Independent Review of Aquaculture Licensing
C/O Deirdre Morgan – Secretary to the Independent Review Group
Department of Agriculture, Food and the Marine
National Seafood Centre
Clonakilty, Co. Cork

Thursday 9th February 2017

A chairde,

We are writing to make a formal observation, pursuant to the terms of reference of the Independent Review Group, as part of the of Aquaculture licencing process and associated legal framework, and as directed by the Minister for Agriculture, Food and the Marine.

We hereby enclose herein details of our submission with respect to same for your consideration.

Objectives of the Review:

- 1. Deliver licence determinations in a timely manner, having regard to international best practice and applicable EU and national law.
- 2. Support achievement of the actions and priorities of *Food Wise 2025* and the *National Strategic Plan for Sustainable Aquaculture Development*;
- 3. Facilitate enhanced transparency in the licensing process for all stakeholders;
- 4. Ensure legally robust licence determinations having regard to EU and national law.

Visual Impact:

The tranquility, quietude and unspoilt attributes associated with many of the rural coastal settings to which a considerable number of applications for aquaculture relate, is a cause of concern for many communities.

In areas which have remained largely undeveloped, it's felt that the impact of large scale oyster farming can greatly impede on the unique rural landscape and unblemished topography of an area.

Oyster farming, as a commercial activity, is specially structured and orientated to take full advantage of the biology and life cycle of the target species. Depending on the methods of cultivation and techniques involved, harvesting of shellfish can cause considerable visual obstruction. The technique favoured by many applicants involve the use of 'Oyster Trestles' which, as physical steel structures of varying heights, are easily visible. Additionally, the installation of 'navigation poles' along the marine bed, which are designed to be much greater in height than trestles, may also be considered to be unsightly.

In such instance where the above cultivation methods have been prescribed, such sizeable frames and poles may be clearly visible in the littoral/inter-tidal zones concerned - particularly during periods of low tide.

It may therefore be argued that such activities and methods of cultivation are visually intrusive and can cause significant visual obstruction for both residents and visitors of the areas in which they are found.

Evidently, there is a responsibility on the licensing authorities to ensure that farms are not disproportionate in terms of their both size and scale compared to the proposed host site.

Collective Impact of Applications:

Further to the earlier argument of there being an onus on licensing authorities to ensure that aquaculture developments are proportional to the areas in which they are located, it is also crucial that, prior to a determination being made in respect of an application, that decision makers are cognisant of both existing aquaculture developments at the host site, and at neighbouring sites, as well of developments for which applications are presently being considered.

In other words, applications should not be viewed merely in isolation but rather, licensing authorities must take into consideration the collective impact which all existing and all potential developments have and are likely to have on the host site before a decision is made to grant or refuse an application. Failure to do so will result in aquaculture developments being disproportionate and not commensurable to the areas in which they are sited.

Method of Notice:

At present, existing regulations require applicants to publish a notice of application, in a newspaper, which is circulated in the vicinity of the proposed aquaculture location.

From the experience to date of many local communities in which aquaculture developments have occurred and in which licences have been sought, this statutorily mandated practice in relation to communicating the intention of the applicant is not sufficient as it does not allow for adequate formal notice to be given to the communities concerned in respect of proposed developments.

Accordingly, efforts to address and rectify this unsatisfactory method of communicating aquaculture licence applications should be further examined and scrutinised, with the view to radically improve, supplement and expand the existing statutory public notice requirements which applicants must give as part of the formal application process.

Navigation and Emergency Services:

Navigation and Emergency Services access needs to be upheld within the licence process, for example; Cruit Strand along with Keadue Strand provided an essential access route for our RNLI lifeboat around the island and bay in the event of emergency. So too does it act as an alternative route for our ambulance service and a landing pad for air ambulance helicopters. Being within such close proximity to our regional airport it provides an emergency air strip for planes in difficulty. If Cruit and Keadue strands were not accessible due to aquaculture this would have disastrous consequences.

Environmental Impact:

Considering that the nature of the activities pertaining to aquaculture applications are primarily marine based, the negative influences often associated with aqua-farming on the marine environment must not be overlooked.

New aquaculture activities, or the reissuing of an existing license, in the special areas of conservation should be considered as plan or project as it would with land based planning, and these should only proceed if the competent authority has ascertained that it will not adversely affect the integrity of a European site, although management or mitigation options may be available to prevent any adverse effects this may not be sufficient to protect and uphold an SAC area.

It is important to note that an Appropriate Assessment using an EIS should be required on each occasion if a plan or project is not inside a European site/special area of conservation.

Native marine habitats, animals and plants that are of European and national marine conservation importance (in terms of their representation, rarity and biological role) should be protected in areas designated as European Marine Sites (which include Special Areas of Conservation) and national Sites of Special Scientific Interest.

This is also balanced by a greater understanding is required of the industry by legislators, which has increased the relevance of EU & National legislated controls that were not enacted thus far in several applications. The aesthetic & Environmental impacts of all aquaculture ventures will require careful management to avoid community conflict and uphold the status of the Special Areas of conservation areas.

We have grave concerns that the conservation objectives of these natural amenities will be jeopardised should populations of oysters be allowed to develop. We are aware of the time and cost that can be incurred by new businesses wanting to farm oysters in European Marine Sites when subject to an environmental assessment; this should not be over looked due to cost/timeframe required. EU legislation & National legislation should be upheld by carrying out an EIS on each application for a licence. Without an EIS insufficient information to make an informed decision so therefore the precautionary principle should be evoked in each licence/ individual case and an EIS should be required by the department. The cost of compiling these reports (which could be done by the environmental protection agencies) would be met with an increased cost of licence application fee. The fee is currently way, way too low and needs to be reviewed.

Furthermore, the potential impact of intertidal oyster culture on water birds and the disturbance of any birds which inhabit or depend on water bodies has become the subject of much study in recent years. Research carried out by the Marine Institute into the effects of oyster farming on marine and aquatic birds, has found that the assemblage variation and flocking behaviour of certain bird species is heavily affected by the presence of oyster trestles.

The study found that the species which tend to feed in large highly concentrated flocks, such as the Knot (Calidris canutus); Sanderling (Calidris alba); Dunlin (Calidris alpina); Blacktailed Godwit (Limosa

limosa); Bar-tailed Godwit (*Limosa lapponica*) and the Ringed Plaver (*Charadrius hiaticula*), all demonstrated a negative response to the structures. The presence of trestles in the samples taken from the studied ordination space, directly interfered with the flocking and territorial behaviour of the species, forcing individual birds to become dispersed across several lines of trestles.¹

It's notable that the species which displayed the strongest negative response to oyster trestles generally favour open mudflats/sandflats, such as those to be found at many foreshore locations. Consequently, mixed sediment and rocky shore sites are often cited as the preferred locations for littoral zone oyster culture as such sites can minimise the potential harmful impact of oyster culture on birds inhabiting the marine environment. In this context, it can reasonably be argued that the areas for which licences are being sought must be suitable for the installation of oyster trestles and harvesting equipment given the repercussions which such activities can have on avifauna. Consequently, and in order to avoid such scenarios as discussed above, it is therefore crucial that aquaculture activities are properly regulated and restricted to ensure that they are sustainable and commensurate to the area and local in which they occur.

Economic Impact:

Notwithstanding the potential knock-on effects which marine based activities may yield as discussed previously in this submission, another area to which consideration must be given is that of the impact which such developments may have on the local economy.

Much of our coastline is widely recognised for its breath taking natural beauty and is renowned for the unspoilt natural habitats contained therein. 'The Beautiful Scenery' was the main reason cited by tourists for choosing to holiday in counties such as Donegal, according to tourism studies. In one such study, 80% of respondents credited the 'Beautiful Scenery' as their primary reason for recommending the area. These figures therefore serve to highlight the significance of protecting and promoting local topographies in order to sustain and further develop the tourism sector here.²

Accordingly, it is important to note that poor and imprudent planning and aquaculture management can impact negatively on lucrative recreational activities and amenities such as fishing, water sports and ecotourism to name a few. This is particularly worrying when one considers the importance of the hospitality and tourism sector to coastal regions, particularly those which host a number of recreational water based leisure activities such as boating, canoeing, equestrian beach trekking, kayaking, sailing and swimming, etc., in areas where favourable marine environments facilitate their use for any great number of leisure purposes.

As a result, such marine locations can act as a major lure and pull factor for visitors when coming to the region, and any development which could potentially restrict or limits their usage for water based leisure activities should be vehemently opposed. Incidentally, the size and scale of projects, as

Gittings, T. & O'Donoghue, P.D. (2012). *The effects of intertidal oyster culture on the spatial distribution of waterbirds*. Report prepared for the Marine Institute. Atkins, Cork.

² Fáilte Ireland, (2013) Holidaymarker Study 2013 – Donegal/Sligo

well as 'Access' Zones, must not render the host strand unsuitable for recreational, sporting and or leisure pursuits.

It may reasonably be argued therefore that aquaculture activities must only be permitted in situations whereby a locality's ability to sustain existing tourism trade would not be irrevocably damaged as a result of same.

Some examples of legislation that should be upheld and strengthened:

Aquaculture licenses are granted by the Department of Agriculture, Marine and Food, who are at the same time, are promoting aquaculture, so there is obviously a conflict of interest there. There should be collaboration with environmental agencies, perhaps the National Parks and Wildlife Services and An Taisce in the whole licensing process from beginning to the final determination. The final decision should not rest with the Minister alone, but the decision of a panel from these agencies, as well as the DAMF.

Under the EU Water Framework Directive, the Pacific oyster has been put on to the 'red list' as a species that would prevent a water body from meeting good quality designation.

The Water Framework Directive (WFD) is a major new legislative driver to ensure waters of good ecological status are achieved in all river basin and inshore coastal waters. The WFD also includes a non-native listing of 'high impact' species which has recently been reviewed and now includes the Pacific oyster. There is significant concern that the Pacific oyster will compromise WFD objectives to achieve good ecological status.

There is a need for information gathering and sharing to continue between industry, communities, fisheries officers, conservationists, scientists and regulators within this whole process in particular via a first initial method of an EIS. The Habitats Directive is key legislation for the protection of Special Areas of Conservation (SACs) these regulations also encompass Special Protection Areas (SPAs) and Ramsar sites classified under the Birds Directive. The 'Aliens and Locally Absent Species in Aquaculture' regulation, Council Regulation (EC) No 708/2007 "concerning use of alien and locally absent species in aquaculture", allows Member States to be able to control aquaculture species movements that may cause adverse ecological impacts. This legislative measure for the control of species movements could be used to restrict future Pacific oyster seed supply if these movements were thought to pose a risk of an adverse environmental impact.

The Pacific oyster is specified in Annex IV of the regulation as a long-term aquatic alien species for which not all articles apply. However, some relevant articles do apply and there is latitude for Member States to decide whether additional restrictions are required for such long-used species. Article 4 (which applies to long-used aliens) states: "Measures for avoiding adverse effects - Member States shall ensure that all appropriate measures are taken to avoid adverse effects to biodiversity, and especially to species, habitats and ecosystem functions which may be expected to arise from the introduction or translocation of aquatic organisms and non-target species in aquaculture and from the spreading of these species into the wild."

Article 9 applies to 'non-routine' movement controls which will require a Risk Assessment, specified in Annex II. A non-routine movement is the movement of an aquatic organism which does not fulfil the following: "has a low risk of transferring non-target species and which, on account of the characteristics of the aquatic organisms and/or the method of aquaculture to be used, for example closed systems as defined in 3, does not give rise to adverse ecological effects;"

This implies a movement that could give rise to an adverse ecological impact would require an RA. A requirement could be applied to Pacific oyster seed movements on a regional basis according to the potential threat posed to the receiving waters.

In May 2008 the European Commission produced a study on "The Cost of Policy Inaction – The Case of Not Meeting the 2010 Biodiversity Target" (COPI, 2008). A central component of this study is to model the change in biodiversity to 2050 using the underlying drivers of population development, economic development, and energy use and food production. The study acknowledges that certain drivers such as invasive species and changes in coastal marine ecosystems are not modelled. The Environmental Liability Directive (ELD) 2004/35/EC extends the current 'polluter pays' principal to cover environmental damage. This includes adverse effects on Sites of Special Scientific Interest (SSSIs) and EU protected habitats/species wherever they may occur. In principal this regulation could possibly be applied to an aquaculture operation causing damage through the release of viable oyster larvae which might impact on a protected feature. Terminology and ecological definitions are important as they shape perception and inform legislative controls.

Despite some discrepancy in 'naturalisation' definitions it appears that this term does not imply a degree of legislative acceptance in the event that the Pacific oyster becomes well established within the native ecosystem. Terminology and invasive ecological status are critical in how non-natives are judged in Risk Assessments (RA) which informs new regulatory controls. The 'scoring' of a non-native within a RA is strongly influenced by its determination (e.g. 'established' and 'invasive'). This potential threat to designated protected sites is the key issue regardless of any positive economic benefits must be considered to protect the environment. In addition to the principal environmental concerns and potential conflict with the communities and leisure industry an overview of the benefits and threats show that from an economic & environmental perspective. A more robust methodology beyond current controls should be explored it may well be in the government's own best interest to consider undertaking stronger controls in line with and beyond EU legislation.

In conclusion, our observations regarding the review of the Aquaculture licencing process and associated legal framework are set out and outlined herein for the due consideration of the Independent Review Group concerned.

Signed:

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