

**Scottish Aquaculture – A Fresh Start
A Consultation on the Renewed Strategic
Framework for Scottish Aquaculture.
5th November 2008**

Scottish Environment LINK is the umbrella body for Scotland’s voluntary environmental organisations, representing around 500,000 members. Scottish Environment LINK’s Marine Task Force response to this consultation is supported by:

- ❑ Marine Conservation Society
- ❑ National Trust for Scotland
- ❑ RSPB Scotland
- ❑ Scottish Wildlife Trust
- ❑ Whale and Dolphin Conservation Society
- ❑ WWF Scotland

Scottish Environment LINK’s Marine Task Force welcome the opportunity to respond to the Scottish Government’s consultation on the Renewed Framework for Scottish Aquaculture. We are pleased to see that many of the comments we raised during the pre-consultation period have been included in this document.

We wish to make some more general comments before answering the specified questions as set out in the response guidance.

Overarching Comments.

Carrying capacity

Through out this document (Page 3 - Ministers Foreword, Page 4 - Vision and Guiding Principles, Page 8 – The Bigger Picture) reference is made to working within the carrying capacity of the environment. What definition of carrying capacity is being used and how is it being defined and monitored? We feel that it should refer to the collective environmental, assimilative and visual carrying capacity. We feel that if carrying capacity is a term to be used within this document its meaning should be fully defined.

Scottish Marine Bill.

Page 19 - Scottish Marine Bill. As we stated in our response to the Scottish Marine Bill Consultation (www.savescottishseas.org/pdfs/LINK-consultation-resp.pdf), we believe it is vital that responsibilities for aquaculture and fisheries are integrated within Marine Scotland along with other sectoral activities and that these industries are included in the marine planning system. As with all sectoral activities, we believe that this is the most appropriate solution for consistency, integration and simplification of marine management.

Page 10 refers to “*balancing socio-economic benefits against environmental impacts*” - what is the limit of environmental impact that is acceptable and who is charged with defining it? Scottish Environment LINK’s Marine Task Force would like a Scottish Marine Bill with the environment at its heart, by which we mean it must result in protection and recovery of our marine environment in order to achieve a healthy, functioning marine ecosystem. The marine ecosystem is the foundation, which underpins all human activities, and therefore it is essential to ensure that this is healthy and well-functioning for a sustainable economy. “*Balancing socio-economic benefits against environmental impacts*” is not consistent with such an approach and we note that aquaculture, like many other industries, relies on a healthy, functioning marine ecosystem. This reviewed SFSA must ensure that the Scottish aquaculture industry contributes towards that overarching aim.

Sustainable Development

We believe that all Scottish Government policy, including the reviewed SFSA must be delivered in accordance with the five principles of Sustainable Development, in particular ‘living within environmental limits’.

Sea lice

Page 11, first bullet point – We believe that a strategy to control sea lice is required as it is as crucial for the long-term future of wild salmonids as it is for the finfish industry. In particular, we note that the total reported Scottish catch of wild sea trout in 2007 was the lowest ever recorded at 27,115 – 1,709 fewer than in 2006. Sea lice in coastal waters present different threats to salmon and sea trout smolts/post-smolts because salmon smolts migrate quickly out into the open ocean, whereas sea trout remain in coastal waters.

We also believe that sea lice management and control represent one of the most significant challenges to the health of not only farmed fish but also wild salmonids, to reflect this we feel sea lice should be included in the framework on pages 14 & 15.

Feed

Page 11 – We believe that one of the main challenges omitted from this section is that of feed sustainability. Without ensuring the long-term sustainability of feed ingredients derived from wild capture fisheries the overarching aim of a sustainable industry, and the objective of aquaculture industry growth cannot be achieved. We would be interested to see more information included on the aims and objectives of the feed and capture fisheries sustainability agenda as mentioned on Page 5.

Planning and site consolidation

It is proposed that the Marine Bill for Scotland will introduce a comprehensive system of marine planning. Issuing permanent planning consents for aquaculture at this stage negates the flexibility of a new planning system. We are also concerned that as the industry is moving towards larger, consolidated sites with cage diameter increasing from 70m up to 120m polar nets the issuing of permanent consents for such sites is premature. It is too early to say what will be the challenges faced as the industry moves towards these larger sites. The potential for a mass escape event is very real, particularly as the industry has not yet adequately dealt with prevention of escapes, combined with the added pressures of climate change and resulting increased storm events. Disease and sea lice control and management are additional challenges that will

be amplified in these consolidated sites. To issue permanent consents for these sites at such an early and experimental stage is highly concerning.

Water Framework Directive

We are disappointed by the lack of reference to the Water Framework Directive (WFD). The WFD is one of the most important pieces of environmental legislation to emerge from Europe. It is a major driver for better water management in Europe and aims to address a wide range of impacts, including fisheries and aquaculture activities. It was transposed through the Water Environment and Water Services (Scotland) Act 2003 (the WEWS Act). The Act requires that all inland and coastal waters out to 3 nautical miles achieve “good ecological status” by 2015.

All sectors, including fisheries and aquaculture are required to comply with the WEWS Act, and are subject to the new regulatory controls (the Controlled Activities Regulations or CARs). Despite these controls being in place since 2005, pollution from freshwater fish farms has been identified as a significant issue under WFD (Significant Water Management Issues Report, SEPA publication, 2007)¹. The significant water management issue associated with freshwater aquaculture is the input of nutrients into lochs. One fifth of the area of freshwater loch water bodies at risk of failing to meet the environmental objectives within the Scotland river basin district are impacted by point source pollution from fish farms and fish hatcheries. The Significant Water Management Issues Report also identified the following routes by which marine salmon farms may affect the ecological value of the coastal water environment:

- impacts on the seabed
- the potential to enhance algal blooms
- the effect of diseases, parasites and escapes on wild fish populations.

These issues must be resolved if compliance with the requirements of WFD is to be ensured. We therefore recommend that the Scottish Government fully incorporates WFD and actions contained in draft river basin management plans (RBMPs) with the renewed strategic framework for aquaculture.

Responses to specific directed questions.

1. The proposed Renewed Strategic Framework suggests a way forward for Scottish aquaculture. The Ministerial Working Group on Aquaculture will have an over-arching role across the five themes, to review progress, reprioritise planned actions and to deal with emerging issues as appropriate. Priority actions will be reassessed and agreed at each meeting and a champion for each of the five themes will be responsible for reporting back to the MWGA.

1a. Do you agree, in principle, with this proposed way of working?

We agree in principle with this way of working as long as the full range of stakeholders is represented and their opinions, themes and suggestions treated in an equitable way. We would like to ascertain who would monitor the progress of the work of the MWGA against the overarching objectives of those highlighted in Michael Russell’s Foreword? Namely:

¹ http://www.sepa.org.uk/consultation/closed/2008/swmi_scotland/8.html#8.2

Economic Strategy, National Food and Drink Policy, EU Aquaculture strategy, Marine Strategy Framework Directive, Scottish Marine Strategy Framework Directive, Scottish Marine Bill and the Water Framework Directive. It is essential that the work of the SFSA and the MWGA is measured against the agreed objectives and commitments of these wider, overarching policies.

1b. If not, please give us your own ideas.

*2. The Renewed Strategic Framework is based on the five **key themes** of; Health; Planning, Consents and Sites; Containment; Markets, Marketing and Image; and Finance.*

*2a. Do you agree that the ‘five **themes** approach’ proposed in this Renewed Strategic Framework is sufficiently flexible to accommodate new and emerging issues?*

Not as currently drafted.

2b. If not, please explain why and offer your suggestions.

We feel that insufficient flexibility currently exists to adequately consider the future sustainable development of the aquaculture industry and to incorporate technological advancements and innovative practices. We also feel and that some of the key themes should be given a wider remit and renamed to reflect this.

We believe that the theme of Containment needs to be widened to incorporate other key issues. As well as including all current issues listed under the Containment theme we would suggest in addition:

- ❑ Mitigation of the impact of sea lice on wild salmonid populations.
- ❑ The promotion of innovative sea lice control measures.
- ❑ Improved and innovative non-lethal predator control measures and the requirement to record and report all lethal predator controls.
- ❑ Innovation in cage design technology to reflect current best practice and to deal with the challenges posed by increasing storm events as a result of climate change (page 9).

We would suggest it is renamed and called “Impact Mitigation” to reflect this wider remit.

We would also suggest that Health be renamed Husbandry and Welfare to be fully reflective of the issues covered and to incorporate additional issues that may arise in future. The expansion of the aquaculture industry may involve the culture of additional species in addition to the predominant salmon and trout culture in Scotland today, such new species may present a unique set of challenges and issues to be resolved, such as parasite infestation and diseases not currently experienced within salmonid farming. Within this section we would also like to see clarification of the species of sea lice referred to. Does sea lice simply refer to *Caligus elongates* and *Lepeophtheirus salmonis* or are other, more generalist species, also included?

*3. The main **issues** raised by stakeholders during the pre-consultation exercise have been marshalled into five key themes and set out in this document.*

*3a. Do you agree that the main **issues** to be addressed have been identified in this draft Renewed Strategic Framework?*

Partly

3b. If not yes, fully, please explain why.

- There is no requirement for the review of the efficacy of the Code of Good Practice in achieving overall improved environmental performance.
- Within planning sites and consents there is no mention of assessing the carrying capacity of Scotland's coastline in being able to determine the amount of expansion able to take place. This omission is a very significant one, given the explicit reference to carrying capacity in the Ministerial foreword. It is at odds with the principles of Sustainable Development, endorsed by all UK Administrations, which include 'living within environmental limits'. It is against the Marine Strategy Framework Directive, which requires adoption of the 'Ecosystem-based approach' and is soon to be transposed by the Scottish Marine Bill. However loosely one defines environmental carrying capacity, given the industry's reliance on a healthy marine environment, it would seem extremely shortsighted not to take the natural limits of the marine environment into account in determining how much expansion should and can take place
- There is a need for the identification of scientific data/evidence gaps on environmental issues, particularly in relation to impacts on current protected sites/species/habitats and on any future species, habitats or features identified as nationally important as part of the 2008 - Marine Biodiversity Implementation Plan or requiring protection in compliance with international obligations and/or the forthcoming Scottish Marine Bill.
- Shellfish farms need to be subject to Environmental Impact Assessment regulations.
- The aquaculture strategy needs to be fully integrated with the aims of the WFD, including the proposed actions identified in draft river basin management plans.

4. **Desired outcomes** for each of the **issues** identified within each key theme are also set out in this document.

4a. Do you agree with the proposed **desired outcomes**?

Partly

4b. If not yes, fully, please explain why.

We feel that all desired outcomes should integrate with: the Water Framework Directive and River Basin Management Plans and should be consistent/integrated with those Marine Environmental Objectives and regional marine plans arising from the Scottish Marine Bill.

Theme	Issue	Suggested desired outcome
Health	Integrated sea lice control	Decreasing reliance on chemical based sea lice control measures and encouraging and incentivizing innovation and trial of non-chemical based control measures.
	Tripartite Working	A review of the TWG's to identify successes

	Group (TWG)	and failures and to communicate widely the purpose and effectiveness of this partnership.
Planning, consents and sites	Improved availability of sites	Plans should also identify places that are not suitable for aquaculture expansion. SEPA advice, the requirements of WFD, management plans for existing and future marine protected areas (including Natura sites and possible new nationally important sites) and requirements of future regional marine plans must be fully considered.
	Fitness for purpose of locational guidelines.	Guidance should also include reducing impact on biodiversity and avoiding conflict with wild salmonid populations.
Containment	Escapes of fish from farms	The existing desired outcome is to minimize escapes. We believe the revised outcome should be to identify and eliminate the continued causes of escapes.
	Implementation of Aquaculture Act	Again escape minimization is desired outcome, however would suggest that this is standard practice. We believe the revised outcome should be to identify and eliminate the continued causes of escapes.
	Sources of escaped fish	Traceability put in place but there is also a need to trace to source, investigate and remediate escape event.
Markets, marketing and image	Developing niche markets	Outcome should include not only top quality but also those producers striving to achieve the highest environmental standards of production.
	Feed sustainability	Although agree with desired outcome the statement is tenuous. There needs to be a definition and an understanding of what feed sustainability means. We would suggest: Ensuring the long-term sustainability of feed to supply the aquaculture industry, which should be achieved by the combination of: <ul style="list-style-type: none"> ❑ The maximized use of by-product (trimmings and offal) fish protein sources from sustainable fisheries. ❑ The use of feed-grade fish independently certified by the Marine Stewardship Council (or equivalent) ❑ Vegetable based substitutes for marine protein and oil (Soya, rape ,palm etc) independently certified by ProTerra or equivalent).

5. What do you think is the priority **issue** for each of the key themes, as described in this document? Please highlight only **one issue per theme**.

5a. Health

Gaining effective control of sea lice in an environmentally acceptable way, incorporating effective management measures implemented through a successful and open TWG and a combination of innovative practices such as bioemitters and the use of cleaner wrasse, should commercial trials prove successful.

5b. Planning, Consents and Sites

Identification of sites that are NOT suitable for aquaculture development should be incorporated as part of regional marine plans in a wider system of Marine Spatial Planning and the draft river basin management plans under the WFD.

5c. Containment

The full understanding of the causes of and the **elimination** of escapes from fish farms.

5d. Markets, Marketing and Image

Ensuring the long-term sustainability of feed to supply the aquaculture industry, which should be achieved by the combination of:

- ❑ The maximized use of by-product (trimmings and offal) fish protein sources from sustainable fisheries.
- ❑ The use of feed-grade fish independently certified by the Marine Stewardship Council (or equivalent)
- ❑ Vegetable based substitutes for marine protein and oil (Soya, rape, palm etc) independently certified by ProTerra (or equivalent).

5e. Finance

Support must be made available to encourage innovation and the development and application of new technologies to deal with existing and emerging challenges, such as cage design in a changing climate, sea lice control and long term sustainability of feed.

6. Progress will be reviewed against the outcomes set for each key theme. Mechanisms for monitoring will be agreed and reviewed by the MWGA as action plans develop.

6a. Please give your suggestions on how progress could be monitored.

We feel that it is important under the reformed MWGA that each of the outcomes under the key themes be progressed by a working group fully reflective of the Scottish Governments Strategic Objectives. The objective of “Greener” is identified as being an important element of many of the desired outcomes and we would like to ensure that these interests are represented when issues are progressed.

We understand that there will be a ” Scottish Aquaculture Management Group” to replace the current MWGA structure, and that it will be at this meeting that progress is monitored and issues discussed. Is it anticipated that a range of stakeholders be represented at this Group or will only the newly formed Aquaculture Forum be multi stakeholder? If the latter is the case then it is essential that the discussion of emerging issues and concerns at the SAMG be fully informed and influenced by the Aquaculture Forum.

7. Please indicate **the main** sector or stakeholder group to which you belong or which you represent as a respondent to this consultation. Select only **one** of the following options:

1. Aquaculture industry
2. Other business/industry
3. Local government/planning
4. Recreation/tourism
5. Public sector/regulatory body
6. Wild fish interests
7. Environmental protection (other than wild fish)
8. Academic/scientific
9. Public health and food safety
10. Community interests
11. Other:

Please specify

**Scottish Environment LINK Marine Task Force
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