SCOTTISH ENVIRONMENT PROTECTION AGENCY SEPA Finfish Aquaculture Advisory Panel

Minutes of Meeting: 4th November 2021

13:30-16:00

Microsoft Teams

Attendees:

Welcome/Introduction

Coastal communities (Coast/Coastal Communities Network); CoSLA (The Highland Council); Crown Estate Scotland, Environmental NGO (Scottish Environment LINK - Fidra, Scottish Wildlife Trust); finfish buyer (Aquascot, Sainsburys); finfish producers (British Trout Association, MOWI, Scottish Salmon Company, Salmon Scotland); Fisheries Groups (Fisheries Management Scotland, Salmon & Trout Conservation); Marine Scotland; NatureScot; Scottish Environment Protection Agency (SEPA);

Apologies: Fisheries Group (West Coast Regional Inshore Fisheries Group);

Agenda

 The Chair welcomed new members to the panel: Fidra will replace Marine Conservation Society as a Scotting Environment Link Representative. Scottish Aquaculture Innovation Centre (SAIC) will join the panel. Actions from the last meeting 				
Action	Status	Update		
SEPA and Salmon Scotland to explore inclusion of impact of residue on shellfish in upcoming azamethiphos study	Close	Will be covered at item 6		
SEPA to schedule the following at future meetings: a. Medicine discharge; assessment, control, treatment and cumulative impacts b. How SEPA are applying new regulatory regime c. Spatial planning d. Further innovations update e. Update on investment by SAIC	Open	a - c. On today's agenda - Close d – e. To be scheduled		
SEPA to explore communications with stakeholders regarding the use of SEPA position statements	Close	Targeted communications have been undertaken. A further public communication is being prepared		
Marine Scotland and Salmon and Trout Conservation representatives to	Close	To be take forward out-with meeting		

discuss reporting of fish escapes outwith the meeting		
Salmon Scotland to explore weather industry standards for equipment will change in line with strengthened policies introduced by the operator of the Kilbrannan Sound farm	Open	Salmon Scotland will share the report from the improved containment working group when it is available Salmon Scotland will confirm estimated timing for report
SEPA and Marine Scotland to look at data published on Scotland's Aquaculture Website to ensure users can see the licence holder and operator of site (currently can only see the former)	Open	On hold until full functionality of Scotland's aquaculture website is restored post cyber-attack

3. How SEPA is working now

SEPA is still recovering from the cyber-attack on 24 December 2020 which significantly impacted the ability of SEPA to operate as normal. The cyber-attack impacted every area of the organisation.

Aquaculture has been identified as a priority sector on which SEPA is focusing its sector work during the recovery.

Determining permits

SEPA has implemented a new 'cell approach' to permitting. This is collaborative, focused and less transactional. It allows staff to focus on novel or high-risk applications, while processing the simpler applications more quickly.

Pre-application, screening and industry engagement were all impacted by covid and the cyber-attack but are back up and running. As a result SEPA is receiving applications which better address environmental risk upfront.

<u>Transfer of sites onto the new regulatory framework</u>

SEPA has developed and refined a simple, outcome focused permit template to reflect the new regulatory framework, introduced in June 2019. The new template is being used to permission all new farms or expansions to existing farms.

SEPA planned to move all other farms onto the new framework template in early 2021, however due to the cyber-attack SEPA lost access to permit data and existing permits so the work had to be put on hold.

Much of the data has now been recovered and SEPA plans to commence the transfer of all farms onto the new permit template in the coming weeks.

There are a small number of items still to be finalised, including performance standards for sampling and analysis and standardising the approach to permitting discharges of certain groups of substances, such as disinfectants and fish anaesthetics. Both are almost complete.

We have engaged with active licence holders and will shortly provide them with a copy of the conditions we intend to include in the varied permits. Thereafter any discrepancies will be checked against the existing permits. We expect to begin issuing varied permits early in 2021.

The variation will be neutral, meaning that biomass limits and medicine discharge limits will not be changed (except to correct errors). If changes to biomass or medicine volumes are required, this must be done separately through the normal application process.

Permits issued since 2019 will be varied onto the latest version of the new template in due course.

ACTION: SEPA to circulate new framework template once finalised.

<u>Current verification programme (site compliance)</u>

Covid and the cyber-attack impacted the ability of SEPA to undertake normal verification work, including field-based compliance checks.

Post cyber-attack, SEPA focused on regaining the ability to accept and assess data returns from finfish farm operators. A process is now in place to manually add data returns to Scotland's Aquaculture Website; although we cannot yet add new sites or publish seabed survey results.

Field work has recommenced within national covid guidelines and SEPA is undertaking unannounced inspections and sampling visits.

A 2022-23 compliance plan is being developed.

The 2019 compliance assessment results will be published by the end of 2021. In 2020, the disruption caused by the pandemic means that the normal compliance assessment scheme cannot be run.

Use of temporary regulatory position statements

SEPA adopted 3 Regulatory positions in response to covid:

- i. Medicine use The position was in place from March 2020 to Aug 2020 and was used sparingly (SEPA received 6 notification of intended use).
- ii. Monitoring The position was in place from March 2020 to June 2021.

 Monitoring was challenging for SEPA and operators due to covid restrictions.

 The position was widely used with 145 sites notifying SEPA of intended use.
- iii. Biomass, fallow periods and pen configuration The biomass and fallow period elements of the position were put in place in March 2020 and remain in effect. SEPA intends to withdraw the position on 31 December 2021, unless the sector provides justification for retention by the end of November. SEPA received notifications from 62 sites in terms of biomass and a further 9 sites in relation to the fallow position, with most instances being for a short duration and for small increases above permitted biomass limits or small breaches relating to fallow periods.

A representative of finfish producers expressed concern that SEPA monitoring requirements under the new framework are extremely hard to meet, even without covid restrictions and requested SEPA reduce the burden. SEPA noted:

- increased analysis time has been built in to allow transition.
- The use of DNA in monitoring seabed impacts (which will be covered at Item 4) will also help reduce analysis times and expense.
- SEPA has developed an option for demonstrating compliance that requires analysis of samples from fewer sampling stations than the current approach.

This will soon be launched alongside the new Environmental Monitoring Plan guidance.

A representative of Fisheries Management Scotland (FMS) asked if risks to wild salmonids was considered in deciding the appropriateness of using the regulatory position on biomass limits.

A representative of finfish producers requested that, if advice is given that farm practices are resulting in environmental harm, evidence should be provided to support that advice.

SEPA confirmed that the risk framework accompanying the regulatory position includes a section on wild salmonids.

Changing the way we work with local authorities

SEPA and local authorities have begun discussions on aligning SEPA and local authority authorisation processes.

The Panel support a more joined up approach. However, given that the Scottish Government's review of finfish aquaculture regulation is due to report by the end of the year, the Panel suggested that the work should be delayed for a few weeks so that it can take account of the findings of the review.

4. Use of DNA for compliance assessment

Through a SAIC project supported by SEPA and operators, SAMS has developed a method for using DNA extracted from seabed sediments to assess the effects of deposition of faeces and other matter from finfish farms on the condition of seabed invertebrate communities.

SEPA is now preparing guidance on the standardised procedures (e.g. sample collection; sample storage; DNA extraction; DNA sequencing) required to apply the method. The completion of this guidance will allow the method to be used to demonstrate compliance with seabed biological quality standards.

The use of DNA has the potential to provide significant benefits.

- DNA samples can be analysed far more quickly than conventional samples, allowing a site's compliance to be understood much earlier than at present.
- There are considerable efficiencies in using DNA. The analysis of a single conventional sample can take a trained analyst 3 days to complete whereas large numbers of DNA samples can be processed every day. This will reduce the analytical cost of demonstrating compliance. It will also increase efficiencies for SEPA in its programme of independent compliance surveys.
- DNA analyses are largely automated, which is expected to reduce analytical variability.

In its initial form, not all farms will be able to use the method. This is because the method's application will be limited to those seabed habitat types from which data was available to include in testing during the method's development. However, the method can be readily trained to assess other seabed habitat types, given sufficient matched DNA and conventional seabed invertebrate data being provided.

The Panel supported the development. A representative of finfish buyers expressed the desire to see efficiencies extended to reporting and publishing data too. SEPA confirmed this will be developed but a timescale has not been set yet.

A representative of finfish producers asked that SEPA consider implementing this method for cage edge samples immediately. SEPA confirmed this will be explored, however, to avoid errors in compliance assessments, time would be needed to develop and test a DNA method for assessing cage-edge compliance. Immediate implementation would not be possible.

SEPA confirmed that the method is based on a set of gene markers that are strongly predictive of seabed invertebrate community condition. No issues with the bodies of organisms that were dead prior to sampling confounding assessments were identified during the method's development.

SEPA will provide the algorithm for producers to use to assess compliance. Producers will need the equipment and expertise to sequence the genes.

A number of panel members expressed an interest for a more detailed workshop on this topic, including more information on the calibration between the traditional approach and machine learning.

ACTION: SEPA to arrange a more detailed session for relevant stakeholders once procedure for collection, storage and extraction has been defined.

5. Development of a new wild fish & sea lice framework

Scottish Government has identified 12 groups of high-level pressures on wild salmonids, one of which includes sea lice from marine finfish farms.

Following the Parliament's Rural Economy and Connectivity Committee report on finfish farming, Scottish Ministers set up the Salmon Interactions Working Group. The Group published its recommendations in May 2020.

Scottish Government published its response to the Salmon Interactions Working Group's recommendations in October 2021, confirming that SEPA will take on the lead regulatory role in managing the interaction between sea lice from finfish farms and wild salmon.

In parallel, and in consultation with, the Salmon Interactions Working Group, a Technical Working Group, including local authorities, SEPA, Marine Scotland and NatureScot, has been working to develop technical proposals for a sea lice risk assessment framework.

Building on these proposals, SEPA will launch a public consultation before the end of the year on a regulatory framework for managing the risk to wild Atlantic salmon from proposed marine finfish farm developments. A subsequent implementation planning process will develop the detailed regulatory procedures and protocols. This process will be consultative and inclusive. SEPA expects to implement the new framework fully within about 12 months.

SEPA told the Panel that new framework would not cover sea trout rivers at this stage.

A representative of finfish producers advised that early information on modelling requirements would be important because of the long planning times for farm developments.

A member of the panel asked if the Scottish Government commissioned review of aquaculture regulation will delay this work. SEPA advised the panel that Scottish Government has confirmed that SEPA will be the lead regulatory body for sea lice interactions with wild salmon and that it expects SEPA to consult on a regulatory framework before the end of the year.

6. Development of regulatory framework – next phase

SEPA do not intend to 'bolt-on' sea lice regulation to the existing framework; but rather will incorporate it into a phase 2 development of the new framework.

The principles and structure of the framework established in 2019 will not change.

Areas in addition to embedding regulation of sea lice interactions with wild salmon that SEPA plan to develop are:

- i. Nutrient discharges To include nutrient discharges in SEPA's screening modelling (rather than risk assessments for nutrients being undertaken by local authorities). SEPA noted that nutrient discharges are not thought to pose a widespread risk but may do in constrained areas with long water residence times.
- ii. Bath medicine discharges –In the next stage, SEPA will undertake a review of its regulatory approach to bath medicines. This will include developing permitting conditions for discharges from well boats that would support the potential adoption by operators of medicine capture and removal technologies and make it easier for operators to demonstrate compliance; checking that the environmental standards for bath medicines, which underpin risk assessments, reflect the latest scientific understanding; and exploring whether patterns of use in some constrained locations require a review of how cumulative risk is assessed.
- iii. Review of its risk assessment for discharges affecting the seabed in constrained areas to account for cumulative risks.

The development work outlined will be undertaken over the next 12-18 months and the Panel will be asked for input at future meetings.

ACTION: SEPA will bring a more detailed timeline to a future meeting.

A representative of the Coastal Communities network (CNN) asked for an update on the emamectin benzoate EQS review by UKTAG. SEPA confirmed that peer review is currently being tendered. Publication should follow shortly after the peer review stage.

A representative of the CNN asked if jellyfish blooms will be included in nutrient work. A representative of SEPA confirmed that SEPA is looking at evidence for the primary ecological effects of elevated nutrient concentrations, specifically those on phytoplankton.

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A representative of the CNN asked how the impact of discharge of bath medicines on wild swimmers (as 'other water users' under CAR) will be addressed.

A representative of SEPA told the panel that SEPA is keenly aware that participation in wild swimming, and related public expectations about the environment, are increasing. There are range public bodies with relevant roles and expertise, including local authorities, SEPA and specialists in public health. We think it is important that the public sector response is joined up and considered in the round. SEPA have been liaising with other relevant public bodies on a case-level and we are now taking forward conversations at a national level with Scottish Government's help.

A representative of SAIC asked how SEPA is addressing the impact of other polluters on wild salmonids (e.g. agricultural or industrial impacts). A representative of SEPA noted there are a large number of initiatives under the umbrella of River Basin Management Plans. These are communicated and discussed via membership of the Wild Salmon Strategy Advisory Group.

7.	AOB

None

8 Next meeting

We will return to quarterly meetings with the next meeting in February. Background information will be circulated in advance of any technical items.