

Appendix from Dansk Akvakultur

Comment on public consultation:

ASC FRESHWATER TROUT STANDARD ver. 1.1

This feedback is on behalf of the Danish fish farmers.

Thank you for the possibility to comment on the standard. Dansk Akvakultur has worked with the Freshwater trout standard since initialization and certification of the first trout farm, and we believe in having an ambitious and realistic global standard for fish farming. Dansk Akvakultur has an ambitious ASC strategy and today more than 40% of Danish freshwater trout production is ASC certified and more farms are on the way.

However, we are very critical over the proposed revisions. We are concerned that it will make it impossible for Danish fish farmers to remain or acquire a ASC certification. There is no evidence that the industry or veterinary bodies (with knowledge of environmental and veterinarian law and fish farming in Denmark) have been consulted prior to these proposed revisions. In Denmark we have one of the strictest environmental laws and we are one of the most regulated countries in the world. It should therefore be possible to farm ASC certificated freshwater trout in Denmark.

The feedback form only allows us to comment on a few and specific subjects. We think the process should be more open, so it could be possibly to comment on the whole standard. Therefore, we would like you to also consider the comments in the appendix.

Hopefully ASC will revise the proposed changes so that the standard will be realistic for the industry.

We have following comments to the above draft (as they appear in the standard):

Scope – Species to which the standard applies:

“Products marketed as freshwater trout should use this Standard, while products marketed as salmon should use the ASC Salmon Standard”

For a standard like this, it is less relevant how the fish is marketed. The key criteria must be how it is produced. The above sentence is irrelevant and therefore should be revised .

Complying with all national and local laws and regulations:

“Freshwater Trout Standard also recognizes that different countries have different levels of regulation and so, in some cases, adhering to national and local legislation is only the initial foundation for compliance with the ASC Freshwater Trout Standard”.

This is correct. A logical way of further utilizing this regulation will be to open for the possibility of having a number of the requirements of the standard covered by a national / regional certification. That would not only make the process of certification simpler to the individual farmer, but also encourage nations/regions as well as farmers associations to work towards general legal regulations. This would not only have effect for farmers applying for ASC-certification, but also lift the general level of the region.

2.5.4 – 7:

These criteria have been expanded from being valid for cage farming to now also being valid for land based farms. For land based farms such counting procedures are not relevant, are extremely stressful for the fish, and not necessary. Furthermore, a criteria of 300 fish is a ridiculously small percentage in a standard production with millions of small fish.

We suggest that the original concept of controlling escapees via safe and well maintained physical barriers, with a comprehensive risk assessment, and emergency plan, should be maintained in the standard.

2.6.:

Predator control -*“public scientific” has been added to the sentence.* What is ASC’s definition?

If it is defined as the farmer has to obtain permission for regulation from the authorities, based on input from a biologist, can the criteria be realistic. If it involves a scientific project conducted by universities, reports etc. is it not realistic. “public scientific” should be removed from the text, or described for countries where there is no national/regional infrastructure to regulate predator control.

3.1.4

“Well depths are tested at least annually, and results made publicly available”. Food note 31:” Well depths must be tested at similar times of the year, with results submitted to ASC. More detailed methodology will be provided in the Auditing Guidance document.”

We suggest to change this, so there will be different demands for open and closed wells.

We suggest, that there will still be the same demand for open wells, but that there won’t be any demand for testing the well depths for closed wells sat by a professional well driller and with permission of the water authority. In Denmark many of the wells are closed, and it is undesirable (or not allowed) to open it due to risk of contamination of the groundwater.

3.2.1 and 3.2.1:

“Maximum total amount of phosphorus released into the environment per ton (t) of fish produced over the previous 12-month period”.

We suggest to change this to the more specific *“Maximum total amount of phosphorus released into the environment per tonne (t) of fish produced over the last calendar year”*. This will make it easier for all parties to make standard reports and one will avoid discussions about definition of: “previous 12 month period”.

3.2.2 and app. II-B:

Oxygen saturation in the emitted water should be related to the amount of water oxygen saturation of the water in the stream, e.g. that criterion 3.2.2 only applies for out-flows exceeding 10% of the flow in the receiving stream.

If the out-flow is less than 10% of the water flow in the stream the oxygen saturation in the out-flow is insignificant to the conditions in the stream. Only effect of keeping the criteria, is investments in oxygenation systems and use of energy to keep it running – all together a negative effect for the environment. The problem can occur in Semi-Ras system where a little amount of water has a residence time of 20 – 50 h in a constructed wetland before entering the recipient / stream. The oxygen saturation in the constructed wetland must be low to promote denitrification.

3.3.9:

In contrast to the criteria 3.2.2 , criteria 3.3.9 prohibits the use of aerations systems. It does not make sense to prevent farmers from assuring adequate conditions to their fish as well as to the surrounding environment. This will only cause poorer utilization of resources as well as increased negative effects on the surrounding environment.

4.2.5:

“Number of treatments of antibiotics over the last recent production cycle: ≤ 3 ”

A definition of “production cycle” is missing. The term is used extensively in the Salmon standard, but also here we have failed to find an explanation. If the production cycle refers to the whole lifecycle of the fish from hatching of egg to slaughter of the fish, the demand is unrealistic.

Rainbow trout has bacterial diseases (e.g. Rainbow Trout Fry Syndrome, RTFS), where no vaccines exist and bacterial diseases where vaccines are not 100 % effective. The suggested demand of ≤ 3 antibiotic treatments are for most batches in the current situation simply impossible to achieve during the lifecycle of the rainbow trout. Especially RTFS caused by the bacteria *Flavobacterium psychrophilum* is causing problems for trout production all over the world. The bacteria often cause disease in very small fish (< 1 gram fish) and can often lead to 1-3 antibiotic treatments during the fry stage.

Use of antibiotics is within the EU strictly regulated according to the medicine legislation. Use is only allowed through veterinarian prescription. We agree that ASC certified fish farms should work intensively on avoiding use of antibiotic, but fish farming is often depending of uncontrollable externally conditions. Outbreaks of bacterial diseases depends of water temperature that again depends of the weather conditions which no one can control. In Denmark we have 100 % transparency of the use of antibiotic in all farmed animals (Vetstat system). All use of antibiotic is reported by the Vet to the authorities and officially reports shows big variation from year to year. Some years we only need very few treatments during the lifecycle (less than 2-3) other years we need more (above 3).

Antibiotic use in Danish fish farming

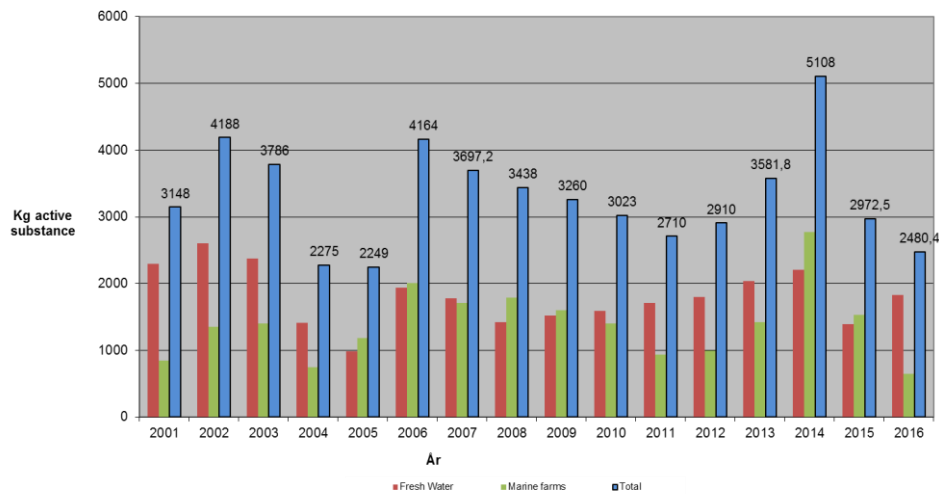


Diagram showing the variation in use of antibiotic in Danish Fish Farming

We agree that use of antibiotics in fish farming in theory could be a risk for both the environment and of development of antibiotic-resistant bacterial strains causing lack of treatment in humans. But this is not the case in Danish freshwater trout farming.

All Danish fish farms are regulated in a way where the use of antibiotics has a zero-effect to the environment. Based on the rules of the Water Frame Directive the Danish authorities have set up antibiotic-specific EQS (environmental quality standards). During this work, it is realized that from an environmental point of view the important issue is to set up a farm specific max amount of antibiotic used per treatment not a max number of treatments. This way, today all Danish fish farms have a farm specific amount (weight) of active substance allowed per treatment.

The risk of development of antibiotic-resistant bacterial strains causing lack of treatment in humans is neglectable. The reason for this is primarily the lack of zoonotic bacteria's in freshwater trout farming.

We suggest that the suggested demand is changed in a way where the farmer instead is obliged in cooperation with the veterinarian to set up own goals of antibiotic use, incorporating vaccination strategies and best management practice. Fixed max numbers of antibiotic use and max amount of active substance per year makes no sense in most trout farming since it depends of the weather conditions and which bacterial diseases that are present.

4.2.6

“Allowance for use of antibiotics listed as critically important for human medicine by the WHO. None”

Danish fish farmers are severely challenged by this demand. Like the rest of fish farmers within the EU, we are only allowed to use antibiotics that have obtained a nationally approval and a market authorization. In Denmark, we only have three antibiotic products authorized for farmed fish. One with sulfa/trim, one with florfenicol and one with oxolinic acid. Florfenicol is only authorized for one disease (furunculosis), and based of our strict environmental regulation we are only allowed to use a very restricted amount of

florfenicol and sulfa/trim per treatment. This way oxolinic acid today often is the only antibiotic that can be used in needed amounts. Oxolinic acid is a quinolone and thereby listed as critically important for human medicine by the WHO.

Lack of treatment with oxolinic acid in fact often means lack of treatment of any antibiotics. In Denmark use of antibiotics in all farmed animals is strictly regulated, e.g. use of fluoroquinolones may only be used, distributed or prescribed for production animals for a maximum treatment period of 5 days, if it has been verified by a laboratory examination that the agent causing disease is not sensitive to any other permitted antibiotic.

This year the use of oxolinic acid in aquaculture have been questioned, and the Danish Authorities therefor requested a risk assessment from the experts of antibiotic resistance within the Technical University of Denmark. The experts have made a risk assessment report and concluded (translated from Danish):

Conclusion:

On the question: Does the use of quinolones in aquaculture contribute to an increased resistance problem? Answer: Any use of quinolones contributes to resistance problems, but use in aquaculture is considered to be a low risk compared to other human and veterinary use of quinolones and fluoroquinolones.

Does any quinolone resistance in aquaculture create problems in food and human e.g. in the form of transmissible genes? Answer: With our present knowledge, it is estimated that quinolone resistance in aquaculture is not and is not expected to cause significant problems in food or human as the risk is considered to be low.

Based on this risk assessment the Danish Authorities have now decided not to take any further actions to restrict the use of oxolinic acid in Danish Aquaculture.

The situation is critically. If oxolinic acid will no more be accepted, many of our fresh water trout farmers must give up the ASC certification, and no one new will join. No trout farmers will take the risk of farming fish without having any antibiotic treatment available.

We suggest either not to enforce the suggested demand, or at least to make some modifications so it in exceptionally cases still is allowed.

We suggest the following modification.

"Allowance for use of antibiotics listed as critically important for human medicine by the WHO. None^{39+XX"}

^{XX}If no other antibiotic is available and the nationally authorities have concluded that use of a specific substance has only low risk of increasing resistance problems in humans, treatments with this specific substance is still accepted.