



Agenda item 6.2  
For information

**Council**

**CNL(16)45**

***The NGO Perspective***



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### *The NGO Perspective*

**Summary of remarks by Niall Greene (NGO Group/Salmon Watch Ireland) to the Theme-based Special Session: ‘Addressing impacts of salmon farming on wild Atlantic salmon: challenges to, and developments supporting achievement of NASCO’s international goals’ at the Thirty-third Annual Meeting of the Council of the North Atlantic Salmon Conservation Organisation (NASCO) at Bad Neuenahr-Ahrweiler, Germany, 8 June 2016.**

#### **NASCO and salmon farming**

It may be useful to commence by reminding ourselves what NASCO itself has had extensive and insightful things to say over many years about the impacts of salmon farming on wild Atlantic salmon. The Williamsburg Resolution<sup>1</sup> is the main text on the subject and in considering that resolution it is important to remember that it was developed from its original formulation in the Oslo Resolution<sup>2</sup> from 2000 onwards in liaison with the salmon farming industry – it is not just a wish list of those of us concerned with the welfare of wild salmonids.

Williamsburg, *inter alia*, has this to say:

- ‘Each Party, in accordance with the Precautionary Approach, should require the proponent of an activity covered by this Resolution to provide all information necessary to demonstrate that the proposed activity will not have a significant adverse impact on wild salmon stocks or lead to irreversible change’.<sup>3</sup>
- ‘[Each Party shall take measures to]...minimise escapes of farm salmon to a level that is as close as practicable to zero through the development and implementation of action plans as envisaged under the Guidelines on Containment of Farm Salmon (CNL(01)53)’.<sup>4</sup>
- ‘[Each Party shall take measures to]...minimise the risk of disease and parasite transmission between all aquaculture activities, introductions and transfers and wild salmon stocks’.<sup>5</sup>

In addition to the principles set out above Williamsburg goes into some detail on how they should be implemented. The measures in the Annexes in respect of salmon farming cover issues to do with location of farms, the establishment of ‘wild salmon protection areas’, the designation of exclusive ‘aquaculture regions’, separation distance between sites and the disposal of dead and dying fish and infectious material.<sup>6</sup> Notable among these guidelines and measures are those that propose that:

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<sup>1</sup> (2006) Resolution by the Parties to the Convention for the Conservation of Salmon in the North Atlantic Ocean to Minimise Impacts from Aquaculture, Introductions and Transfers and Transgenics on the Wild Salmon Stocks (CNL(06)48), NASCO, Edinburgh.

<sup>2</sup> (1994) Resolution by the Parties to the Convention for the Conservation of Salmon in the North Atlantic Ocean to Minimise Impacts from Aquaculture non the Wild Atlantic Salmon Stocks, NASCO, Edinburgh.

<sup>3</sup> Williamsburg (fn 1) Article 3.

<sup>4</sup> Williamsburg (fn 1) Article 5.

<sup>5</sup> Williamsburg (fn 1) Article 5.

<sup>6</sup> Williamsburg (fn 1) Annex 2, section 1.

- ‘[T]agging or marking or inventory tracking systems will be used to facilitate the identification of farmed salmon in the wild and their separation from wild fish, to determine the source of escapes and to assess the interactions of escaped salmon with wild stocks. These systems could be coupled with river monitoring and recapture systems that allow holding and close examination of returning fish in the rivers’.<sup>7</sup>
- ‘Procedures should be established for the early identification and detection of, and rapid response to, an outbreak of any new disease or parasitic infection likely to affect wild Atlantic salmon’.<sup>8</sup>
- ‘[T]here is a need to strengthen and amend disease controls to minimise disease transfer between aquaculture activities and wild fish’.<sup>9</sup>

Finally, Annex 3 of Williamsburg goes into considerable detail on ‘Guidelines on Containment of Farm Salmon’<sup>10</sup> covering site selection, equipment and structures, operations, verification and record keeping, action plans and reporting and a requirement that ‘each jurisdiction should advise the Liaison Group [of NASCO and salmon farming industry representatives] annually on progress in implementing its action plan(s)’.

In 2009 NASCO adopted further more precise guidelines on sea lice and containment in consultation with the salmon farming industry.<sup>11</sup> This guidance was ‘intended to supplement the Williamsburg resolution and to assist the Parties and jurisdictions’ in managing salmon aquaculture and in preparing IPs and FARs. The ‘International Goals’ of the document were stated to be (a) ‘100% of farms to have effective sea lice management such that there is no increase in sea lice loads or lice-induced mortality of wild salmonids attributable to the farms’ and (b) ‘100% farmed fish to be retained in all production facilities’. Precise courses of action are then set out under each objective which if rigorously applied would make a major impact on reducing the negative effects of salmon farms.

The conclusions of at least two further NASCO-related documents need also to be taken into account:

The report of the conveners of a NINA/NASCO/ICES conference held in Bergen in 2005 stated that ‘The Conveners propose that interactions between farmed and wild salmon need to be virtually eliminated, not just reduced....progress in addressing the sea lice problem has been made....but it is clear that difficulties remain, particularly with regard to protecting wild sea trout populations....The prospect of resistance developing to the available sea lice treatments are a real concern....Progress has been made in reducing escapees but their numbers remain large relative to the wild stocks and they may be irreversibly damaging the stock structure and diversity of the wild Atlantic salmon....If

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<sup>7</sup> Ibid Annex 2, section 1.6.

<sup>8</sup> Ibid Annex 2, section 2.5.

<sup>9</sup> Ibid Annex 2, section 2.6.

<sup>10</sup> The terms of Annex 3 Guidelines on Containments of Farm Salmon was originally adopted as NASCO resolution (CNL(01)53.

<sup>11</sup> (2009) Guidance on Best Management Practices to address impacts of sea lice and escaped farmed salmon on wild salmon stocks (SLG(09)5, NASCO.

physical containment cannot be achieved then the use of sterile salmon may be necessary'.<sup>12</sup>

The rapporteurs of the 2011 NASCO/ICES 'Salmon Summit' in La Rochelle note that 'the following international goals will need to be vigorously pursued: 100% of farms to have effective sea lice management such that there is no increase in sea lice loads or lice-induced mortality of wild salmonids attributable to the farms [and] 100% farmed fish to be retained in all production facilities'.<sup>13</sup>

### **The reality**

It is clear that at a formal level in NASCO there has, over quite a long time, been no lack of awareness of, in particular, sea lice and escapee problems, and no lack of the formulation and adoption of objectives, policies and operating guidelines. The salmon farming industry has been involved in much of this. Why, therefore, has there been so little change at the level of many of those jurisdictions that are party to the NASCO Convention?

The reactions of the salmon farming jurisdictions within NASCO range from openly recognizing that there are sea-lice, escape and disease problems and attempting to find technical and management solutions; to not caring about whether there is a major threat to wild salmonids; to living in a fantasy land where it is believed that all the problems have been solved. In none of these jurisdictions, even the best, has policy or practice come even close to the 'minimise escapes....to zero' and the 'minimise risk of disease and parasite transmission' of Williamsburg.

Why is this the case?

One reason, maybe the dominant one, is that many governments (or at least those parts of government promoting salmon farming) have got themselves into a position where they believe that wild salmon conservation and farmed salmon development cannot be reconciled and that the socio-economic and, therefore, political benefits of farming trump all else. The deep advertising and PR pockets of the salmon farming industry help to bolster the benign image of salmon farming as a form of regional development.

It would be wrong, of course, to deny that salmon farming does bring some benefits, not major ones but some, to remote coastal communities. But as the production of salmon becomes ever more automated and more and more concentrated in the hands of major multinationals, those benefits are increasingly confined to relatively small pockets of highly marginalised employment which is prey to a vast array of market, technical and disease risks. These are not reasons for abandoning salmon farming but they are factors that must be taken into account in comparing the socio-economic impacts of wild and farmed salmon.

Arguments about bio-diversity, the protection of heritage and wild salmon conservation generally, find it hard to get any real traction in this world.

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<sup>12</sup> Hansen, L P, Windsor M (2006) Interactions between aquaculture and wild stocks of Atlantic salmon and other diadromous fish species: science and management, challenges and solutions, NINA Special Report 34.

<sup>13</sup> Windsor, M L, Hutchinson, P, Hansen, L P, Reddin, D G (2012) Atlantic salmon at sea: Findings from recent research and their implications for management, NASCO.

In most of our jurisdictions those of us with a wild salmon interest, both inside and outside government, are fighting with at least one arm tied behind our backs. The system of licensing and regulation of salmon farming, such as it is, largely sidelines wild salmon advocates whether governmental or private. For those of us who are members of the European Union the European Commission may offer a route to a more objective assessment of the competing interests. The NGO Group notes that Salmon and Trout Conservation (both UK and Scotland) have recently lodged a complaint<sup>14</sup> with the Commission about the Scottish government's failure to address the impacts of sea lice produced by salmon farms. We look forward with interest to seeing how this develops.

### **What is to be done?**

The NGO Group is not necessarily opposed in principle to salmon farming but it is vigorously opposed to the manner in which it is currently conducted. Something approaching 2.0 million tonnes of farmed salmon are produced in the North Atlantic each year and, however much we might wish it, that is not going to be dismantled overnight in a world where wild fish food stocks are rapidly declining.

What we do want is:

- A coherent plan by each of the Parties to transition salmon farming to closed containment systems. We acknowledge that the technology is still evolving and that the business and financing models are different from open cage farming. However, even if there were no problems associated with what open cages *export* to the environment, there are problems of diseases and parasites that the cages *import* and which in an environment of rising temperatures demand solutions that closed containment can offer to the industry itself. It is interesting that some large farmers in Norway seem to be recognizing this and are moving in towards closed containment – but with little sign of them doing likewise in the other jurisdictions in which many of them operate.
- A regime of enforced hard law must be initiated to govern the location, operation and regulation of fish farms. We recognize that on the one hand we cannot dismantle all current farms overnight but on the other hand we cannot live with the extremely lax arrangements that currently exist in most of our jurisdictions. What we are asking for here is no more than the style of law which applies to terrestrial farming in most countries and not one based, as it is in many salmon farming countries, on soft law non-justiciable protocols, guidelines and calls for the adoption of best practice. Just because salmon farming takes place beneath the waves (and ‘out of sight, out of mind’) is no justification for the absence of effective regulation.
- If Parties are in any doubt as to what the legal regime should incorporate then they will find it specified in some detail in a document to which I have already referred and which they have themselves already approved – ‘Guidance on best management practices to address impacts of sea lice and escaped farmed salmon in wild salmon stocks’ – NASCO document SLG(09)5.

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<sup>14</sup> Complaint to the Commission of the European Communities concerning the failure of the United Kingdom (UK) to draw up and take appropriate measures pursuant to the Marine Strategy Framework Directive in relation to the impact of sea lice emanating from Scottish marine salmon farms on wild Atlantic salmon and sea trout, Salmon and Trout Conservation (UK and Scotland), May 2016.

- Wild salmon interests, official and private, need to be given a direct and legitimate role in the licencing and regulation processes, which must include statutory protection of wild salmonids and not just the welfare of farmed fish. As an absolute minimum, the NGOs call on all parties to make mandatory:
  - ❖ Complete transparency of sea lice numbers per farmed fish on an individual farm basis, together with a maximum allowable number of lice per fish, with particular attention paid to setting limits during the period when wild salmonid smolts enter the marine environment;
  - ❖ Compulsory culling/early harvest of farmed fish if lice levels exceed the agreed trigger level.
- The Williamsburg Resolution needs to be revisited in the light of scientific, technical and managerial developments since it was adopted, so that it can be a more influential guide to the framing of law and the more prescriptive measures set out in the 2009 ‘Guidance on Best Management Practices’<sup>15</sup> incorporated in it. Issues arising from climate change, the more pervasive incidence of certain diseases, treatment resistance, the identification of escaped fish, etc need to be addressed.

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<sup>15</sup> See fn 11