaken proactive consultation with indigenous communities</p> <p>Requirement: Yes</p> <p>Applicability: All Smolt Producers</p>	<p>a. See results of 8.22a (above) to determine whether the requirements of 8.23 apply to the smolt supplier.</p> <p>b. Where relevant, obtain documentary evidence that smolt suppliers undertake proactive consultations with indigenous communities.</p>	Fukaura is not applicable because there are no indigenous people.	N/A		
<p align="center">ADDITIONAL REQUIREMENTS FOR OPEN (NET-PEN) PRODUCTION OF SMOLT</p> <p align="center">In addition to the requirements above, if the smolt is produced in an open system, evidence shall be provided that the following are met:</p>						
<p align="center">Instruction to Clients for Indicators 8.24 through 8.31 – Requirements for Smolt Produced in Open Systems</p> <p align="center">Client shall provide documentary evidence to the CAB about the production system(s) from which they source smolt. If smolt used by the farm are produced, for part or all of the growth phase from alevin to smolt, in open (net-pen) systems, indicators 8.24 – 8.31 are applicable.</p>						
	<p>Indicator: Allowance for producing or holding smolt in net pens in water bodies with native salmonids</p> <p>Requirement: None</p> <p>Applicability: All Smolt Producers Using Open Systems</p>	<p>a. Obtain a declaration from the farm's smolt supplier stating whether the supplier operates in water bodies with native salmonids.</p> <p>b. Request smolt suppliers to identify all water bodies in which they operate net pens for producing smolt and from which facilities they sell to the client.</p> <p>c. For any water body identified in 8.24b as a source of smolt for the farm, determine if native salmonids are present by doing a literature search or by consulting with a reputable authority. Retain evidence of search results.</p>	Not applicable because the smolt seed production facility is not an open system.	N/A		
8.25	<p>Indicator: Allowance for producing or holding smolt in net pens in any water body</p> <p>Requirement: Yes</p> <p>Applicability: All Smolt Producers Using Open Systems</p>	<p>a. Take steps to ensure that the farm does not source smolt that was produced or held in net pens.</p>	Not applicable because the smolt seed production facility is not an open system.	N/A		
8.26	<p>Indicator: Evidence that carrying capacity (assimilative capacity) of the freshwater body has been established by a reliable entity [151] within the past five years [152] and total biomass in the water body is within the limits established by that study (see Appendix VIII-5 for minimum requirements)</p> <p>Requirement: Yes</p> <p>Applicability: All Smolt Producers Using Open Systems</p>	<p>a. For the water body(s) where the supplier produces smolt for the client (see 8.24b), obtain a copy of the most recent assessment of assimilative capacity.</p> <p>b. Identify which entity was responsible for conducting the assessment (8.26a) and obtain evidence for their reliability.</p> <p>c. Review the assessment (8.26a) to confirm that it establishes a carrying capacity for the water body, it is less than five years old, and it meets the minimum requirements presented in Appendix VIII-5.</p> <p>d. Review information to confirm that the total biomass in the water body is within the limits established in the assessment (8.26a).</p> <p>e. If the study in 8.26a is more than two years old and there has been a significant increase in nutrient input to the water body since completion, request evidence that an updated assessment study has been done.</p>	Not applicable because the smolt seed production facility is not an open system.	N/A		

Footnote	[151] E.g., Government body or academic institution.							
Footnote	[152] If the study is older than two years, and there has been a significant increase in nutrient input to the water body since the completion of the study, a more recent assessment is required.							
8.27	<p>Indicator: Maximum baseline total phosphorus concentration of the water body (see Appendix VIII-6)</p> <p>Requirement: $\leq 20 \mu\text{g/l}$ [153]</p> <p>Applicability: All Smolt Producers Using Open Systems</p>	<p>Instruction to Clients for Indicator 8.27 and 8.28 – Monitoring TP and DO in Receiving Water for Open Smolt Systems</p> <p>Farms must confirm that any smolt supplier using an open (net-pen) system is also engaged in monitoring of water quality of receiving waters. Requirements for the supplier's water quality monitoring program are presented in detail in Appendix VIII-6 and only re-stated briefly here. Monitoring shall sample total phosphorus (TP) and dissolved oxygen (DO). TP is measured in water samples taken from a representative composite sample through the water column to a depth of the bottom of the cages. Samples are submitted to an accredited laboratory for analysis of TP to a method detection limit of $< 0.002 \text{ mg/L}$. DO measurements will be taken at 50 centimeters from the bottom sediment.</p> <p>The required sampling regime is as follows:</p> <ul style="list-style-type: none">- all stations are identified with GPS coordinates on a map of the farm and/or available satellite imagery;- stations are at the limit of the farm management zone on each side of the farm, roughly 50 meters from the edge of enclosures;<ul style="list-style-type: none">- the spatial arrangement of stations is shown in the table in Appendix VIII-6;- sampling is done at least quarterly (1X per 3 months) during periods without ice, including peak biomass; and- samples are also collected at two reference stations located ~ 1–2 km upcurrent and downcurrent from the farm. <p>Note: Some flexibility on the exact location and method of sampling is allowed to avoid smolt suppliers needing to duplicate similar sampling for their local regulatory regime.</p>						
		a. Obtain documentary evidence to show that smolt suppliers conducted water quality monitoring in compliance with the requirements of Appendix VIII-6.	Not applicable because the smolt seed production facility is not an open system.	N/A				
		b. Obtain from smolt suppliers a map with GPS coordinates showing the sampling locations.						
		c. Obtain from smolt suppliers the TP monitoring results for the past 12 months and calculate the average value at each sampling station.						
		d. Compare results to the baseline TP concentration established below (see 8.29) or determined by a regulatory body.						
		e. Confirm that the average value for TP over the last 12 months did not exceed $20 \mu\text{g/l}$ at any of the sampling stations nor at the reference station.						
Footnote	[153] This concentration is equivalent to the upper limit of the Mesotrophic Trophic Status classification as described in Appendix VIII-7.							
8.28	<p>Indicator: Minimum percent oxygen saturation of water 50 centimeters above bottom sediment (at all oxygen monitoring locations described in Appendix VIII-6)</p> <p>Requirement: $\geq 50\%$</p> <p>Applicability: All Smolt Producers Using Open Systems</p>	<p>Note: see instructions for Indicator 8.27.</p>						
		a. Obtain evidence that smolt supplier conducted water quality monitoring in compliance with the requirements (see 8.27a).	Not applicable because the smolt seed production facility is not an open system.	N/A				
		b. Obtain from smolt suppliers the DO monitoring results from all monitoring stations for the past 12 months.						
		c. Review results (8.28b) to confirm that no values were below the minimum percent oxygen saturation.						
8.29	<p>Indicator: Trophic status classification of water body remains unchanged from baseline (see Appendix VIII-7)</p> <p>Requirement: Yes</p> <p>Applicability: All Smolt Producers Using Open Systems</p>	<p>a. Obtain documentary evidence from the supplier stating the trophic status of water body if previously set by a regulator body (if applicable).</p> <p>b. If the trophic status of the waterbody has not been classified (see 8.29a), obtain evidence from the supplier to show how the supplier determined trophic status based on the concentration of TP.</p> <p>c. As applicable, review results from 8.29b to verify that the supplier accurately assigned a trophic status to the water body in accordance with the table in Appendix VIII-7 and the observed concentration of TP over the past 12 months.</p> <p>d. Compare the above results (8.29c) to trophic status of the water body as reported for all previous time periods. Verify that there has been no change.</p>						

8.30	Indicator: Maximum allowed increase in total phosphorus concentration in lake from baseline (see Appendix VIII-7) Requirement: 25% Applicability: All Smolt Producers Using Open Systems	a. Determine the baseline value for TP concentration in the water body using results from either 8.29a or 8.29b as applicable. b. Compare the baseline TP concentration (result from 8.30a) to the average observed TP concentration over the past 12 months (result from 8.27e). c. Verify that the average observed TP concentration did not increase by more than 25% from baseline TP concentration.	Not applicable because the smolt seed production facility is not an open system.	N/A		
8.31	Indicator: Allowance for use of aeration systems or other technological means to increase oxygen levels in the water body Requirement: None Applicability: All Smolt Producers Using Open Systems	a. Obtain a declaration from the farm's smolt supplier stating that the supplier does not use aeration systems or other technological means to increase oxygen levels in the water bodies where the supplier operates.	Not applicable because the smolt seed production facility is not an open system.	N/A		
ADDITIONAL REQUIREMENTS FOR SEMI-CLOSED AND CLOSED PRODUCTION OF SMOLTS Additionally, if the smolt is produced in a closed or semi-closed system (flow through or recirculation) that discharges into freshwater, evidence shall be provided that the following are met [157]:						
Instructions to Client for Indicators 8.32-8.35 – Requirement for smolts produced in open systems Client shall provide documentary evidence to the CAB about the production system(s) from which they source smolt. -If smolt used by the farm are not produced, for part or all of the growth phase from alevin to smolt, in open (net-pen) systems, indicators 8.32 – 8.35 are applicable. -If the production system is closed or semi-closed and does not discharge into freshwater, Indicators 8.32 – 8.35 are not applicable to smolt producers as per [154]. For such an exemption, farms must provide documentary evidence to the CAB. Auditors shall fully document their rationale for awarding exemptions in the audit report.						
Footnote	[154] Production systems that don't discharge into fresh water are exempt from these standards.					
8.32	Indicator: Water quality monitoring matrix completed and submitted to ASC (see Appendix VIII-2) Requirement: Yes [155] Applicability: All Smolt Producers Using Semi-Closed or Closed Production Systems	a. Obtain records from smolt suppliers showing that water quality monitoring was conducted at least quarterly (i.e. once every 3 months) over the last 12 months. b. Obtain water quality monitoring matrix from smolt suppliers and review for completeness. c. Submit the smolt supplier's water quality monitoring matrix to ASC as per Appendix VIII-2 and Appendix VI at least once per year.	Water quality monitoring is conducted at Fukaura Smolt Station. There are records after 2018. However, some items shown in Attachment VIII-2, such as total nitrogen and total phosphorus, were not examined.	Minor	In Fukaura, water quality inspections are ongoing, but some items such as total nitrogen and total phosphorus shown in Attachment VIII-2 have not been inspected. Since water quality inspection itself is being carried out continuously, minor is raised	
Footnote	[155] See Appendix VI for transparency requirements for 8.32.					
8.33	Indicator: Minimum oxygen saturation in the outflow (methodology in Appendix VIII-2) Requirement: 60% [156,157] Applicability: All Smolt Producers Using Semi-Closed or Closed Production Systems	a. Obtain the water quality monitoring matrix from each smolt supplier (see 8.32b). b. Review the results (8.33a) for percentage dissolved oxygen saturation in the effluent to confirm that no measurements fell below 60% saturation. c. If a single DO reading (as reported in 8.33a) fell below 60%, obtain evidence that the smolt supplier performed daily continuous monitoring with an electronic probe and recorder for at least a week demonstrating a minimum 60% saturation at all times (Appendix VIII-2).	DO was measured in the water quality monitoring at Fukaura Smolt Station. There are records after 2018. There was no day when DO dropped below 60%.	Compliant		
Footnote	[156] A single oxygen reading below 60 percent would require daily continuous monitoring with an electronic probe and recorder for at least a week demonstrating a minimum 60 percent saturation at all times.					
Footnote	[157] See Appendix VI for transparency requirements for 8.33.					
8.34	Indicator: Macro-invertebrate surveys downstream from the farm's effluent discharge demonstrate benthic health that is similar or better than surveys upstream from the discharge (methodology in Appendix VIII-3) Requirement: Yes Applicability: All Smolt Producers Using Semi-Closed or Closed Production Systems	a. Obtain documentation from smolt supplier(s) showing the results of macro-invertebrate surveys. b. Review supplier documents (8.34a) to confirm that the surveys followed the prescribed methodology (Appendix VIII-3). c. Review supplier documents (8.34a) to confirm the survey results show that benthic health is similar to or better than upstream of the supplier's discharge.	The Fukaura Smolt Station drains into the river, but no benthic fauna survey has been conducted upstream and downstream of the drainage site. The survey is scheduled for fall 2019.	Minor	A benthic fauna survey upstream and downstream of the drainage site has not yet been conducted. Since the investigation plan has already been made, minor is raised.	

8.35	Indicator: Evidence of implementation of biosolids (sludge) Best Management Practices (BMPs) (Appendix VIII-4) Requirement: Yes Applicability: All Smolt Producers Using Semi-Closed or Closed Production Systems	a. Maintain a copy of smolt supplier's biosolids (sludge) management plan and confirm that the plan addresses all requirements in Appendix VIII-2.	Sludge is collected in the form of urine collection. The records collected on May 28, 2019, outsourced to Iwasaki Sanitation Company, were confirmed. However, the best management practices for sludge have not been established.	Minor	The best management practices for sludge have not been established. The sludge treatment itself is done properly and is only a matter of documentation, so minor is raised.	
		b. Obtain from smolt suppliers a process flow diagram (detailed in Appendix VIII-2) showing how the farm is dealing with biosolids responsibly.				
		c. Obtain a declaration from smolt supplier stating that no biosolids were discharged into natural water bodies in the past 12 months.				
		d. Obtain records from smolt suppliers showing monitoring of biosolid (sludge) cleaning maintenance, and disposal as described in Appendix VIII-2.				

11 Findings

11.1 DO NOT DELETE ANY COLUMN

11.2 Columns B/C/D/E (in black) are automatically populated from the species checklist/audit manual

11.3 Each NC is raised against a standard indicator or a CAR requirement

11.4 Use the "sort" function for presenting the list to your liking (e.g. grading, status, closure deadline, etc.)

11.5 Add new rows as needed

11.6 Adjust the column wide as needed – to show the whole text

NC reference	Indicator	Grade of NC	Description of NC	Evidence	Date of detection	Status	Related VR (#)	Root cause (by client)	Corrective/ preventive actions proposed by UoC and accepted by CAB	Deadline for NC close-out	Evaluation by CAB (including evidence)	Actual date of close-out	Date request for delay received	Justification for delay	Next deadline	Request evaluation by CAB	Date request approved
	2.1.1	Minor	The sulfur level of the sediment at the outer edge of AZE exceeded 1,500 μ Mol / L. An improvement plan has been created and the next aquaculture will take place where the sulfur level is below 1,500 μ Mol / L (this year or next). The system is already in place to ensure that the next season's aquaculture will meet the standards, so the minor is raised.	The range of AZE (30m from float) is mapped. It is set for the sacrifice place in 2017 and the future increase place. There is a sedimentary layer on the ocean floor. In accordance with ASC standards, nine survey points including the control zone were set and mud collected with a mud collector. The survey was conducted on April 12, 2019, when the biomass amount reached its maximum. Selected based on sulfide concentration. The survey was commissioned to a specialized research company (Shin Nihon Kankyo Chosa Co., Ltd.). As a result, the ASC reference value of 1500 μ M / L was exceeded all around AZE. In the control group, it was 1000 μ M / L or less. When the diving survey was conducted on January 20, 2019, no sediment was observed. When a diving survey was conducted on April 10, deposition was observed. Therefore, it is considered that the uneaten feed during this period has accumulated. A bottom quality improvement plan was created. First of all, observe the self-cleaning recovery for 2 months. If there is no improvement after that, we will try to stir the deposited layer. After that, the investigation is continued and the improvement situation is confirmed. If the situation does not improve immediately next fiscal year, they will move to the location of the fence. The maximum amount of feeding is 2% of the body weight, but we are considering reducing it a little and feeding slowly so as not to eat. For example, shifting system and feed twice a day.	2019/9/2	Open	-	There was a time when the fish did not eat extremely. At that time, the food was given for a while without changing the amount of food to be fed.	Diving investigation and agitation work were conducted according to the improvement plan. The fishing grounds were moved prior to the bottom sediment survey. We will continue to conduct periodic bottom sediment surveys.	2020/3/10							
	2.2.5	Minor	The nitrogen and carbon content of the whole fish could not be measured. For this reason, data on the same fish species of an affiliated company in Denmark was obtained and the BOD was calculated. Minor is raised since the BOD had been calculated and they plan to measure it again in the next fiscal year.	The harvested fish was sent to the Okamura food industry, a group company that processes the fish, and stored, but because intestines were removed, the nitrogen and carbon content of the entire fish could not be measured. For this reason, data on the same fish species of an affiliated company in Denmark was obtained and the BOD was calculated. Feed data was calculated using values received from feed companies. As a result, BOD was 1,067,104 O ₂ / kg in the previous production cycle. In the next term, JSF plan to measure the nitrogen and carbon content of the whole fish and calculate the BOD.	2019/9/2	Open	-	Measurement was not possible because the harvested fish had been removed. In addition, there was no place in Japan that could measure the carbon of all fish.	I contacted two major analytical companies and asked them to measure nitrogen and carbon in the entire fish, but they said that measuring carbon was impossible in Japan. We will continue to look for it, but as a last resort it is possible to send frozen fish to a Danish analytical company.	2020/3/10							
	2.4.1	Minor	Some evidence had been prepared that there would be no species or natural environment corresponding to Attachment I-3. However, potential impact assessments on biodiversity and ecosystems have not been compiled. Moreover, there were few experts who interviewed, and there was a lack of specialized information. The current evidence and field observations suggest that the farm is unlikely to affect biodiversity and rare species, so minor is raised for the lack of interviews and no documentation of the assessments.	JSF owns the Aomori Red Data Book (2010 edition). Marine life is not designated as a valuable species. There were no precious species or their habitats that could be affected by farms in other species such as birds. AMITA interviewed employees of the environmental research company in 2.1.1, but there was no information on precious species in the region regarding birds. As mentioned above, there was some evidence that there would be no species or natural environment applicable to Attachment I-3. However, potential impact assessments on biodiversity and ecosystems have not been compiled. Moreover, there were few experts who interviewed, and there was a lack of specialized information.	2019/9/2	Open	-	Since there were no organisms listed in the Red Data Book, it was considered unnecessary to conduct an impact assessment. For this reason, impact assessments for biologically valuable organisms have not been compiled.	About the impact assessment of the farm, the impact assessment was summarized for wild animals (birds) and sea cucumbers.	2020/3/10							

3.1.6	Minor	There is no salmon monitoring system for wild salmonids in the region. In this region, salmon lice is not the problematic level, and monitoring is less important, so minor is raised.	JSF interviewed the Aomori Prefectural Water Surface Test Station. In Aomori Prefecture, the number of salmon lice occurring in natural salmonids is not zero, but it is not high, and it is not a problem level. The prefecture does not investigate because there is no impact on product value. Therefore, there is no salmon lice monitoring system for wild salmonids in this region. In the future, it will be necessary to monitor some salmon lice, such as observing the salmon in the local fish market. Report will be sent to ASC in the future.	2019/9/2	Open	-	In Aomori, salmon lice of wild salmonids have not been monitored because salmon lice has never been a problem. Therefore, it was necessary to produce without data and monitoring methods.	The time when cherry salmon was caught was identified from the landing data of the fishery cooperative. Next year, we will conduct surveys on individuals caught during this period.	2020/3/10								
3.2.2	Minor	The investigation of rainbow trout settlement risk based on scientific knowledge was not completed. Since the settlement risk is considered low based on the evidence at the present stage, the point that the investigation (consideration) has not been completed is raised as minor.	Rainbow trout is an exotic species. On the sea surface in Aomori Prefecture, "Kaikyo Salmon" has been cultivated since 1989. Inland water culture has also been conducted since 1979. For Kaikyo salmon, there have been cases where float completely destroyed and escaped in the past. Aomori Prefecture and other organizations are not investigating whether rainbow trout is naturally breeding in the ocean or river. It has been reported that rivers have settled in several places in Japan, but rainbow trout cultivated on the surface of the sea cannot grow at the sea water temperature of the region in the summer, so the risk of colonization in the ocean is considered low. However, the investigation (consideration) of rainbow trout settlement risk based on scientific knowledge was not completed. It is necessary to scientifically evaluate the establishment risk with reference to past catch data. It is necessary to submit the results to ASC.	2019/9/2	Open	-	No literature on research based on scientific knowledge was found	We considered the reduction of the establishment risk by the introduction of all female seedlings.	2020/3/10								
5.1.2	Minor	No fish disease specialists are allowed to visit the farm at least four times a year In this region, the risk of fish disease is low, so it is not considered to be an important issue. Minor is raised.	In Aomori Prefecture, a veterinarian could not find a fish disease specialist. In addition, the expert (fish quarantine officer) of the Aomori Prefectural Industrial Technology Center's Water Surface Research Institute was unable to take on the role of a designated veterinarian because he was busy with his regular work. Therefore, no fish disease specialists who can visit the farm at least four times a year have been designated. The health manager is Mr. Suzuki.	2019/9/2	Open	-	Since Aomori Prefecture has the same qualifications as a veterinarian and there are no specialists who can visit the farm at least four times a year, it was not possible to nominate people with such qualifications.	Dr. Hara (Honorary Professor at Hokkaido University) and Dr. Fukuda (Professor at Hirosaki University) were invited to visit as both experts.	2020/3/10								
5.1.3	Minor	In the unlikely event that a large number of moribunds occurred due to illness, there was no decision on how to remove and treat dead fish in a responsible manner.	Current moribund fish are sold to feed companies through collection and transportation companies. An industrial waste manifest is stored. In the unlikely event that a large number of moribunds occurred due to illness, there was no decision on how to remove and treat dead fish in a responsible manner. Measures are needed to prevent the disease from spreading.	2019/9/2	Open	-	The procedure was not made because there was no fish that appeared to have died from a fish disease.	Fish that die from illness are stored separately from other dead fish, and contracted with a supplier that can issue Manifest as industrial waste.	2020/3/10								
5.1.4	Minor	Whether the disease can be accurately determined when the disease occurs is unknown. The name of the employee who determined the cause of death was not recorded. In this region, the risk of fish disease is low, so it is not considered to be an important issue. Minor is raised.	Basically, all dead fish are dissected except when accustomed. Those that have decayed over time and cannot be dissected are recorded as unknown. If there are many dead fish whose cause is unknown even after dissection, send them to the Aomori Prefectural Industrial Technology Center's Water Research Institute for judgment. All drowning numbers are recorded. The cause of death is classified and recorded. There has been no suspicion of illness so far, and there has been no case of requesting judgment from the Aomori Prefectural Water Research Institute. Each employee determines the cause of death on site. New employees are taught by OJT with experienced employees. Especially suspicious things are taken and taken home for further analysis. Each employee decides whether or not the fish disease. The criteria for judging the appearance of fish disease are documented and shared among employees, but since only Vibrio disease has actually been seen, the disease is accurately determined when other diseases occur. Whether it can be done is unknown. The name of the employee who determined the cause of death was not recorded. Report will be sent to ASC in the future.	2019/9/2	Open	-	Although he had knowledge about fish diseases at the field level, a system for accurate judgment was not in place.	Prepared fish disease list and outbreak schedule table for trout and trained employees. Fish disease diagnosis is judged according to the health care sheet.	2020/3/10								
5.2.2	Minor	Antibiotics or chemicals prohibited in either major salmon producing or importing countries are not used, but there is no list. Since antibiotics and chemicals are not used, it is a matter of the list not present. Minor is raised.	The company possesses the "Use of Fishery Drugs (No. 32)" issued by the Ministry of Agriculture, Forestry and Fisheries, and knows the therapeutic agents that can be used in Japan. So far, only OTC has been used, and no antibiotics or chemicals prohibited in either major salmon producing or importing countries are used, but there is no list.	2019/9/2	Open	-	There was no need to prepare yet because it was not exported	Antibiotics and chemicals Norris prohibited for use in the EU, Norway, Canada and the US were prepared. Currently searching for Chile.	2020/3/10								

	6.6.3	Minor	The method of determining wages was not clearly documented. There are no complaints from employees regarding wage setting methods, and since they are already working on it, minor is raised.	The current wage is decided by the president at the time of joining the company. In addition, only the president evaluates salary increases. Therefore, the method of determining wages was not clearly documented. Currently, while consulting with social insurance laborers, JSF have decided on employee evaluation standards and salary raise standards, and JSF are also working on a management method for working hours. JSF will start operating a new personnel system as early as one year later. It is going to go. An "Employment Agreement and Notification of Working Conditions" has been exchanged with all employees, and the salary set at the time of joining the company is clearly stated. The salary is paid by bank transfer. In employee interviews, there was no opinion that there was a delay in paying salaries.	2019/9/2	Open	-	There were 8 employees, and there was no need to create employment rules in the law. Therefore, no wage rules were made.	The company continues to work on the creation of employment rules and is scheduled to be developed around FY2020. Includes wage rules.	2020/3/10							
	6.9.2	Minor	There is currently no disciplinary policy. There are no examples of discipline so far, and since they are already working on the disciplinary policy, minor is raised.	There are no disciplinary cases, but there is currently no disciplinary policy. JSF are currently working on a working rule, which will include disciplinary provisions.	2019/9/2	Open	-	There were 8 employees, and there was no need to create employment rules in the law. Therefore disciplinary rules were not made	The company continues to work on the creation of employment rules and is scheduled to be developed around FY2020. Disciplinary provisions are also included.	2020/3/10							
	6.10.2	Minor	Currently, no overtime hours are recorded for employees. There was an explanation from the administrator that the basic salary was set a little higher in anticipation of overtime hours, but the details are not clear on the employment contract or salary details. In addition, there were employees who worked for more than 10 consecutive days during the busy season due to a lack of personnel and unable to take time off. No such arrangement was made in advance between the company and the class members. Overtime work was based on free will, and actual salary was set higher than industry standards. Minor is raised because it is a business management problem such as lack of clear records.	Currently, no overtime hours are recorded for employees. Since all of them work together, when overtime occurs, the working hours on other days are shortened and adjusted. There was an explanation from the administrator that the basic salary was set a little higher in anticipation of overtime hours, but the details are not clear on the employment contract or salary details. JSF keep a record of my work days. The number of holidays is adjusted to the same number of days as the group company Okamura Food Industry. Sundays are basically closed except on duty. Recorded when paid leave is taken. When employee go to work on a holiday, he basically take a substitute holiday. When work is so busy that you can't get paid, you are paid a holiday allowance. The wage ledger confirmed that the holiday work allowance was paid as an extra wage. However, there were employees who worked for more than 10 consecutive days during the busy season due to lack of staff. No such arrangement was made in advance between the company and employees.	2019/9/2	Open	-	The project has been standing for only two years, and maintenance has been delayed.	Currently, we are introducing a working time management system using mobile phone terminals as a mechanism for managing overtime hours throughout the group. Scheduled for trial from November 2019. The introduction of a modified working hour system is being constructed with a social insurance labor worker. During the busy season, part-time workers can be secured (4 short-term contracts, 1 annual contract).	2020/3/10							
	8.3	Minor	In Fukaura Town, the potential impact assessment results on the biodiversity and ecosystems of the species corresponding to Attachment I-3 were not compiled. Based on the current evidence, it is considered unlikely that the farm will affect biodiversity and rare species. Minor is raised for the assessments not documented.	Aomori Prefecture Red List is being prepared. In Fukaura Town, some evidence was prepared that there would be no species or natural environment corresponding to Attachment I-3. However, the results of potential impact assessments on biodiversity and ecosystems have not been compiled. Fukaura Smolt Station is located in the designated area of the Class 3 Special Area of the Tsugaru National Park, but the Class 3 Special Area of the National Park is not a protected area and there are no restrictions on aquaculture business.	2019/9/2	Open	-	I asked an environmental assessment company, but it was delayed because of the schedule of the survey.	We are requesting a benthic biota survey from an environmental assessment company. Based on this survey, we will evaluate the potential impact on the ecosystem.	2020/3/10							
	8.4	Minor	Sludge is collected twice a year but is not included in the calculation because the amount of phosphorus was not measured. As a result, 18.29 kg / t of phosphorus was discharged. Actually, sludge is collected and the released phosphorus is expected to be within the standard value, so minor is raised.	Based on the feed company data, the amount of phosphorus in the feed was calculated from the feed. Smolt biomass is also recorded. From daily reports, the amount of dead and dead biomass was calculated. The amount of phosphorus in the fish is not available, and the values of Danish affiliates were used as a reference. Sludge is collected twice a year but is not included in the calculation because the amount of phosphorus was not measured. As a result, 18.29 kg / t of phosphorus was discharged.	2019/9/2	Open		Sludge is collected twice a year but is not included in the calculation because the amount of phosphorus was not measured.	I contacted an analytical company and asked them to measure phosphorus in the sludge.	2020/3/10							

[illegible]

ASC Audit Report – Traceability

10	Traceability Factor	Description of risk factor if present.	Describe any traceability, segregation, or other systems in place to manage the risk.
10.1	The possibility of mixing or substitution of certified and non-certified product, including product of the same or similar appearance or species, produced within the same operation.	All rainbow trout cultivated in Imabetsu farm will be the scope. Other fish are not farmed. Therefore, there is no possibility that non-certified fish are mixed or replaced with non-certified fish.	
10.2	The possibility of mixing or substitution of certified and non-certified product, including product of the same or similar appearance or species, present during production, harvest, transport, storage, or processing activities.	All rainbow trout cultivated in Imabetsu farm are subject of the certification, and no other fish will be handled until they arrive at the processing plant, so there is no possibility that non-certified fish will be mixed or replaced with non-certified fish.	
10.3	The possibility of subcontractors being used to handle, transport, store, or process certified products.	There is no contractor use until certified fish are shipped. When transporting harvested fish to a fish tank and transporting it to the processing company, Okamura Food Industry, an external carrier may be used.	Only the fish from Imabetsu farm is placed and transported in a sealed fish tank, there is no risk of mixing with other fish during transport.
10.4	Any other opportunities where certified product could potentially be mixed, substituted, or mislabelled with non-certified product before the point where product enters the chain of custody.	There is no opportunity for non-certified fish to be mixed or replaced with non-certified fish, since only fish from Imabetsu farm are now loaded and transported in a sealed fish tank and delivered to the CoC certified Okamura food industry.	

	Owned by client	Subcontracted by client
10.4.a Total number of sites owned/subcontracted by client producing the same species that is included in the scope of certification	1	0

Number of sites included in the unit of certification

1	0
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10.4.b Site(s) within UoC that has product to be excluded from entering the chain of custody

Site name(s)	Reason(s)
None	
10.5 Detail description of the flow of certified product within the operation and the associated traceability system which allows product to be traced from final sale back to the unit of certification	<p>After accepting the smolt, they are nurtured in each cage. All farming history is recorded in daily reports of each cage</p> <p>Shipment is done for each cage and is not mixed with cage fish from different farms. It is clearly recorded when and how much cage fish were shipped.</p> <p>The harvested fish are immediately done ikejime, packed in fish tanks and shipped. The current shipping destination is only Okamura Food Industry, which is a group company and has already obtained CoC certification.</p> <p>The traceability system that goes back to the cage from the sold products is clear.</p>

10.6 Traceability Determination:

10.6.1 The traceability and segregation systems in the operation are sufficient to ensure all products identified and sold as certified by the operation originate from the unit of certification. or

The traceability mechanism is sufficient because there is no opportunity for non-certified fish to be mixed or replaced with non-certified fish until it reaches the processing site from the farm.

10.6.2 The traceability and segregation systems are not sufficient and a separate chain of custody certification is required for the operation before products can be sold as ASC-certified or can be eligible to carry the

From the above reason, no separate CoC certification is required.

10.6.3 The point from which chain of custody is required to begin

The next CoC certification is required from the time when the rainbow trout of this farm is transported and arrives at the processing destination.

10.6.4 If a separate chain of custody certificate is required for the unit of certification

Producers do not need a separate CoC certification.

For Multi-site clients

ASC Audit Report – Closing

12 Evaluation Results

12.1 A report of the results of the audit of the operation against the specific elements in the standard and guidance documents	The operation of rainbow trout farm meets the requirements of ASC Salmon Standard version 1.2.
12.2 A clear statement on whether or not the audited unit of certification has the capability to consistently meet the objectives of the relevant standard(s)	The audited certification unit has the ability to consistently meet the objectives of the relevant standards.
12.3 In cases where BEIA or PSIA is available, it shall be added in full to the audit report. IF these documents are not in English, then a synopsis in English shall be added to the report.	There is no BEIA or PSIA available.

13 Decision

13.1 Has a certificate been issued? (yes/no)	Yes
13.2 The Eligibility Date (if applicable)	2019/12/10 note: the Eligibility Date will be the same date of certification approval. (at the timing of audit)
13.3 Is a separate CoC certificate required for the producer? (yes/no)	No

13.4 If a certificate has been issued this section shall include:

13.4.1 The date of issue and date of expiry of the certificate.	The date of issue: 10 December 2019 The date of expiry of the certificate: 9 December 2022
13.4.2 The scope of the certificate	Rainbow salmon farm of Japan Salmon Farm Inc. Imabetsu branch Product: Rainbow Trout (<i>Oncorhynchus mykiss</i>) Scope of activity: Farming, transportation ASC standard: ASC salmon standard version 1.2 (March 2019)
13.4.3 Instructions to stakeholders that any complaints or objections to the CAB decision are to be subject to the CAB's complaints procedure. This section shall include information on where to review the procedure and where further information on complaints can be found.	Contact AMITA Corporation for complaint handling procedures. Location: 2-4, Kudan Kita 3-chome, Chiyoda-ku, Tokyo 102-0073, Japan Email address: ninsho@amita-net.co.jp

14 Surveillance

14.1 Next planned Surveillance	
14.1.1 Planned date	1/6/2020
14.1.2 Planned site	Japan Salmon Farm Inc. Imabetsu branch
14.2 Next audit type	
14.2.1 Surveillance 1	✓
14.2.2 Surveillance 2	
14.2.3 Re-certification	
14.2.4 Other (specify type)	

