## An Bord Achomharc Um Cheadúnais Dobharshaothraithe Aquaculture Licences Appeals Board



Mr Jeffrey Fisher Marine Institute Rinville Oranmore Co Galway

27 February 2018

Re: Appeal against the decision by the Minister for Agriculture, Food and the Marine to the conditions/grant of Aquaculture and Foreshore Licences to Bradán Fanad Teo t/a Marine Harvest Ireland, Kindrum, Fanad, Letterkenny, Co. Donegal on site Ref: T05/555 for the cultivation of Atlantic Salmon; Salmo Salar on a site on the foreshore at Shot Head, Bantry Bay, Co Cork

Dear Mr Fisher

The Minister for Agriculture, Food and the Marine granted an Aquaculture and Foreshore licence for the cultivation of Atlantic Salmon; *Salmo Salar* on a site on the foreshore at Shot Head, Bantry Bay, Co Cork.

Subsequently, a number of appeals were lodged under the provisions of Section 40(1) of the Fisheries (Amendment) Act 1997 ("the Act"). The Appellants raised a wide range of issues as grounds for their appeal, and an Oral Hearing was convened by the Aquaculture Licence Appeals Board (ALAB). The Oral Hearing considered the technical complexity of the issues raised, including concerns relating to risks to species of conservation significance in Bantry Bay.

Subsequent to the Oral Hearing, the chair of the Oral Hearing presented his report to the ALAB Board with a number of recommendations. These included a recommendation that before making a determination pursuant to section 40(4) of the Act, the ALAB Board should conduct a desk-top study, which may indicate the need for supplemental appropriate assessment (AA) screening for such matter, of the potential impacts upon wild birds within nearby SPAs.

A desk-top Bird Impact Assessment has since been undertaken by the Board's Technical Advisors and a copy of the Report dated 5 February 2018 is attached to this Notice. That Report concludes that the EIS and EIA conducted in connection with this Licence Application were flawed with respect to the assessment of the potential impact of the proposed Shot Head fish farm, either on its own or in combination with other aquaculture activities, on birds.

The following issues have been identified in respect of the adequacy of the EIA supplied in support of the Shot Head Licence Application:

- The EIA contains no assessment of potential impacts on bird populations and does not make any reference to the possible interaction with the gannet colonies of Bull and the Cow Rocks SPA;
- The EIA conclusion that there is "no potential source-pathway-target vector" connecting the proposed fish
  farm site and the Beara Peninsula SPA is incorrect, as the site is within the foraging range of Fulmar, a
  species of Special Conservation Interest (SCI) of the Beara Peninsula SPA;
- The EIA does not consider important non-SPA bird populations which have the potential to interact with the proposed fish farm site.

Cúirt Choill Mhinsí, Bóthar Bhaile Átha Cliath, Port Laoise, Contae Laoise, R32 DTW5 Kilminchy Court, Dublin Road, Portlaoise, County Laois, R32 DTW5 In addition, it therefore follows that further Appropriate Assessment screening is required, with the possibility of a Stage 2 Appropriate Assessment being necessary to evaluate the impact on SPA-associated gannet mortalities.

Pursuant to Section 47(1) (a) of the Act, where the Board is of the opinion that any document, particulars or other information is or are necessary for the purposes of enabling the Board determine the Appeal it may serve a Notice on a party.

In accordance with the provisions of section 47(1) (a) of the Act, the Board requires the issues specified below be reviewed and addressed:

- The EIA submitted with the Licence Application contains no assessment of potential impacts on bird
  populations and in particular does not make any reference to the possible interaction with the gannet
  colonies of Bull and the Cow Rocks SPA. Please assess the potential impacts of the proposed Aquaculture
  Licence on bird populations and in particular assess the possible interaction of the proposed Licence with the
  gannet colonies of Bull and the Cow Rocks SPA.
- 2. The EIA conclusion that there is "no potential source-pathway-target vector" connecting the proposed Aquaculture Licence site and the Beara Peninsula SPA is incorrect, as the site is within the foraging range of Fulmar, a species of Special Conservation Interest (SCI) of the Beara Peninsula SPA. Please reconsider the EIA conclusion in this regard and either confirm the conclusion of the EIA, providing the scientific reasoning and evidence to support your conclusion, or if there is an alternative conclusion, assess the impact of that alternative conclusion and advise if other measures are required.
- 3. The EIA does not consider important non-SPA bird populations which have the potential to interact with the proposed fish farm site. Please assess the potential impacts on important non-SPA bird populations which have the potential to interact with the proposed Aquaculture Licence.
- 4. Having conducted further Appropriate Assessment screenings as outlined at 1 above, please consider whether a Stage 2 Appropriate Assessment is necessary to evaluate the impact on SPA-associated gannet mortalities.

A response to this Notice is required within 28 days of the date hereof.

Please also note that a person who refuses or fails to comply with a requirement under subsection (1)(a) shall be guilty of an offence.

We await hearing from you.

Yours sincerely

Mary O'Hara

Secretary to the Board

Mary D'Harp

An Bord Achomhairc Um Cheadúnais Dobharshaothraithe Aquaculture Licences Appeals Board



### Amendment to

## Marine Institute Section 47

received 24 April 2018

#### OHara, Mary

From:

Jeffrey Fisher [Jeffrey.Fisher@Marine.ie]

Sent:

24 April 2018 19:28

To:

Alab, Info

Subject:

correction to marine institute submission on shothead

#### Dear Mary,

In the response of the Marine Institute, dated March 28, 2018, I wish to alert ALAB to a typographical error in the concluding sentence of my memo. It should have been written as, 'On the basis of the points above, the requirement to carry out a full Article 6.3 assessment on the likely interactions with <u>gannet</u> or to assess the importance of the area for other bird populations is not warranted.'

The reference to 'two gull species' in that sentence, as originally provided, was erroneous. I regret any confusion this may have caused. This change alters in no way the substance of our submission and no additional information has been reviewed that would alter the conclusions in my previous submittal. If you would like me to resubmit the memo with this error addressed, please let me know.

Sincerely,

Dr. Jeff Fisher
Director
Marine Environment & Food Safety Services
Marine Institute
Rinville
Oranmore
Co. Galway
Ireland

Direct: 353-(0)91-38 7474 Mobile: 353-(0)87-400-9092 An Bord Achomharc Um Cheadúnais Dobharshaothraithe Aquaculture Licences Appeals Board



# Response of

## the Marine Institute

dated March 28, 2018

to the section 47 Notice



Date: March 28, 2018

To: Aquaculture Licences Appeals Board

From: Dr. Jeff Fisher, Director of Marine Environment, Marine Institute

CC: Dr. Francis O'Beirn & Dr. Terry McMahon, Marine Institute.

Re: ALAB communication re: Appeal against the decision by the Minister for Agriculture, Food and the Marine to the conditions/grant of Aquaculture and Foreshore Licences to Braden Fanad Teo t/a Marine Harvest Ireland, Kindrum, Fanad, Letterkenny, Co. Donegal on site Ref: T05/555 for the cultivation of Atlantic Salmon; Salmo Solar on a site on the foreshore at Shot Head, Bantry Bay, Co Cork

On behalf of the Marine Institute, I am responding to the Aquaculture Licenses Appeals Board (ALAB) query to the Marine Institute regarding the appeal against the Shot Head licencing decision T05/555. Specifically, the Marine Institute was requested to review and address the following:

- 1.The EIA submitted with the Licence Application contains no assessment of potential impacts on bird populations and in particular does not make any reference to the possible interaction with the gannet colonies of Bull and the Cow Rocks SPA. Please assess the potential impacts of the proposed Aquaculture Licence on bird populations and in particular assess the possible interaction of the proposed Licence with the gannet colonies of Bull and the Cow Rocks SPA.
- 2. The EIA conclusion that there is "no potential source-pathway-target vector" connecting the proposed Aquaculture Licence site and the Beara Peninsula SPA is incorrect, as the site is within the foraging range of Fulmar, a species of Special Conservation Interest (SCI) of the Beara Peninsula SPA. Please reconsider the EIA conclusion in this regard and either confirm the conclusion of the EIA, providing the scientific reasoning and evidence to support your conclusion, or if there is an alternative conclusion, assess the impact of that alternative conclusion and advise if other measures are required
- 3. The EIA does not consider important non-SPA bird populations which have the potential to interact with the proposed fish farm site. Please assess the potential impacts on important non-SPA bird populations which have the potential to interact with the proposed Aquaculture Licence.
- 4. Having conducted further Appropriate Assessment screenings as outlined at 1 above, please consider whether a Stage 2 Appropriate Assessment is necessary to evaluate the impact on SPA-associated gannet mortalities.

Our response below addresses these requests collectively, rather than individually, in sequence.



#### **Bull and Cow Rocks SPA**

The Bull and Cow Rocks SPA (Site Code 004066), located at the western end of Bantry Bay, is circa 44 km from the proposed salmon farm site at Shot Head. The Conservation Objectives of this SPA are:<sup>1</sup>

To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA:

- Storm Petrel (Hydrobates pelagicus)
- Gannet (Morus bassanus)
- Puffin (Fratercula arctica)

It is noted that the Wild Bird Impact Assessment (V1 02 Feb 2018) concluded that "the development of the proposed fish farm is unlikely to have any impacts of the Storm Petrel SCI or the Puffin SCI of the Bull and the Cow Rocks SPA" The Marine Institute agrees with this conclusion.

#### Potential Interactions with Gannets

With respect to potential interaction with Gannets we offer the following observations:

- Gannets are an offshore species coming inshore only to follow fish and to breed.
   With the exception of the Bull and Cow Rocks there are no gannet breeding colonies
   in the vicinity of the proposed fish farm site, breeding occurs within the SPA. Given
   the low numbers of gannets recorded in Bantry Bay, the likelihood of interaction
   with the proposed farm site is very low, as also acknowledged in Board's Technical
   Advisors Wild Bird Impact Assessment report
- While gannets have been recorded foraging /feeding within Bantry Bay, the potential loss of 42.5 Ha (the total area of the proposed farm site) for foraging /feeding at the proposed fish farm site is not considered to be significant given the very large area both within Bantry Bay and seaward of the SPA available for foraging/feeding. Specifically, Bantry Bay is approximately 32Km long and 5Km wide with a surface area of approximately 16,000 Ha. The area occupied by the proposed fish farm therefore would represent only about 0.002% of the foraging area available within the bay. There is no indication that the proposed fish farm area provides favoured feeding habitat and thus would be preferentially attractive to gannets, or any other bird species. Habitat displacement is therefore unlikely to have significant effects on gannets which may occasionally use the area, and significant impacts on the population of gannets is not considered likely.
- Gannets generally show habituation to human activities at sea and readily feed of fisheries discards. As such, they are unlikely to be adversely disturbed by boat traffic associated with installation, operation and maintenance of the proposed fish

<sup>&</sup>lt;sup>1</sup> NPWS (2016) Conservation objectives for The Bull and The Cow Rocks SPA [004066]. Generic Version 5.0. Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs



farm. This was also recognized in the Board's Technical Advisors Wild Bird Impact Assessment report

• While we recognize that net entanglement by gannets has occurred at other fish farms in the past, and hence can't be completely discounted at the proposed site, the occurrence of such events is extremely rare. Further, the population of gannets at the Bull Rock SPA has more than doubled over the period in which fish farms have been in operation in Bantry Bay. If fish farms in Bantry are asserting a cumulative mortality from net entanglement to affect local gannet population abundance, the record is lacking. Thus, the weight of evidence would indicate the proposed farm site will have no adverse effect on gannet population abundance.

#### **Bull and Cow AA Screening**

Guidance on AA Screening provided in the by the then Department of Environment, Heritage and Local Government<sup>2</sup> recommends that any Natura 2000 sites within 15 Km of the location of a project should be considered. It is also advised that in the case of a project that could affect water quality or quantity, for example, it may be necessary to consider the full extent of the upstream and/or downstream catchment.

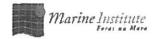
As noted above, the Bull and Cow Rocks SPA is located at the western end of Bantry Bay and is circa 44 km from the proposed salmon farm site at Shot Head, well outside the 15 Km guidance distance. It is noted, however, that the surrounding water, between and to a distance of 500 m around each island, is included within the SPA for the benefit of the breeding seabirds and thus impacts on water quality within this zone needs to be considered. Results of modelling of the deposition of particulate material (e.g. waste food / faeces) at the proposed fish farm site provided in Section 4.8 of the Environmental Impact Statement submitted by the applicant show that the zone of impact will not extend beyond circa 100m of the farm and thus will have no impact on the SPA. Similarly, given the volume of water available for dilution and dispersion between the proposed farm site and the SPA, the AA justifiably concluded that no significant impacts are considered likely from the emission of dissolved material from the farm. This is consistent with the conclusion set out in Section 6.8 of the Technical Advisors Interim Report.<sup>3</sup>

There is no spatial overlap between the SPA and proposed salmon farm site. Therefore, there will be no direct impacts of the aquaculture activity on the SPA. There will be no reduction in habitat area and no habitat or species fragmentation within SPA. Additionally,

<sup>&</sup>lt;sup>2</sup> Appropriate Assessment of Plans and Projects in Ireland – Guidelines for Planning Authorities" Available on the Web at

https://www.npws.ie/sites/default/files/publications/pdf/NPWS 2009 AA Guidance.pdf

http://www.alab.ie/media/alab/content/technicalreports/TechnicalAdvisorReportBantryBayInterim120117.pd f



there will be no reduction in species density or impacts on water quality within the SPA nor interference with key relationships that define the function of the site.

On the basis of the above, significant interactions between the activity at the proposed fish farm and gannets that may occasionally forage/feed within Bantry Bay are unlikely. Similarly, significant interactions between the activity at the proposed fish farm and gannets colonies within The Bull and Cow Rocks SPA are considered unlikely.

It is concluded that a Stage 2 Appropriate Assessment is not necessary to evaluate the interactions of the farm with gannets. This is consistent with the conclusion set out in Sections 6.5.3 and 10.1 of the Technical Advisors Interim Report.

#### "Source -pathway- target" vector

In the context of the proposed salmon farm at Shot Head the "source-pathway-target" vector term was used to describe the potential mechanism by which a pollutant, including noise, emitted at the farm could be transferred and interact with a target e.g. habitat, species within an adjacent Natura 2000. We remain of the view that, in this context, this statement is correct. As set out in the Site Synopsis<sup>4</sup> available on the NPWS Web site:

"The Beara Peninsula SPA is a coastal site situated on the west coast of Co. Cork, south-west of the town of Kenmare. It encompasses the high coast and sea cliff sections of the western end of the peninsula from Reenmore Point/Cod's Head in the north, around to the end of Dursey Island in the west, and as far east as Bear Island in the south. The site includes the sea cliffs, the land adjacent to the cliff edge and several upland areas further inland of the coast about Eagle Hill, Knockgour, Allihies and Firkeel. The high water mark forms the seaward boundary.

Considering, the largely terrestrial nature of the SPA, and the fact that the high water mark forms the seaward boundary of the SPA, it is considered that there is no mechanism for pollutants to be transported from the farm site into the SPA. There will be no loss of habitat or impacts on habitat quality within in the Natura 2000 site. The proposed farm site is circa 12.5Km from the nearest boundary of the SPA and, given this distance, it considered that disturbance of the Chough or Fulmar within the SPA resulting from activity at the proposed farm site is not likely. Breeding and nesting sites will not be impacted.

It is acknowledged that Fulmar have been recorded within Bantry Bay and may occur from time to time at the location of the proposed fish farm. Notwithstanding this, the footprint of the proposed salmon farm is relatively small considering the overall area available for foraging within the broader Bantry Bay and alternative and essentially unlimited (and preferred) open ocean foraging habitat outside the bay. There is no indication that the area of the proposed farm provides favoured feeding habitat for Fulmar. Indeed, as the Board's Technical Advisors Wild Bird Impact Assessment report cites—and we concur:

<sup>4</sup> https://www.npws.ie/sites/default/files/protected-sites/synopsis/SY004155.pdf



- Water depth within and around the proposed fish farm site is substantially shallower than Fulmar's preferred depth for foraging (30m to 40m vs 100m preferred).
- No foraging Fulmar have been recorded in Bantry Bay transect surveys.
- · Fulmar prefer open marine waters well offshore for foraging.

It is industry best practice to use top netting on the cages to exclude birds and the use of such netting is intended to be used at the proposed fish farm site. Mortalities of seabirds as result of entanglement with top netting on cages may occur but it is considered that such events are not likely to be frequent and adverse impacts on bird populations, including fulmars, is not likely. This is consistent with the conclusion set out in Section 6.5.1 and 6.5.3 Technical Advisors Interim Report, and with our conclusion regarding entanglement risk to gannets discussed earlier (see also discussion of entanglement risks to non-SPA birds, below).

#### Important non-SPA birds

There will be a potential loss of circa 42.5 Ha (the total area of the proposed farm site) of open water foraging / feeding habitat for seabirds at the proposed fish farm. This area is not considered large in the context of the overall area available to birds within Bantry Bay which is estimated to be approximately 16,000 Ha. Significant impacts on bird populations are therefore considered unlikely.

There is no indication that the proposed fish farm area provides favoured feeding habitat for any other bird species. Displacement is therefore unlikely to have significant effects on bird species which may occasionally use the area.

Mortalities of seabirds as result of entanglement with top netting on cages may occur yet technological advances have minimised this risk considerably. We note the adoption of a Standard Operating Procedure identified in the EIS relating to the installation and maintenance of Bird Nets and Supports on Fish Pens. Consequently, it is considered that such events are not likely to be frequent and adverse impacts on bird populations are, therefore, not likely. This is consistent with the conclusion set out in Section 6.5.1 and 6.5.3 of the Technical Advisors Interim Report.

On the basis of the points above, the requirement to carry out a full Article 6.3 assessment on the likely interactions with two gull species or to assess the importance of the area for other bird populations is not warranted.

An Bord Achomhairc Um Cheadúnais Dobharshaothraithe **Aquaculture Licences Appeals Board** 



### Amendment to

## Marine Institute Section 47

received 24 April 2018

#### OHara, Mary

From:

Jeffrey Fisher [Jeffrey.Fisher@Marine.ie]

Sent:

24 April 2018 19:28

To:

Alab, Info

Subject:

correction to marine institute submission on shothead

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The reference to 'two gull species' in that sentence, as originally provided, was erroneous. I regret any confusion this may have caused. This change alters in no way the substance of our submission and no additional information has been reviewed that would alter the conclusions in my previous submittal. If you would like me to resubmit the memo with this error addressed, please let me know.

Sincerely,

Dr. Jeff Fisher
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Marine Environment & Food Safety Services
Marine Institute
Rinville
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Co. Galway
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