Draft CCN response to SEPA consultation on the use of biomass or feed to regulate the organic output from marine pen fish farming to the environment

1) What is your name?

Paul Chandler

2) What is your email address?

[redacted]

3) What is your interest in the use of biomass or feed to regulate the organic input from marine pen fish farming to the environment?

Interest: Community group.

Other: The Community of Arran Seabed Trust

4) Do you think that these are the appropriate criteria to allow us to make the right decision on the proxy for pollutant load?

Yes
Don't know
No

If no, why not?

COAST believes that switching to using feed rates as a proxy for determining the polluting farm emissions is an improvement to the current method, which only approximates the probable/possible biomass in the cages and their emissions. Monitoring feed use would reveal when farms have been deliberately overstocked, but under-declared. This change needs to happen urgently and with velocity. We recommend installing feed barge and feed pipe metering systems, which also take into account the wild fish meal and oil component of different feeds to ensure that producers do not move to less sustainable and higher calorific and protein value feeds, which can produce a higher phosphate and nitrogen load per kilo of feed. Richer feed types need to have a lower kilo to tonne of biomass limit to ensure farms do not use this method to artificially appear to keep within the maximum allowed biomass limits. The metering system needs to also link in with the companies' records of feed purchase and delivery and feed-stock held at specific farms.

The modelling of biomass emissions and their seabed effects are the only current mechanism by which the open-cage industry has its environmentally damaging footprint measured. The industry continually pushes back against SEPA's monitoring work and we encourage and support SEPA to resist this push back and resist any Government's initiatives to encourage a light touch regulatory regime.

5) Do you have any evidence for changing our standard assumptions for converting biomass to feed rate?

Yes
Don't know
No

If yes, please describe your evidence to us

We have no detailed evidence to present here but do know that our community lack confidence in the auditing of biomass that has been undertaken up to the present time. Members of the Coastal Communities Network have passed on reports to SEPA regarding under-reporting of biomass at farms. Our concern is that the 7kg of feed per tonne of fish per day may be based on inaccurate reporting of feed used and biomass present and we would like to see load reduced with a per tonne figure nearer to your average figure of 5.5kg. This will encourage farms to become more efficient and less wasteful in their feeding practises per tonne of maximum biomass. Again as above (Question 4), our concern is also about the type of feed used and the resulting variance in the feed rate per tonne, which may not be taken into account. We do not want to see a move to less sustainable feeds, containing a higher wild fish component, being used purely to 'cheat' the biomass limit because certain feeds are being used with a higher nutritional value per kilo and the consequent higher phosphate and nitrogen loading to the environment. How is this taken into account and monitored to ensure this practise does not occur?

6) Do you have any evidence for changing our standard assumptions for converting feed usage to pollutant loads?

Yes
Don't know
No

If you answered yes, please tell us about the evidence

7) Do you consider that a feed-based control in the form of daily feed usage averaged over 90 days would appropriately capture the period of peak feed use within a production cycle but be long enough to smooth out short-term, daily variability in feed use?

Yes
Don't know
No

Share your views with us

While feed-based control may help to regulate the organic pollutant load, it will not protect marine ecosystems from detrimental organic pollution loads. We understand that averaging the daily feed usage over 90 days would capture the period of peak feed use within the production cycle and allow farm operators sufficient time to move fish to other cages/farms, if a farm was approaching its feed limits, in order not to exceed its benthic pollution thresholds. However, we believe that the recording system should be made efficient and have the capability to record the digital data over full cycles to ensure that current assumptions based on existing practises can be adapted as more detailed information are collected. If farming practises adapt to work at or near peak biomass for longer periods then this will be crucial as the pollution load will also increase and we need the data collected to continually improve monitoring, modelling, regulation and enforcement

8) Do you have any comments on or suggestions for improving how we calculate the pollutant load and undertake the modelling?

Share your views with us

Yes.

Ensure that all operators pay an ongoing tariff/license fee to cover the real cost of SEPA establishing and operating an effective monitoring system of the pollutant load inputs, emissions and effects; this includes the seabed effects and those in the water column(feed metering, benthic surveys, water quality surveys). It is time that the polluter pays for these services and ensure the monitoring and measurement is undertaken independently by the national regulator to end reliance on the self-monitoring by the industry. Accurate data collection by SEPA will then help to ensure that the feedback into the modelling helps the modelling to become more accurate but will also establish the detail of the harm to the environment; this is vital to uphold the integrity of SEPA and ensure the results are transparent and produced in the public interest.

We will continue to call for the Scottish Government to stop the expansion of open-cage systems and promote the transition to land-based recirculating aquaculture systems, which would eliminate the organic pollution problem that underpins this consultation. Captured waste material would then be used as a raw material element of a circular economy.

Is the relationship between biomass and pollutant load robust?

Yes
Partly
No

Is the relationship between feed use and pollutant load robust?

Yes
Partly
No

9) Do you have any comments on or suggestions for improving the proposed permit conditions?

Share your views with us
Any proposal to change the way that fish farm pollution is regulated must ensure that all farms will comply with their licence terms, and be able to be robustly monitored by SEPA. Regulating pollution via a feed proxy is a step in the right direction, however, we wish to see a more conservative limit on the feed allowed per tonne of proxy maximum biomass allowed. Also we want those feeds containing more wild fish component, and producing more nitrogenous and phosphate waste, to have more conservative limits so that their use is reduced and not encouraged by the changes.

We are aware that SEPA's own figures show high levels of CAR licence non-compliance by fish farms, and a high proportion of which are due to levels of pollution, which have caused death to life on the seabed and in sediment, beyond which SEPA determined to be acceptable limits. This non-compliance is a direct result of the biomass present at the farms and is likely to be due to either a failure in pollution modelling of waste deposition, false assumptions about the environment's ability to assimilate this pollution, or that the pens have been overstocked with fish.

SEPA have stated that fish farms are already the largest polluter of Scotland's seas, and the industry wants to double in capacity by 2030. The breaches of fish farm CAR licences should be seen in the context of their generous permission to pollute the sea and to not pay for the dubious privilege of

doing so. , which is unique to this industry and is at the expense of others, whose jobs in our coastal communities depend on the sea not being polluted.

The uniquely high level of fish farm pollution is a direct consequence of the industry using open cages, which are the cheapest method, rather than the best available technology. This Government-supported open cage industry expansion needs to have a Strategic Environmental Impact Assessment before it can expand further so that the environment's capacity to improve its health and assimilate existing farms, and any future expansion, is known. It is considered negligent that the Government support and promotion of this expansion is going ahead without this assessment having been undertaken.

10) Do you have any comments on or suggestions for improving how the monitoring of biomass or feed is undertaken?

Share your views with us

We have made some recommendations, which are included in our answer to Question 4 and have suggested how they can be paid for in our answer to Question 8.

Could operators precisely measure biomass at any time?

Yes
Partly
No

Could operators precisely measure feed rates at any time?

Yes
Partly
No

11) Do you have any comments on how we have described the site management implications of using biomass feed?

Share your views with us

Given the recurring problem with breaches of CAR licenses, the COAST is not convinced that the industry is a reliable self-regulator or self-monitor. We are concerned that operators will deliberately avoid or ignore compliance and disregard the proposed management implications unless there is a tamper proof remote system in place and SEPA staff are funded by fees paid by the polluters to manage and monitor the data. In addition we encourage the feed limits to err strongly on the conservative side as there is no doubt that operators will aim to push right up to the limit anyway and a significant contingent buffer is needed to ensure that the environment has some degree of protection.

Do you agree that operators can manage compliance with a biomass limit?

Yes
Partly
No

Do you agree that operators can manage compliance with a feed rate limit?

Yes
Partly
No

12) Do you have any comments on or suggestions for improving how we could audit biomass or feed compliance?

Share you views with us

We have no confidence that the present auditing system for biomass can uncover the accidental or deliberate under-reporting of biomass. Biomass monitoring has not prevented BDNC and other farms from being operated beyond the environment's capacity to cope with their waste or the consequences of disease spreading among such large numbers of salmon. The ECCLR and REC Committees and the Ministers for the Environment and the Rural Economy have all said that the status quo is not an option for fish farming and this needs to change.

We in agreement that companies are more likely to act responsibly when faced with an approaching ceiling imposed by a cap on feed rates. However, for the independent auditing to be successful this monitoring needs to be paid for by the industry and to be a tamper proof SEPA-managed, remotely monitored, feed metering system, which also ties up with feed purchase and delivery records per farm.

Do you consider that it is possible to independently audit compliance with a biomass limit?

Yes
Partly
No

Do you consider that it is possible to independently audit compliance with a feed rate limit?

Yes
Partly
No

13) Do you consider that we should use biomass or feed as a proxy for the pollutant load from a fish farm?

Yes
Don't know
No

Share your views with us

SEPA should switch to using feed as a proxy for pollutant load with urgency and velocity. COAST agrees that the following questions are the appropriate criteria for SEPA to use to make the right decision on the proxy for pollutant load:

1. There should be a robust relationship between the proxy for pollutant load and the pollutant load.

2. The operator must be able to measure the proxy accurately and reliably at any time.
3. The operator must be able to manage the farm to ensure compliance with the permit limits set for the proxy.
4. SEPA must be able to independently audit compliance with the permit limits set for the proxy.

We support SEPA in their statement that *'calculation of pollutant load from feed quantity is more direct; involves fewer assumptions; and is more accurate than the calculation of pollutant load from a biomass.'*

We are disappointed that the industry rejects this method, saying:

'*Feed use is a poor proxy measure of seabed impact since different diets, environmental conditions and genetic makeup of different strains of salmon will result in markedly different levels of waste from the fish.'* (From 'FINAL SSPO response submitted: Finfish aquaculture sector plan consultation'; http://scottishsalmon.co.uk/wp-content/uploads/2019/01/sspo-response-to-sepa-sector-plan-dec18.pdf),

The industry continually pushes back against SEPA's monitoring work and we encourage and support SEPA to resist this push back and also to resist any Marine Scotland and Government interference to encourage a light touch regulatory regime.

14) Do you have any other responses to make to this consultation?

Share your views with us

While switching to using feed rates as a proxy for pollution is indeed an improvement to the current regulatory system, COAST continues to call on the Scottish Government to halt the current expansion of the open-cage industry and promote the transition to land-based recirculating aquaculture systems, which will entirely eliminate the organic pollution problem that underpins this consultation.