

Technical Advisors' Initial Site Inspection Report – Deenish Island Co. Kerry

Appeal Ref No. 1/2019

Appeal description:

Appeal against the decision of the Minister to revoke the statutory entitlement of Silver King Seafoods Ltd., a wholly owned company of Mowi Ireland, to continue aquaculture operations at site T06/202, Deenish Island, Co Kerry.

Technical Advisors: Mary Hegarty and Michelle Moloney

Date of site inspection: 29 April 2025

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1.0 General Matters / Appeal Details

1.1 Licence Application

Department site reference no: T06/202

Department Aquaculture Licence reference no: AQ 199

Applicant: Silver King Seafoods Ltd., a wholly owned company of Mowi Ireland

Minister's Decision: To Revoke

1.2 Appeal Details

ALAB Appeal reference no.: AP1/2019

Date Appeal Received: 09 May 2019

Appellant: Silver King Seafoods Ltd., a wholly owned company of Mowi Ireland

1.3 Relevant Grounds for Appeal

Appellant AP1/2019 issues:

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| 1. Legislative | The Appellant is refuting the claim that they breached condition 2(e) of licence AQ 199 "the Licensee shall not harvest more than 500 tonnes (dead weight) of salmon in any one calendar year." |
| 2. Environmental impact | The Appellant states that there is no evidence to conclude that there was an increase in the effluent discharged from the site as a result of the number of stock harvested. |
| Effect of the Ministers Determination on the | |
| 3. local economy | |
| The Public interest/Department's lack of progress in | The Appellant claims that the Determination will have substantial impacts on the overall operation of Mowi Ireland and that it will have potential consequences for the economy of the local area. |
| 4. determining licence applications | The Appellant claims delays in progressing applications and failure to implement Maximum Allowable Biomass (MAB) for finfish licences is negatively impacting the development of the aquaculture sector. |
| Condition 2(e) of the license should be substituted with a | |
| 5. condition which provides for the | The Appellant states that Condition 2(e) requires revision and review. Mowi are seeking amendment to the terms of the |

control production by reference to the MAB Licence to allow for the application of a MAB which will regularise the Deenish Licence and would be in line with internationally recognised sustainable farming practices.

1.4 Observers

Third-party observers' submissions in relation to appeal AP1/2019:

1. Jack Power received 15 May 2019: The observer states that the restoration of the licence would be a breach of licencing terms and would undermine the integrity of the licencing process. The observer has concerns regarding the environmental impact of the farm and the potential impact to Lough Currane salmon stock.
2. Jenifer Corcoran received 18 May 2019: The observer supports the revocation of the licence.
3. Inland Fisheries Ireland (IFI) received 07 June 2019: IFI have concerns regarding the risk to wild salmon and sea trout stocks due to potential negative effects from sea lice and escapees. IFI also have concerns regarding the decline in stocks of salmon and sea trout at Lough Currane and the impact of large numbers of farmed salmon located 10.8 km from the mouth of the Waterville River. IFI state that they support the Minister's decision to discontinue the aquaculture licence at the Deenish Island site.
4. Galway Bay against Salmon Cages received 07 June 2019: The observer has issues with the breach of license regarding overstocking, sea lice, the decline in salmon and sea trout stocks in rivers on the west coast and generally in relation all open sea cage salmon farming. The observer requests that the minister/licencing authority move to land closed cage containment systems.
5. Salmon Watch Ireland Submission received 09 June 2019: The observer endorses the minister's decision to revoke the licence. The observer is seeking enforcement of the license by discontinuing the entitlement to continue aquaculture operations. The observer raised concerns regarding the impact of overstocking of the site, the decrease in sea trout stocks in the Waterville area, the collapse in angling tourism, losses to the economy, the potential licence breach regarding the lack of a movement order, issues with effluent from the farm due to over stocking and they claim that insufficient benthic studies and inspections are carried out. They also claim that Mowi were non-compliance and non-cooperative.
6. Department of Agriculture, Food and Marine (DAFM): DAFM reiterated the view that the Minister's decision to treat the licence as discontinued is warranted by the undisputed facts of this case and the decision is proportionate having regard to the very significant excess in stock harvested (121% excess).

DAFM state that it has not to date received an application from the Appellant to amend the applicable licence to reflect harvesting by reference to MAB. DAFM state that the Appellant has not submitted the Environmental Impact Statement necessary to support the request for the change to MAB.

DAFM state that the current capping mechanism on harvesting based on tonnage harvested is viable and is the basis on that which the finfish industry generally in Ireland operates. DAFM claim that this view is supported by the Marine Institute. DAFM go on to state that MAB would need to be calculated to reflect the current licence conditions at all currently licensed sites and that such a protocol/metric would need to be objective, transparent and independently validated. DAFM also state that such a protocol/metric should be subject to consultation and peer review. DAFM believe the conversion to MAB would represent a significant and material change to a licence and require an Environmental Impact Statement.

1.5 Ministers File

The Minister's file was requested on the 17 May 2019 and received by ALAB on 11 December 2019.

The file contained:

- The Submission to the Minister
- A copy of the letter, dated 12 April 2019, sent to the Mowi Ireland from the Aquaculture and Foreshore Management Division stating the Minister's decision to discontinue the statutory entitlement of Silver King Seafoods to continue aquaculture operations under the provisions of Section 19(A)4 of the 1997 Fisheries (Amendment) Act
- Copy of the certification of renewal, dated 04 August 2004, of Aquaculture Licence No. 199 and Foreshore Licence No. 199 (both licences dated 30 January 1995)
- Copy of the certificate of assignment, dated 31 July 2004, of Aquaculture Licence No. 199 from Murpet Fish Ltd. to Silver Kind Seafoods Ltd.
- Copy of the certificate of assignment, dated 15 November 1999, of Aquaculture and Foreshore Licences No. 199 to Murpet Fish Ltd.
- Copy of the Aquaculture Licence (then called Fish Culture Licence)
- Copy of Submission made by the Licencing Division to the Minister 11 July 2018
- Marine Engineering Division T06/202 Marine Fin-Fish Inspection reports July 2015
- Correspondences between the Aquaculture & Foreshore Management Division (AFMD) and Licence Applicants
- Copy of the certificate of renewal, dated 08 March 2001, of Aquaculture Licence No. 199 to Murpet Fish Ltd.
- Copies of Movement Approval Notices
- Copy of ALAB Determination to grant a two-year amendment to Aquaculture Licence AQ199
- Copy of Certificate of Amendment (until the 31 March 2015) of Aquaculture and Foreshore Licences 199 dated 31 October 2012
- Copy of Licence special conditions letter dated 01 April 2011
- AFMD Notice of Decision to amend Aquaculture Licence (site reference no. T6/202)

- Marine Harvest Stock Report dated 20 January 2015
- Aquafact Benthic Report issued September 2016
- Copy of Submission made by the Licencing Division to the Minister 01 November 2017
- DAFM map of Aquaculture sites @ Deenish, Co. Kerry, dated 10 December 2019

1.6 Section 46 and 47 Submissions

Section 46 requests:

1. S46 request sent to Mowi sent on 16 December 2019 and response received 14 January 2020
2. S46 request sent to DAFM 10 February 2020 and response received 12 February 2020
3. S46 request sent to DAFM 21 December 2023 and response received 12 February 2024
4. S46 request sent to observers 21 December 2023 and response received 7 February 2024 from GBASC and 19 January 2024 from SWI
5. S46 request sent to Mowi 21 December 2023 and response received 22 January 2024

Section 47 requests:

1. S47 request sent to Silver King Seafoods 24 June 2020 and response received 21 July 2020
2. S47 request sent to DAFM 24 June 2020 and response received 22 July 2020
3. S47 request sent to BIM 24 June 2020 and response received 19 August 2020
4. S47 request sent to Marine Institute 24 June 2020 and response received 02 July 2020
5. S47 request sent to Mowi 30 October 2020 and response received 03 November 2020
6. S47 request sent to Mowi 23 April 2021 and response received 23 April 2021
7. S47 request sent to the Marine Institute 07 March 2023 and response received 3 APR 2023
8. S47 request sent to MOWI 07 March 2023 and response received 10 March 2023
9. S47 request sent to MOWI 07 March 2023 and response received 03 April 2023
10. S47 request sent to Mowi 14 March 2024 and response received 19 March 2024

2.0 Context of the Area

Deenish Island is located off the Coast of County Kerry. The island is 122 acres in area and its highest point is 144m above sea level. Deenish is in the Atlantic Ocean approximately 1 km east of Scariff Island and 6 km west of Hogs Head. The island is uninhabited and grazed by sheep. Deenish lies on the northern entrance to Kenmare Bay. (See figure 1).

Aquaculture licence site T06/202 lies on the eastern side of Deenish Island and as such is sheltered from westerly and southerly swells.

The seafloor underneath the northern section of the site is primarily flat. Sediments in this area are predominantly sands (ranging to fine and medium sand) with varying proportions of coarse shell fragments. Water depths increase toward the southern side of the site. The sea floor under the southern section of the site is uneven and comprises of gravel and rocky reef.

Site T06/202 is located within the Kenmare River Special Areas of Conservation (SAC) and the Deenish Island and Scariff Island Special Protected Areas (SPA) (See figures 2 and 3)

There are several other licensed aquaculture sites in Kenmare Bay, licenced for European Flat Oyster, Blue Mussel, Pacific Oyster, Stony Sea Urchin, Red Seaweeds, Brown Seaweeds species, Atlantic salmon and Rainbow Trout.

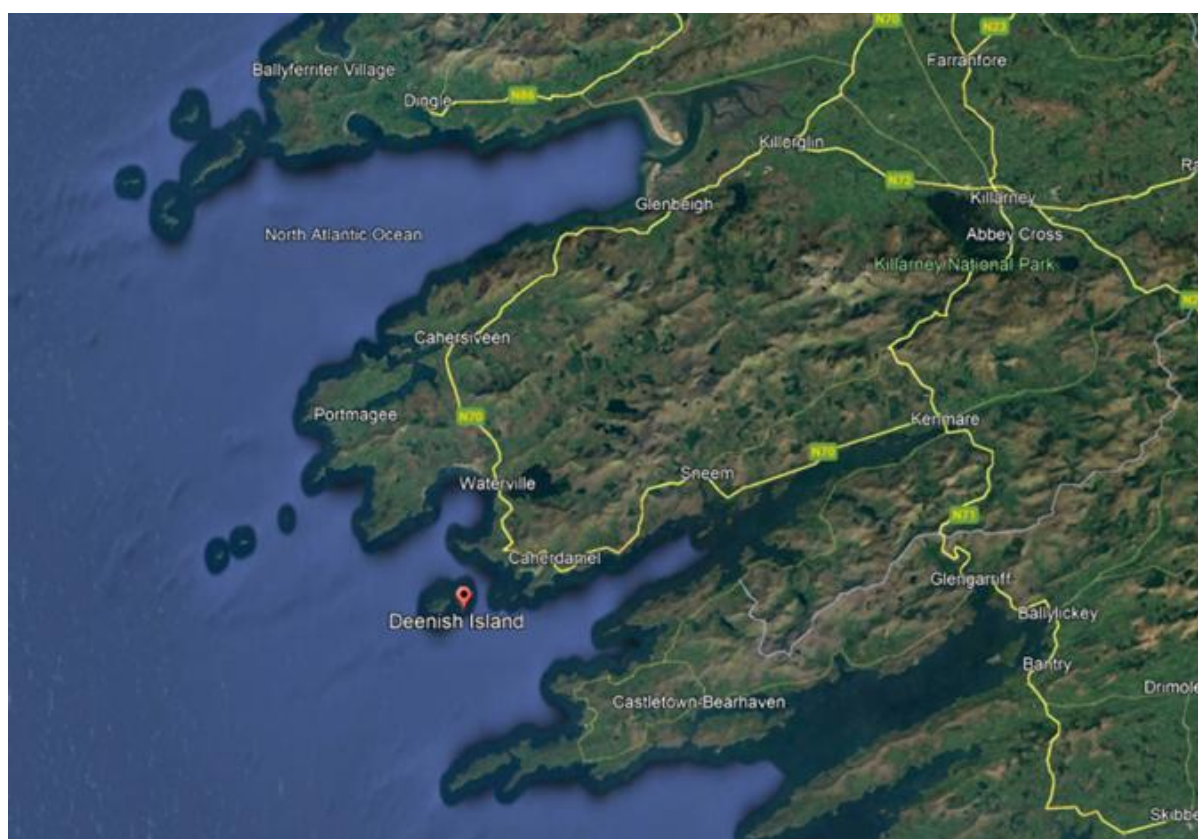


Figure 1: Location of Deenish Island

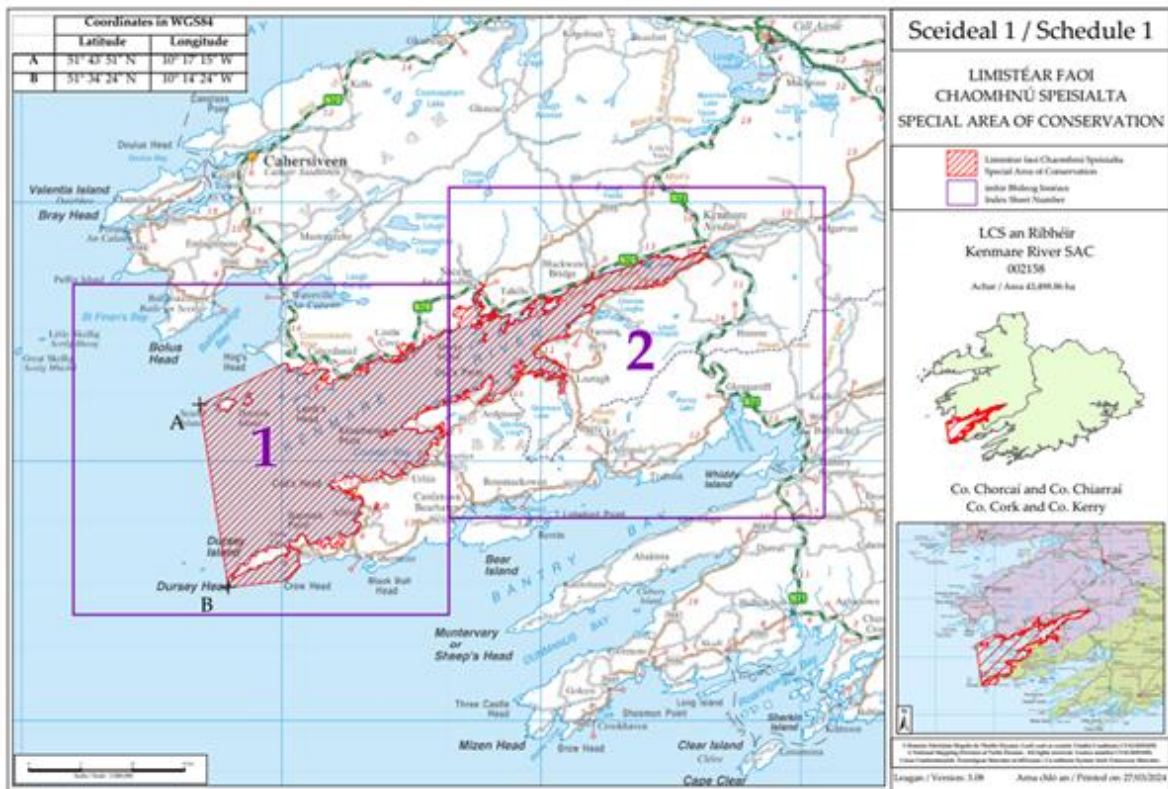


Figure 2: Kenmare River SAC

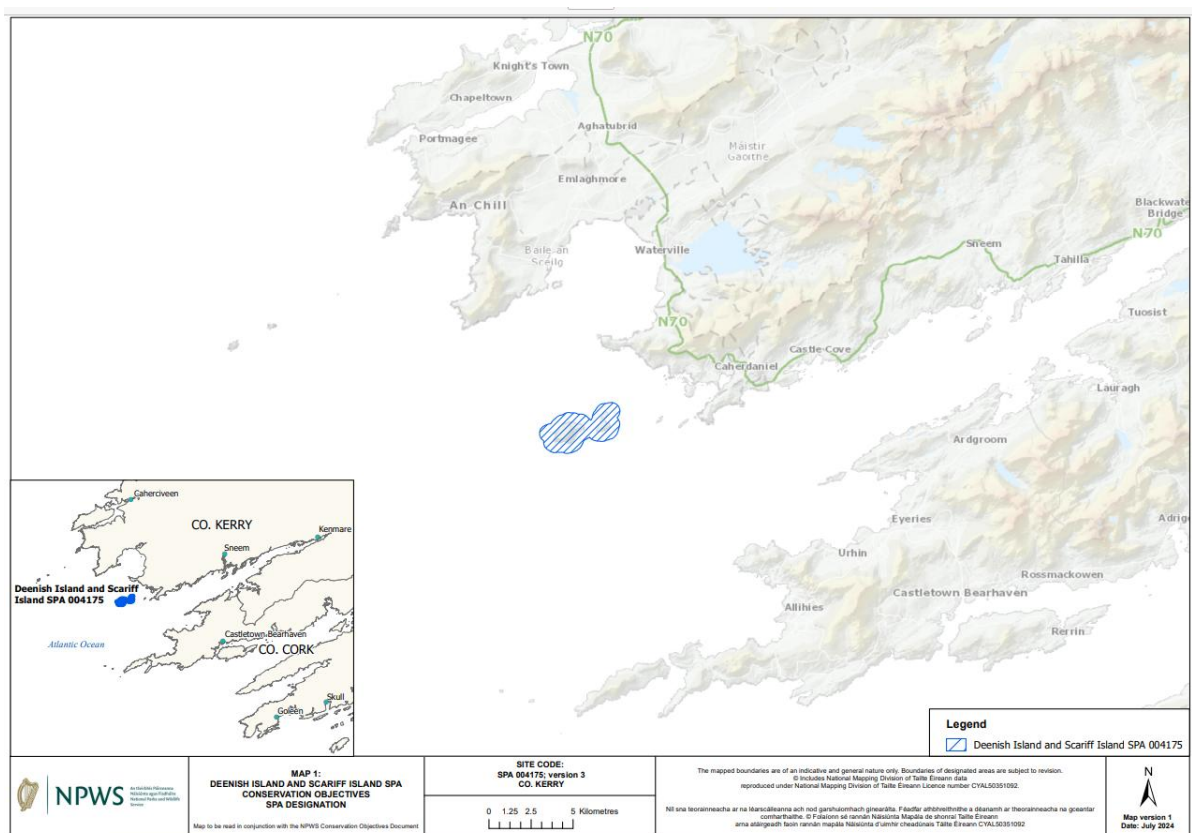


Figure 3: Deenish Island and Scariff Island SPA



Figure 4: Deenish aquaculture site T06/202 (received from AFMD 14 May 2025)

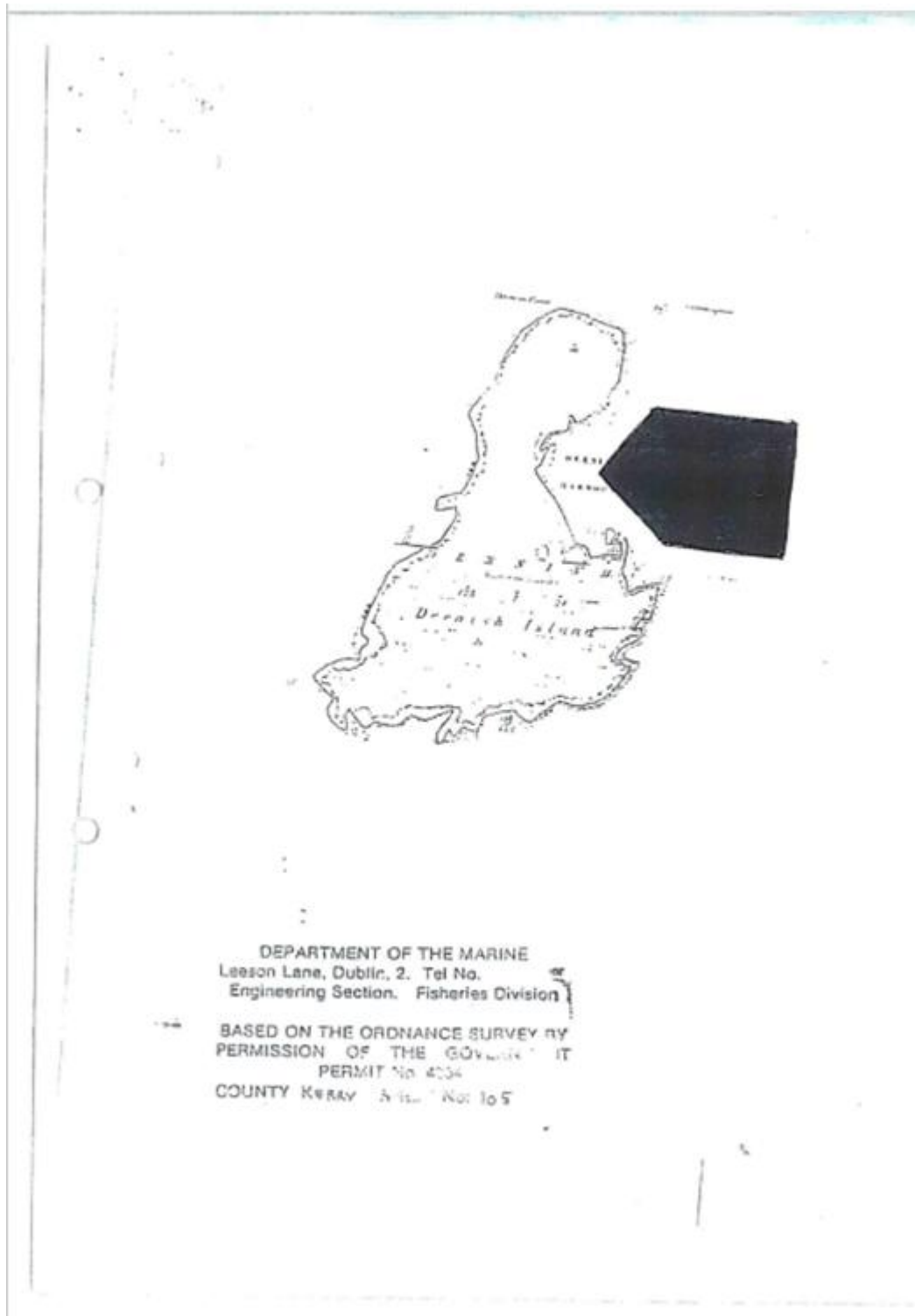


Figure 5. 1995 Aquaculture Licence map

3.0 Site Visit

ALAB Technical Advisors (TAs) carried out a site visit of the Deenish Site (T06/202) on 29 April 2025. Staff from Mowi Ireland provided access to the site by boat from Bealtra Bay pier.

The 14.4899-hectare site currently consists of ten pens (with space for an additional two pens). Each pen is 18m deep, consisting of a 10m wall that is conical for the final 8m. All 10 pens have a similar construction. The pens are moored in a grid system where each pen is secured to an underwater grid with 8 mooring lines.

At four corners of the site there are navigation lights and radar reflectors for maritime navigation traffic purposes.

Fish Feed:

The site contains a 200-tonne barge which is secured for the purpose of storing feed. Feeding is automated and controlled remotely from the Castletownbere control room. The site is actively monitored with surface and underwater cameras that can monitor all areas of the farm. The TAs were informed by the Mowi sea operations manager that this system is installed for fish farms at Deenish, Inishfarnard, and Bantry Bay sites. Three full time employees in the Castletownbere office control and monitor all sites seven days a week.



Figure 6. Anchored feed barge with mainland and farm in background



Figure 7. Fish feed platform and pipes from bow of moored barge



Figure 8. Close up view of feed station on barge



Figure 9. Feed pipes on water surface to cages from barge with view of mainland in background



Figure 10. Automatic feeder station within the pen with salmon jumping in background



Figure 11. View from starboard side of feed barge



Figure 12. Stern view of feed barge from transportation vessel



Figure 13. Feed monitoring from Castletownbere control room

Fish Health:

The barge has a zoo phytoplankton lab where composite samples are taken. All size classes of phytoplankton are obtained and analysed.

Operations staff undertake daily samples to monitor the conditions which assists with feeding and husbandry of fish to ensure fish health is optimised. The TAs were informed by the Mowi sea operations manager that this data is also used in long forecast planning production.

The Barge also contains staff storage, hygiene facilities and a staff canteen.



Figure 14. View of Deenish site from monitoring control station Castletownbere



Figure 15. Laboratory station onboard feed barge

Sea temperature, salinity, chlorophyll and oxygen levels are also monitored and recorded at the site. The Marine Institute access this through a data logger permanently moored on site.

Fish are treated for amoebae gill disease by placement for up to 3 hrs in a fresh water well boat which also has the benefit of killing any sea lice on the fish also. This process is carried out on all fish under 2kg as it is not an issue for larger more mature fish.

The site operates a cleaner fish program, where farmed cleaner fish are added to the tank. Mowi staff informed the TAs that farmed Sea wrasse (figure 18) will be the species to be imputed onsite on Thursday 1st of May, previously the site used wild caught wrasse, it also uses lump sucker (figure 16 & 17) fish in Winter months. The TAs were informed that this has successfully ensured sea lice are not a problem for the site.



Figure 16. Lump fish looking at underwater camera, viewed from monitoring centre in Castletownbere, Co. Cork



Figure 17. Lump fish on Deenish site (cleaner fish)



Figure 18. Example of a Sea wrasse (cleaner fish)

The site operates a robotic net washing remotely operated vehicle (ROV) from a support boat. The ROV was onsite during the visit and the TAs were informed that net washing is carried out over a 10 – 14-day cycle, to ensure that all algae is removed from the nets. Net washing has the added benefit of aiding the cleaner fish as the cleaner fish feed on the algae rather than carry out the sea lice removal.



Figure 19. Robotic net cleaner deployed from support vessel

Data from the phytoplankton program is used for risk management. Review of the data is used for the mitigation of risk when production planning with potential high-risk periods controlled by advanced production planning to ensure site is fallow during high-risk periods. Jelly fish can be an issue, in particular lions' mane jelly fish. Cameras and monitoring are employed to mitigate such risks by continually observing fish behaviours to assist with optimising feed times controlled by remote controllers in Castletownbere as fish instinctively will move away from risk to deeper parts of the nets. And these control measures can be engaged remotely, regardless of weather conditions.

Seals:

The TAs were informed that the site does not engage in the use of seal scarers; the site currently uses seal ingress prevention protection netting as an alternative to seal scarers (see figures 21 & 22). This additional net is to completely close of the gap between the pen net and bird net. The TAs were Informed that company uses it as a mitigation measure to prevent seals from entering the pen through any gaps.

In addition, weights creating tension on the pen nets are the only other form of seal prevention employed and no seal scarers are used on any Mowi Ireland sites.



Figure 21. Seal ingress prevention protection netting at Deenish site



Figure 22. Seal ingress protection netting exterior view

Fish life cycle: Hatched fish are reared in hatchery from 100g, transferred as 500g smolts to brackish sea water, until ready for transfer to salt water.

The TAs were informed by the sea operations manager that the current fish at the Deenish site were transferred to the Inishfarnard & Gerhies sites in Quarter 1 of 2024. Where they were reared until approx. 2kg (12 months). They were then transferred to the Deenish site in Quarter 1 2025. It is anticipated harvest from the Deenish site will be Quarter 3 2025. Following harvest, the sites (Deenish Island and Inishfarnard) will both remain fallow. This is planned to ensure the same generation of fish between both sites are in line with company's single bay management plan.

Fish Harvest: All fish are harvested from the site into a well boat; the site operates a passive grading system for harvesting. The manager informed the TAs that staff deploy a net used for grading out the larger fish which allows smaller fish to escape back to pen for further on growing.

Fish are harvested in 12 lines and chilled to 0 °C and fish are then killed on the boat. Waste is removed to an appropriate facility. The fish are transferred into tankers contracted by Mowi and are sent to Rinmar in Co. Donegal for processing.

Site Maintenance:

The TAs were informed that a full maintenance program is in place, carried out by staff who since the introduction of the automated feeding system, have undertaken an increase in operational maintenance workload.

The site operates a 5-year cycle and at the end of the period all grids, pens, pipes and the barge are removed and fully serviced and/or replaced.

All anchoring systems are replaced at the end of the 5-year cycle.

Economic impact of the site:

The Deenish Island Fish farm supports/employs:

- 4 full time employees (in addition the company is currently recruiting a full-time manager for the site).
- 4 contract divers to carry out weekly inspections,
- A fish health inspector and net cleaning team is employed onsite on a 10 – 14-day cycle moving between farms.
- A contract haulage company are engaged to transport the fish to Donegal and transport fish feed to farms.
- Maintenance staff are deployed when required.
- 3 full time site support staff are employed in Castletownbere, Co. Cork to monitor cameras and fish feed deployments for all Southwest of Ireland sites.

The TAs were informed that Mowi Ireland currently support 200 jobs in Ireland.

There is also a data buoy deployed by the Marine Institute (Figure 25) on site.



Figure 23. Bealtra Bay pier used for boat access to site

The area around the site is rural in character, with several dwellings located on the road to the pier used for access and number of houses above the pier the road is quite narrow with a series of tight bends. There is good access to this pier, which is also used for ferry tours to the Skellig Island tours. Navigational lights aid navigation for vessels transiting to access the pier through a narrow channel. Pier has steps and ladders on both sides which are in good condition.

At low water/ tide there is limited water at the pier. The site is approximately 8NM from the pier. Strong swell was evident on the day of the visit though weather conditions were quite good. A noticeable back wash from the land to the island was also evident on the day



Figure 24. View from transport vessel on approach to Bealtra Bay pier



Figure 25. Marine Institute data buoy



Figure 26. Distant view of fish cages at site

4.0 Section 61 Assessment

In considering an appeal against a decision on a revocation of a licence, Section 61 of the 1997 Act requires the Board to take into account, as may be appropriate in the circumstances of the particular case, the following factors:

4.1 Site Suitability

Section 61 (a) considers the suitability of the site at or in which the aquaculture is proposed to take place.

Given its use as an aquaculture site for approximately 30 years, it can be preliminarily concluded that the site is suitable for the intended use. However, site suitability is to be further considered in the TA Final Report.

4.2 Other uses

Section 61 (b) takes account of other beneficial uses, both in existence or future in the area and / or waters of the proposed site.

Other uses are to be further considered in the TA Final Report.

4.3 Statutory Status

Section 61 (c) considers the statutory status of the area under consideration including the provisions of any development plan.

Statutory Status is to be further considered in the TA Final Report.

4.4 Economic effects

Section 61 (d) takes into account the likely effect a proposed aquaculture development (or its amendment / revocation) would have on the economy of the area in which the aquaculture is to be located.

Economic effects are to be further considered in the TA Final Report.

4.5 Ecological Effects

Section 61 (e) considers the likely effect that the proposed aquaculture operation would have on wild fisheries, natural habitats and the fauna and flora of the area.

Ecological effects are to be further considered in the TA Final Report.

4.6 General Environmental Effects

Section 61 (f) considers any other effects on the environment in general that could occur in the vicinity of the area where the proposed site is to be located.

General environmental effects are to be further considered in the TA Final Report.

4.7 Effect on man-made heritage

Section 61 (g) considers the effect or likely effect on the man-made environment of heritage value in the vicinity of the place or waters.

The effects of the project on man-made heritage are to be further considered in the TA Final Report.

5.0 Recommendation of Technical Advisor

It is the TAs opinion that there are areas to be considered under Section 61 of the 1997 Act relevant to the revocation which have not been fully answered in the Minister's file submitted to ALAB in relation to this appeal.

I recommend that a full Section 61 assessment is carried out as part of the TA's Deenish Appeal Final Report as appropriate in the circumstances of this particular appeal.

Technical Advisor: Mary Hegarty, MSc.

Date: 16 May 2025