



AQUACULTURE LICENCES APPEALS BOARD

FISHERIES (AMENDMENT) ACT 1997 (AS AMENDED AND SUBSTITUTED)

Appeal Reference Numbers: **AP2/1-14/2015**

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DETERMINATION

PART 1: THE APPEALS

WHEREAS appeals having been made to the Aquaculture Licences Appeals Board ("**the Board**") pursuant to section 40 of the Fisheries (Amendment) Act, 1997 (as amended) ("**the Act**") by

1. Save Bantry Bay (AP2/1/2015)
2. Residents of Roosk, Adrigole (AP2/2/2015)
3. John Brendan O'Keeffe (AP2/3/2015)
4. Denis O'Shea, Kieran O'Shea, and Jason O'Shea (AP2/4/2015)
5. Bantry Salmon and Trout Anglers Association (AP2/5/2015)
6. Marine Harvest Ireland (AP2/6/2015)
7. C. Harrington, V. O'Sullivan, P. Murphy, C. Forker (AP2/7/2015)
8. Coomhola Salmon & Trout Anglers' Association (AP2/8/2015)
9. Galway Bay Against Salmon Cages (AP2/9/2015)
10. Salmon Watch Ireland (AP2/10/2015)
11. John Hunt (AP2/11/2015)
12. Friends of the Irish Environment (AP2/12/2015)
13. Inland Fisheries Ireland (AP2/13/2015)
14. Federation of Irish Salmon and Sea Trout Anglers (AP2/14/2015)

(together "**the Appellants**"), against the decision of the Minister for Agriculture, Food and the Marine ("**the Minister**") to grant an Aquaculture Licence to **Bradán Fanad Teo** t/a Marine Harvest Ireland, now known as MOWI ("**the Applicant**") Kindrum, Fanad, Letterkenny, Co. Donegal for the cultivation of Atlantic Salmon; *Salmo Salar* on a site on the foreshore at Shot Head, Bantry Bay, Co Cork on site reference T5/555 ("**the Site**")

AND WHEREAS the Board agreed at its meeting on 20 October 2015 to exercise the discretion granted to it by section 42(1) of the Act, to treat two or more appeals, and the appellants as parties to a single appeal and has not since that date decided to separate the appeals

AND WHEREAS the Board exercised its discretion pursuant to section 49(1) of the Act to hold an Oral Hearing in respect of the appeals and the Oral Hearing was heard over 4 days, on 14 and 15 February 2017 and 19 and 20 September 2017 ("**Oral Hearing**")

PART 2: MATTERS CONSIDERED

AND WHEREAS the Board, in considering the appeals took account of the following:

- 2.1 The appeals from the Appellants received by the Board in respect of the Minister's decision;
- 2.2 The copy of the aquaculture licence application concerned, and any drawings, maps, particulars, evidence, environmental impact statement, other written studies or further information received or obtained from the Applicant together with copies of reports prepared for the Minister in relation to the application and copies of documents recording the decision of the Minister in respect of the application and of the notification of the decision given to the Applicant, all provided to the Board by the Minister in response to the Board's notice to the Minister issued on 23 October 2015 pursuant to the provisions of section 43(2) of the Act ("**the Minister's File**");
- 2.3 Submission dated 9 November 2015 from Save Bantry Bay in response to Notice dated 23 October 2015 issued pursuant to section 44(1) of the Act;
- 2.4 Submission dated 16 November 2015 from John Brendan O'Keeffe in response to Notice dated 23 October 2015 issued pursuant to section 44(1) of the Act;
- 2.5 Submission dated 18 November 2015 from Denis, Kieran and Jason O'Shea in response to Notice dated 23 October 2015 issued pursuant to section 44(1) of the Act;
- 2.6 Submission dated 20 November 2015 from Marine Harvest Ireland with accompanying Report by RPS on Water Quality Modelling for all existing & currently proposed salmon farm sites in Bantry Bay dated November 2015 ("**the Water Modelling Report**"), in response to Notice dated 23 October 2015 issued pursuant to section 44(1) of the Act;
- 2.7 Submission dated 23 November 2015 from Salmon Watch Ireland in response to Notice dated 23 October 2015 issued pursuant to section 44(1) of the Act;
- 2.8 Responses from the Applicant dated 2 November 2016 and 18 November 2016 to Notice dated 6 October 2016 issued pursuant to section 47(1)(a) of the Act to which were attached (1) Protocol for Structural Design of Marine Finfish Farms (April 2016) prepared by the Department of Agriculture, Food & the Marine ("**DAFM**") ("**the Structural Design Protocol**") and (2) Shot Head Integrated Pest Management/Single Bay Management Plan dated 26 October 2016 prepared by the Applicant ("**the Pest Management Plan**");
- 2.9 Responses from Inland Fisheries Ireland ("**IFI**") dated 19 October 2016 and 6 September 2017 to Notice dated 6 October 2016 issued pursuant to section 47(1)(a) of the Act;

- 2.10 Responses from Marine Institute ("**MI**") dated 9 November 2016 and 12 December 2016 to Notice dated 6 October 2016 issued pursuant to section 47(1)(a) of the Act;
- 2.11 Response from National Parks and Wildlife Service ("**NPWS**") dated 17 November 2016 to Notice dated 6 October 2016 issued pursuant to section 47(1)(a) of the Act;
- 2.12 The Technical Advisor Interim Report dated 31 December 2016, prepared by the Board's appointed Technical Advisor Graham Saunders ("**Technical Advisor Interim Report**");
- 2.13 Report dated 8 November 2017 of Oral Hearing Chairperson following the Oral Hearing ("**Oral Hearing Report**"), and the submissions made to the Oral Hearing, including:
 - 2.13.1 Submission from NPWS being Report entitled "*Rapid Assessment of *Margaritifera margaritifera* (L.) populations in Ireland: Rivers assessed in 2008*" dated January 2009
 - 2.13.2 Submissions by Friends of the Irish Environment dated 14 February 2017 and 20 September 2017
 - 2.13.3 Submissions by Salmon Watch Ireland received 19 September 2017 and 20 September 2017
 - 2.13.4 Submissions by Galway Bay Against Salmon Cages received 18 September 2017 and 21 September 2017
 - 2.13.5 Submission from Federation of Irish Salmon and Sea Trout Anglers received 18 September 2017
 - 2.13.6 Submission from IFI received 20 September 2017
 - 2.13.7 Submission on behalf of the Applicant from Neil Bass entitled " Numerical Modelling of the dispersion of wastes, medication and salmon lice (*Lepeophtheirus salmonis* Kroyer) from the proposed MHI Shot Head site in Bantry Bay; and
 - 2.13.8 Submissions from MI as follows:
 - 2.13.8.1 Response to issues raised in Technical Advisor Interim Report, dated 9 February 2017
 - 2.13.8.2 Copy Report by Central Fisheries Board entitled "*Quantification of the Freshwater Salmon Habitat Asset in Ireland 2003*"

- 2.13.8.3 Copy Report of Department of Environment, Heritage and Local Government entitled "Freshwater Pearl Mussel – Strategic Environmental Assessment – Environmental Report - March 2010"
- 2.13.8.4 Copy Report of International Council for the Exploration of the Sea Advisory Committee being "Report of Workshop to address the North Atlantic Salmon Conservation Organisation ("**NASCO**") request for advice on possible effects of salmonid aquaculture on wild Atlantic salmon populations in the North Atlantic (WKCULEF) dated March 2016 and
- 2.13.8.5 Copy Report on Sea Lice Epidemiology and Management in Ireland with Particular Reference to Potential Interactions with Wild Salmon (*Salmo salar*) and Freshwater Pearl Mussel (*Margaritifera margaritifera*) Populations. Irish Fisheries Bulletin No. 43 2013;
- 2.14 Supplementary EIS dated April 2018 ("**the Supplemental EIS**") received in response to Notice dated 20 December 2017 issued to the Applicant pursuant to section 47(1)(a) of the Act;
- 2.15 Report dated 24 November 2017 comprising Otter Impact Assessment ("**the Otter Screening Report**"), prepared by the Board's appointed Technical Advisor Graham Saunders;
- 2.16 Report dated 1 February 2018 comprising a Common Seal Impact Assessment ("**the Seal Screening Report**") prepared by Alex Coram of St. Andrew's Marine Research, Scotland;
- 2.17 Report dated 5 February 2018 comprising a Bird Impact Assessment ("**the Bird Impact Assessment Report**") prepared by Tom Gittings;
- 2.18 Response dated 28 March 2018 (with clarification dated 24 April 2018) from MI to Notice dated 27 February 2018 issued pursuant to section 47(1)(a) of the Act;
- 2.19 Response dated 27 April 2018 from the Minister to Notice dated 10 April 2018 issued pursuant to section 46(1)(a) of the Act;
- 2.20 Response dated 28 April 2018 from Save Bantry Bay to Notice dated 10 April 2018 issued pursuant to section 46(1)(a) of the Act;
- 2.21 Response dated 30 April 2018 from P. Sweetman to Notice dated 10 April 2018 issued pursuant to section 46(1)(a) of the Act;

- 2.22 Response dated 30 April 2018 from Salmon Watch Ireland to Notice dated 10 April 2018 issued pursuant to section 46(1)(a) of the Act;
- 2.23 Response dated 30 April 2018 from An Taisce to Notice dated 10 April 2018 issued pursuant to section 46(1)(a) of the Act;
- 2.24 Response dated 30 April from the Applicant to Notice dated 10 April 2018 issued pursuant to section 46(1)(a) of the Act;
- 2.25 Response dated 1 May 2018 from Galway Bay Against Salmon Cages to Notice dated 10 April 2018 issued pursuant to section 46(1)(a) of the Act;
- 2.26 Responses dated 17 June 2018, 27 July 2018, 30 July 2018 (6), and 31 July 2018 (2) from J. B. O'Keeffe to Notice dated 10 April 2018 issued pursuant to section 46(1)(a) of the Act;
- 2.27 Responses dated 1 November 2018 and 16 November 2018 from NPWS to Notice dated 3 October 2018 issued pursuant to section 47(1)(a) of the Act;
- 2.28 Notice dated 14 November 2018 issued to the Applicant pursuant to section 47(1)(a) of the Act requiring publication of the Supplemental EIS in connection with the appeals in The Irish Examiner, The Kerryman, and the Southern Star newspapers (published on 20 November 2018, 22 November 2018 and 24 November 2018 respectively) and requiring the Applicant to make the Supplemental EIS available for inspection and to provide copies of the Supplemental EIS to the bodies listed in Regulation 10(1) of Aquaculture (Licence Application) Regulations 1998 and 2018, informing them of their right to make submissions or observations to the Board;
- 2.29 Submissions received in response to the published notices referred to in paragraph 2.28 above and notification to the bodies listed in Regulation 10(1) of Aquaculture (Licence Application) Regulations 1998 and 2018, as follows:
 - 2.29.1 from Bord Iascaigh Mhara dated 10 December 2018
 - 2.29.2 from IFI dated 19 December 2018
 - 2.29.3 from Galway Bay Against Salmon Cages dated 10 January 2019
 - 2.29.4 from Salmon Watch Ireland dated 5 and 8 January 2019
 - 2.29.5 from Sea Fisheries Protection Authority dated 14 January 2019
 - 2.29.6 from P. Sweetman dated 16 January 2019 and

- 2.29.7 from Save Bantry Bay dated 16 January 2019;
- 2.30 Response dated 15 February 2019 from MI to Notice dated 23 January 2019 issued pursuant to section 47(1)(a) of the Act;
- 2.31 Response dated 14 May 2019 from MI to Notice dated 23 April 2019 issued pursuant to section 47(1)(a) of the Act;
- 2.32 Supplemental Appropriate Assessment Screening by Olivia Crowe dated April 2019 (“**the AA Screening Report**”);
- 2.33 Notice dated 20 June 2019 to the Applicant requiring a Natura Impact Statement as defined in Regulation 2(1) of the European Communities (Birds and Natural Habitats) Regulations 2011 as amended (**2011 Regulations**) together with Supplemental Notices dated 16 September 2019, 23 March 2020 and 8 June 2020;
- 2.34 Natura Impact Statement (“**NIS**”) dated July 2020;
- 2.35 Appropriate Assessment Report dated 11 September 2020 and Supplemental Briefing Note dated 19 May 2021 including a population viability analysis as an addendum thereto;
- 2.36 MI Appropriate Assessment Screening Matrix Reports dated June 2018, as referenced in the AA Report referred to in paragraph 2.35 above, as updated in September 2020, for Aquaculture Activity in Outer Bantry Bay;
- 2.37 Submissions received in response to Notices dated 23 September 2020 issued pursuant to section 46(1)(a) of the Act to all parties to the appeal and in response to Public Notices published in The Southern Star (26 September 2020), The Kerryman (30 September 2020) and the Irish Examiner (30 September 2020) pursuant to Regulation 42(8) of the 2011 Regulations advising that the Board had determined that an Appropriate Assessment, as referred to in Article 6(3) of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (as amended), was required and inviting the opinion of the Appellants and the general public for the purposes of conducting its Appropriate Assessment, as follows:
- 2.37.1 From Save Bantry Bay dated 13 November 2020, and with a further copy of the Submission referred to at 2.29.7 above
- 2.37.2 From Billy Smyth of Galway Bay against Salmon Cages dated 15 November 2020

- 2.37.3 From An Taisce dated 16 November 2020
- 2.37.4 From Friends of the Irish Environment dated 16 November 2020 and
- 2.37.5 From DAFM dated 16 November 2020;
- 2.38 The Technical Advisor Final Report dated 8 December 2020 prepared by the Board's appointed Technical Advisor Graham Saunders ("**Technical Advisor Final Report**");
- 2.39 Response dated 2 March 2021 of the Applicant to Notice dated 15 February 2021 issued pursuant to section 47(1)(a) of the Act;
- 2.40 Site Visit Report dated 26th May 2021, following visit to the Dromagowlane/Trafrask River Catchment, Adrigole, Co. Cork on 5th March 2021 prepared by the of the Board's own Technical Advisor Ciar O'Toole ("**the Freshwater Pearl Mussel Report**");
- 2.41 Report of the Board's own Technical Advisor dated 28th May 2021 on Potential In-Combination Effects on Special Conservation Interest species identified in the AA Screening Report arising from proposed mechanical kelp harvesting in Bantry Bay ("**the Kelp Report**"); and
- 2.42 Appropriate Assessment Conclusion Statement of the Board dated 28th May 2021 ("**Appropriate Assessment Conclusion Statement**").

The Board considered the appeal at its meetings on the 20 October 2015, 24 November 2015, 19 January 2016, 7 March 2016, 5 April 2016, 13 September 2016, 22 November 2016, 10 January 2017, 9 February 2017, 7 March 2017, 5 May 2017, 13 June 2017, 19 July 2017, 25 August 2017, 31 October 2017, 9 November 2017, 13 December 2017, 19 February 2018, 1 May 2018, 12 June 2018, 28 August 2018, 9 October 2018, 14 November 2018, 11 December 2018, 22 January 2019, 26 March 2019, 30 April 2019, 15 May 2019, 25 June 2019, 9 October 2019, 14 November 2019, 10 December 2019, 31 January 2020, 26 February 2020, 19 March 2020, 22 April 2020, 15 May 2020, 11 June 2020, 9 July 2020, 6 August 2020, 4 September 2020, 8 October 2020, 5 November 2020, 30 November 2020, 10 December 2020, 12 January 2021, 5 February 2021, 2 March 2021, 1 April 2021, 29 April 2021, 28 May 2021 and 24 June 2021.

PART 3: GROUNDS OF APPEALS BY THE APPELLANTS

The grounds of the appeals are summarised as follows:

- 3.1 Increased threat to wild salmon and sea trout from sea lice - this issue was raised by nine of the fourteen Appellants;
- 3.2 Threat to wild salmon from escaped farm fish/disease control - this issue was raised by six of the fourteen Appellants;
- 3.3 Insufficient carrying capacity to support additional aquaculture – that the Bay has reached the limit of its ability to support multiple aquaculture activities. This issue was raised by two of the fourteen Appellants;
- 3.4 Site suitability: weather vulnerability - this issue was raised by three of the fourteen Appellants;
- 3.5 Toxic chemical discharges/pollution - this issue was raised by six of the fourteen Appellants;
- 3.6 Nutrient and settleable solid discharges - this issue was raised by four of the fourteen Appellants;
- 3.7 Impacts on farmed shellfish - this issue was raised by two of the fourteen Appellants;
- 3.8 Impacts on benthic/pelagic and local freshwater habitats and species, including marine mammals, birds and benthic impacts - these issues were raised by four of the fourteen Appellants;
- 3.9 Impact on tourism, including salmonid angling - this issue was raised by four of the fourteen Appellants;
- 3.10 Impact on commercial in-shore fishing- this issue was raised by two of the fourteen Appellants;
- 3.11 Impact on on-shore angling – this issue was raised by two of the fourteen Appellants;
- 3.12 Licence conditions including underwater archaeology, cage dimensions and type, cage number and configuration and production and farm management strategies, including following – these issues were raised by four of the fourteen Appellants;
- 3.13 Cumulative impacts - this issue was raised by three of the fourteen Appellants;

- 3.14 Noise impacts - this issue was raised by one of the fourteen Appellants;
- 3.15 The adequacy of the Environmental Impact Statement for the proposed aquaculture prepared on behalf of the Applicant in May 2011 ("the 2011 EIS") and the Environmental Impact Assessment report provided by DAFM as part of the Minister's file ("the EIA") - this issue was raised by four of the fourteen Appellants;
- 3.16 Inadequate public consultation - this issue was raised by three of the fourteen Appellants;
- 3.17 Threats to navigation - this issue was raised by one of the fourteen Appellants;
- 3.18 Absence of a local aquaculture management scheme - this issue was raised by one of the fourteen Appellants;
- 3.19 Dissatisfaction with licence approval process - conflict of interest - this issue was raised by six of the fourteen Appellants;
- 3.20 Matters concerning governmental policy on aquaculture relating to: disapproval of government policy on aquaculture; the potential requirement for Strategic Environmental Assessment ("SEA") in response to changes in government policy on fish farming; the absence of a local aquaculture management scheme; and the lack of regulation of salmon farming industry – these issues were raised by three of the fourteen Appellants;
- 3.21 Danger of farmed fish to human health - this issue was raised by one of the fourteen Appellants;
- 3.22 Change of Applicant name - this issue was raised by one of the fourteen Appellants;
- 3.23 Matters relating to the environmental impacts of fish farming, including: sustainability of the salmon farming industry in relation to the preparation of farm feed; the potential contribution of the fish farming industry to climate change; and the potential impact of the licence on the global protection of wild salmonid stocks - this issue was raised by two of the fourteen Appellants; and
- 3.24 The Applicant's supposed record of inadequate compliance, enforcement and monitoring - this issue was raised by one of the fourteen Appellants.

PART 4: ENVIRONMENTAL IMPACT ASSESSMENT

- 4.1 The Board considered both the 2011 EIS and the EIA.
- 4.2 In considering the Appeals, the 2011 EIS and the EIA, and having regard to Oral Hearing Report, the Board determined that the 2011 EIS was inadequate in certain respects and required the Applicant to provide the Supplemental EIS in order to specifically address:
- 4.2.1 the risk of sea-lice infestation of wild salmonids migrating from/to the Dromagowlane and Trafrask Rivers, and any resulting implications for local freshwater pearl mussel populations, based on available research and data; and
 - 4.2.2 to assess the potential impact of salmon farm waste on water quality, having particular regard to the maintenance of 'good water status' as required under the Water Framework Directive.
- 4.3 The Board required the Applicant to publish details of the Supplemental EIS in The Examiner, The Kerryman, and the Southern Star newspapers; to make the Supplemental EIS available for public inspection, and to provide copies of the Supplemental EIS to the bodies listed in Regulation 10(1) of Aquaculture (Licence Application) Regulations 1998 and 2018, informing them of their right to make submissions or observations to the Board. The Board received a number of submissions in response. In considering these and the Supplemental EIS, the Board determined that the Supplemental EIS was adequate in respect of water quality but that queries remained in relation to the salmonid populations in the Dromagowlane/Trafrask River and potential implications for Freshwater Pearl Mussel populations in the same location.
- 4.4 MI and IFI provided information to the Board on this issue (as listed in paragraphs 2.9, 2.13.6, 2.13.8, 2.29.2, 2.30 and 2.31 above). The Board considered this information and the findings of the Technical Advisor Final Report and concluded that, notwithstanding the differing views, it was satisfied that risks to wild salmon from sea lice infestation is unlikely to be a significant factor influencing conservation status of salmon stocks in Bantry Bay. In reaching this conclusion, the Board had regard to the DAFM Monitoring Protocol No.3 for Offshore Finfish Farms - Sea Lice Monitoring and Control, with which the Applicant is required to comply as a standard Term and Condition of the licence and determined that this, along with the Pest Management Plan, is deemed to be sufficient and reduces any risk to a reasonable, non-significant level. The Board concluded there were no significant risks of sea-lice infestation of wild salmonids migrating from/to the Dromagowlane and Trafrask Rivers arising from the proposed activity at the Site. However, given the potential importance of the population of freshwater pearl mussel reported in the NPWS report submitted as part of its Oral Hearing submission (as referred to in paragraph 2.13.1 above), the Board decided that this issue warranted a site visit and

separate report by the Board's own Technical Advisor. The resulting Freshwater Pearl Mussel Report concluded that due to the hydrology, size and recorded location of Freshwater Pearl Mussel within the catchment, the host species for juvenile glochidia larvae of these Freshwater Pearl Mussel populations was highly likely to be juveniles of resident brown trout. This means that it is highly unlikely that the pearl mussel populations in the Dromagowlane/Trafrask River are reliant on juveniles from migratory salmonids (salmon and sea trout) as hosts for its larval stage and that any decline in the migratory salmonid populations of the Dromagowlane/Trafrask catchment would not negatively impact on any remaining Freshwater Pearl Mussel populations present in the catchment. The Board considered and accepted this conclusion.

4.5 In addition, in accordance with the Recommendation contained in the Oral Hearing Report that prior to making a determination, further investigations should be undertaken with regard to the potential impacts of the proposed activity at the Site upon wild birds within nearby Special Protection Areas ("SPAs"), the Board commissioned the Bird Impact Assessment Report. The Bird Impact Assessment Report concluded that further AA screening was required but also noted that the 2011 EIS and the EIA did not consider important what it referred to as "non-SPA bird populations which have the potential to interact with the proposed fish farm at the Site". This was considered by the Board to be all other bird species in or using Bantry Bay, other than those species considered in the AA Screening and the Stage 2 Appropriate Assessment process, where they were identified as SCI species from connected SPA sites ("**Non-SPA Bird Species**"). In considering the potential impact on Non-SPA Bird Species, the Board sought information from MI whose response (referred to in paragraph 2.18 above) concluded that there was no risk of significant negative effects from the proposed aquaculture activity due to the size of the Site, disturbance and displacement effects, or from entanglement risks for Non-SPA Bird Species. These conclusions agreed with the conclusions in Sections 6.5.1 and 6.5.3 of the Technical Advisor Interim Report (referred to in paragraph 2.12 above). The Board accepted the conclusions from MI and the Technical Advisor Interim Report in relation to Non-SPA Bird Species. The Board considered further work was required in relation to other bird species which was undertaken in the AA Screening and in the Stage 2 Appropriate Assessment process, as more particularly discussed in Part 5 below.

4.6 Having considered the 2011 EIS, the EIA, the Supplemental EIS, the Technical Advisor Interim Report, the Technical Advisor Final Report, the Freshwater Pearl Mussel Report, the Bird Impact Assessment Report and all the material provided to the Board in response to Notices issued, detailed in Part 2 above, the Board is satisfied that all the documents taken together identify, describe and assess in an appropriate manner, in the light of the appeals before it, the direct and indirect effects of the proposed activity at the Site on the following factors:

4.6.1 human beings, fauna and flora;

4.6.2 soil, water, air, climate and the landscape;

4.6.3 material assets and the cultural heritage; and

4.6.4 the interaction between the factors referred to in 4.6.1- 4.6.3

and that the proposed aquaculture activity at the Site will not have significant effects on the environment, including the factors listed in 4.6.1- 4.6.4, by virtue of, inter alia, its nature size or location.

Part 5: Appropriate Assessment

- 5.1 The Board noted that the Site does not fall within a Natura 2000 site and all of the scientific literature in the material referred to in Part 2 of this Determination indicates that the proposed fish farm is not likely to have any deleterious effect, either individually, or in combination with other plans or projects, on the qualifying features of any of the designated sites within or related to Bantry Bay as a result of habitat use and there is no potential for significant effects and it is not likely to have a significant effect on such designated sites, either individually or in combination with other sites, plans or projects.
- 5.2 In accordance with the Recommendations arising from the Oral Hearing Report, further detailed evaluation of the potential threats to seal and otter populations (Natura 2000 interests of Glengarriff Harbour and Woodland Special Area of Conservation (“SAC”)) were undertaken.
- 5.3 The Board commissioned the Seal Screening Report in February 2018 which concluded that the operation of a fish farm at Shot Head has no potential for significant effects and it is not likely to negatively impact the conservation status of the population of harbour seals within the Glengarriff Harbour and Woodland SAC. The Board accepted the conclusion of the Seal Screening Report and determined that the proposed activity at the Site has no potential for significant effects and it is not likely to have a significant effect on the Glengarriff Harbour and Woodland SAC either individually or in combination with other sites, plans or projects.
- 5.4 The Board commissioned the Otter Screening Report in November 2017 which concluded that the operation of a fish farm at Shot Head has no potential for significant effects and it is not likely to have any detrimental impact on the otter population within the Glengarriff Harbour and Woodland SAC, or indeed throughout the entirety of the Bantry Bay catchment. The Board accepted the conclusion of the Otter Screening Report and determined that the proposed activity at the Site has no potential for significant effects and it is not likely to have a significant effect on the Glengarriff Harbour and Woodland SAC or in the Bantry Bay catchment either individually or in combination with other sites, plans or projects.
- 5.5 MI carried out Appropriate Assessment Screening of Aquaculture Activities in Outer Bantry Bay. The Board had regard to the June 2018 and September 2020 Screening Reports produced by MI and accepted their Finding of no Significant Impacts for the two relevant SAC sites only - Glengarriff Harbour and Woodland SAC and Sheep’s Head SAC - and determined that the proposed activity at the Site has no potential for significant effects and it is not likely to have a significant effect on either of the SACs either individually or in combination with other sites, plans or projects.

5.6 As referred to in paragraph 4.5 above, a Recommendation contained in the Oral Hearing Report was that there be further evaluation of the potential impacts upon wild birds within proximal SPAs.

5.6.1 The Board had regard to the Bird Impact Assessment Report which concluded that Appropriate Assessment screening with respect to these SPAs was inadequate. Accordingly, the Board commissioned an Appropriate Assessment Screening for the proposed development at the Site to determine whether the proposed fish farm presents a risk of adverse impacts to the Species of Conservation Interest ("SCIs") of SPAs that have ecological connectivity with Bantry Bay. The Board received the AA Screening Report in April 2019. Based on proximity to the proposed development at Shot Head, seven SPAs were identified for consideration in the AA Screening Report.

5.6.2 A range of SCIs were identified in the AA Screening Report on the basis that they are an SCI within either Beara Peninsula and/or Sheep's Head to Toe Head SPAs or if not an SCI within either of these SPAs, that the known foraging ranges of the species could lead to potential overlap with the Site and/or the adjacent sea area.

5.6.3 The determination of the AA Screening Report was that the proposed activity at the Site has no potential for significant effects and it is not likely to have a significant effect on the SPAs or in the Bantry Bay catchment either individually or in combination with other sites, plans or projects in relation to SCI species:

5.6.3.1 Chough and Peregrine for Sheep's Head and Toe Head SPA;

5.6.3.2 Chough for Beara Peninsula SPA;

5.6.3.3 Chough, Peregrine and Kittiwake for Iveragh Peninsula SPA;

5.6.3.4 Manx Shearwater, Storm Petrel, Lesser Black-backed Gull and Arctic Tern for Deenish Island and Scariff Island SPA;

5.6.3.5 Storm Petrel and Puffin for The Bull and Cows Rock SPA;

5.6.3.6 Fulmar, Manx Shearwater, Storm Petrel, Kittiwake, Guillemot and Puffin for Skelligs SPA; and

5.6.3.7 for all SCI species for Puffin Island SPA.

The Board considered this conclusion and accepted that the proposed activity at the Site has no potential for significant effects and it is not likely to have a

significant effect on these listed SCI species of these SPAs either individually or in combination with other sites, plans or projects.

5.6.4 The further determination of the AA Screening Report was that in relation to Gannet, Fulmar and Guillemot, considering the available information and in reviewing the nearby SPAs and their SCIs, it was not possible to rule out potential adverse impacts of the proposed development at the Site and/or the adjacent area on:

5.6.4.1 Fulmar SCI for Beara Peninsula SPA, Iveragh Peninsula SPA, Deenish Island and Scariff Island SPA;

5.6.4.2 Gannet SCI for The Bull and The Cow Rocks SPA and Skelligs SPA; and

5.6.4.3 Guillemot SCI for Iveragh Peninsula SPA.

5.6.5 The Board therefore progressed to a Stage 2 Appropriate Assessment for the SCIs in the SPAs referred to in paragraph 5.6.4 above, which began with the NIS. The Applicant provided the NIS in July 2020 and the Board commissioned a report for the purposes of its Appropriate Assessment in September 2020 ("**the AA Report**"). The Board sought the opinion of the public for the purposes of conducting its Appropriate Assessment and had regard to the responses received, detailed at paragraph 2.37 above ("**Public Consultation Phase Responses**"). Having done so, the Board required further clarification on the Public Consultation Phase Responses from MERC Consultants who had provided the AA Report. The Board received this further clarification in a briefing note ("**the Briefing Note**") received by the Board in May 2021. This Briefing Note provided the requested clarification to the Public Consultation Phase Responses based on best available scientific evidence and expertise. The Briefing Note addressed the points raised in the Public Consultation Phase Responses, including the issue of lacunae or gaps in the AA Report, concerns relating to the issue of bird entanglement and mortality and how this may impact on the SPA species as considered in the AA Report and how the conclusions of the AA Report were formed.

5.6.6 Concurrently, as part of its Stage 2 Appropriate Assessment process, the Board considered the issue of potential in-combination effects of mechanical kelp harvesting in Bantry Bay. The Board noted that An Taisce (in its submission to the Board referred to at paragraph 2.37.3 above) highlighted that the potential in-combination effects of mechanical kelp harvesting needed to be factored into the Board's consideration. The Board sought further information and this additional information was provided in the Kelp Report. The Board considered the Kelp

Report and having done so determined that the proposed activity at the Site has no potential for significant effects and it is not likely to have a significant effect on the connected SPA sites concerned, either individually or in combination with other sites, plans or projects, including mechanical kelp harvesting.

- 5.6.7 The Board considered and approved the AA Report, as supplemented by the Briefing Note, and the Kelp Report.
 - 5.6.8 The AA Conclusion Statement was received by the Board and the Board concluded, at its meeting on 28th May 2021, that the proposed fish farm development at the Site will not impact adversely on SCI species or conservation objectives for the connected SPA sites as referred to in paragraph 5.6.4 above and as such, will not adversely affect the integrity of the connected SPA sites concerned either individually or in combination with other plans or projects.
- 5.7 Having regard to all of the foregoing, the Board was satisfied that the proposed activity at the Site has no potential for significant effects and it is not likely to have any significant deleterious effect, either individually, or in combination with other plans or projects, on SCI species or conservation objectives for the connected SPA and SAC sites concerned and as such, will not adversely affect the integrity of the connected SPA sites concerned either individually or in combination with other plans or projects.

PART 6: BASIS FOR BOARD'S DETERMINATION

6. In reaching its determination on the Appeals and in addition to having regard to the documents set out in Part 2 above, the grounds for appeals as detailed in Part 3, the Board's Environmental Impact Assessment as detailed in Part 4, and the Board's Appropriate Assessment in Part 5, the Board also noted and had regard to the matters set out at section 61 of the Act (as amended and substituted), including the following:
- (a) the suitability of the place or waters at or in which the aquaculture is or is proposed to be carried on for the activity in question,
 - (b) other beneficial uses, existing or potential, of the place or waters concerned,
 - (c) the particular statutory status, if any, (including the provisions of any development plan, within the meaning of the Local Government (Planning and Development) Act, 1963 as amended) of the place or waters,
 - (d) the likely effects of the proposed aquaculture, revocation or amendment on the economy of the area in which the aquaculture is or is proposed to be carried on,
 - (e) the likely ecological effects of the aquaculture or proposed aquaculture on wild fisheries, natural habitats and flora and fauna, and
 - (f) the effect or likely effect on the environment generally in the vicinity of the place or water on or in which that aquaculture is or is proposed to be carried on-
 - (i) on the foreshore, or
 - (ii) at any other place, if there is or would be no discharge of trade or sewage effluent within the meaning of, and requiring a licence under section 4 of the Local Government (Water Pollution) Act, 1977, and
 - (g) the effect or likely effect on the man-made environment of heritage value in the vicinity of the place or waters.

Having considered all the foregoing, the Board further determined as follows:

6.1 the suitability of the place or waters at or in which the aquaculture is or is proposed to be carried on for the activity in question

- 6.1.1 The proposed fish farm is not within a designated conservation area and will have no impact on adjacent Natura 2000 sites and their qualifying interests or conservation objectives as outlined in Section 5 above.

Notwithstanding, the Board determined that the licence for the Site should include, in Schedule 5 thereof, an additional condition requiring the Applicant to comply with any code of practice or monitoring programme developed in agreement with NPWS or any other relevant State body for the purposes of monitoring and recording bird populations in Bantry Bay.

- 6.1.2 On the basis of modern modelling techniques, the site is hydrologically isolated from adjacent main rivers and other fish farms and will therefore present an overall low sea lice infestation and pollution risk, as presented in the 2011 EIS, Supplemental EIS and Technical Advisor Final Report.

In this context, the Board considered potential threats from sea lice both to the Site and to wild salmonid populations in Bantry Bay, including migratory salmonids within its catchment. The Board noted that the impacts and risks associated with sea lice were assessed in the 2011 EIS and in the EIA. The impacts and risks were subsequently assessed further during the Oral Hearing, in the Supplemental EIS, in submissions to the Board from MI and IFI (referred to at paragraphs 2.9, 2.13.6, 2.13.8, 2.29.2, 2.30 and 2.31 above), in the Technical Advisor Final Report and at paragraph 4.4 above. Further the Board had regard to the DAFM Monitoring Protocol No.3 for Offshore Finfish Farms - Sea Lice Monitoring and Control, with which the Applicant is required to comply with as a standard Term and Condition of the licence and determined that this, along with the Pest Management Plan, is deemed to be sufficient and reduces any risk to a reasonable, non-significant level.

Notwithstanding, the Board determined that the licence for the Site should include, in Schedule 5 thereof, an additional condition requiring the Applicant to comply with any bay wide single bay management plan or code of practise for Bantry Bay developed in agreement with any relevant State body.

- 6.1.3 The risk of fish escapes from the proposed salmon farm at the Site was discussed in the 2011 EIS and was considered also at the Oral Hearing and in the Technical Advisor Final Report. The advice of the Board's Technical Advisor in the Technical Advisor Final Report was that the proposed activity at the Site presents a negligible risk for the transfer of fish diseases to wild stocks via escapes into Bantry Bay. The Board noted that certain Appellants had raised concerns over large episodic events associated with holes in nets caused by predators, or as a result of storm events. The Board noted the specifications of the farm cages and their ability to withstand the expected conditions were not supplied but also noted that approval of the cages specification will fall within the jurisdiction of and require approval from DAFM. The Board also noted that a Term and Condition of the licence will include compliance with the most up to date guidelines on fish

containment developed by the North Atlantic Salmon Farming Industry and the NASCO Liaison Group.

Notwithstanding, the Board determined that the licence for the Site should include, in Schedule 5 thereof, an additional condition requiring the Applicant to comply with the standards laid out in the Structural Design Protocol, as revised from time to time.

- 6.1.4 The Site bathymetry and water exchange regime are favourable for anchored cages and is therefore suitable for salmonid culture.
- 6.1.5 The Site is not close to any National Monuments and will have no impact on any known marine archaeological sites.
- 6.1.6 The location of the Site below a cliff and seaward of raised land will completely obscure the farm from established tourist routes.
- 6.1.7 The Site is not within sight of an established public footpath and the use of the adjacent land by recreational visitors is infrequent.
- 6.1.8 There are unremarkable and locally common benthic communities within the expected footprint of the Site, with no concerns for rare or vulnerable species.
- 6.1.9 The Site is serviceable from an existing shore base, requiring only occasional access from existing local facilities.
- 6.1.10 The location of the Site is exposed to prevailing winds with a possible considerable fetch. Since the suitability of the cage structures and system will be subject to scrutiny and approval by DAFM, as outlined in paragraph 6.1.3 above, the Board consider this can be managed by DAFM approval and adherence by the Applicant to the standards set out in the Structural Design Protocol, as revised from time to time.
- 6.1.11 While MI advice to the Board initially suggested that a potentially commercially harvestable population of Nephrops may be present within the Site, further clarification from MI stated that *"disruption would appear limited and pot fishing could otherwise continue in very close proximity to the proposed salmon farm."* Deposition from the proposed fish farm at the Site is likely to have a significant adverse impact on part of this potentially exploitable prawn (*Nephrops*) ground directly beneath the cages themselves. However, the overlap with commercial pot fishing is deemed minimal and current and future pot fishing could continue outside the footprint of the mooring grid, in close proximity to the Site. The Board

determined that the presence of *N. norvegicus* within the Site shall have a non-significant impact on commercial fisheries in Bantry Bay.

- 6.1.12 The mouth of the small Dromagowlane River (which accesses the Dromagowlane/Trafrask River system) lies 1.2 km to the north of the Site, with a sea travel distance of approximately 2.5 km and has been confirmed as supporting breeding salmonid populations. This is not a recognised National Salmon River and is not considered to hold a nationally important population of Atlantic Salmon. For the reasons outlined in paragraph 6.1.2 above, the Board considers the monitoring as outlined in Monitoring Protocol No.3 for Offshore Finfish Farms - Sea Lice Monitoring and Control and the Pest Management Plan to be sufficient to manage the threat from sea lice to salmon in this catchment.
- 6.1.13 The Dromagowlane/Trafrask River system is known to support a freshwater pearl mussel population. In addition to the matters considered at paragraph 6.1.12 above, the Board has considered the Supplemental EIS, submissions from NPWS, MI and IFI and the Freshwater Pearl Mussel Report, as discussed in paragraphs 4.4 and 6.1.2 above. The Freshwater Pearl Mussel Report concluded that due to the hydrology, size and recorded location of Freshwater Pearl Mussel within the catchment, the host species for juvenile glochidia larvae of these Freshwater Pearl Mussel populations were highly likely to be juveniles of resident brown trout. This means that it is highly unlikely that the pearl mussel populations in the Dromagowlane/Trafrask River system are reliant on juveniles from migratory salmonids (salmon and sea trout) as hosts for its larval stage. The Board considered and accepted all the above and has concluded there is no potential negative impact on this population due to the proposed aquaculture activity at the Site.
- 6.1.14 The Board notes that the local water current conditions could potentially lead to retention and slow dispersal of pesticide treatment Emamectin Benzoate, potentially causing a breach of the Environmental Quality Standards ("EQS").

The Board has determined that the licence for the Site should include, in Schedule 5 thereof, the following additional conditions:

- 6.1.14.1 that the Applicant shall not use Emamectin Benzoate after the expiry of month seven of the growing cycle;
- 6.1.14.2 that well boat discharges shall be within the Site; and

- 6.1.14.3 that concentrations of Emamectin Benzoate, Deltamethrin, or other such product as may be authorised for use, will remain within EQS limits.

6.2 other beneficial uses, existing or potential, of the place or waters concerned

- 6.2.1 The proposed development at the Site has a non-significant impact on the possible other uses or users of the area for the following reasons:

6.2.1.1 The positioning of the cages themselves, along with associating mooring equipment and deposition from the proposed fish farm at the Site is likely to have a significant adverse impact on part of a potentially exploitable prawn (*Nephrops*) ground within the footprint of the mooring grid, as discussed in paragraph 6.1.11 above. However, the overlap with commercial pot fishing is deemed nominal and current and future pot fishing could continue in close proximity to the Site. The Board determined that the presence of *N. norvegicus* within the Site shall have a non-significant impact on other users of the area.

6.2.1.2 The fish farm cages will present a non-significant adverse visual and navigational impact to recreational boat users entering and leaving the Trafrask embayment and others transiting close to the northern coastline of Bantry Bay.

6.2.1.3 The fish farm cages will have a non-significant navigational impact on commercial boat traffic and will be marked by the relevant navigational buoys.

6.2.1.4 The installation of the fish farm at the Site may have a non-significant adverse impact on the availability of the single known local on-shore angling site, or on-shore angling in general.

6.2.1.5 The fish farm cages on the Site will not be visible from the R572 road, which constitutes part of the Wild Atlantic Way. The fish farm cages would be visible from sections of the Wild Atlantic Way road on the southern shore of Bantry Bay (some 4.5 km away at its closest point), but the Technical Advisor Final Report indicates that it would probably constitute a very small visual feature. As such, the Site will have no significant negative impact on the visual impact for local tourist routes.

6.3 the particular statutory status, if any, (including the provisions of any development plan, within the meaning of the Local Government (Planning and Development) Act, 1963 as amended) of the place or waters

6.3.1 There are no predicted significant negative impacts on the statutory status of the area including Nature Conservation Designations, Protected Species (as discussed in Part 5, in paragraphs 6.1.1 - 6.1.3, 6.1.8, and 6.1.11 - 6.1.14 above, and paragraph 6.5 below) and water quality status (discussed in paragraphs 6.6.2 - 6.6.4 below).

6.3.2 There are predicted significant positive effects in relation to the Cork County Development Plan 2014, Objective EE 9-1, Business Development in Rural Areas, Objective EE 11-1 Fishing and Aquaculture (as outlined in the Technical Advisor Final Report) and there are no predicted significant negative impacts on other relevant sections of the Cork County Development Plan 2014, including Rural, Coastal and Islands, Tourism, Heritage, Water Services, Surface Water and Waste and Environment.

6.4 the likely effects of the proposed aquaculture, revocation or amendment on the economy of the area in which the aquaculture is or is proposed to be carried on

6.4.1 The proposed fish farm will have a significant positive effect through the provision of local employment (between five and eight jobs over four years).

6.4.2 The presence of a fish farm at the Site may have a non-significant adverse impact on pleasure boat activity in the immediate vicinity, with a resulting effect on the use of slipway and mooring facilities in the Trafrask embayment.

6.4.3 The location of the fish farm will force small working vessels to deviate southwards when attempting to use the northern shoreline for shelter from high wind which may incur a non-significant impact to fuel costs.

6.5 the likely ecological effects of the aquaculture or proposed aquaculture on wild fisheries, natural habitats and flora and fauna

6.5.1 There will be a localised adverse impact on the benthic community beneath the proposed fish cages as discussed in paragraphs 6.1.11 and 6.2.1.1 above and in the Technical Advisor Final Report. The Board notes that will be a localised impact, similar to other finfish farms of equal density and that there are unremarkable and locally common benthic communities within the expected footprint of the Site, with no concerns for rare or vulnerable species, as noted in paragraph 6.1.8 above. The Board also noted that the licence includes a Term and Condition

requiring the Applicant to comply with Monitoring Protocol No. 1 for Offshore Finfish Farms – Benthic.

- 6.5.2 The Board noted that Schedule 4 of the licence proposed to be granted by the Minister permitted biennial production of 3,500 tonnes of farmed salmon. The production cycle was 24 months, with harvesting over 6 months between months 17 and 22 inclusive, and the final 2 months being a fallowing period prior to restocking. As part of its appeal, the Applicant requested that the licence condition specifying production limits be changed from a biennial production limit by harvested weight to a Maximum Allowable Biomass ("MAB"), limiting the biomass of live fish on the Site at any given time. This was considered in some depth at the Oral Hearing and in the Technical Advisor Final Report. Having considered the matter the Board has agreed with submissions from the Applicant provided as part of their appeal (referred to in paragraph 2.1 above), that MAB is recognised internationally as an appropriate metric for assessing loading at finfish production sites and that it facilitates effective regulation and management of sites. The Board has therefore determined that the Site should operate on a MAB of 2,800 tonnes over a production cycle of 24 months, with no restriction on the timing of harvesting of stock, and the final 2 months being a fallowing period prior to restocking.

Accordingly, the Board determines that Schedule 4 of the licence be amended by removing the specified details concerning Production and substituting the following:

"Production

The production limit shall be based on a maximum allowable biomass of 2,800 tonnes over a production cycle of 24 months, with no restriction on the timing of harvesting of stock, and the final 2 months being a fallowing period prior to restocking."

- 6.5.3 The Board noted the Applicant had, as part of its appeal, requested a removal of the licence condition that specified the dimensions and spatial arrangement of the fish pens and feeding barge (while remaining within the boundaries of the Site) to allow for upgrades or improvements in pen and mooring technology and to accommodate the application of changes in best practice. The Board determined that this ground of appeal should be acceded to. Specifically, the Board is granting the licence on the basis of an increase in the number of cages from 14 to 18 to facilitate current best practice, as this configuration would still be contained within the Site and will enhance disease management and fish welfare provisions. As specified in paragraph 6.1.3 above, the licence will include a condition that the Applicant will adhere to the standards set out in the Structural

Design Protocol and this plan will be approved by DAFM. The Board also noted that a Term and Condition of the licence includes compliance with the most up to date guidelines on fish containment developed by the North Atlantic Salmon Farming Industry and the NASCO Liaison Group.

Accordingly, the Board determined that Schedule 4 of the licence proposed to be granted by the Minister be amended by removing from Schedule 4 the specified details concerning Floating Facilities and the substitution for same with the following:

"Floating Facilities

It is proposed to deploy 18 No. circular cages in the licensed site area. the proposed layout and position of pens may be varied provided that the pen volumes do not exceed the space required to accommodate the MAB to a peak biomass of 10 kg/m³ in any pen and provided that the pen, grid and mooring configuration is certified by way of written confirmation by a Chartered Engineer which will be submitted to, and approved by DAFM. All associated moorings and anchors are to be located within the boundaries of the licensed site area.

It is proposed to deploy a single feed barge on the cage mooring grid within the licensed site area. All associated moorings and anchors are to be located within the boundaries of the licensed site area.

No other floating structures may be moored for extended periods at the site overall licenced site area.

The Licensee will adhere to the standards set out in the DAFM Protocol for Structural Design of Marine Finfish Farms, 2016 and the Floating Facilities shall be approved by DAFM."

Furthermore, the Applicant shall obtain the prior approval of the Minister to the Initial layout of the cages on the Site and such plan shall be included in Schedule 2 to the Licence.

- 6.5.4 There is a potential non-significant adverse impact on wild salmonid populations in the Bay due to the increase in farmed salmon stock. As discussed in paragraphs 4.4 and 6.1.2 above, the Board has had regard to the monitoring plan pursuant to Monitoring Protocol No.3 for Offshore Finfish Farms - Sea Lice Monitoring and Control, compliance with which is a Term and Condition of the licence, and this, along with the Pest Management Plan is deemed to be sufficient and reduces any risk to a reasonable, non-significant level.

- 6.5.5 The mouth of the small Dromagowlane River (which accesses the Dromagowlane/Trafrask River system) lies 1.2 km to the north of the Site, with a sea travel distance of approximately 2.5 km and has been confirmed as supporting breeding salmonid populations. As discussed in paragraphs 4.4, 6.1.2 and 6.1.12 above, the Board has had regard to the monitoring plan pursuant to Monitoring Protocol No.3 for Offshore Finfish Farms - Sea Lice Monitoring and Control, compliance with which is a Term and Condition of the licence, and this, along with the Pest Management Plan is deemed to be sufficient and reduces any risk to a reasonable, non-significant level.
- 6.5.6 The Dromagowlane/Trafrask River system is known to support a freshwater pearl mussel population. The Board has considered the Supplemental EIS, submissions from NPWS, MI and IFI and the Freshwater Pearl Mussel Report (as discussed in paragraphs 4.4 and 6.1.13 above). The Freshwater Pearl Mussel Report concluded that due to the hydrology, size and recorded location of Freshwater Pearl Mussel within the catchment, the host species for juvenile glochidia larvae of these Freshwater Pearl Mussel populations was highly likely to be juveniles of resident brown trout. This means that it is highly unlikely that the pearl mussel populations in the Dromagowlane/Trafrask River are reliant on juveniles from migratory salmonids (salmon and sea trout) as hosts for its larval stage and that any decline in the migratory salmonid populations of the Dromagowlane/Trafrask catchment would not negatively impact on any remaining Freshwater Pearl Mussel populations present in the catchment. The Board considered and accepted this and has concluded there is no potential negative impact on this population due to the proposed aquaculture activity.
- 6.5.7 As outlined in paragraph 6.1.14 above, there will be periodic non-significant and transitory adverse effects on the water column habitat communities close to the Site associated with the use of Emamectin Benzoate, Deltamethrin, or other such product as may be authorised for use. As outlined, the Board is making it a condition of the licence that Emamectin Benzoate will not be used on the Site past month seven of the growing cycle. It is also a condition of the licence that well boat discharges shall be within the Site, and that concentrations of Emamectin Benzoate, Deltamethrin, or other such product as may be authorised for use, will remain within EQS limits. The Board considered and accepted this.
- 6.5.8 The Board had regard to and accepted the findings of the Technical Advisor Final Report in relation to marine mammals in Bantry Bay, as well as the Otter Screening Report and Seal Screening Report. Those findings were that for cetaceans, grey and harbour seals and otters in Bantry Bay, any disturbance from the Site constitutes a non-significant risk to populations of these species in Bantry Bay.

- 6.5.9 The Board had regard to and accepted the findings of the Technical Advisor Final Report in relation to birds in Bantry Bay. It also had regard to the Bird Impact Assessment Report and a submission from MI as discussed in paragraph 4.4 above. Anti-predation measures, such as protective netting, have occasionally led to entanglement and death of individual seabirds on existing sites in Bantry Bay. For sea bird species that may visit the Site, including those discussed in Part 5 above, these incidents are expected to be infrequent and thus constitute a low, non-significant risk to populations of these species. The Board have considered and accepted this outcome.
- 6.5.10 The Board had regard to and accepted the findings of the Technical Advisor Final Report in relation to wild finfish in Bantry Bay. In relation to salmonids, in the context of sea lice, these are discussed in paragraphs 4.4, 6.1.2, 6.1.3, 6.1.12, 6.5.4 and 6.5.5 above. The ecological effect on all wild finfish within Bantry Bay is deemed to be insignificant, with the loss of feeding ground arising from the deposition of settleable solids deemed to be negligible. Nutrient releases will not breach the EQS and therefore no related impact by harmful algal blooms is expected on the wild finfish population of Bantry Bay. Residues of discharged pesticides such as Emamectin Benzoate are not expected to have any effect on demersal or pelagic fish present in Bantry Bay. Similarly, the Board is satisfied that a slight increase in biological oxygen demand within the boundaries of the Site will have no significant impact on demersal or pelagic fish present in Bantry Bay. The Technical Advisor Final Report found a minimal, non-significant risk to populations of these species in Bantry Bay. The Board have considered and accepted this outcome.
- 6.5.11 Potential cumulative ecological impacts have been addressed in the Technical Advisor Final Report. This raised concerns regarding the potential for increased sea lice loading in Bantry Bay with the addition of the Site. The Board has considered this issue in paragraphs 4.4, 6.1.2, 6.1.12 and 6.1.13, 6.5.4 and 6.5.5 above. As discussed in these paragraphs, the Board has had regard to the monitoring plan pursuant to Monitoring Protocol No.3 for Offshore Finfish Farms - Sea Lice Monitoring and Control, compliance with which is a Term and Condition of the licence, and this, along with the Pest Management Plan is deemed by the Board to be sufficient and reduces any risk to a reasonable, non-significant level. As such, the Board has considered the issue of cumulative impacts and determined, when considered within the context of all finfish aquaculture operations within Bantry Bay, the addition of the Site will not contribute to a significant cumulative ecological impact relating to sea lice burden. The Board has considered the issue of overall ecological cumulative impacts and determined, when considered within the context of all aquaculture operations

within Bantry Bay, the addition of the Site will not contribute to a significant cumulative ecological impact.

6.6 the effect or likely effect on the environment generally in the vicinity of the place or water on or in which that aquaculture is or is proposed to be carried on-

- (i) on the foreshore, or**
- (ii) at any other place, if there is or would be no discharge of trade or sewage effluent within the meaning of, and requiring a licence under section 4 of the Local Government (Water Pollution) Act, 1977**

6.6.1 The Board had regard to and accepted the findings of the Technical Advisor Final Report which states that there will be no general environmental effects from the proposed fish farm at the Site beyond the localised impacts of deposition of organic material and the transitory effects of discharges after pesticide treatments as discussed in paragraphs 6.5.1 and 6.5.10 above.

6.6.2 The modelling results in the Water Modelling Report indicate that the impacts of the finfish farms operations at the Site will not negatively affect Outer Bantry Bay's and Berehaven's current classification under the Water Framework Directive. The Board have considered and accepted this outcome. The Water Framework Directive water quality status of the Outer Bantry Bay and Berehaven coastal water bodies have been classified at "High" and "Good" respectively for the 2013 – 2018 reporting period. The Board noted also that as a Term and Condition of the licence the Applicant is required to comply with DAFM's Monitoring Protocol No.1 for Offshore Finfish Farms - Benthic Monitoring and DAFM's Monitoring Protocol No. 2 for Offshore Finfish Farms - Water Column Monitoring.

6.6.3 The Board had regard to and accepted the findings of the Technical Advisor Final Report and the Water Modelling Report relating to nutrient releases. These state that nutrient releases will not breach the EQS and it is therefore concluded that nitrogen and phosphorous from the Site will not constitute a significant additional nutrient burden to Bantry Bay, will not stimulate algal blooms or enhance naturally occurring blooms and therefore present no risk to wild or cultivated shellfish or finfish in Bantry Bay.

6.6.4 Potential cumulative impacts have been addressed in the Water Modelling Report. The results indicate that the Site, when considered within the context of all aquaculture operations within Bantry Bay will not contribute to a significant cumulative environmental impact. The Board have considered and accepted this outcome.

6.7 the effect or likely effect on the man-made environment of heritage value in the vicinity of the place or waters

6.7.1 There will be no impact on known sites of historical or archaeological interest, either marine or terrestrial, in the area.

6.7.2 As part of its appeal the Applicant requested a withdrawal of the licence requirement to undertake further works for the protection of underwater archaeology. The Board noted that the Minister's File included an archaeological impact assessment, including a full side-scan and magnetometer survey of the licence area dated June 2012. The Board noted that this assessment, while acknowledging the potential for some of the sediment types to retain archaeological material but observing that local hydrological conditions serve to reduce the survivability of such artefacts, indicated that no evidence for the Site being of archaeological significance was found. It also noted that the assessment had indicated that the deployment of anchors may disturb and uncover buried items and recommended that a further side-scan survey be undertaken subsequent to anchor deployment. The Board is of the view that the assessment was adequate and that a further acoustic survey is unnecessary. The Board further determined that there be a rapid visual inspection of the anchors post deployment and any unearthed objects of human origin be reported.

Accordingly the Board determined that that the licence be amended by deleting from Schedule 5 the additional condition requiring the Applicant to engage the services of a suitably qualified Archaeologist, with underwater/maritime experience to monitor all seabed disturbance works, including anchor installation, associated with the development and substituting therefor in Schedule 5 to the Licence a requirement for the Applicant to undertake a visual inspection of the anchors as soon as is practicable following their deployment and to report any unearthed objects of human origin to the Underwater Archaeology Unit of the Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media.

6.8 Miscellaneous

6.8.1 The Technical Advisor Final Report found that, throughout the current licensing process, both the Applicant and DAFM have complied with all of the statutory requirements as set out in S.I. No. 236/1998 - *Aquaculture (Licence Application) Regulations, 1998 in respect of public notices, public consultation and universal access to relevant information*. The Board accepted this conclusion.

6.8.2 It is the conclusion of the Technical Advisor Final Report that the carrying capacity of Bantry Bay in terms of effects on wild salmonids, the dispersion and breakdown of chemical, nutrient and biological farm discharges and the removal of enriching nutrients from Bantry Bay is not expected to be exceeded by the addition of the proposed activity at the site, with the exception of Emamectin Benzoate. The Board assessed and accepted this conclusion and is satisfied that any concern can be managed by the inclusion of the licence condition referred to in paragraph 6.1.14 above.

6.8.3 The Board had regard to and accepted the finding of the Technical Advisor Final Report which stated that the noise generated from the operation of the proposed fish farm will present no risk, either direct or indirect, to birds or marine mammals and that sound levels will be sufficiently attenuated by distance to below that which could be considered to constitute a nuisance to nearby human habitation.

6.8.4 A number of appeals expressed dissatisfaction with the adequacy of the 2011 EIS and the EIA. Part 4 of this Determination outlines the steps taken by the Board to ensure a complete Environmental Impact Assessment process was followed. The Board is satisfied that the 2011 EIS, the EIA, the Supplemental EIS, the Technical Advisor Final Report, the Freshwater Pearl Mussel Report, the Bird Impact Assessment Report and all the material provided to the Board in response to Notices issued, as detailed in Part 2 above, taken together identify, describe and assess in an appropriate manner, in the light of the appeals before it, the direct and indirect effects of the proposed activity at the Site on the following factors:

6.8.4.1 human beings, fauna and flora;

6.8.4.2 soil, water, air, climate and the landscape;

6.8.4.3 material assets and the cultural heritage; and

6.8.4.4 the interaction between the factors referred to in 6.8.4.1- 6.8.4.3

and that the proposed aquaculture activity at the Site will not have significant effects on the environment, including the factors listed in 6.8.4.1- 6.8.4.4 by virtue of, inter alia, its nature, size or location.

6.8.5 An Appellant raised concerns regarding the potential impact of the Bantry Bay licence on the global protection of wild salmonid stocks. The Board considered the impact on local wild salmonid populations whose adults return to rivers in Bantry Bay in paragraphs 4.4, 6.1.2, 6.1.12, 6.1.13 and 6.5.4-6.5.5, 6.5.10 and 6.5.11 above and determined the proposed development at this Site would not

have any significant negative effect. This same determination applies to potential global effects on wild salmonid populations also.

- 6.8.6 The Applicant requested that the licensee name be amended to reflect a corporate restructuring which has precipitated a re-branding of the Applicant. The Board had regard to this and determined that the assignment of any licence is a matter for the Applicant to address in line with the licence provisions.
- 6.8.7 An appellant raised concerns regarding the absence of a local aquaculture management scheme. The Board noted that local aquaculture management schemes such as Co-ordinated Local Aquaculture Management Systems ("CLAMS") remain voluntary. The Board further noted that CLAMS has to date been explicitly removed from the licensing and regulatory process and is not intended for use in the consideration of individual site licences.
- 6.8.8 A number of appeals expressed dissatisfaction with the licence approval process, with a common theme being a suggestion of a lack of impartiality amongst government/ministerial advisors, government agency staff or Board members, including assertions of conflicts of interest. The Board considered this in terms of government/ministerial advisors and government agency staff and determined this is not a matter that needs to be considered by the Board, where it determines the application for the licence as if the application had been made to the Board in the first instance. In relation to assertions of conflict of interest within the Board, the Board gave very careful consideration to these assertions, and having done so, was satisfied that no conflicts of interest arise in respect of the position of any of the Board in connection with the appeals. The details of the determination of the Board were communicated in writing to the relevant Appellants in April 2016.
- 6.8.9 An Appellant raised concerns regarding the contribution of the fish farming industry to climate change. The Board had regard to this and determined that that this issue specifies the fish farming industry as a whole and was not specific to the licence under appeal. As regards this particular fish farm, the Board has considered the potential impacts it would have on climate change and has deemed them to be non-significant.
- 6.8.10 An Appellant raised concerns regarding the Applicant's record of supposed inadequate compliance, enforcement and monitoring. The Board considered this and determined the Applicant's corporate compliance history and competence for operating within Ireland is a matter for direct consideration by DAFM as part of the oversight of any licence.

6.8.11 A number of Appellants raised matters to which the Board had regard and having done so determined that those issue fell outside the matters for consideration in this appeal, being the following:

6.8.11.1 disapproval with government policy on aquaculture;

6.8.11.2 concerns regarding the apparent impact of farmed fish on human health;

6.8.11.3 recent Irish Government policy statements and associated publications, such as *Food Harvest 2020* and *Harnessing Our Ocean Wealth - An Integrated Marine Plan for Ireland*, which promote the expansion of the aquaculture industry in Ireland, arguing that these represent changes in policy which under EU Directive 2001/42/EC require an SEA to be undertaken before any further aquaculture licences can be granted;

6.8.11.4 an alleged lack of regulation of the salmon farming industry nationally;
and

6.8.11.5 concerns regarding the sustainability of the salmon farming industry, including the preparation of farm feed.

PART 7: MAIN REASONS AND CONSIDERATIONS

In reaching its determination on the Appeals, the Board had regard to the documents set out in Part 2 above, the grounds for appeals as detailed in Part 3, the Board's Environmental Impact Assessment as detailed in Part 4, and the Board's Appropriate Assessment as detailed in Part 5, and the matters set out as at section 61 of the Act as detailed in Part 6 above.

- 7.1 As was required during this appeals process, different technical advisors provided information as requested by the Board, as can be seen from the list of reports submitted to the Board given in paragraph 7.2 below. This ensured the Board had access to the best available scientific advice and allowed the Board to make their decisions being confident that the standard of no reasonable scientific doubt has been reached regarding all ecological and environmental queries concerning Natura 2000 sites (SACs and SPAs) and that a sufficient standard of information was provided for all other queries, allowing them to make informed decisions as required. All queries from the Board itself, its technical advisors, appellants, and public consultation have been answered to the Board's satisfaction.
- 7.2 Reports referenced by the Board in making their decision are referred to in Part 2 above and include the 2011 EIS and Supplemental EIS submitted by the Applicant; the Water Modelling Report submitted by the Applicant; the EIA carried out by DAFM and submitted as part of the Minister's file; the Technical Advisor Interim Report; the Oral Hearing Report; the Seal Screening Report; the Otter Screening Report; the Bird Impact Screening Report; the AA Screening Report; the NIS; the AA Report and Briefing Note; the Kelp Report; the Freshwater Pearl Mussel Report and the Technical Advisor Final Report. The Board is generally adopting the contents of these reports, with some exceptions highlighted in 7.4 below. A full list of reports and submissions to the Board can be found in Part 2 of this determination.
- 7.3 The Board is satisfied with the outcome of the EIA and AA processes as outlined in Parts 4 and 5 above. All queries from the Board itself, its technical advisors, appellants, and public consultation have been answered to the Board's satisfaction. The Board is also satisfied that the standard of establishing no reasonable scientific doubt has been reached regarding all ecological and environmental queries concerning Natura 2000 sites (SACs and SPAs).
- 7.4 In general the Board agreed with and adopted the reports of its technical advisors referred to in paragraph 7.2. However, in some limited instances the Board's opinion differed from those reports and these instances and their resolutions are outlined as follows:

- 7.4.1 The 2011 EIS submitted by the Applicant was considered inadequate in parts by the Board. See Part 4 of this Determination for details of this and of subsequent reports requested, along with consideration by the Board before their acceptance of the Environmental Impact Assessment process as complete and adequate and that the proposed aquaculture activity will not have significant effects on the environment, by virtue of, inter alia, its nature, size or location.
- 7.4.2 The conclusion of the Technical Advisor Interim Report that AA screening was not required for any connected Natura sites was not accepted by the Board and further work was carried out following the Recommendations of the Oral Hearing Report, as outlined in Part 5. As a partial result of this, and the work outlined in paragraph 7.4.3 below, AA Screening was carried out on connected SPA sites, with the details given in Part 5 and relevant reports. This process is fully outlined in Part 5.
- 7.4.3 The Bird Impact Assessment Report, as discussed in paragraph 4.5 above, raised issues regarding bird species in Bantry Bay, both those that were SCI species for connected SPAs and those species that were not. A response from MI regarding bird species (referred to at paragraph 2.18 above) was accepted by the Board in relation to its assessment of potential effects on bird species in Bantry Bay other than those considered in the Appropriate Assessment as more particularly detailed in Part 5. The Board did not find that MI conclusions regarding SCI species from connected SPA sites was sufficiently robust compared to the evidence put forward by the Bird Impact Assessment Report and recommended the matter go to Appropriate Assessment screening, resulting in the issuing of the AA Screening Report. Following the completion of the Appropriate Assessment process, the Board determined that the proposed fish farm development at the Site will not impact adversely on SCI species or conservation objectives for the connected SPA sites concerned and as such, will not adversely affect the integrity of the connected SPA sites concerned either individually or in combination with other plans or projects.
- 7.4.4 The Board accepted the outcome of the MI AA Screening Matrix for Outer Bantry Bay 2018, as referred to in the AA Report in relation to connected SACs only (and similarly for the updated 2020 version of the Screening Matrix). These findings in relation to the SACs considered corresponded with the Seal Screening Report and Otter Screening Reports which had been considered and accepted by the Board. The AA Report did not find that the MI conclusions relating to potentially connected SPAs were sufficient given the development of this new project and the outcome of the AA Screening Report which recommended a Stage 2 Appropriate Assessment process be carried out for three SCI species. The Board considered and accepted these conclusions.

- 7.5 The EIA and AA processes, once completed, did not indicate any basis not to allow the proposed fish farm on the Site. The Board considered all the grounds for appeal and reasons are given for all appeal decisions made in Part 6 of this Determination. The Board considered each appeal issue individually and also had regard to section 61 of the Act, as outlined at Part 6 of this determination, when making their decision.
- 7.6 The Board is satisfied that it had access to all relevant up to date evidence available while carrying out this appeals process and its conclusions outlined at paragraphs 7.1 to 7.5 above remain up to date.


PART 8: DETERMINATION

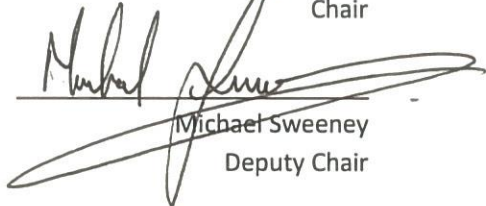
Having considered all the foregoing, the Board determined at its meeting on 24 June 2021, pursuant to section 40(4)(b) of the Act, to determine the application for the licence as if the application had been made to the Board in the first instance and **TO GRANT** a licence to the Applicant for the proposed activity on the Site in accordance with the draft licence prepared by the Minister, but subject to the varied and amended Terms and Conditions as set out in this Determination.

Dated this *29th* day of June 2021

PRESENT when the Common Seal of the
AQUACULTURE LICENCES APPEALS BOARD
was affixed hereto:-




Imelda Reynolds
Chair


Michael Sweeney
Deputy Chair