SALMON WATCH IRELAND

Response by Salmon Watch Ireland to the invitation by the Independent Aquaculture Licensing Review Group for submissions and observations on matters to do with the review of the aquaculture licensing process and associated legal framework.

Introduction

Salmon Watch Ireland Limited ('SWIRL') is a not-for-profit membership organisation dedicated to the restoration of wild salmon abundance. It is SWIRL's position that open-cage salmon farming is inherently damaging to sea-migrating wild salmonids, Atlantic salmon and sea trout, and that it has proved to be so in Canada, Norway, Scotland and Ireland; in addition, there are other significant environmental threats associated with open-cage farming. In the view of SWIRL, and many others here and internationally, it is only through conversion to closed containment systems, whether on land or in the sea, that the hugely negative impacts flowing from current systems of salmon farming can be mitigated. There are now marketable quantities of closed containment salmon being produced on both sides of the Atlantic and the Norwegian government has committed to closed containment for further expansion of its industry.

Nonetheless, Ireland has a salmon farming industry which the Government is intent on expanding using current, out-dated technology with all its' dangers. Without prejudice to its opposition to open-cage salmon farming, therefore, SWIRL is obliged to put forward observations designed to mitigate the damage caused, particularly to wild salmonids, by existing and new open cage installations.

The observations that follow, which are exclusively concerned with salmon farming, should be seen in that light.

The Independent Review Group

Without in any way questioning the competence and objectivity of the individual members of the Review Group it is clearly unsatisfactory that the terms of reference and membership of the group were determined exclusively by the Minister of Agriculture Food and the Marine, who has primary responsibility for the conflicting tasks of developing and of regulating aquaculture. SWIRL has long advocated a 'three wise persons' approach to determining whether a framework for a truly sustainable salmon farming industry can be developed but one which involved, in addition to DAFM, DCCAE and NPWS, all key stakeholders in assessing the impacts of salmon farms on the environment and the consequences of those impacts.

The Terms of Reference of the Review Group

The issues which the Review Group have been asked to address are important but only a small part of what the regulatory regime for salmon farming should encompass. Issues to

do with what projects get through the gate need to be addressed, of course, but a comprehensive approach requires that there also be a radical review of:

- The substance and legal status of the rules under which salmon farms operate;
- The mechanism by which these rules are policed and enforced;
- The means by which new scientific insights are progressively integrated in the licencing/regulatory systems.

The Minister's remarks at the launch of the Review Group suggest that he may have some appreciation of the limitations of the terms of reference: '…any changes must ensure that all stakeholders can participate in a transparent licensing process and have confidence that any licensing decision complies with all EU and national legal requirements and protects our oceans for future generations'[1].

Dealing with the scientific evidence

It is not proposed to recite here details of the extensive international scientific literature on the negative impacts of poorly sited, badly managed and unregulated salmon farms on wild salmonids. These impacts encompass sea lice infestations, escapees and, increasingly, concerns about diseases, the use of pesticides and benthic effects. It would be surprising if this extensive literature and its significance was not already available to the Review Group.

There is now, however, clear guidance in EU legislation and in judgments of the EU courts about how account should be taken of such scientific knowledge, particularly in the areas of the application of the precautionary principle and certainty.

The precautionary principle and certainty

The application of the precautionary principle is well enshrined in EU environmental law. The precautionary approach to risk management holds that if an action or policy has a suspected risk of causing harm to the public or the environment, in the absence of scientific consensus that the action or policy is not harmful, the burden of proof that it is not harmful falls on those taking or authorising the action.

The Lisbon Treaty states that 'Union policy on the environment shall aim at a high level of protection [and] shall be based on the precautionary principle and on the principle that preventive action should be taken…..'[2]

It is established in the jurisprudence of the European Court of Justice ('ECJ') and the Court of First Instance ('CFI') that in considering risk and whether the precautionary principle should be applied, that 'the best available scientific knowledge and information'[3] must be invoked and that in the event of conflict of evidence the 'equal or better' rule applies[4]. The 'equal or better' standard is designed to deal with situations in which there is genuine scientific

[1] DAFMPR 199/2016
[2] Consolidated version of the Treaty on the Functioning of the European Union, art 191, para 2.
[3] Case C-258/11 *Sweetman v An Bord Pleanala* – judgement of the Court 11 April 2013. See also Jiang, P, A uniform precautionary principle under EU Law, PKU Transnational Law Review (2014) 491-518 at 506
[4] Case C-331/88 *ex parte Fedesa*, 1990 ECR I-04023

uncertainty about the effect of a particular course of action. From its own knowledge of the scientific literature SWIRL submits that the application of the 'equal or better' standard to the sea lice issue requires that a precautionary approach be taken to the issuing of salmon farming licences given the weight of scientific information and analysis about the threats it may pose.

In Ireland the 'best available scientific knowledge and information in the field' does not appear to have been given primacy in the licensing and regulatory process governing salmon farming in Ireland. The Irish authorities have consistently shown a preference for the scientific advice of the Marine Institute to the exclusion of the findings of other Irish and international scientists and institutions who advocate a precautionary approach, and who take issue with the Marine Institute positions. It is suggested that the existence of a significant body of scientific knowledge in Ireland and internationally, which holds that sea lice have a greater adverse impact than the Marine Institute acknowledges, ought not to be disregarded without further detailed investigation.

In circumstances where expert scientific advice diverges as to the extent of the adverse impact of projects having adverse impacts on the environment, consents should be withheld in the absence of 'certainty' that adverse consequences will not flow from projects such as intensive salmon farming. This is the essence of the precautionary approach applied by the European Court of Justice.

The application of the precautionary principle in environmental matters has been approved by the Supreme Court in the *Cromane Fisheries*[5] case. The Supreme Court took the view that, before projects can be consented to, the absence of adverse effects on sites and species must be established *'beyond all reasonable scientific doubt'*, and based on the '*best available scientific knowledge in the field'*[6]. Clearly there is significant scientific evidence that salmon farming is having adverse impacts on salmonids.

The deficient legal framework in Ireland

The main statutory legal framework which governs and regulates intensive salmon farming in Ireland is primarily comprised in the Fisheries (Amendment) Act 1997, the '1997 Act', and the Regulations made thereunder. As a measure designed to regulate and control intensive salmon farming it appears to lack many essential legal provisions desirable to effectively regulate the consent process and operations of salmon farms.

These include the following deficiencies;

2.1 The lack of explicit requirements in the 1997 Act for the Minister and the Aquaculture Licenses Appeals Board to have regard to the provisions of the Habitats Directive and the Environmental Impact Assessment Directive when assessing licence applications and appeals, in accordance with the Natura 2000 requirements. The provision at S. 61 (e) of the 1997 Act to have regard to; '*the likely ecological effects of the aquaculture or proposed aquaculture on wild fisheries, natural habitats and flora and fauna'* is

[5] *Cromane Fisheries Limited & Another –v- Minister for Agriculture Fisheries and Food & Others,* 2016 IESC 6.
[6] See Appendix Two for SWIRL letter to ALAB about the significance of the *Cromane Fisheries* case.

inadequate. The requirements of the aforementioned EU Directives, Natura 2000 site protection, and other relevant legislation are not adequately observed.

2.2 The lack of provisions in the 1997 Act, or amendments thereto, to provide for access to information, public participation, or access to justice without prohibitive cost, as provided for in the Arhus Convention, and the Environmental Impact Assessment Directive. Significantly, by comparison, the Planning and Development Act 2000 has been amended by the addition of S. 50 (b) by amendments, whereby the aforesaid provisions of the Arhus Convention and the EIA Directive have been transposed into Irish law with respect to planning permissions. No such amendment has been made to incorporate those provisions into the aquaculture licensing code as set out in the 1997 Act, representing a marked deficit in that Act.

2.3 The lack of effective enforceability of conditions of licences, the failure to police and prosecute for breaches of conditions, and the lack of legally enforceable action to prevent continuance of breaches, in the 1997 Act. We are unaware of any instance of prosecution of any operator of a fish farm in Ireland in relation to the breach of licence conditions or the law – not even in instances of the non-payment of aquaculture licence fees. The existence of legally unenforceable protocols and largely voluntary management systems and codes of practice are inadequate as they lack enforceability.

2.4 The provisions of S. 18 and S. 19 of the 1997 Act which permits amendments and renewals of licenses by the licensing authority without public consultation, or due process, regarding the terms of such amendments or renewals of licenses. In the *Waterville Fisheries* case[7], an aquaculture licence for a site near Dinish island in Co. Kerry was considered. It was renewed by the Minister in or about 2010, when it should have actually been revoked in 2007 or thereabouts under the provisions of S. 69 of the 1997 Act, (due to cessation of aquaculture on the site in question for some years). The same licence was later amended to permit double the previously permitted tonnage in early 2011. Advance notification of the proposals was not given and the local applicants/objectors seeking to oppose the licence only became aware of the non-revocation, and of the increase in tonnage retrospectively. As these decisions regarding the licence were in accordance with the provisions of the 1997 Act the court could not intervene. The lack of advance access to relevant information, the lack of any scope for timely participation in the decision making process, and consequent delay in taking legal action led to the applicants for Judicial Review being unsuccessful. The court was constrained by the provisions of the 1997 Act. Existing licences can quite easily be renewed and amended without advance public knowledge or participation.

2.5 The lack of provision for public information and consultation regarding the decision making process applicable to the revocation of licenses as set out in S. 68 & S. 69 of the 1997 Act. The Minister can effectively make decisions whether to revoke a license or not, in

[7] *Waterville Fisheries Development Limited –V- Aquaculture Licenses Appeals Board & Others*, 2013 40 JR

consultation with the licensee only, but without the public at large being informed, until afterwards. By then the options for opposing such a decision can be extremely limited.

EU legal framework and authority

The 1997 Act does not apply any standard or requirement for decision-making '*certainty*' that aquaculture will not have adverse impacts on salmonids – a standard that derives from judicial authority at EU level. Two significant cases, in particular, underpin the legal position that there has to be 'certainty' that adverse impacts will not be caused to specified Annex 11 species of designated EU sites (SAC or SPA); the Waddensse case [C -127 – 02], and the Sweetman Case [C 258 - 11]. As salmonids are susceptible to adverse impacts from salmon farms, then licences should not be issued unless the adverse impacts can be mitigated. The *Cromane Fisheries* case now be added as one of the leading Irish authorities in relation to the requirement for scientific *'certainty'* as to the absence of adverse impacts on EU sites and the 'annexed species' therein.

Cumulative effects

The Habitats Directive[8] in Article 6.3 requires that any 'plan or project' be considered 'individually and in combination with other plans and projects'. In the current licencing regime there is no requirement that such factors to be taken into account. In recent EISs and EIAs involving salmon farms (admittedly few) there has been little to no attempt to assess the cumulative effect on the proposed site and its neighbours of the totality of the farming activity within a given geographic area. This is particularly important given the very weak to non-existent commitment of Irish salmon farmers to SBM and CLAMS management systems.

Architecture

The Minister's statement envisaged a new licensing process that is transparent, in which all stakeholders can participate and have confidence in the outcomes. While it has many deficiencies both in its internal processes and outcomes, only the Norwegian decision-making architecture comes anywhere near meeting the standards specified by the Minister. We commend it for further study by the Review Group.

Salmon Watch Ireland
10 February 2017

[8] Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (21 May 1992)

APPENDIX ONE TO SALMON WATCH IRELAND SUBMISSION:
ADDITIONAL SUPPLEMENTAL MATERIAL

LICENCE CONSENTS WITHOUT PUBLIC INFORMATION, CONSENT, OR TIMELY ACCESS TO JUSTICE; S. 18 & S. 19, FISHERIES (AMENDMENT) ACT 1997.

The current legal provisions in the Fisheries (Amendment) Act of 1997 encompass a number of regulatory lacunae which do not provide adequate protection for Wild Atlantic salmon from adverse parasitic impacts within the overall salmon farm licensing scheme. For example, the current provisions permit the renewal and amendment of existing licenses without advance public consultation or prior environmental impact assessment. This has been used to increase the biomass capacity of existing licensed fish farms. This occurred in numerous instances in Ireland in recent years, most notably at Dinish Island, of off the south west Kerry coast, in 2011. Such provisions create an Ex Post Facto situation, where the enlargements of salmon farms are permitted without any advance disclosure, without timely access to information, without public participation in the making of the decision, or access to justice without prohibitive costs at the judicial review stage. The public and other stakeholders are then faced with a decision effectively made behind administrative 'closed doors' which is published in the local press, as a *fait accompli*. They have a limited right of appeal in writing, retrospectively only, within a subsequent 4 week period, following such limited retrospective notification. The legislation further provides that an oral hearing may be granted purely at the discretion of the Appeals Body, although such oral hearing is rarely afforded. One notable and welcome decision to hold an oral hearing recently arose in relation to a licence awarded for a 500 ton salmon farm in Bantry Bay, where Salmon Watch Ireland participated.

As an example of the operation of this legislative provision the Irish Minister for Agriculture issued a 'consent' for a doubling of the standing biomass at the Dinish Island Fish farm off the coast in County Kerry in 2011. This authorized the increase in the capacity of that salmon farm from 400 tons to 800 tons. An appropriate assessment was not carried out. These provisions were employed in order to circumvent the requirement under the Directives to carry out Appropriate Assessments on the environmental impacts of the enlarged entity. No appropriate assessment had ever been carried out when the license was granted there originally either. Advances in scientific knowledge have identified to a much greater extent the increasing capacity of sea lice parasites to damage and lead to increased mortality of juvenile wild salmonid's as they migrate out to sea, and the body of scientific knowledge supporting this is increasing year by year.[i]

That salmon farm had been operating for a number of years by means of a temporary amendment. There is no provision in the 1997 Act for a 'temporary amendment' to licences to increase the standing biomass or particularly to double the capacity from 400 tons to 800 tons at such farms. To do so without an EIA, as happened in that case, was not in accordance with the Directives, public information requirements, or public participation. Timely recourse to an adequate appeal was not provided for.

NON REVOCATION, LAPSED LICENCE – *'EXCEPTIONAL CIRCUMSTANCES'*; (S. 68 & S. 69, 1997 Act)

The 1997 Act provides that licences which have not been operated for in excess of 2 years shall be revoked save where the minister is satisfied that *'exceptional circumstances'* exist to justify not revoking it. Exceptional Circumstances are stated to be the sole basis on which the minister may exercise a discretion not to revoke a licence where that licence had not been operated for in excess of 2 years.[ii]

The lack of information to the public was notable in the decision not to 'revoke' this licence in 2010. The legislative process did not afford the Public any opportunity to participate. Locals only learned of decision afterwards. By the time that the public and interested parties became aware of the decision the time limits for Judicial Review proceedings in the Irish Courts had long expired. The public were never made aware of it; no opportunity had been provided to engage in the decision making process as required in the EIA Directive or the Arhus Convention. The time limits for a Judicial Review in the High Court, as provided in the 1997 Act, had expired. The scope for public participation as provided for in the Arhus Convention and the EIA Directive was denied to the public. No advance notification whatsoever of this decision was provided to the public at large or published in any way in respect of the decision not to revoke this licence.

As a result of Freedom of Information Act requests for information, some years afterwards, it was then belatedly disclosed that the Minister had decided not to revoke the licence due to *exceptional circumstances*, which were stated by the operator to be due to the requirement to observe *'best practice'*. The contention that adherence to *'best practice'* gave rise to *'exceptional circumstances'* was based on the submission that the cages and the fish farm had been kept fallow in accordance with best management practice over the years while it had not been used. The suggestion that adherence to *'best practice'* could amount to '*exceptional circumstances'* sounds peculiar. Adherence to *'best practice'* surely ought to be the norm, and not be considered *'exceptional'*. It is difficult to reconcile how observing '*best practice'* could be said to amount to *'exceptional circumstances'*; the decision not to revoke is therefore a perplexing outcome. As such, the process, and the decision not to revoke the licence in that instance, when the legal and statutory conditions seemed to require that it be revoked, did not meet the standards of openness, transparency, public participation, or judicial reviewability in decision making required by the Directive. It does not provide for adequate legislative or transparency of the licensing process or adherence to the requirements of Community law as set out in the EIA Directive or the Habitats Directive.

It is notable that the licence non revocation referred to above was the same site as that for which the decision was afterwards taken to double the capacity and standing biomass in 2012. This was again without advance public information, consultation, or timely access to justice, other than a belated *'ex post facto'* notice in the local press providing limited scope for appeal only. A '*temprorary amendment'* of the licence conditions doubled the size of the fish farm. This was the subject of the High Court proceedings aforementioned, which were unsuccessful due mainly to the constraints of Irish domestic legislation, ie the 1997 Act, and

due to the fact that the legislation did not provide for timely information and participation in the decision making process.

However, the process wherein lapsed licences are not 'revoked'' takes place 'behind closed doors', so it is nigh impossible for the public to participate in the decision making in the absence of advance information regarding the decision. While the non-revocation decision was not reviewable, as it was out of time within which to do so, the practice reveals the consistent denial of the public right to information, participation, and justice which is inherent in the application of the 1997 Act in Ireland.

UNLICENSED OPERATIONS

A further example of failure to meet the requirements of the Directive arises in the tolerance of unlicensed salmon farms for which there is no licence at all in being, and for which environmental impact assessment has never been undertaken at all.[iii] These salmon farms are located in sensitive inshore locations, often in narrow bays where concentrations of sea lice are such as to significantly damage juvenile wild salmonid migrations. Their legal status is entirely unclear over long periods of operation.

2011 DIRECTIVE

The 1997 Act has not been amended to incorporate or transpose the terms of the 2011 Directive, Article 11, Annex and A 11 f of the Directive which specifies 'intensive fish farming' as an activity to which the Directive applies. As a consequence of the failure to transpose and implement the terms of the 2011 Directive applicants and the public are not in a position to rely on appropriate provisions of Irish domestic legislation. They are consequently left to invoke the Direct Effects of the 2011 Directive, as set out by the ECJ jurisprudence in *R. Edwards –v- Environment Agency* [2010] UKSC 57, in order to vindicate their entitlement to review such decision in the courts without prohibitive costs. It is required that Member states, including Ireland, must import and transpose such provisions of Directive within their relevant domestic legislation which is applicable to the activities specified in the Directive. It is not in compliance with the provisions of the directive to leave applicants or the public solely reliant on the determinations of the ECJ alone. Proper provision should be made in domestic member state legislation for such rights for the public when these are necessary to give effect to the provisions of Directives in particular areas of operation of community law.

In contrast to this situation, the Irish Government has by virtue of the 2011 Environmental (Miscellaneous) Provisions Act 2011 and 2012, given effect to the bulk of the directive in relation to the Planning Acts 2000 - 2013. *It is conspicuous that it did not do so within the statutory consent process in relation to intensive fish farming.* The consent process relating to intensive fish farming is, therefore, not in conformity with the requirements of the Art 11 of the 2011 directive, and Annex II thereof, in relation to the statutory consent process and licensing of intensive fish farming. This aspect of the implementation of the Directive was raised extensively in the aforementioned High Court proceedings.

The requirements of EU law that full Environmental Impact Assessments and Appropriate Assessments are conducted are therefore not being complied with and projects are not being scrutinized in accordance with the *'best available scientific information and knowledge in the field'*. Regard is required to be had to the requirements of EU Law. The requirement to assess projects such as intensive fish farming in accordance with the *'best available scientific information and knowledge in the field'* is mandated by numerous authorities of the ECJ and is in accordance with the *'precautionary principle'*. This is not being adhered to in Ireland. Consents are not being withheld in circumstances where respected bodies of opposing expert scientific knowledge confirm greater adverse impacts than those that the operators and state agencies acknowledge. See Krkosek et al. Report on Sea Lice infestation of wild salmonids; '*Impact of parasites on Salmon Recruitment in the North East Atlantic Ocean' 7 November 2012*.

REFERRAL TO EUROPEAN COMMISSION.

Notwithstanding the attempts to litigate these issues in the High Court, that court is constrained by the legislative provisions of the 1997 Act aforementioned. These provisions permit non-revocation applications to be dealt with behind closed doors, while renewals, and temporary amendments can be made without Appropriate Assessment or any applicable statutory provisions in order to double fish farm capacity. The legislation and the process fails to incorporate Article 11 of the EIA Directive giving the public the benefits of the Arhus scheme of inclusive decision making without the prohibitive legal costs of review. There appears to be little alternative but to ultimately bring these issues to the attention of the courts here and to EU Commission, in a suitable case arising in future, given the failure of the legislation to ensure the public interest.

Salmon Watch Ireland
10 February 2017

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[i] Krkosek et al; '*Impact of parasites on Salmon Recruitment in the North East Atlantic Ocean' 7 November 2012*.
[ii] S. 101, Sea Fisheries and Maritime Jurisdiction Act 2006.
[iii] Freachillaun South, County Galway, Site; T 200

SALMON WATCH IRELAND

6 SUTTON CASTLE, SHIELMARTIN ROAD, D13NN20, DUBLIN 13

PHONE: +353 1 832 4852

3 March 2016

The Secretary
Aquaculture Licences Appeals Board
Kilminchy Court
Dublin Road
PORTLAOISE
Co Laois

Dear Secretary

I refer to my letter and submission of 15 October 2015 about Salmon Watch Ireland's appeal in respect of the granting of aquaculture and foreshore licences reference T5/555.

We now wish to draw your attention to the following development which impinges on the basis on which the Aquaculture Licences Appeal Board must make its determination in this case:

The Supreme Court has recently restated, in three significant judgments, the legal position in Ireland regarding development consents in which important environmental and conservation considerations arise. This applies in respect of projects which can have an adverse impact on European Sites that are designated pursuant to the Habitats Directive or the Birds Directive to be Special Areas of Conservation (SACs) or Special Protected Areas (SPAs). The judgments were delivered by Mr Justice McMenamin, Mr Justice Charleton, and Mr Justice Clarke, in the case of Cromane Foods Limited & Anor -v- Minister for Agriculture, Fisheries & Food & Ors [2016] IESC 6. Relevant extracts from the judgment are set out hereunder.

While this case primarily concerned the application of legitimate expectation and public policy in Ireland, it contains important and authoritative restatements of Irish law regarding the application of Article 6.3 of the Habitats Directive. This involves the central requirement to ensure certainty that there remains *"no reasonable scientific doubt regarding the absence"* of adverse effects on designated European Sites, before consents can be given, in situations where there may be risks of adverse impacts.

JUDGMENTS

1. Paragraph 43 of Mr Justice McMenamin's judgment clearly sets out that all *'reasonable scientific doubt'* must first be excluded regarding the impact of projects on protected European sites, p. 15. In relation to the previous CJEU decision in the Waddensee case, Case C-127/02, regarding appropriate assessments required to be undertaken as part of the consent process he stated, at paragraph 40 of his judgment, that the legal position is:

> *" that such assessment(s), must be carried out prior to approval being granted, and authority may be given only if the State authorities have made certain that it will not adversely affect the integrity of that site".* The Court held that there must be no reasonable scientific doubt remaining as to the absence of such effects. *Additionally, it is necessary to identify what the "conservation objectives" of a site are."*

He went on at paragraph 43 to emphasise that the Court of Justice of the EU held at I – 11077, par. 243 that:

> *"Under Article 6(3) of the Habitats Directive, an appropriate assessment of the implications for the site concerned of the plan or project implies that, prior to its approval, all aspects of the plan or project which can, by themselves or in combination with other plans or projects, affect the site's conservation objectives must be identified in the light of the best scientific knowledge in the field. The competent national authorities are to authorise an activity on the protected site only if they have made certain that it will not adversely affect the integrity of that site.* ***That is the case where no reasonable scientific doubt remains as to the absence of such effects. …"***

2. Mr Justice Charleton likewise affirmed the foregoing legal position in his judgment, at p.22, and he went on the say that:

> ***'None of this is or was, as Hanna J put the matter on page 29 of his judgment in the High Court, "the discretion of the Minister" or "the annual discretion" of the Minister. On the designation of a site there is no such discretion. It is clear that nothing impacting on a site can occur unless it is certain that it will not affect the integrity of the site. Nothing could be further from any notion of discretion.'***

3. Mr Justice Clarke also affirmed the foregoing legal position at paragraph 3 of his judgment which also deals with the EU Legal Framework, p. 43. At paragraph 3.6 he referred to the Waddensee Case C-127/02, and to *Commission v. Ireland* (Case C-418/04, ECR [2007] I-10947). At paragraph 3.8 he held that;

> *'As a result, it was clear that, as a matter of law, the Minister could not grant any permissions which would have the effect of allowing activity within the boundaries of the protected area unless and until an appropriate assessment had been carried out and such assessment satisfied the requirements identified by the ECJ, being that there was no reasonable scientific doubt as to the absence of adverse effects'.*

THE SCIENTIFIC EVIDENCE

4. The Appellants herein wish to refer to the extensive body of expert scientific evidence regarding the adverse impacts of intensive salmon farming in Ireland as previously referred to. This evidence is now of increased relevance in light of the Supreme Court judgments aforementioned. In view of the extensive body of expert findings the Appellants submit that it would defy the clearest evidence possible for any reasonable decision maker to now conclude that there is *'no reasonable scientific doubt as to the absence of adverse effects'.* It is plain that there is an extensive body of international peer reviewed published scientific evidence pointing to the existence of scientific evidence to the contrary. In the circumstances no licence ought to be granted until the risk of such adverse

impacts can be excluded beyond *'reasonable scientific doubt'*. [Please see attached reference to scientific reports cited in the Schedule hereto. This Addendum should be read in conjunction with the aforementioned reports].

5. CONCLUSION.

As a consequence of the foregoing Supreme Court analysis of the overall legal position, the applicable legal requirements, and in reliance on the substantial body of expert scientific knowledge advanced in its original submission and in this appeal by this Appellant, and others, it appears that clear implications are inescapable. It is clear that weight of the evidence confirming the existence of *'reasonable scientific doubt'* regarding the adverse impacts of intensive fish farming of salmon must be recognised. *'Reasonable scientific doubt'* cannot be excluded in any objective assessment of the intended project herein. Indeed it is very clear, based on domestic and international peer reviewed expert reports, to be relied on by the Appellant, that significant and *'reasonable scientific doubt'* does exist regarding the adverse impacts of intensive salmon farming on protected Atlantic Salmon in SAC's for which they are a *'qualifying interest'*. Experience and expert scientific knowledge shows that the mitigation measures being taken, in this sector, and those proposed in relation to this particular application, fail to mitigate the adverse effects of intensive fish farming on those designated sites for which wild salmonids are a 'qualifying interest'. As a consequence the consent granted in this case ought to be set aside and the licence refused.

6. ORAL HEARING

In view of the foregoing legal and scientific authority, which was not available at the time of making our appeal, Salmon Watch Ireland, herein repeats its request for an oral hearing in this matter. This is essential in order to adequately present its appeal against the licence granted herein. Otherwise this Appellant would be precluded from adequately advancing these important aspects of its position.

Salmon Watch Ireland,

2 March 2016.

SCHEDULE;

Expert Scientific Reports Cited:

The Impact of naturally spawning captive bred salmon on wild populations; Proc. R. Soc. B 2009 276 3601-3610; DOI: 10.1098/rspb.2009.0799. Published 10 September 2009

IMPACT OF PARASITES ON SALMON RECRUITMENT IN THE NORTHEAST ATLANTIC OCEAN (PUBLISHED 21 NOVEMBER 2012.DOI: 10.1098/RSPB.2012.2359, KRKOSEK M, ET AL, PROCEEDINGS OF THE ROYAL SOCIETY OF BIOLOGICAL SCIENCES).