Aquaculture Stewardship Council

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Introducing the ASC Freshwater Trout Standard

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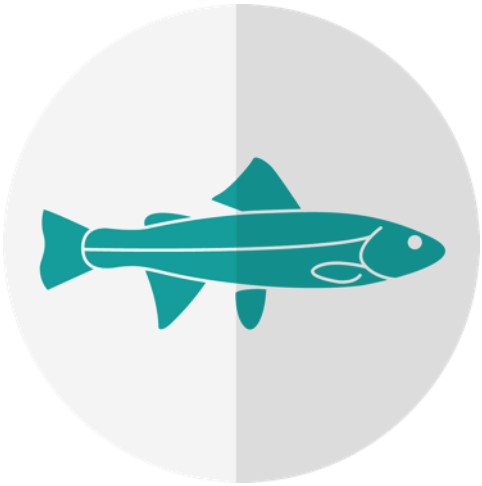
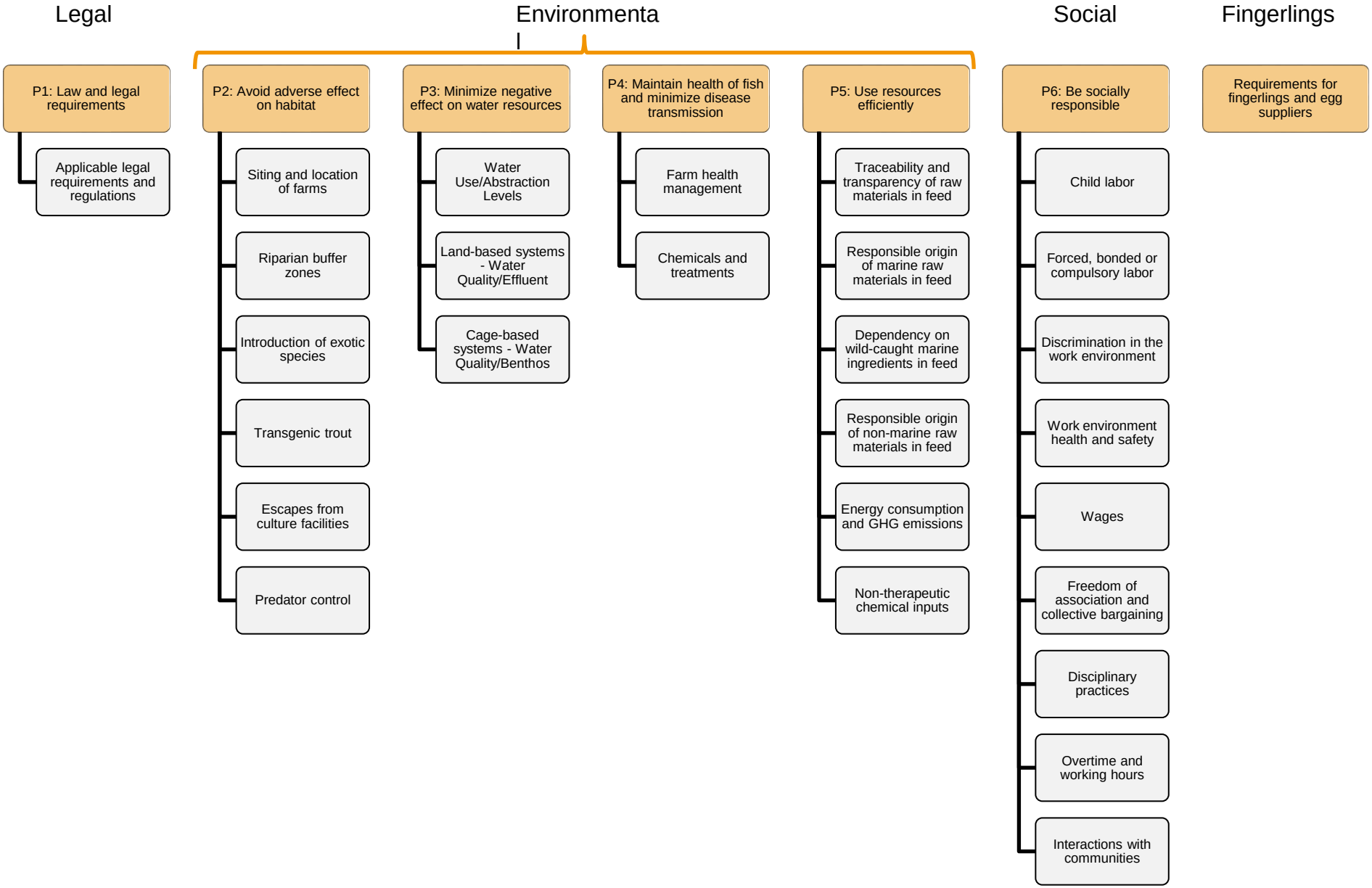
The ASC Freshwater Trout Standard…



- … is available in English and Danish
- … applies globally to all type of production systems
- … is applicable to any salmonid grown in **fresh water**
- … does not cover large trout grown in marine water

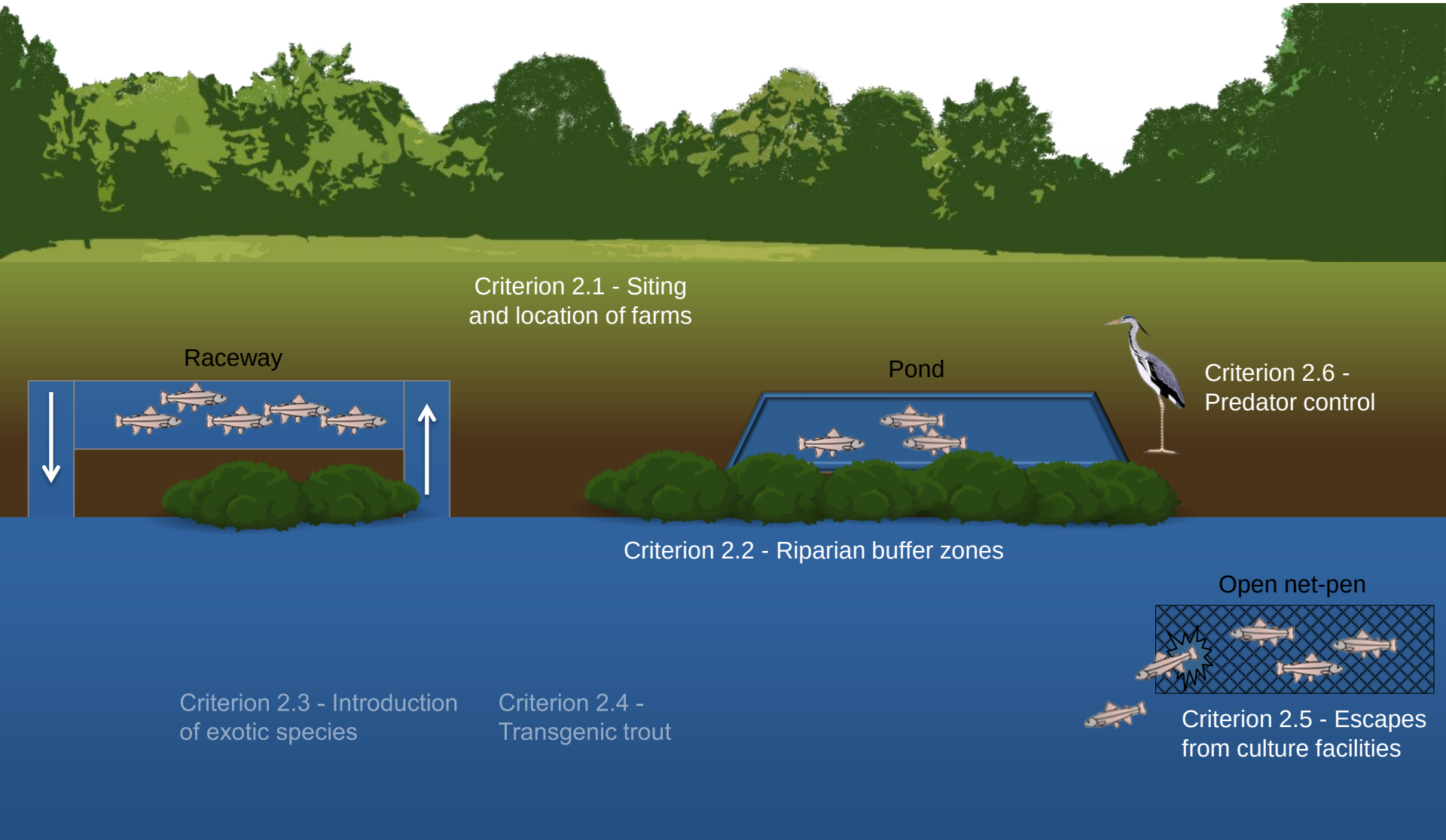
The principles of the ASC Freshwater Trout Standard



Environmental Principles

- Principle 2 - Conserve habitat and biodiversity
- Principle 3 – Minimize negative effect on water resources
- Principle 4 – Proactively maintain the health of cultured fish and minimize the risk of disease transmission
- Principle 5 – Use resources in an environmentally efficient and responsible manner

Principle 2 - Conserve habitat and biodiversity



Principle 2 - Conserve habitat and biodiversity

2.1 Criteria: Siting and location of farms[2]

INDICATOR		REQUIREMENT
2.1.1	Allowance for siting in National Protected Areas[3]	None[4][5]
2.1.2	Conversion of wetlands[6] after 1999	None[7]
2.1.3	An assessment of the presence on the farm of species listed on the International Union for Conservation of Nature (IUCN) "Red List of Threatened Species" as vulnerable, near threatened, endangered or critically endangered; an evaluation of the farm's impact on any such species present; and clearly defined mitigation measures to reduce any negative impacts and allow existence of such species	Yes

Principle 2 - Conserve habitat and biodiversity

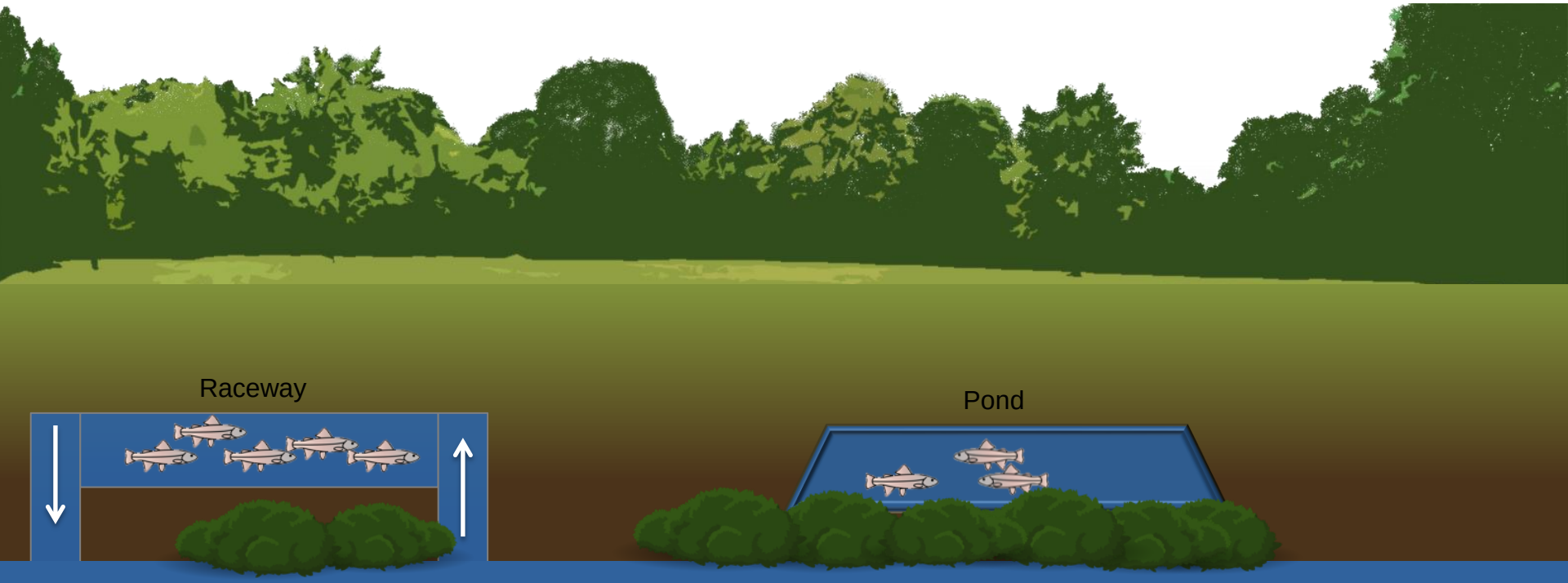
2.5 Criteria: Escapes from culture facilities

INDICATOR	REQUIREMENT
2.5.1 Evidence of a well-designed, maintained and managed culture system, infrastructure and farm management to prevent escapes during grow-out and at harvest, as demonstrated through the requirements in Appendix VI	Yes
2.5.2 Presence of trout farming standard operating procedures (SOP) that incorporate an escape risk assessment[17]	Yes
2.5.3 Evidence of farm staff capacities and capabilities, including training of staff prior to starting work and regular training during employment to understand and address risks from escapes and follow the defined SOP	Yes
2.5.4 Estimated unexplained loss18 of farmed trout in net pens is made publicly available	Yes
2.5.5 All fish in net pens are counted during each grading	Yes

2.6 Criteria: Predator control[19]

INDICATOR	REQUIREMENT
2.6.1 Intentional use of lethal predator control	None[20]

Principle 3 – Minimize negative effect on water resources



Criterion 3.1 – Water Use/Abstraction Levels

Criterion 3.2 – Land-based systems – Water Quality/Effluent

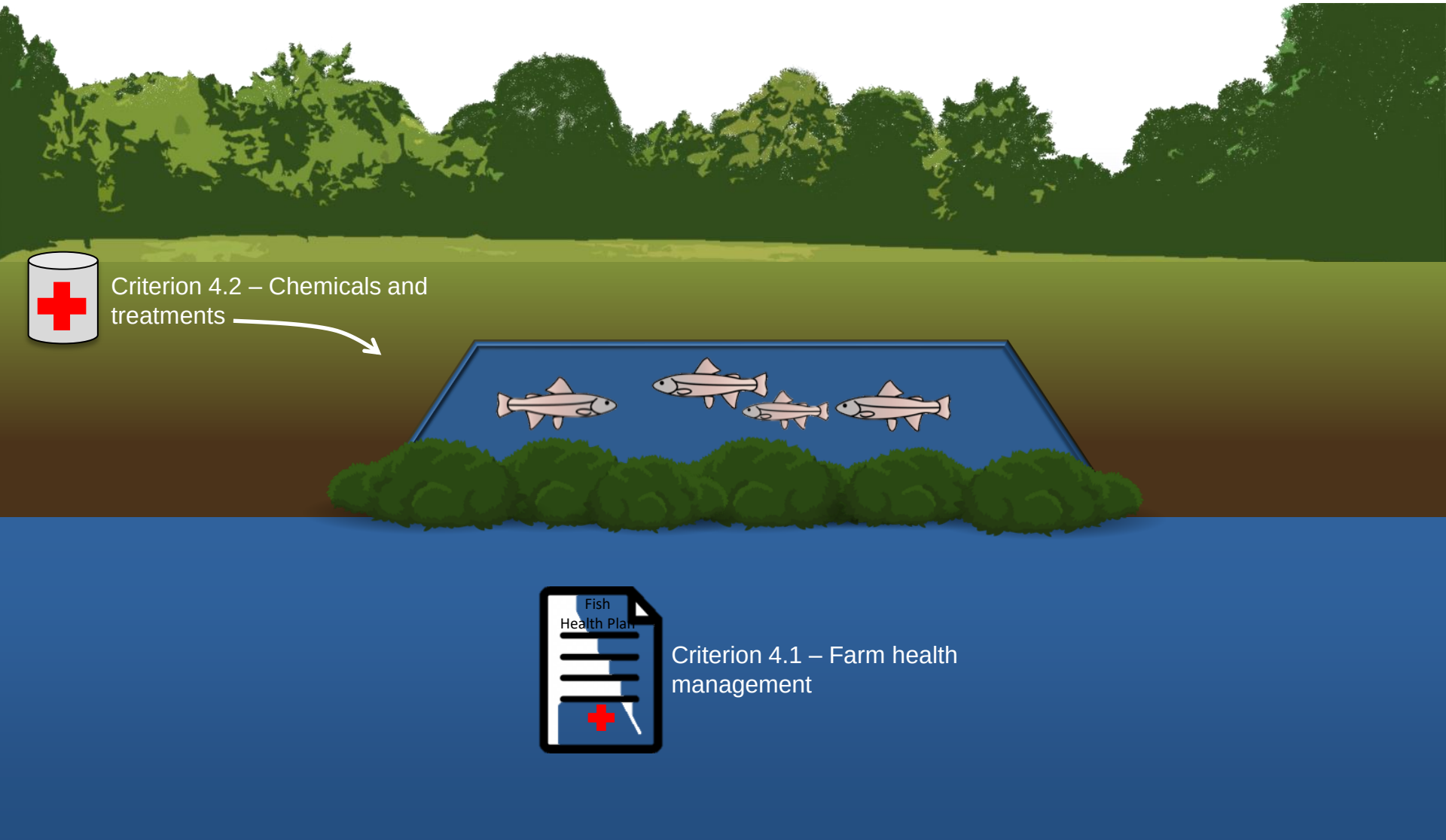
Criterion 3.3 – Cage-Based Systems – Water Quality/Benthic Community

Principle 3 – Minimize negative effect on water resources

3.3 Criteria: Cage-Based Systems - Water Quality/Benthic Community

INDICATOR	REQUIREMENT
3.3.1 For cages located on water bodies with a surface area less than 1,000 km^2, evidence that farm production levels reflect the results of an assimilative capacity study (see Appendix II-E)	Yes
3.3.2 For cages located on water bodies with a surface area of 1,000 km^2 or greater, evidence that cages are located at sites that are classified as "Type 3" sites, as defined in Appendix II-F	Yes
3.3.3 Water quality monitoring matrix completed (see Appendix II-G)	Yes
3.3.4 Maximum baseline total phosphorus concentration of the water body (see Appendix II-H)	≤ 20 µg/l [24]
3.3.5 Minimum percent oxygen saturation of water 50 centimeters above bottom sediment (at all oxygen monitoring locations described in Appendix II-G)	≥ 50%
3.3.6 Trophic status classification of water body remains unchanged from baseline (see Appendix II-H)	Yes
3.3.7 Maximum allowed increase in total phosphorus concentration in lake from baseline	25% for water bodies with a surface area of less than 1,000 km^2 15% for water bodies with a surface area of 1,000 km^2 or greater
3.3.8 Maximum total amount of phosphorus released into the environment per metric ton (mt) of fish produced over a 12-month period (see Appendix II-A)	5 kg/mt of fish produced over a 12-month period; within three years of publication of the ASC Freshwater Trout Standard, 4 kg/mt of fish produced over a 12-month period

Principle 4 – Proactively maintain the health of cultured fish and minimize the risk of disease transmission

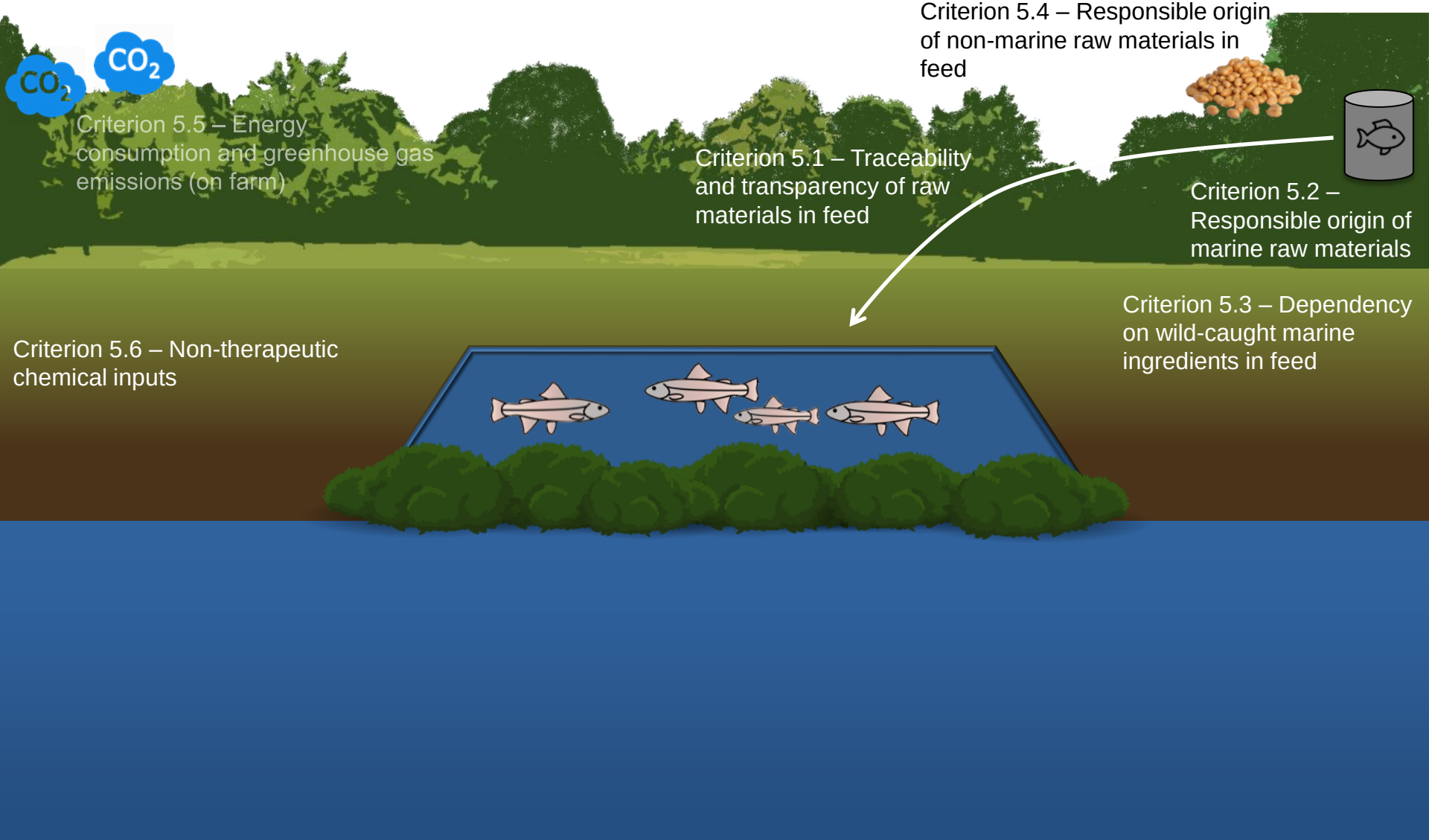


Principle 4 – Proactively maintain the health of cultured fish and minimize the risk of disease transmission

4.1 Criteria: Farm health management

INDICATOR		REQUIREMENT
4.1.1	Presence of a site-specific farm health plan that is reviewed at least annually and addresses biosecurity, veterinary health, crisis management and risk assessment	Yes
4.1.2	All fish, at all stages in the life cycle, are sourced from a supply that is of equal or better health status than its own stock	Yes
4.1.3	All fish that are moved off site, at all stages in the life cycle, are moved to a location of equal or lesser health status	Yes
4.1.4	Site access, disinfection and hygiene protocols are written and observed	Yes
4.1.5	Biosecure disposal of mortalities and fish trimmings	Yes
4.1.6	Immediate investigation of all mortality events on site and, in instances where mortality remains unexplained or unattributed, further investigation with fish health professionals off site	Yes
4.1.7	Minimum frequency of inspection of the farm by a designated veterinarian[26] who specializes in aquatic animal health. The inspection must review the farm health plan.	≥ 1 inspection per year, at a time when the site is in production
4.1.8	Evidence that maximum stock density was determined jointly by the designated veterinarian	Yes

Principle 5 – Use resources in an environmentally efficient and responsible manner



Principle 5 – Use resources in an environmentally efficient and responsible manner

5.1 Criteria: Traceability and transparency of raw materials in feed

INDICATOR	REQUIREMENT
5.1.1 Evidence of traceability, demonstrated by the feed producer, of feed ingredients that make up more than 1% of the feed[28]	Yes
5.1.2 Presence of a list of all ingredients that make up more than 1% of the feed	Yes

Principle 5 – Use resources in an environmentally efficient and responsible manner

5.2 Criteria: Responsible origin of marine raw materials

INDICATOR	REQUIREMENT
5.2.1 Percentage of fishmeal and fish oil used in feed that comes from fisheries[29] certified under a scheme that is ISEAL-accredited and has guidelines that specifically promote responsible environmental management of small pelagic fisheries	10% within three years of publication of the ASC Freshwater Trout Standard and 100% within five years
5.2.2 Prior to 100% achievement of 5.2.1, the Fishsource[30] score required for the fisheries from which marine raw material in feed is derived (excluding trimming and by-products)	All individual scores ≥ 6, and biomass score ≥ 8
5.2.3 Prior to 100% achievement of 5.2.1, demonstration of chain of custody and traceability for fisheries products in feed through an ISEAL-accredited or ISO 65-compliant certification scheme that incorporates the United Nations Food and Agriculture Organization's "Code of Conduct for Responsible Fisheries"	Yes
5.2.4 Evidence that by-product feed ingredients do not come from fish species that are categorized as vulnerable[31], endangered or critically endangered according to the IUCN Red List of Threatened Species[32]	Yes

Now the interim feed solution – replaced by the ASC Feed Standard once launched

Principle 5 – Use resources in an environmentally efficient and responsible manner

5.3 Criteria: Dependency on wild-caught marine ingredients in feed[33]

INDICATOR	REQUIREMENT
5.3.1 Fishmeal Forage Fish Dependency Ratio (FFDRm) for grow-out (calculated using formulas in Appendix III, subsection 1)	≤1.5
5.3.2 Compliance with one of the two following requirements:	
a) Fish Oil Forage Fish Dependency Ratio (FFDRo) for grow-out (calculated using formulas in Appendix III, subsection 1)	a) ≤2.95
or	or
b) Maximum level of EPA/DHA content from marine sources as a percentage of fatty acids in the feed (excluding EPA/DHA from trimmings and by-products)	b) ≤ 9%

Principle 5 – Use resources in an environmentally efficient and responsible manner

5.4 Criteria: Responsible origin of non-marine raw materials in feed

INDICATOR	REQUIREMENT
5.4.1 Presence and evidence of a responsible sourcing policy for the feed manufacturer for feed ingredients that comply with internationally recognized moratoriums and local laws[34]	Yes
5.4.2 Percentage of soy ingredients that are certified by the Roundtable on Responsible Soy, or equivalent35	100% within five years of publication of the ASC Freshwater Trout Standard
5.4.3 Disclosure by the feed supplier of any ingredients that contain more than 0.9% transgenic36 plant material	Yes
5.4.4 Disclosure by the farm to the direct purchasers of its harvested fish of any feed ingredients that have contained more than 0.9% transgenic material	Yes

Principle 5 – Use resources in an environmentally efficient and responsible manner

5.6 Criteria: Non-therapeutic chemical inputs

INDICATOR	REQUIREMENT
5.6.1 Percentage of combustibles contained in waterproof bunds	100%
5.6.2 Percentage of chemicals stored in impermeable containers or buildings	100%
5.6.3 Percentage of used lubricants recycled or turned over to a waste management company	100%
5.6.4 Percentage of chemical containers reused or turned over to a waste management company	100%
5.6.5 Percentage of non-hazardous, non-recyclable wastes turned over to a waste management company or landfill[37]	100%
5.6.6 Demonstration that a farmer is aware of recycling facilities that are accessible to the farm and demonstration of a commitment to use those facilities	Yes

Social Principles

- Only one principle covering both conditions on farms and the community, e.g.:
    - Child & Forced Labour
    - Health & Safety measures
    - Wages & training
    - Disciplinary practices
    - Community consultations

Requirements for fingerling and egg suppliers

	INDICATOR	REQUIREMENT
7.1	Presence of documents issued by pertinent authorities proving compliance with local and national authorities on land and water use, effluent regulations and use of treatments	Yes
7.2	New introductions of exotic species from the date of publication of the ASC Freshwater Trout Standard, unless the hatchery/fingerling facility is a closed production system[55]	None
7.3	Allowance for siting in National Protected Areas[56]	None[57 58]
7.4	Evidence of an assessment of the property for the presence of species listed on the International Union for Conservation of Nature (IUCN) "Red List of Threatened Species" as vulnerable, near threatened, endangered or critically endangered; an evaluation of the farm's impact on any such species present; and clearly defined mitigation measures to reduce any negative impacts and allow existence of such species	Yes
7.5	Evidence that the egg and fingerling producer must have an equivalent or better health status than that of the grow-out facility, and must follow all national and local (jurisdictional) guidance on disease management	Yes

A farm seeking certification must have documentation from all of its fingerling and egg suppliers to demonstrate compliance with the requirements in this section

“Performance Data”

Each farm has to submit data points for water quality directly to ASC

Date	Analysis (*TP, TN, BOD, TSS, etc.*)	Location (*Effluent, Inlet, etc.*)	Method (*Single grab, 24-hour bulk, etc.*)	Sampling by Third Party? (*Yes/No*)	Analysis by Third Party? (*Yes/No*)	Result (*including units*)

Different from the performance data salmon farms have to submit to ASC

Thank you!

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Aquaculture Stewardship Council

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