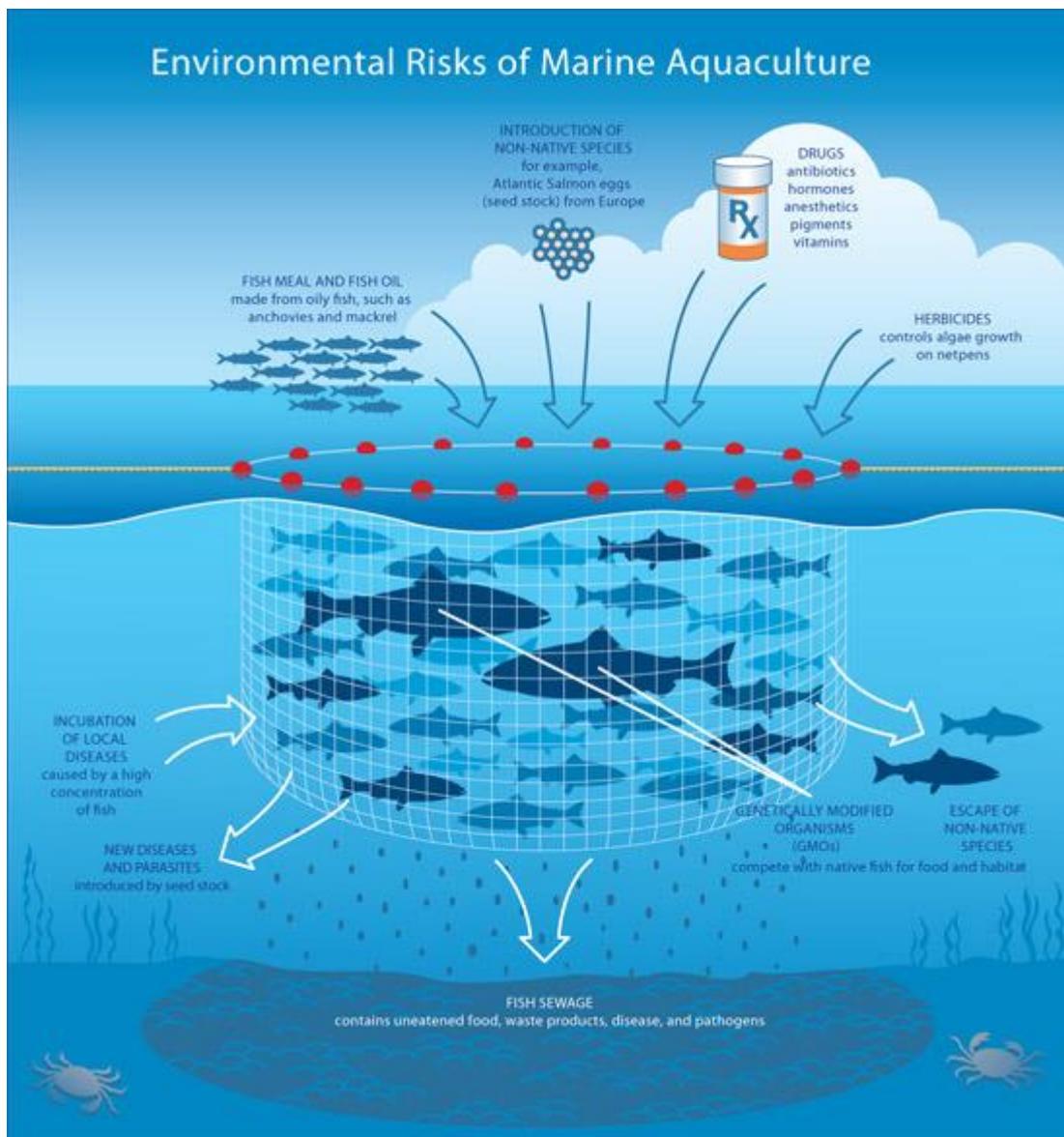




Submission of the Environmental Pillar on

The Draft National Strategic Plan for Sustainable Aquaculture Development





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1. Introduction

This submission sets out views of members of the Environment Pillar regarding sustainable aquaculture which may be helpful in:

- Deciding on whether the multiannual strategic aquaculture plan as now presented should be adopted as is, or should be amended.
 - Considering how we are to develop our national aquaculture sector to high environmental quality while simultaneously achieving environmental improvements required under the marine and nature law, and at the same time maximising employment.
 - Considering legislation and law enforcement in this sector.
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1.1. Context

Ireland is blessed with a >7000 km long coast, >9 times more water than land area and an amazing diversity of marine habitats and species - due to different exposures, rock formations, water temperatures, salinities and depths. Sadly the quality of these diverse habitats is not what it should be, especially in the intertidal and inshore areas. There is a legal obligation and policy at EU and national level to address this.

Our challenge is to maintain and develop a good resilient mix of complementary uses of the coastal zone and sea and improve quality of that environment at the same time.

The marine environment is a fragile ecosystem where irreversible changes can occur if practices employed are not environmentally sensitive. Aquaculture can have negative impacts on the marine environment, including through the accumulation of waste (waste feed and faecal pellets) under fish farm cages, changes in macrofauna benthic communities, alteration of the nutrient balance within the system, reduction in gene pool strength due to escaping aquaculture stock mating with wild populations, and transmission of diseases to wild stocks. In areas where there is a large amount of aquaculture, this is likely to lead to environmental degradation as well as very poor aquaculture growth rates. Therefore, in bays where too many aquaculture projects are operating, aquaculture is likely to have detrimental effects on the yields of the different aquaculture businesses, meaning that both the marine environment as well as the aquaculture industry will suffer from over stocking. Bad aquaculture planning and management can also have negative impacts on important recreational industries such as angling and ecotourism.



1.2. Environmental Impact Assessments (EIA)

1.2.1. EIA should be carried out to assess the in-combination effects of all aquaculture activities within each bay, rather than assessing licences on an individual basis. Annex III of EIA Directive 2011/92/EU refers to the characteristics of projects that must be considered for an EIA. Paragraph 1(b) of Annex III refers to the cumulation with other projects, indicating that cumulative impacts of aquaculture operations are an important factor for EIA purposes. EIAs should also take into account the potential impact of the aquaculture facility over its entire lifecycle, including the construction, operation and decommissioning phases of the facility.

1.2.2. Further, whole bay management plans ought to be developed for bays supporting aquaculture, to ensure the level of aquaculture does not exceed the carrying capacity of the bay. These management plans should set out the need for rigorous and independently informed cumulative impact assessment as part of the EIA consent process for aquaculture, together with an independent and regular monitoring system. In addition, in areas where there are a significant number of activities and anthropogenic demands and influences on a coastal zone, a Strategic Environmental Assessment should also be carried out.

1.3. Aquaculture as a food resource

Finfish aquaculture is sometimes referred to as being a key component in meeting future seafood demand. However, finfish farms for carnivorous fish, such as salmon farms, require considerable amounts of fishmeal and oil by way of feed, which is mainly produced from small, oil-rich pelagic fish. Thus, this type of aquaculture does not reduce our dependence on wild fisheries or increase protein and oil availability for humans. This should be taken into account during the EIA process.



2. Some key considerations

There are several principles which, if appropriately applied, would help to reduce the negative impacts of aquaculture activities:

2.1. Precautionary principle

The precautionary principle is an approach to human activity that attempts to minimise potential damage to the environment. In the present context, the precautionary principle is particularly relevant with regard to the lack of scientific certainty, in some cases, regarding the cumulative impacts of aquaculture. The precautionary principle should be applied in Ireland to ensure that an aquaculture project is not permitted unless adverse impacts of the project, in combination with other activities in the area, can be excluded. The onus should be on aquaculture developers to demonstrate beyond reasonable scientific doubt that there will not be such adverse impacts.

2.2. Ecosystem-based management

Aquaculture activities should be considered at an ecosystem level. "An ecosystem approach for aquaculture (EAA)¹ is a strategy for the integration of the activity within the wider ecosystem in such a way that it promotes sustainable development, equity, and resilience of interlinked social and ecological systems." An ecosystem-based approach should ensure that the methods used to assess and manage marine living resources are geared towards maintaining and monitoring biodiversity, productivity, and the physical and chemical properties of an ecosystem.

2.3. Cumulative impacts

The cumulative impacts of the multiple environmental pressures within a bay should be assessed in conjunction – i.e. the cumulative impacts from one sector should not be viewed in isolation from other environmental impacts.

2.4. Carrying capacity

The aquaculture within a bay should not exceed the carrying capacity of that area. "Carrying capacity" is a term used to describe the maximum average number of organisms that can be sustained so that they can survive and reproduce in the long term (i.e. without degrading the surrounding environment). The extent of

¹ <http://www.ecasa.org.uk/Documents/ECASA.May10.1510.pdf>



aquaculture should not exceed what an area can naturally sustain and assimilate to ensure no environmental degradation.

2.5. Invasive species

Aquaculture should not put the environment at risk from invasive species; instead native species should preferentially be cultivated. In this regard, of particular concern is the fast growing Gigas (Pacific) oyster (*Crassostrea gigas*), introduced to Ireland from the Pacific, and now the main cultivated oyster species here. The Pacific oyster was originally thought to be of no threat to European wildlife as it was believed it would not spawn in our cold waters. However, this proved incorrect and the Pacific oyster is now established as an invasive alien species in Lough Swilly, Lough Foyle and Strangford Lough. Despite this, the Pacific oyster continues to be used by aquaculture businesses in Ireland, and it is now establishing “self-sustaining feral populations” here.

2.6. Aquaculture operations must be appropriately sited

Aquaculture operations should be appropriately sited to ensure minimal impacts. Locations should be selected not only on the basis of growing conditions, availability and accessibility, but also on the basis of environmental impacts. For example, the disturbance impacts of noise on foraging wild fauna and the impact of Sea Lice on migrating wild salmon. The EIA process should act as a catalyst for better research into the suitability of locations for aquaculture activities within the marine environment. The process should also ensure the collection of baseline information which will help in terms of measuring and assessing any changes over time.

2.7. Considerations under the Habitats and Birds Directives

In addition to the need to consider any potential impacts of aquaculture on Natura 2000 sites (i.e. SACs under the Habitats Directive and SPAs under the Birds Directive), the aquaculture licensing process and subsequent monitoring processes should take account of the continuing legal obligation to avoid, in such sites, the deterioration of natural habitats and the habitats of species as well as disturbance of the species for which the areas have been designated, in so far as such disturbance could be significant. Further, in respect of species listed on Annex IV to the Habitats Directive - including otters and cetaceans, for example – it is prohibited, without a licence, to (amongst other things): deliberately capture or kill any specimen of these species; deliberately disturb these species, particularly during the period of breeding, rearing, hibernation and migration; or damage or destroy a breeding site or resting place of these animals. “Deliberately” has been interpreted very broadly by the European Court of Justice for these purposes, to



include proceeding having accepted the possibility of a prohibited act being committed. Thus, it would be an offence to, for example, capture or kill an otter in an aquaculture facility (e.g. through entanglement and drowning) having accepted the possibility that this might happen.

As a more general point, in 2007 Ireland was found in breach of EU law by the European Court of Justice for failing to ensure that aquaculture projects likely to have a significant effect on Natura 2000 sites, either individually or in combination with other projects, are made subject to an appropriate prior assessment. This is a major concern which remains to be fully addressed.



3. Vision:

3.1. Our aquaculture is to be based on sustainably sourced indigenous local species

and fit as one among many legitimate job creating economic activities and potentially sustainable uses of land and water in Ireland.

3.2. Preferential access to license and grants for aquaculture is a useful tool if it is transparent and helps **operators** with most local knowledge, good environmental track record, training on environmental impacts and **operations** with **lowest ongoing impact and accident risk**.

3.3. **Integration:** Development in aquaculture, nature protection, research and monitoring, agriculture, tourism and wild fisheries are all well integrated to achieve several sustainable development, job and information gathering goals at once under a Coastal Zone Management (CZM) frame.

3.4. **Highest quality environment and products is our foundation and marketing tool:**

As many inshore waters are no longer at good environmental status there is a double commitment when considering sea and coastal zone use to no deterioration of our marine environment and better protection, with targeted restoration where required – e.g. in shellfish waters of B quality, wild mussel stocks, native salmon stocks in individual river systems ... This will require an immediate review of harvesting from the wild for aquaculture like mussel seed, the types of aquaculture, intensity and locations with a precautionary approach applied where there isn't enough information.

3.5. **Full Aarhus Convention Compliance:** Timely access to information, meaningful informed public participation and access to justice on decisions related to all aspects of aquaculture in our commons.

3.6. **Legal Frame:** Coastal users, including those in aquaculture, need a clear support frame: that is Coastal Zone Management (CZM), an adequate network of marine protected areas (MPAs), a top information gathering and data management system and adequate fair law and law enforcement. The Environmental Pillar has adopted



a policy on MPAs (see appendix below). MPAs can be proposed by local stakeholders and their reasoned proposal must be considered and either confirmed or if delayed or rejected the reasons given.

3.7. In our vision the first multiannual strategic aquaculture plan should focus on three national goals:

3.7.1. To plan and support the restoration of wild harvest and aquaculture species like native oyster and mussel, clams and lobster stocks.

3.7.2. To support reaching and maintaining high water and habitat standards as required under nature, water and marine law. That includes a wide range of practical actions like removal of defunct oyster trestles, cages, marine litter, local training for monitoring and reporting.

3.7.3. To maintain and create jobs and income, especially along the coastal fringe and inland

3.8. Spending under the EMFF needs to be carefully planned out in order to facilitate these goals being achieved.

3.9. Additionally there are 2 international roles:

3.9.1. To resolve cross-border lough protection, use and planning issues and actively widen the scope of cross-border cooperation on nature protection. The NI native oyster action plan could be an all-Ireland one. Recent illegal aquaculture problems which have grown to bizarre proportions and are wrecking the seafloor must be halted, the habitats restored and a mechanism of licensing put into place urgently.

3.9.2. To comply with EU and other international marine and nature policy.



4. Indicators of success

Indicators of success of the sector in the life of the first plan include:

- 4.1.** Compliance with MSFD, WFD and Nature law in the host environment, (eg wild fish and shellfish at favourable conservation status, marine litter caused by aquaculture operations below certain thresholds)
- 4.2.** Integration – number of farmers with trial sea vegetable aquaculture which also supports coastal wetland restoration and climate change adaptation.
- 4.3.** Compliance with the Aarhus Convention. Indicators to measure, in the lifetime of our first multiannual strategic aquaculture plan, would be public access to information, participation and access to justice in full compliance with the Aarhus Convention.
- 4.4.** Number of local jobs, work skill level and income (direct in the industry and in linked areas)



5. The main differences between our vision and that of the BIM drafted plan can be summed up as follows:

5.1. Risks

The BIM plan has a very heavy reliance on genetically different, often imported species to be placed in our open waters – Norwegian salmon, Japanese oysters, Manilla clams, and ‘novel species’. We estimate that around 90% of the aquaculture production, in terms of tonnage and number of aquaculture sites, is proposed to be in this risk area, where our record shows disease, invasive alien species and unwanted genetic mixes have created very serious problems for the environment, existing economic sectors and the social fabric of remote rural areas. Also the BIM focus is very much on doubling output which is likely to carry higher risks than a focus on more jobs and environmental returns.

5.2. Public gain:

The Environmental Pillar sees informed public participation in environmental management and protection as a fundamental element of aquaculture, which as planned is a private economic use of our commons. From our experience and that of the many fishermen and local shore users who contact us for help, the present aquaculture application, appeals, monitoring and law enforcement process is woefully inadequate on Aarhus compliance. The BIM drafted plan doesn’t acknowledge that. It is written as though all that is needed is a little bit of gold plating. The larger and more distant the owner – Canadian seaweed farm, Norwegian salmon growers, Dutch mussel industry interests – the more likely that we will find a few doing economically very well, while most others included in the job figures are local, or cheap imported labour lucky to be allowed to work for them. Is that what we want?

5.3. European Court C-418-04

The proposals in chapter 8 of the draft supposedly to address c-418/04 and drawing on the POM - are insufficient to address both legal compliance and our environmental concerns. While the focus on AA is welcome – it is both inadequate and fails to integrate a vision or proposal which is compliant with the broad range of relevant environmental law pertaining to this area.

Leverage of EU funds from the EMFF must be first prioritised on ensuring Ireland’s compliance with EU law and a programme which is advanced which supports



Ireland's ongoing breach of EU law will not be acceptable. The words of the CJEU in c-494/01 which reinforced the views of the AG in that case might be quoted:

“ 126 As the Advocate General has observed in point 75 of his Opinion, where a Member State has been failing for some 20 years to fulfil its obligation to achieve the result prescribed in Article 9 of the Directive, it is incumbent upon it to do everything to remedy that failure as rapidly as possible.”

It is now over 7 years since the judgement in c-418/04 – and the failures at issue in that case pre-date the actual judgement by some years. Therefore Ireland needs to exercise similar urgency to resolving properly this legacy of non-compliance, as urged by the Court in c-494/01. In short Ireland cannot propose to or indeed arguably avail of EU funds in the absence of a credible approach to such resolution.

There is a significant funding implications for this outstanding compliance requirement – given that the funding for the MNASP derives in the main from the EMFF OP – highlight the necessity of revisiting the EMFF OP in light of the MNASP – and the SEA's for both – and so resolve the issue of consistency which Ireland's approach to the failure to provide for this MNASP as an ex ante conditionality and pre-requisite to the OP. Such a re-visitation is also necessary in order to facilitate proper compliance with the public participations requirements these plans including the obligation for “fairness” emphasised in Article 7 of the Aarhus Convention.

There is a need to leverage the EMFF OP as a critical opportunity to both facilitate the proper assessment of legacy sites, to facilitate doing away with the problematic S19A of the fisheries act interim measure, which is problematic for the industry and the environmental sector, and to provide practical support to eNGOs and prescribed bodies in being able to consult effectively on a significant backlog volume of sites. There is also a need to comply with the conservation and proactive management obligations of Articles 6(1) and 6(2) for Natura Sites, and so provide as a consequence a sounder base on which any proposal for co-location of aquaculture projects then might be evaluated. Infringement proceedings [ref 2015/2006] are now being advanced against Ireland re failure to comply with Habitats Art 6(1



6. Specific points in the draft plan

6.1. Context and Timing

We welcome the reform of the CFP and the new European approach of multiannual strategic aquaculture plans with guidance and funding for Member states. However we wish there had been a longer time line and real public participation in drafting the first Irish plan so that alternative visions could be discussed and considered with adequate time.

We are also very concerned that essential elements are all still missing, such as the new Foreshore Act which should include: CZM and spatial planning; designation of Marine Protected Areas under the MSFD; and compliance with the ECJ in the Birds Case. So it will be difficult for all.

6.2. Aarhus

This plan now on the table is in our opinion not Aarhus compliant especially regarding public participation because:

6.2.1. The Environmental Pillar was not involved in the drafting process or given access to drafts even though this plan was produced over many years. It is now on the table 14 months after the deadline by when Member States were to have delivered their final plan to Brussels.

6.2.2. The recent Seafood Operational Programme consultation included spending on aquaculture and closed weeks before we had any sight of this strategic multiannual aquaculture plan which is to inform the spending. This needs to be re-opened for review including full public participation.

6.2.3. An Taisce are the only statutory Environmental NGO consultee for a range of issues including aquaculture licencing. They receive no funding in order to fulfil this role which could be a full time job with the increases proposed. Other NGOs who are not statutory consultees are finding it virtually impossible to get early notice of licence applications as they are not on the web, no local site notice and often the local papers where an application is advertised is not the one read locally – eg recent L Swilly case.

6.2.4. Regarding access to justice under Aarhus

We still have an estimated > 500 aquaculture areas being run on lapsed licenses some have been in this limbo for over a decade. Neither a citizen nor the lapsed license holder has any democratic way of influencing the timing of



the Minister's decision to refuse or grant an extension to that license, as the Minister hasn't commenced section 13 of the Fisheries Act which sets a time limit for decision making. If lapsed license conditions are not complied with, citizens can't do anything about it. An aquaculture operator who really tries his best and runs a low impact well sited operation may not get that renewal ahead of a totally new applicant - as there is no prioritising on good track record or any other transparent way.

6.2.5. Multiple Licenses. The Minister regularly grants multiple licenses for one bay area in one newspaper advert, yet citizens are required to produce individual appeals to the Aquaculture Licensing Appeals Board (ALAB) with individual fees for each license.

6.2.6. Secret Advisory Committee. There is an advisory committee to help the minister decide on applications which sits without names or minutes behind closed doors. One repeat controversial advice is to grant licenses where each application is treated on its own as though no other operation existed. This then leads to the conclusion that no EIS is needed as there won't be an impact from the one applicant. In other words, cumulative impacts are not considered, despite the legal requirement to do so.



7. Addressing these fundamental short comings

- 7.1. A reopening of the Seafood OP including a public participation process to allow spending to be tweaked to match the final aquaculture plan when adopted
- 7.2. For the Dail to review annual progress reports in reaching plan objectives and a mid-term review with full public participation.
- 7.3. For the Dail to reform the undemocratic aquaculture licensing and enforcement system



8. Finfish farming is the most controversial aspect of the Draft National Strategic Plan for Sustainable Aquaculture Development

8.1. Finfish farming in Ireland mainly consists of salmon farming.

There are a number of negative impacts associated with this type of aquaculture. Some of these impacts could be addressed by moving away from open sea cages towards closed containment systems. As the David Suzuki Foundation comments, “an increasing body of evidence shows that land-based, closed-containment aquaculture is an environmentally, technically and economically viable option to net-pen aquaculture....It's generally accepted that closed containment aquaculture has the ability to drastically reduce environmental impacts on the marine environment.”

8.2. Nutrient Overload

One of the main issues in finfish aquaculture relates to the output of uneaten fish food and fish faecal deposits entering the water body. This causes a decrease in available oxygen, leading to negative changes in the benthic community on the sea floor. In many cases, the output far exceeds the normal carrying capacity of these water bodies. It is therefore crucial that regular monitoring of the water body takes place prior to and after an aquaculture license is granted. This would help to ensure that negative environmental consequences are identified and addressed quickly. A recent data release by the Scottish Environmental Protection Agency (SEPA) revealed that assessments of the seabed conditions under and around fish farms in Scotland found that 44% were “unsatisfactory” (i.e. beyond the assimilative capacity of the local environment), 21% were “borderline” (i.e. close to having an unsustainable impact), while only 34% were found to be “satisfactory”.

8.3. Fish Food

Marine finfish aquaculture is heavily dependent on wild fish for use as feed, which serves to increase fishing pressure on marine fish stocks. Salmon are carnivores and pellets made from fishmeal and fish oil resources are the most commonly used food for such aquaculture. The fish used in this feed are caught from the wild and it is estimated that for each 1 kg of farmed salmon, 4 kg of wild caught fish is needed. At a time when a huge number of the world's fisheries are overfished, it is important to ensure that the fish going into salmon food is sustainably caught by responsible operators. As salmon farming increases, there will be further pressure on these wild populations.



8.4. Disease

A further problem is the introduction and spread of disease and parasites as a consequence of aquaculture. For example, one of the most contentious issues in relation to the farming of salmon is the link between the production of sea lice on fish farms and the decline in wild sea-trout and salmon populations in the west of Ireland (and elsewhere). (It is worth noting that Atlantic salmon is an Annex II protected species under the Habitats Directive.) Research investigating this issue has been carried out in Ireland, Scotland and elsewhere. The findings of several studies suggest that sea lice from salmon farms play a major role in the collapse of wild sea-trout populations and are implicated in declines in salmon numbers. Dr Mark Costello of the Institute of Marine Science, University of Auckland, and a Technical Consultant to Ireland's Aquaculture Licences Appeals Board in its early years, recently intervened in this debate, e-mailing Minister Coveney to express his surprise "at some of the recent incorrect information in the media about whether sea lice from salmon farms can cause problems on wild fish". As Dr Costello makes clear, sea lice "have proven difficult to control on farms, especially large farms because it is difficult to treat all fish simultaneously against the parasite"; furthermore, lice emanating from farms have, Dr Costello reports, "been linked to epizootics (mass fatal parasite infestations) on wild salmonids (salmon, trout and their relatives) in Ireland, Scotland, Norway and Canada". Such reflections clearly have serious implications for large aquaculture proposals such as the enormous salmon farm proposed for Galway bay.

8.5. Treatment Resistant Sea Lice

Another potential problem is the increasing resistance of sea lice to current treatments, which results in fish farmers using higher doses of chemicals to treat for sea lice. Data released by SEPA showed that there was a 110% increase in the amounts of chemicals used to treat sea lice due to increasing resistance. However, there was only a 22% increase in the level of salmon production in the same period. The chemicals used can be highly toxic to marine species such as lobsters and prawns.

8.6. Escapees

The impact of escaped farmed salmon on the genetic integrity of wild stocks also poses a potential threat. A 37-year study of the influence of farmed fish on wild populations in the Burrishoole River catchment in Co. Mayo found that 'hybrid'



Atlantic salmon showed significantly reduced survival capacity compared with wild fish.

9. Specific Issues in the Plan regarding Finfish Farms

9.1. Lack of analysis of wild stocks.

There is little or no information in the SEA/AA regarding the impact finfish farms can have on wild stocks of salmonids. For example in Chapter 3 of the SEA “Sectoral Analysis of the impact” there is no mention whether perceived to be great or small, on wild salmonids (salmon and sea trout). Nor is there *any* mention of the impact sea lice may have on wild stocks, and therefore *why* it is so important to regularly monitor sea lice levels on farms. The purpose of the SEA is to investigate impacts on the “wider ecosystem”, not the stock of the farm and any associated economic issues. This skewed perspective is clearly illustrated in the Baseline Environment Section (p.122): “Diseases and parasites pose a threat to aquaculture on a number of levels. Animal health and welfare is seriously affected by any disease outbreak or parasite infestation. Most recently Amoebic Gill Disease (h) has emerged as a serious health challenge to Irish salmon farms.” This is undoubtedly all true but it does not explain the Baseline Environment, which is the purpose of the section. It explains how things in the environment can be a problem for the industry. It needs to explain the baseline condition of the wild stocks and their current environment. The SEA should then discuss the potential impacts of aquaculture on this environment, and how best any threats can be mitigated. This lack of acknowledgement of the baseline environment and the pressures that may be put upon it is ignored in the Plan. The fundamental aim of the exercise is therefore lost.

9.2. Lack of consultation and participation of relevant salmon and sea trout groups, state agency and NGOs.

There has been little/no opportunity to hear the concerns of those with an interest in wild salmon/sea trout throughout the process. Public participation is a fundamental principle of SEA/AA. Furthermore Inland Fisheries Ireland, the state agency with statutory responsibility for the conservation of wild salmonids appear to have had minimal input at best, appearing at an initial steering group and invited to make a submission to the SEA. They raised 21 points (in the Annex of the SEA), two of which were acknowledged with an action in the report. They also raised the key issues of salmon migratory routes being a factor in the location of salmon farms (steering group meeting). This is the only mention of vital location criteria. When



there is no scientific agreement on the impact of salmon farms on these wild stocks we immediately demand the legally binding Precautionary Principle to be applied, and therefore a buffer zone of 25kms from any salmonid bay/estuary should be enforced. This is standard European policy procedure. Neither have any organisations with a particular concern for the impact of salmon farming on wild salmonids been involved in the process. No Salmon Watch Ireland, No Save Bantry Bay, No Save the Swilly, no Galway Bay groups, no salmon conservation groups. It would appear from the SEA/AA and the National Strategic Plan that there is no opposition to aquaculture in Ireland, and no concerns regarding its impact on the environment. It is the duty of the SEA and AA to at least acknowledge the concerns that people have and then address them accordingly. There would appear to be considerable national opposition to some of the recent plans for larger farms in Galway Bay and along the western seaboard: would it not be useful to address these concerns and at least try to explain how/why those fears are unfounded? The first step in this process would be to engage with stakeholders from the outset. This is missing from the entire SEA/AA process, and is not mentioned at all the National Strategic Plan.

9.3. “Knowledge, Innovation & Technology”

SEA Chapter 5 of the Plan on Knowledge, Innovation & Technology makes reference to Research into Disease and Parasites. Incredibly again there is no mention of wild fish stocks and the impact farms may have on wild salmonids. As previously mentioned even if there is a differing opinion on the science there must be an acknowledgement of some risk of sea lice infection on wild stocks thanks to the concentration of salmon population in a fish farm. The cumulative effect of farms on these wild stocks in particular must be addressed at SEA level, and therefore should be part of the Plan.

9.4. Sea Trout

There is no mention of sea trout (*salmo trutta*) throughout the three reports. This we find extraordinary, especially when you consider the untimely collapse of the great sea trout population in Connemara in the 1980's. It is still prohibited to keep a sea trout between Galway Bay and Clew Bay such is the scale of the collapse in stocks. There is still ongoing debate about the cause of this collapse, with the aquaculture industry still strongly denying any role. However irrespective of your view on the exact cause of the collapse of sea trout we should be actively encouraging the revival of the species and vigorously protecting their habitat, to



ensure such a collapse never occurs again. Sea trout are an extremely important native species, who spend a portion of their life in freshwater and saltwater. Their saltwater phase is spent in the inshore area of the coast, unlike salmon who migrate to the northern waters of the Atlantic. They are therefore at risk of any change to the environment in the inshore area, where the current aquaculture industry is located at sea. The potential for growth of Sea Trout farms “by utilising inshore sea sites that are more suitable for on-growing trout than salmon” (National Plan, Chapter 4, p.58) must therefore take into account both wild salmon migration routes and sea trout habitats. Please note our reservation on the impact of farms on wild trout habitats and the lack of analysis in the SEA/AA/Plan. Does this also infer that some of these inshore farms are not suitable for growing salmon?

9.5. Offshore must be exactly that: offshore!

It is not a “deep water” site in inshore water close to the coast. The 12 mile baseline is defined as the low-water line around Ireland. Offshore is only beyond this baseline and not within it. There is no mention of what “offshore” is in either the SEA or AA. Neither is there a definition in the Plan. When referring to offshore developments they will be beyond the baseline, in offshore water. All offshore sites referred to in the Plan and any future developments will therefore be beyond the 12 mile baseline.

9.6. Lack of Enforcement

The current enforcement of the law is viewed as “soft” at best. As we are relying on protocols for sea lice management, fallowing, benthic effects, and escapes, these issues are not adequately dealt with. For the most recent example of this please see Appendix 2 re overstocking for **3 years** at Inisfarnard and Deenish sites. We suggest these protocols are converted into statutory instruments and statutory regulations, such as every terrestrial farmer in the country has to abide by. There is no mention of these protocols or suggestion of an existing problem with compliance in the SEA/AA/Aqua Plan. It may be difficult for an agency connected with the development of the aquaculture industry therefore to enforce such issues. Perhaps it would be of benefit therefore to suggest a body separate from aquaculture development for enforcement – the Sea Fisheries Protection Authority perhaps (although it is acknowledged they are already asked to carry out a number of responsibilities in addition to their core responsibilities and may not have capacity)? Perhaps this could fall under the remit of IFI.



9.7. No Gap Analysis

Section 6 of SEA – no reference to IFI plans, therefore no gap analysis between two sectors. IFI could also have provided insight into other national/international projects concerning wild stocks (for example the Celtic Sea Trout Project) but they don't appear and therefore no gap analysis is available.

9.8. Closed containment

Closed containment is the future for finfish farming. There is very brief mention of this in the Plan, but no details of where/size/impact/potential problems/potential gain. We feel this system requires much more investigation and investment, as it is seen as the most environmental and ecologically sound and therefore sustainable.

9.9. Organic Salmon?

According to the report the US and Asian markets don't recognise the Organic label for salmon. Why is this? We also have difficulty with organic salmon labelling – how consuming so much fishmeal to produce less farmed fish is considered organic, the use of regular veterinary treatments, the impact on environment from excrement & feed, the impact on wild stocks. None of these conform to organic principles

9.10. Feeding the World?

The Executive Summary justified the expansion of aquaculture production due to a very real and honourable need to feed the growing global population, many of whom are now born into poverty. Ireland however is actively promoting high end, low-volume niche output. It is also an inefficient conversion of one form of fish protein and oils into another. These two don't quite match.

9.11. SWOT Analysis

Chapter 2 of the National Plan is a SWOT analysis of the Aquaculture Industry. There are a number of points to make:

- 9.11.1.** Sheltered bays for aquaculture production are only suitable for finfish aquaculture if they do not have a wild salmonid population. Otherwise this should be restricted to shellfish aquaculture.
- 9.11.2.** “Complex Environmental requirements leading to delays in the licencing process” is a weakness. We do not accept this. The weakness is with the industry who do not appear to understand or appreciate the importance of the Environmental requirements, or the complexity and sensitivity of the



environment in which it operates. The weakness should be “lack of training on Environmental Issues throughout the industry has led to delays in the licencing process”. Lack of Environmental training, particularly for those farms in SAC’s/SPA’s is a major weakness of the industry and one we feel should be immediately addressed.

9.11.3. Spatial restrictions due to Natura 2000 sites should not be viewed as a Threat to the industry. This is legally binding EU Legislation, designed to protect the environment which we all, including aquaculture, operate and live in. It is about trying to provide a future for mankind. Again this may be regarded as a weakness of an industry that does not understand the significance and importance of the environment and trying to provide for a sustainable future. Environmental training of the industry is again seen as important here



This submission was developed using the Environmental Pillar processes but is not necessarily the policy of each member group in the Pillar.

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Appendix 1

Environmental Pillar Outline Policy Regarding the Setting up of a Coherent Network of Marine Protected Areas.

June 2014

The Environment Pillar is calling for urgent action to protect and restore marine habitats and biota including fish stocks around Ireland. The Environmental Pillar welcomes the Marine Strategy Framework Directive as one of the key means to achieve this and urges that full timely implementation is now prioritised by government and stakeholders.

The Directive provides for a 'coherent network of Marine Protected Areas' (MPAs) to be set up - from regional sea (here OSPAR region), over All Ireland, to national and local level. The European Maritime and Fisheries Fund (EMFF) allows funding to be allocated towards this goal. Government and agencies need to:

1. **Create better fora** to facilitate structured dialogue on MPAs, designations, management, monitoring and review. These fora for stakeholders, policy makers, enforcement agencies and environmental groups need to be appropriate for each MPA network level from international to local and linked.
2. **Establish a bottom up mechanism for designation of inshore MPAs.** Inshore fishermen and other stakeholders need an easily accessible process they can use to put their proposals for MPAs and management measures forward and have them dealt with in a timely fashion. Proposals need to be considered on merit and given reasoned legally enforceable approval, or rejected within set time. An appeal mechanism must be available. Where insufficient information is an issue, the decision may be for further research, with access to funds set out and/or for a pilot MPA.
3. **Step up research to identify, monitor and understand (potential) MPAs** so that a coherent network can be established forthwith. In Ireland with its complex long coast, knowledgeable citizens should be an integral part of inshore MPA research and monitoring, with adequate support.



4. **Draft and/or implement existing MPA management plans.** All current MPAs should have some management by 2015 – at least in regard to protection of known fragile habitats and species, including sea grass beds, biogenic reefs, known fish and shellfish spawning and nursery areas. The piloting of management measures and their enforcement, needs to be well recorded and publicized with adequate reporting and feedback mechanisms to learn, improve and adapt, as both our ecosystems and uses are changing.

 5. **Promote ocean literacy.** We need to raise public awareness and first-hand experience of marine ecosystems, as well as understanding of risks and pressures associated with different uses. The goal is to have a high level of informed public participation in decision making and consequently buy in to actions which lead to 'Good Environmental Status' of our seas.
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Appendix 2

Friends of the Irish Environment Objection to Certification of Marine Harvest in County Cork

June 2015

Jean Ragg

Fisheries & Aquaculture Administrator

SAI Global Assurance Services / Global Trust

Quayside Business Park, Mill Street

Dundalk, County Louth, IRELAND

6 July 2015

jean.ragg@saiglobal.com

Re: Certification under Aquaculture Stewardship Council Salmon Standard for Marine Harvest in Ireland

Objection: Marine Harvest salmon farm at Innishfarnard, Castletownbere, County Cork [and Deenish County Kerry]

And: Observer Request for Site Visit

Dear Ms Ragg;

We note that as part of the Aquaculture Stewardship Council process, potential stakeholders are invited to participate and forward submissions to the Certification Body in relation to the Certification of Marine Harvest salmon farm at Innishfarnard, Castletownbere, County Cork.

We accordingly attach our recent Report on IRISH MARINE FISH FARMS INSPECTIONS 2012 – 2014.



We would draw your attention to the records revealed on ongoing overstocking at the Inishfarnard and Deenish Marine Harvest sites.

These sites have been overstocked for 3 consecutive years in spite of instructions to destock; in 2014 Marine Harvest Inishfarnard refused to give their stocking figures to the State's authorised officers, as did Marine Harvest management of the Deenish Island site in County Kerry.

In the case of Marine Harvest's operations at Deenish, the Certification appears to have taken place without proper examination of the relevant Inspection Checklist for Marine Farms of 10 June 2014.

According to the records you have published, Certification was authorised on 5 March 2015 on the basis of the State's Fin Fish Inspection Report of 2013. [‘Audit report on file from 2013 (26/7/13) carried out by the Dept. of Agriculture food and marine engineer Mick Doyle and Noel O'Murchu.’] The ‘unsatisfactory’ inspection of 10 June 2014 detailing failure through continued overstocking in defiance of requests and refusal to provide stocking figures should have been examined during the audit, which was conducted between the 12th and 14th November 2014, five months after the 2014 Inspection and 5 months before Certification.

Overstocking in spite of repeated warnings is also recorded for successive years at Marine Harvest's Tievetooley (Pettigo) site where the company advanced spurious legal grounds for their continued defiance of the Department's instructions to destock. (Autumn smoults were not envisaged at the time of the licence issue in 1997 so the limit applied only to spring smoults, the claim being that therefore autumn smoults stocks were not limited by the Licence.)

Certification took place at Deenish and is now proposed for Inishfarnard for operations that fail to meet your Principle 1: ‘Comply With All Applicable National Laws and Local Regulations’. Certification in these circumstances would in fact undermine the authority of the State.

Further, the Evaluation Summary under Section 5.1. Principle 1 does not accurately reflect the complex and unsatisfactory legal situation relating to requirement for Environmental Impact Assessment and Appropriate Assessment of the continued operation of fin fish farms through ‘continuity mechanisms’ after the expiry of their licences.

As the matter is complex and the legal interpretation of the Licence stocking levels advanced by Marine Harvest have been rejected by the Minister [‘The operator's



interpretation of the relevant licence provisions, differed from that of my Department. The operator was advised that it must accept my Department's interpretation': PQ 9 June 2015], we would suggest that to meet Principle 1 you ensured that your certifier sought professional assistance to reexamine the legal standing of the aquaculture and foreshore licensing of these sites.

We understand that our feedback must be taken into account during these surveillance audits and would be grateful for your specific replies to our observations and the information provided.

To assist this process, we have appended to the Report a series of written Parliamentary Questions on these activities, the latest of which dates from June 17, 2015. In these the Minister outlines but does not detail his plans to address some of the issues we have raised, including a protocol for fin fish farm construction, a revision of the 'Inspection Checklist for Marine Harvest Fin-Fish Farms', and a commitment to bring overstocking under control 'within a year'.

Certification is inappropriate until these issues are addressed, and we respectfully request you to postpone any proposed certification for Marine Harvest operations at Inishfarnard and suspend Certification for Deenish fin fish farm operations until Marine Harvest complies with Principle 1 of the Aquaculture Stewardship Council Salmon Standard.

Finally, we would be grateful if you permitted a NGO Observers on your site Site Audit(s) 7th July 2015 to the 10th July 2015.

Contact for NGO Observers on Site Audit: 087 2176316.

Yours etc.,

Tony Lowes



Appendix 3

Background Legal References

Some legalistic references relating to Aarhus Compliance and EU environmental law

Case c-240/09 recognised that the Aarhus Convention is an integral part of the EU legal order – therefore all aspects of the licensing need to strictly conform to the three pillars of the Convention

Public participation provisions in Articles 6 emphasise that the procedures must be “effective” - that is from the point of view of facilitating public engagement.

The manner in which advertisements are limited to local newspapers, and the difficulties with accessing information and associated information – which clearly evidence that the process is anything but effective.

The proposals in chapter 8 of the draft plan – for a data management and information system do not make it clear that it will be available to the public or how the system will be used in the context of licensing applications or to provide context against which licences can be evaluated. In fact the text is significant in failing to mention the public and public participation.

Strict compliance of the licensing process to a range of other EU Environmental Law is also necessary, including: the Habitats and Birds Directives; the Water Framework Directive; the Marine Strategy Framework Directive; and the Environmental Impact Assessment Directive. In the context of EIA the failure to assess the cumulative impact of projects is of major concern – as is the limited approach to assessment of alternatives – which can also be critical for Appropriate Assessment.

Recent developments in the Irish High Court – in particular the Kelly Case ([2014] IEHC 400) case highlighting the standard for the competent authority in the conduct of an Appropriate Assessment, and the O’Grianna case ([2014] IEHC 632), in relation to separation of projects for the purposes of application and assessment – need to be assimilated into a root and branch overhaul of the licencing and licensing review process, where both EIA and AA processes undertaken have been the subject of intense criticism. This is if extensive litigation is not to beset the development of a properly sustainable sector.

The effect of O’Grianna and indeed both the first and second complaints in c-215/06 is particularly relevant in the context of freshwater supplies for finfarms.