Scottish Environment LINK

Aquaculture & Fisheries (Scotland) Bill
Written Evidence from Scottish Environment LINK

Scottish Environment LINK is the forum for Scotland's voluntary environment organisations, with over 30 member bodies representing a broad spectrum of environmental interests with the common goal of contributing to a more environmentally sustainable society. We welcome the opportunity to offer views on the general principles of the Aquaculture & Fisheries (Scotland) Bill. This response has been prepared on behalf of LINK Marine Taskforce and is focused on Part 1 of the Bill: Aquaculture.

We believe Scotland should aim to become a world leader in best practice, promoting the highest possible environmental standards whilst recognising the need to secure a vibrant economy supported by the contributions of both aquaculture and freshwater fisheries that must operate alongside each other in many areas.

Our response to the consultation[1] outlined our general support for many of the proposals. While we can support the general principles of this Bill, we are of the view that its provisions must be complemented by proceeding with a number of the proposals set out in the consultation. We understand that a number of these proposals can be progressed through existing powers and we request a firm commitment from Government that these be implemented without delay.

Context
It is important that the Committee consider this Bill within the wider marine policy and legislative context, in particular the Marine (Scotland) Act 2010 and the provisions concerning marine planning, which once established will provide a framework for the sustainable development of all industries and activities throughout Scotland's seas. Marine planning is fundamental to 'pillar one' (wider seas measures) of the Government's three pillar approach to marine nature conservation. Marine planning can assess how multiple uses of the marine ecosystem can proceed whilst operating within the carrying capacity of the marine environment, which is of particular relevance to the aims of this Bill in managing interactions between wild and farmed fish.

Appropriate risk-based site selection for fish farms is a key factor in managing interactions and can prevent many of the unintended and negative impacts of the industry. The use of science-based sensitivity mapping, for example, to identify suitable locations and guide decision-making will be an important approach in future. Integration of fish farm area management with a strategic marine planning system will also enable full and proper consideration of cumulative and in-combination effects.

We are concerned, therefore, that targets for industry growth[2] have seemingly been adopted by Government prior to formal consultation and adoption of a National Marine Plan. Adoption of a National Marine Plan is now unlikely until 2014 with regional plans following in subsequent years. It is therefore vitally important that, in the absence of such a planning system, marine development occurs within the constraints of a robust regulatory regime that ensures environmental protection.

We limit our written evidence on the Bill to the following priority areas.

Chapter 1: 1 - Fish farm management agreements and statements

[1] http://www.scotlink.org/files/policy/ConsultationResponses/LINKrespAqua&FishBillFeb2012.pdf
[2] By 2020: To increase the sustainable production of marine finfish at a rate of 4% per annum to achieve a 50% increase in current production

We welcome the inclusion of a statutory requirement for farms to be party to a Farm Management Agreement (FMAg) or Statement (FMS) with sanctions for non-compliance. Area based management has long been identified as the best method of reducing the risk and spread of disease and parasites as well as reducing the use of chemical treatments and their consequent environmental impacts. While such agreements have proved useful in many cases, the lack of a statutory system risks such agreements being undermined. Additionally, in the spirit of openness and transparency we believe Farm Management Agreements should be publically available documents and would benefit from the participation of appropriate stakeholder groups with common interests in the health of farmed and wild salmonids, and the wider environment.

Under the Bill, operators would retain the primary responsibility for determining boundaries of farm management areas (FMAs) under the Code of Good Practice. LINK firmly believes that boundaries for farm management areas must be determined primarily on ecological grounds, taking into account the best available evidence on sea-lice dispersal and connectivity between sites. Where there is limited information a precautionary approach, of selecting larger, rather than smaller boundaries, should be adopted. The proposed boundaries must be suitable to protect the local environmental and ecological features and account for natural geographic features. They must also take account of the relevant cumulative and in-combination effects of connected activities, such as processing plants. The criteria by which a farm management area boundary has been decided should be publically available and involve the participation of appropriate stakeholder groups.

We note the inclusion at section 1(6) of a power to modify the definition of the Code of Practice in relation to farm management areas. We understand this provides a power allowing Scottish Ministers to define farm management areas under a separate mechanism if deemed necessary. While we welcome the inclusion of this power, we would welcome a timeline for Government review of the current approach to the delineation of farm management area boundaries to ensure that it remains appropriate in all circumstances.

Chapter 1: 2 – Escapes, and obtaining samples, from fish farms
While we would advocate a goal of zero or near zero escapes – which we believe is achievable through a statutory technical standard for farm equipment and other initiatives such as improved training - LINK believes that it is essential that fish identified as escaped can be traced back to their farm of origin. We understand that genetic tools may now be available and we would support the use and application of such samples so that escapes can be identified and related to the farm or company of origin.

Chapter 2: 3 - Technical requirements for equipment used in fish farming
Escaped farmed salmon have the potential to disrupt ecosystems and alter the overall pool of genetic diversity through competition with wild fish and interbreeding with local wild stocks of the same population. It has been shown that interbreeding of farmed fish with wild fish of the same species can result in reduced lifetime success, lowered individual fitness and decreases in production.[3]

Escaped farmed salmon must therefore be considered a severe threat to the productivity and long-term existence of wild stocks of Atlantic salmon. The most effective way to address these risks is to reduce the number of escapes of farmed salmon to zero or near zero. This is in line with the international goal of North Atlantic Salmon Conservation Organisation (NASCO) that states '100% farmed fish to be retained in all production facilities.'[4]

We fully support the inclusion of a power allowing Scottish Ministers to prescribe technical requirements for fish farm equipment. This was a key recommendation of the Improved Containment Working Group.

[3] Thorstad, E.B., Fleming, I.A., McGinnity, P., Soto, D., Wennevik, V. and Whoriskey, F. (2008) Incidence and impacts of escaped farmed Atlantic salmon Salmo salar in nature. NINA Special Report 36. 110 pp.
[4] http://www.nasco.int/pdf/aquaculture/BMP%20Guidance.pdf

However, we believe that, as a high proportion of escapes are caused by human error[5], enforceable technical regulations should extend to include training in the *operation* of equipment as well as its design, construction, manufacture, installation, maintenance or size.

The Norwegian technical standard (NS 9415) was introduced in Norway in 2004 and specifies requirements for the design of feed barges, floaters, net cages and mooring systems necessary to cope with environmental conditions at fish farm sites. It also includes the handling and use of equipment. The introduction of the standard appears to have resulted in a dramatic reduction in the number of major escape incidents in Norway, principally due to a sharp decline in large-scale escapes resulting from the failure of cages.[6]

Predation resulting in a hole in the net has accounted for 36% of total escape events at saltwater salmon farms between Jan 2011 (when current reporting of cause of escape was introduced) and Oct 2012.[7] Efforts to understand and reduce predator effects, specifically seals, on farm equipment must be prioritised in the development of a technical standard. Ultimately, removing the need to kill seals under licence, for example by requiring tensioned nets or other effective and benign deterrents, would benefit wildlife and improve the public and investor perception of salmon farming, which suffers greatly from the association with seal deaths.

Chapter 2: 4 - Wellboats

It is of serious concern that wellboats are not sufficiently covered by controls to manage the risk of parasites, pathogens or diseases. The enabling legislation in the Bill is therefore welcome but this must be implemented as soon as possible. We understand that the control of discharges from wellboats at fish cage sites could be considered under existing Controlled Activities Regulations licence arrangements and we ask that Government to take this forward urgently.

Additional points:

It is important to note that, in addition to this Bill, there are several strands of policy and secondary legislation in development that aim to address those areas covered by the Aquaculture and Fisheries Bill consultation but were not carried into the Bill itself for a variety of reasons. We raise the following points as we feel it appropriate for the Committee to consider the wider context, including other areas that would support the Bill in achieving the highest environmental standards and understanding, mitigation and managing any wider impacts of fish farming in Scotland.

Publication of sea-lice data

Understanding lice levels on farms and how infestations in farmed salmon relate to incidences in wild salmonids is key to ensuring the sustainability of the industry and requires an appropriately robust response. The extent of such a link remains a hotly debated topic. However, a report to the Salmon Aquaculture Dialogue (co-ordinated by WWF) concluded - "it is not plausible to draw a single over-riding conclusion regarding the potential negative impacts of sea-lice on all wild fish stocks world-wide. Nevertheless, we believe that the weight of evidence is that sea-lice of farm origin can present, in some locations and for some host species populations, a significant threat. Hence, a concerted precautionary approach both to sea-lice control throughout the aquaculture industry and to the management of farm interactions with wild salmonids is expedient."[8]

[5] 30% of all salmon farm escape events in 2011

[6] http://preventescape.eu/wp-content/downloads/2010_aei_jensen_et_al.pdf

[7] http://www.scotland.gov.uk/Topics/marine/Fish-Shellfish/18364/18692/escapeStatistics

[8] Revie, C., L. Dill, B. Finstad, C. Todd (2009) Sea Lice Working Group Report – NINA Special Report 39. 117pp. Available at: http://www.nina.no/archive/nina/PppBasePdf/temahefte/039.pdf

The data from on-farm sea lice testing provides a critical resource to gain a broader understanding of the impacts on farmed and wild fish so that strategies to control sea lice can be fully assessed and effective ones developed and implemented. LINK therefore strongly believes that the results from sea lice monitoring from individual farms should be publicly available in disaggregated form. The Aquaculture Stewardship Council standards developed by the global multi-stakeholder Salmon Aquaculture Dialogue[9] process determined that the standard should require frequent on-farm testing for sea lice, with test results made easily publicly available within 7 days of testing.

Norway takes a transparent approach to the publication of data, with a greater amount of both sea lice and disease data being publically available. For example, an overview of aggregated sea lice numbers is available online[10], and the authorities hold information on individual companies. If a company exceeds the legal sea lice limit the result is made public. This practice is also applied to disease outbreaks. Scotland should at least bring itself in line with Norway and preferably aim to improve further and become a world leader in best practice.

We note that the Government intention is to develop an improved voluntary system of reporting, in discussion with stakeholders. We urge that existing powers be used to make such reporting a statutory requirement.

Future of the Code of Practice

The Aquaculture and Fisheries (Scotland) Act 2007 contains the power to adopt the Code of Good Practice in whole or in part. However, this power has never previously been used. We note elements of the Code would become legal requirements under this Bill. Were this Bill to pass, we feel that it would be timely for a multi-stakeholder group to review all elements of the aquaculture Code of Good Practice. Following a review and any amendments needed, the Code could potentially be statutorily adopted. This process could be undertaken by the Ministerial Group on Aquaculture or one of its subsidiary working groups, should future composition of the group reflect the full range of stakeholders with interests in finfish aquaculture.

This response was compiled on behalf of Scottish Environment LINK's Marine Taskforce and is supported by:

Scottish Wildlife Trust
Marine Conservation Society
WWF Scotland
RSPB Scotland
Whale and Dolphin Conservation
Scottish Ornithologists' Club
National Trust for Scotland

For more information, please contact:

Sarah Archer
LINK Marine Policy and Advocacy Officer
Tel: 01350 728200
email: sarah@scotlink.org

Nick Underdown
LINK Marine Policy and Advocacy Officer
Tel: 0131 317 4144
email: nick@scotlink.org

[9] http://worldwildlife.org/industries/farmed-seafood
[10] www.lusedata.no