**Supplemental Report - Appropriate Assessment of Aquaculture in Dunmanus Bay, Co Cork**

**AP1/1-3/2022**

**Site reference: T05/640A - License to produce Seaweed at a site near Dooneen Pier, Dunmanus Bay, Co Cork**

**Applicant: Bantry Marine Research Station**

**Appellants:** **Paul and Kate Brooks on behalf of Residents of Dooneen**

**Friends of Doneen Pier**

**Fishermens Inshore Saltwater Heritage Ltd**

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**Date 14th Sept 2024**

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# 1 Introduction

Dunmanus Bay in Co. Cork is home to licensed aquaculture operations for several species: blue mussels, pacific oysters, sea urchins and seaweed. The applicant (Bantry Marine Research Station) was granted a license to develop a new seaweed farm at a site on the northern side of the bay, near Dooneen Pier. This license was appealed by 3 groups and ALAB are currently processing these appeals. As part of this process a supplementary Appropriate Assessment was conducted.

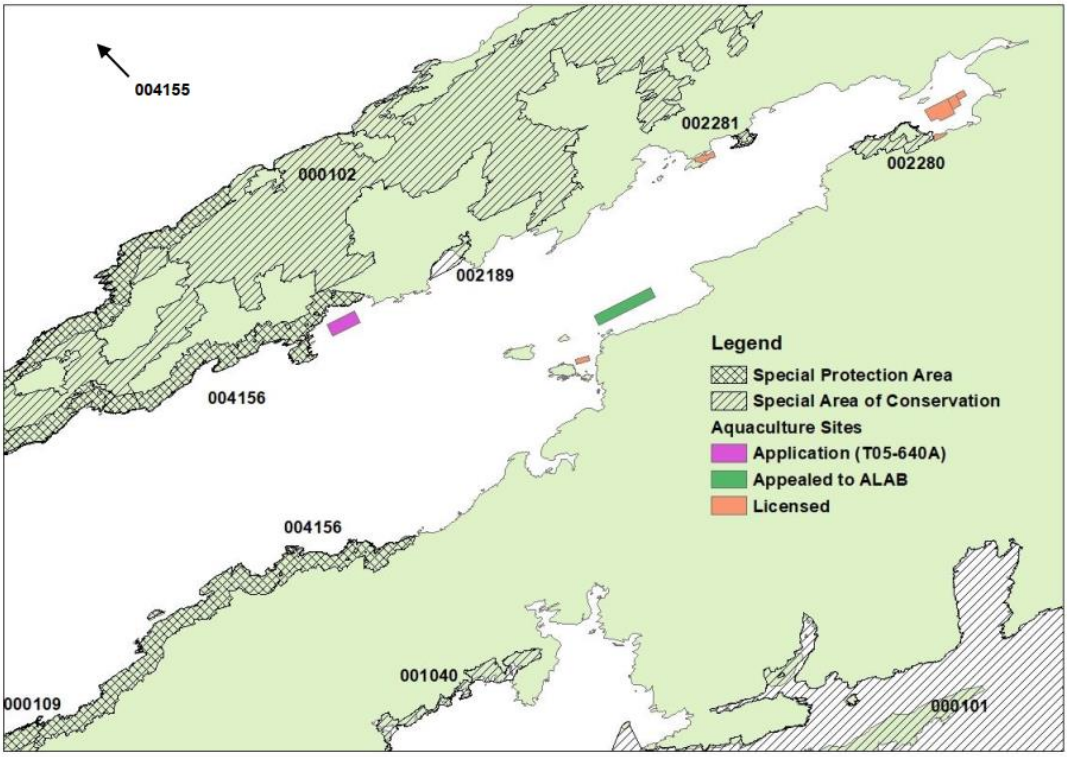



**Figure 1-1: Map of Dunmanus Bay with the site in question indicated on the northern side of the bay. Other licensed aquaculture in the bay also included. SACs and SPAs are included with their site numbers.**

## 1.1 Summary of the appeal:

The license was granted by the Minister of Agriculture, Food and the Marine (DAFM), on the 18th November 2022. The license was for the cultivation of 7 species of native Irish seaweeds on longlines suspended in the water column at the site. The site would be accessed by boat from the nearby Dooneen Pier and also from an alternative pier 14km to the east, near the town of Durrus.

## 1.2 Legislation

Articles 3 - 11 of the European Community (EC) Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Flora and Fauna (Habitats Directive) provide the legislative means to protect habitats and species of Community interest through the conservation of an EU-wide network of protected sites, known as Natura 2000 sites.

The Habitats Directive was originally transposed into Irish law by the European Communities (Natural Habitats) Regulations, 1997 (S.I. No. 94 of 1997). The 1997 Regulations were subsequently revoked and replaced by the European Communities (Birds and Natural Habitats) Regulations 2011, as amended (herein referred to as the 2011 Birds and Natural Habitats Regulations). Natura 2000 sites are referred to as European sites in the 2011 Birds and Natural Habitats Regulations. The terms Natura 2000 sites and European sites are synonymous. Natura 2000 sites include SACs which are designated under the Habitats Directive and Special Protected Areas (SPAs) which are designated under EC Directive EC 79/409/EEC (Birds Directive).

SACs are designated due to their significant ecological importance for habitats and species protected under Annex I and Annex II respectively of the Habitats Directive. SPAs are designated for the protection of populations and habitats of bird species protected under the Birds Directive. The specific named habitats and/or (non-bird) species for which an SAC or SPA are selected are called the 'Qualifying Interests', of the site. The specific named bird species for which a SPA is selected is called the 'Special Conservation Interests'. However, in practice, the common terminology of Qualifying Interest applies also to Special Conservation Interest. The term Qualifying Interest is used throughout.

Under Article 6(3) of the Habitats Directive any plan or project likely to significantly affect the integrity of a Natura 2000 site must be subject to an Appropriate Assessment (AA). AA focuses on the likely significant effects of a plan or project on a Natura 2000 site and considers the implications for the site in view of its' conservation objectives. Every Natura 2000 site has Conservation Objectives which are set out by the National Parks and Wildlife Service (NPWS), the competent authority for the management of Natura 2000 sites in Ireland. The AA process also must consider any plan or proposal in combination with other activities that have the potential to significantly affect the integrity of the Natura 2000 site.

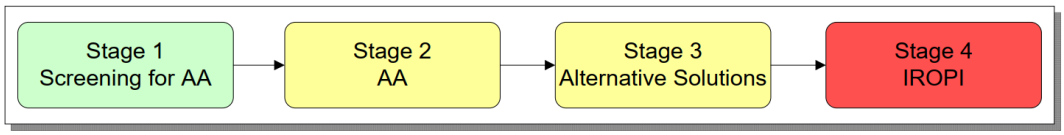
The Dept of Agriculture, Food and the Marine (DAFM) is the aquaculture licensing authority under the Fisheries (Amendment) Act (1997) and determines applications for new aquaculture licences and renewals of existing aquaculture licences. Licenses granted by the Minister / DAFM can be appealed to the Aquaculture Licenses Appeals Board (ALAB).

DAFM is the competent authority responsible for undertaking AA of aquaculture licence applications. By extension ALAB is the competent authority for undertaking AA of appealed licenses. As part of this process DAFM / ALAB must determine if the proposed aquaculture activities, individually or in-combination with other activities, are likely to significantly impact the Conservation Status of Qualifying Interests and the integrity of relevant Natura 2000 sites. DAFM / ALAB are responsible for ensuring that an AA is carried out. DAFM / ALAB must take due consideration of the outcomes of the AA process when determining an aquaculture licence application or appeal.

## 1.3 Appropriate Assessment Stages

The requirements for AA derive directly from Article 6(3) of the Habitats Directive. Article 6(3) outlines the decision-making tests for considering plans and projects that may have a significant effect on a Natura 2000 site. No definition of the content or scope of AA is given in the Habitats Directive, but the concept and approach are set out in EC guidance (EC, 2018). The Guidance on Appropriate Assessment of Plans and Projects in Ireland document published by the Department of Environment, Heritage and Local Government (DEHLG) in 2009 (DEHLG, 2009) sets out how AA of plans or proposals in Natura 2000 sites in Ireland should be carried out in alignment with EC guidance. In 2021 the Office of the Planning Regulator (OPR) published a practice note on AA Screening (OPR, 2021). The practice note provides guidance on how a planning authority should screen an application for planning permission for appropriate assessment.

DEHLG (2009) promotes a four stage process to complete the AA. The four stages are:




Stage 3 and Stage 4 are not applicable here. The key procedures involved in completing the first two stages of the AA process are described.

### 1.3.1 Stage 1: Appropriate Assessment Screening

Stage 1 AA Screening is the process that addresses and records the reasoning and conclusions in relation to whether a plan or project, alone or in combination with other plans and projects, is likely to have significant effects on a Natura 2000 site in view of the site's Conservation Objectives.

If the effects are deemed to be significant, potentially significant, or uncertain, or if the screening process becomes overly complicated, then the process must proceed to Stage 2 AA. Screening should be undertaken without the inclusion of mitigation. The greatest level of evidence and justification will be needed in circumstances when the process ends at screening stage on grounds of no effect.

### 1.3.2 Stage 2: Appropriate Assessment

This stage considers whether the plan or project, alone or in combination with other projects or plans, will have adverse effects on the integrity of a Natura 2000 site, and includes any mitigation measures necessary to avoid, reduce or offset negative effects. This stage requires a targeted scientific examination of the plan or project and the relevant Natura 2000 sites, to identify and characterise any possible implications for the site in view of the site's Conservation Objectives, taking account of in-combination effects. If the assessment is negative, then recommendations on mitigation measures or on licensing decisions will be made.

# 2 Appropriate assessment

## 2.1 Proposed Development

Seaweed farming involves the laying out of ropes, suspended from buoys, which are anchored to the seabed. The growing ropes are “seeded” with seaweed plantlets, usually in an onshore hatchery. The plantlets are then allowed to grow onsite, drawing nutrients from the surrounding seawater and energy from the sun. The seeded ropes in this case would be provided from the applicants own hatchery facility at Gearhies, Bantry Bay. The seaweed grows on the cultivation ropes, requiring no further input and minimal husbandry.

Activity onsite involves a development phase where anchors, buoys and lines are laid within the licensed site. Each production cycle involves laying out seeded rope (seeding), growing and harvesting. During the growing phase the site requires little activity except for regular checks and maintenance of equipment. The applicant estimates that one visit per week may be required during this growing phase.

Once the seaweed plants are fully grown they are harvested and brought to shore. The growing lines are removed from the water and the seaweed is stripped from the lines into 1 tonne bins. This harvesting activity is performed on the deck of the workboat. The growing lines are brought ashore and reused the following cycle. The bins are then transferred to the pier by crane and transported to the applicants facility at Gearhies for processing.

The applicant has estimated that, once the site is in full production, which is expected to take several years, 110t of seaweed could be produced per annum. The harvesting of this tonnage would take 10 days over an 8 week period. Each harvesting day would involve 2 trips by boat and pick-up truck, over a 3 hour period.

The applicant has proposed to use an alternative pier near Durrus for periods of increased activity such deployment and harvesting. This pier is 14km to the east of the site (see figure 1-2). This pier is currently used as a commercial pier and has good road access. The applicant has stated that they would use Dooneen pier for the weekly maintenance visits to the site, estimated at 1 per week.

The timing of seeding and harvesting depends on the species being farmed and a table (see table 1.1) has been provided by the applicant, establishing the relevant times of the year for these activities.

**Dooneen Site**

| Seaweed per the application | Site Preparation Months | Deployment Months | Ongrowing Months | Harvesting Months |
|---|---|---|---|---|
| *Alaria Esculenta* | Mid Sept-Oct | Oct-Dec | Oct-June | Apr-Mid June |
| *Ulva Lactuca* | December- Jan | Jan-Feb | Jan-June | May-Mid June |
| *Palmaria Palmata* | Mid Sept-Oct | Oct-Nov | Oct- May | Apr-Mid May |
| *Asparagopsis Armata* | Mar- Apr | April | Apr- June | June |
| *Saccharina Latissima* | Mid Sept-Oct | Oct-Dec | Oct-June | Apr-Mid June |
| *Laminaria Digitata* | Mid Sept-Oct | Oct-Dec | Oct-June | Apr-Mid June |
| *Fucus Serratus* | Oct - Nov | Nov-Dec | Nov - May | May |

**Table 2-1 Detailing the time periods for site preparation, deployment, ongrowing and harvesting for the 7 different species of seaweed proposed to grow onsite.**

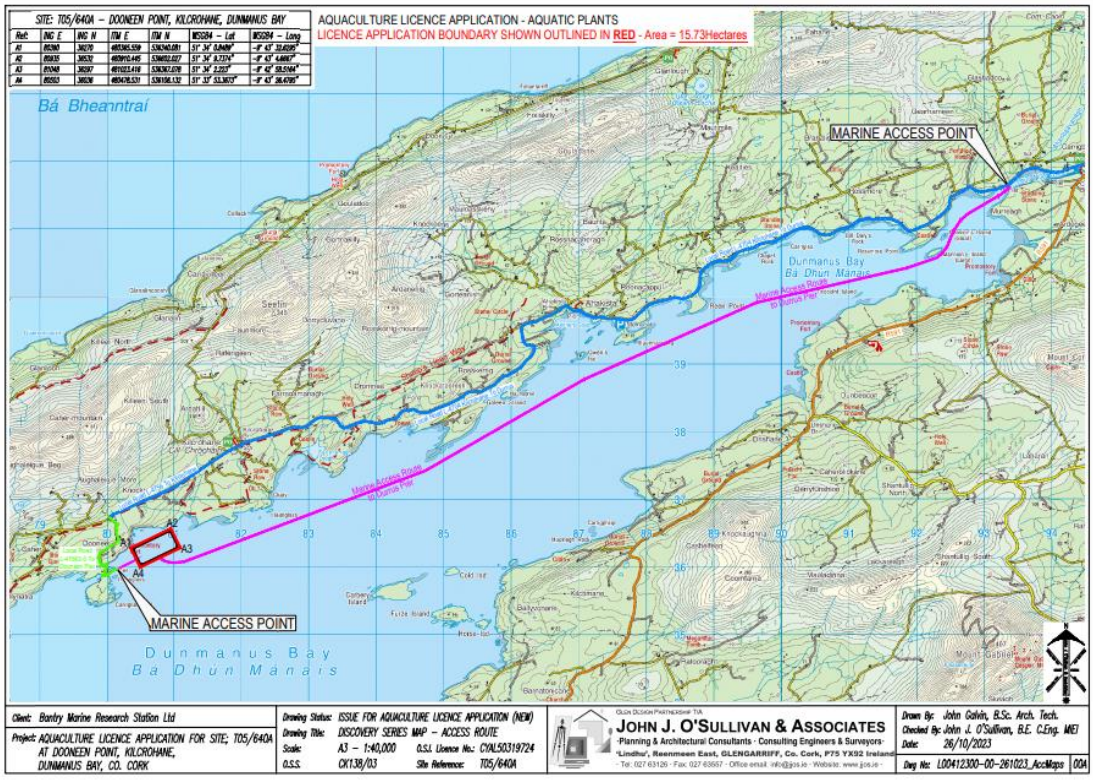



**Figure 2-1: Map of the site indicating Dooneen Pier to the west and the alternative pier to be used for deployment and harvesting**

## 2.2 Identification of relevant Natura 2000 sites:

Appropriate Assessment involves identifying the protected Natura 2000 sites in the vicinity of the proposed project which have the potential to be impacted by the development and operation of the site. The NPWS website provides a geographical database of sites and supporting information such as the qualifying interests of each SAC and SPA. The DEHLG, 2009 guidance document provides a guideline of 15km as the distance outside of which a project would most probably not have an impact but each project should be assessed on an individual basis. The site is not located within any designated Natura 2000 site but it is adjacent and proximal to 7 SACs and 2 SPAs.

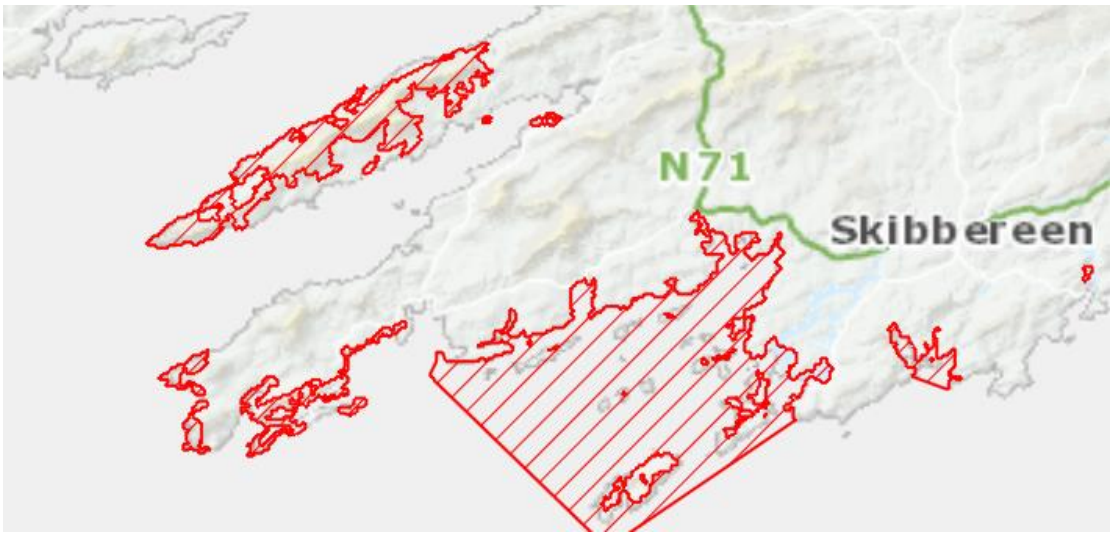



**Figure 2-2: Map, from the NPWS mapviewer, showing the relative proximity of the SACs identified for inclusion in the AA.**

The SACs identified as having the potential to be impacted by the proposed development and included here for screening are:

| Site code | Site Name | Distance to the SAC |
|---|---|---|
| 000101 | Roaringwater Bay and Islands SAC | 10km |
| 000102 | Sheep's Head SAC | 800m |
| 000109 | Three Castle Head to Mizen Head SAC | 9.5km |
| 001040 | Barley Cove to Ballyrisode Point SAC | 7km |
| 002189 | Farranamanagh Lough SAC | 1500m |
| 002280 | Dunbeacon Shingle SAC | 10km |
| 002281 | Reen Point Shingle SAC | 8km |

**Table 2-2 Listing the 7 SACs identified as having the potential to be impacted by the operation of the site in Dunmanus Bay. Also listed is the nearest distance from the site to the boundary of the SAC.**

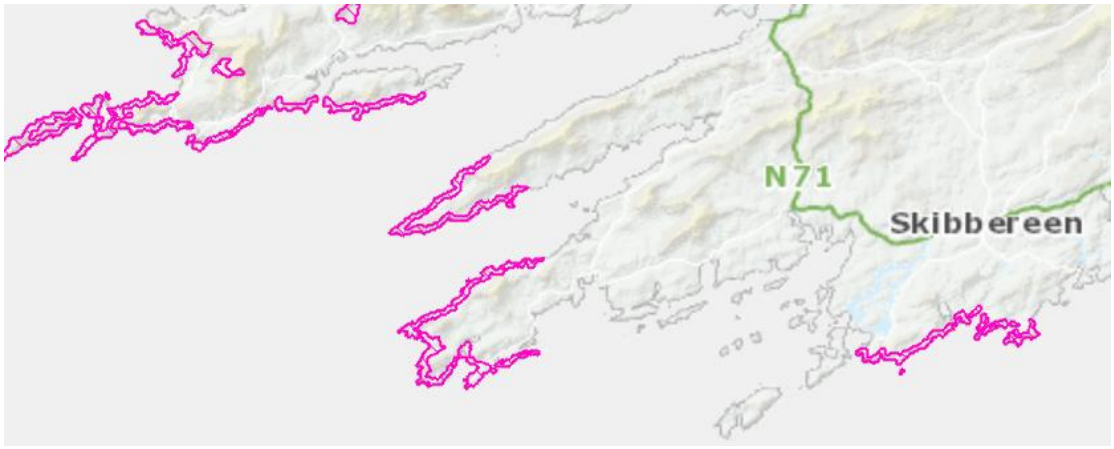



**Figure 2-3: Map, from the NPWS mapviewer, showing the relative proximity of the SPAs identified for inclusion in the AA.**

The SPAs identified as having the potential to be impacted by the proposed development and included here for screening are:

| Site code | Site name | Distance to the SPA |
|---|---|---|
| **004156** | **Sheep's Head to Toe Head SPA** | **50m** |
| **004155** | **Beara Peninsula SPA** | **9.8km** |

**Table 2-3: Detailing the SPAs identified as having the potential to be impacted by the operation of the site in Dunmanus Bay. Also listed is the nearest distance from the site to the boundary of the SPA.**

## 2.3 Qualifying Interests of identified SACs:

SACs and SPAs are designated for specific habitats and species in order to afford these designated interests protection. Any project which has the potential to impact negatively on the qualifying interests (QI) of the protected site must be appropriately assessed. In order for a QI to be assessed as potentially impacted there must be a connection between the site and the QI. If there is no connection, no identified Source-Pathway-Receptor link, then the potential for impact is considered negligible and can be screened out. If a link exists and potential negative impact cannot be screened out then the assessment proceeds to Stage 2, appropriate assessment.

## 2.4 Screening of Qualifying Interests:

The qualifying interests for each of the identified SACs and SPAs were assessed for potential connectivity to the project. If no connectivity exists then the QI will be screened out from further assessment.

| **Site code**<br><br>**Site Name** | **Qualifying Interest** | **Appropriate Assessment Screening** |
|---|---|---|
| 000101<br><br>Roaringwater Bay and Islands SAC | Large shallow inlets and bays [1160] | Due to the distance from the project to the nearest point of the SAC boundary, 10km in a straight line, over 30km by sea, there is no connection identified between the QI in Roaringwater Bay and the proposed project.<br><br>Impact on this QI can be screened out. |
| | Reefs [1170] | Due to the distance from the project to the nearest point of the SAC boundary, 10km in a straight line, over 30km by sea, there is no connection identified between the QI in Roaringwater Bay and the proposed project.<br><br>Impact on this QI can be screened out. |
| | Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] | Due to the distance from the project to the nearest point of the SAC boundary, 10km in a straight line, over 30km by sea, there is no connection identified between the QI in Roaringwater Bay and the proposed project.<br><br>Impact on this QI can be screened out. |
| | European dry heaths [4030] | Due to the distance from the project to the nearest point of the SAC boundary, 10km in a straight line, over 30km by |

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| | | sea, there is no connection identified between the QI in Roaringwater Bay and the proposed project.<br><br>Impact on this QI can be screened out. |
| | Submerged or partially submerged sea caves [8330] | Due to the distance from the project to the nearest point of the SAC boundary, 10km in a straight line, over 30km by sea, there is no connection identified between the QI in Roaringwater Bay and the proposed project.<br><br>Impact on this QI can be screened out. |
| | Phocoena phocoena (Harbour Porpoise) [1351] | The boundary of the SAC is 30km by sea from the site of the proposed project.<br><br>The Harbour Porpoise is a mobile species with a large range. A connection between the population of harbour porpoise in the SAC cannot be screened out and will proceed to stage 2 - Appropriate Assessment. |
| | Lutra lutra (Otter) [1355] | The boundary of the SAC is 30km by sea from the site of the proposed project. Otter are not known to extend their range this distance from their home territory. The range of otter populations from Roaringwater Bay and the site area do not overlap.<br><br>Impact on this QI can be screened out. |
| | Halichoerus grypus (Grey | The boundary of the SAC is 30km by sea from the site of the proposed |

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| | Seal) [1364] | project.<br><br>The Grey Seal is known to be a mobile species with a large range. A connection between the population of Grey Seal in the SAC cannot be screened out and will proceed to stage 2 - Appropriate Assessment. |
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| 000102<br><br>Sheep's Head SAC | Northern Atlantic wet heaths with Erica tetralix [4010] | The shortest distance between the SAC boundary and the site boundary is 800m. This QI is terrestrial and no connectivity has been identified which could result in a negative impact of the proposed project on the QI. The operation of the site will not disturb the species which utilise this habitat.<br><br>Impact on this QI can be screened out. |
| | European dry heaths [4030] | The shortest distance between the SAC boundary and the site boundary is 800m. This QI is terrestrial and no connectivity has been identified which could result in a negative impact of the proposed project on the QI. The operation of the site will not disturb the species which utilise this habitat.<br><br>Impact on this QI can be screened out. |
| | Geomalacus maculosus (Kerry Slug) [1024] | The shortest distance between the SAC boundary and the site boundary is 800m. The site operation will be completed at sea and the activity on land - transport on local roads, has no potential to impact on this species. This QI is terrestrial and no connectivity has |

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| | | been identified which could result in a negative impact of the proposed project on the QI. The operation of the site will not disturb the species which utilise this habitat.<br><br>Impact on this QI can be screened out. |
| | | |
| 000109<br><br>Three Castle Head to Mizen Head SAC | Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] | The shortest distance between the SAC boundary and the site boundary is 9.5km. This QI is terrestrial and no connectivity has been identified which could result in a negative impact of the proposed project on the QI. The operation of the site will not disturb the species which utilise this habitat.<br><br>Impact on this QI can be screened out. |
| | European dry heaths [4030] | The shortest distance between the SAC boundary and the site boundary is 9.5km. This QI is terrestrial and no connectivity has been identified which could result in a negative impact of the proposed project on the QI. The operation of the site will not disturb the species which utilise this habitat.<br><br>Impact on this QI can be screened out. |
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| 001040<br><br>Barley Cove to Ballyrisode Point SAC | Mudflats and sandflats not covered by seawater at low tide [1140] | The shortest distance between the SAC boundary and the site boundary is 7km in a straight line and 20km by sea. No connectivity has been identified which could result in a negative impact of the proposed project on the QI. The operation of the site will not release any compound which may impact on |

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| | | nor remove any limited resource which may be utilised by the species inhabiting this habitat. The operation of the site will not disturb the species which utilise this habitat.<br><br>Impact on this QI can be screened out. |
| | Perennial vegetation of stony banks [1220] | The shortest distance between the SAC boundary and the site boundary is 7km in a straight line and 20km by sea. No connectivity has been identified which could result in a negative impact of the proposed project on the QI. This QI is terrestrial. The operation of the site will not release any compound which may impact on nor remove any limited resource which may be utilised by the species inhabiting this habitat. The operation of the site will not disturb the species which utilise this habitat.<br><br>Impact on this QI can be screened out. |
| | Salicornia and other annuals colonising mud and sand [1310] | The shortest distance between the SAC boundary and the site boundary is 7km in a straight line and 20km by sea. No connectivity has been identified which could result in a negative impact of the proposed project on the QI. The operation of the site will not release any compound which may impact on nor remove any limited resource which may be utilised by the species inhabiting this habitat. The operation of the site will not disturb the species which utilise this habitat.<br><br>Impact on this QI can be screened out. |

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| | Atlantic salt meadows (Glauco-Puccinellietalia maritimae) [1330] | The shortest distance between the SAC boundary and the site boundary is 7km in a straight line and 20km by sea. No connectivity has been identified which could result in a negative impact of the proposed project on the QI. The operation of the site will not release any compound which may impact on nor remove any limited resource which may be utilised by the species inhabiting this habitat. The operation of the site will not disturb the species which utilise this habitat.<br><br>Impact on this QI can be screened out. |
| | Mediterranean salt meadows (Juncetalia maritimi) [1410] | The shortest distance between the SAC boundary and the site boundary is 7km in a straight line and 20km by sea. No connectivity has been identified which could result in a negative impact of the proposed project on the QI. The operation of the site will not release any compound which may impact on nor remove any limited resource which may be utilised by the species inhabiting this habitat. The operation of the site will not disturb the species which utilise this habitat.<br><br>Impact on this QI can be screened out. |
| | Shifting dunes along the shoreline with Ammophila arenaria (white dunes) [2120] | The shortest distance between the SAC boundary and the site boundary is 7km in a straight line and 20km by sea. No connectivity has been identified which could result in a negative impact of the proposed project on the QI. The operation of the site will not release any compound which may impact on nor remove any limited resource which |

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| | | may be utilised by the species inhabiting this habitat. The operation of the site will not disturb the species which utilise this habitat.<br><br>Impact on this QI can be screened out. |
| | Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] | The shortest distance between the SAC boundary and the site boundary is 7km in a straight line and 20km by sea. No connectivity has been identified which could result in a negative impact of the proposed project on the QI. The operation of the site will not release any compound which may impact on nor remove any limited resource which may be utilised by the species inhabiting this habitat. The operation of the site will not disturb the species which utilise this habitat.<br><br>Impact on this QI can be screened out. |
| | European dry heaths [4030] | The shortest distance between the SAC boundary and the site boundary is 7km in a straight line and 20km by sea. No connectivity has been identified which could result in a negative impact of the proposed project on the QI. This QI is terrestrial. The operation of the site will not release any compound which may impact on nor remove any limited resource which may be utilised by the species inhabiting this habitat. The operation of the site will not disturb the species which utilise this habitat.<br><br>Impact on this QI can be screened out. |
| | Petalophyllum ralfsii | The shortest distance between the SAC boundary and the site boundary is 7km |

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| | (Petalwort) [1395] | in a straight line and 20km by sea. No connectivity has been identified which could result in a negative impact of the proposed project on the QI. This QI is terrestrial. The operation of the site will not release any compound which may impact on nor remove any limited resource which may be utilised by the species inhabiting this habitat. The operation of the site will not disturb the species which utilise this habitat.<br><br>Impact on this QI can be screened out. |
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| 002189<br>Farranamanagh Lough SAC | Coastal lagoons [1150] | The shortest distance between the SAC boundary and the site boundary is 1500m in a straight line and 1700m by sea. No connectivity has been identified which could result in a negative impact of the proposed project on the QI. The operation of the site will not release any compound which may impact on nor remove any limited resource which may be utilised by the species inhabiting this habitat. The operation of the site will not disturb the species which utilise this habitat.<br><br>Impact on this QI can be screened out. |
| | Perennial vegetation of stony banks [1220] | The shortest distance between the SAC boundary and the site boundary is 1500m in a straight line and 1700m by sea. No connectivity has been identified which could result in a negative impact of the proposed project on the QI. This QI is terrestrial. The operation of the site will not release any compound which may |

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| | | impact on nor remove any limited resource which may be utilised by the species inhabiting this habitat. The operation of the site will not disturb the species which utilise this habitat.<br><br>Impact on this QI can be screened out. |
| | | |
| 002280<br>Dunbeacon Shingle SAC | Perennial vegetation of stony banks [1220] | The shortest distance between the SAC boundary and the site boundary is 10km by sea. No connectivity has been identified which could result in a negative impact of the proposed project on the QI. This QI is terrestrial. The operation of the site will not release any compound which may impact on nor remove any limited resource which may be utilised by the species inhabiting this habitat. The operation of the site will not disturb the species which utilise this habitat. The operation of the site will not disturb the species which utilise this habitat.<br><br>Impact on this QI can be screened out. |
| | | |
| 002281<br>Reen Point Shingle SAC | Perennial vegetation of stony banks [1220] | The shortest distance between the SAC boundary and the site boundary is 8km by sea. No connectivity has been identified which could result in a negative impact of the proposed project on the QI. This QI is terrestrial. The operation of the site will not release any compound which may impact on nor remove any limited resource which may be utilised by the species inhabiting this habitat. The |

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| | | operation of the site will not disturb the species which utilise this habitat. The operation of the site will not disturb the species which utilise this habitat.<br><br>Impact on this QI can be screened out. |

**Table 2-4: Listing the qualifying interests of each of the identified SACs and the associated screening comment**

## 2.5 Qualifying interests of SPAs:

| Site code<br><br>Site name | Qualifying Interest | Appropriate Assessment Screening |
|---|---|---|
| **004156**<br><br>**Sheep's Head to Toe Head SPA** | Peregrine (Falco peregrinus) [A103] | The shortest distance from the boundary of the site to the boundary of the SPA is 50m. The furthest distance is 37km as the SPA covers a linear coastal location as far to the south-east as Toe Head. The area of the SPA is 2500ha.<br><br>Peregrine are a wide ranging, mobile species and a connection to the operation of the site cannot be screened out.<br><br>The assessment will therefore proceed to Stage 2 – Appropriate Assessment. |
| | Chough (Pyrrhocorax pyrrhocorax) [A346] | Chough are a wide ranging, mobile species and a connection to the operation of the site cannot be screened out.<br><br>The assessment will therefore proceed to Stage 2 – Appropriate Assessment. |
| | | |
| **004155**<br><br>**Beara Peninsula SPA** | Chough (Pyrrhocorax pyrrhocorax) [A346] | Chough are a wide ranging, mobile species and a connection to the operation of the site cannot be screened out.<br><br>The assessment will therefore proceed to Stage 2 – Appropriate Assessment. |
| | Fulmar (Fulmarus glacialis) [A009] | Fulmar are a wide ranging, mobile species and a connection to the operation of the site cannot be screened out.<br><br>The assessment will therefore proceed to Stage 2 – Appropriate Assessment. |

**Table 2-5: Listing the qualifying interests of each of the identified SPAs and the associated screening comment**

## 2.6 Appropriate Assessment:

Stage 1 has screened out all but 5 marine mammal and bird species from further assessment. The marine mammals Grey Seal and Harbour Porpoise and the birds Chough, Peregrine Falcon and Fulmar were not screened out as a connection could not be ruled out. The assessment of the potential impact of the operation on these Qualifying Interests will proceed to Stage 2 - Appropriate Assessment.

| **Site code**<br><br>**Site Name** | **Qualifying Interest** | **Appropriate Assessment Screening** |
|---|---|---|
| 000101<br><br>Roaringwater Bay and Islands SAC | Phocoena phocoena (Harbour Porpoise) [1351] | The boundary of the SAC is 30km by sea from the site of the proposed project.<br><br>The Harbour Porpoise is known to be a mobile species with a large range. The site area is 15.74ha. The area of Dunmanus Bay is 77km$^2$, 7700ha. The site occupies 0.2% of the surface area of Dunmanus Bay.<br><br>Due to the distance from the site to the SAC, the small area occupied by the site relative to the area available to harbour porpoise, the low impact activities onsite (in terms of area, season and number of days) the potential impact of the operation of this site on the harbour porpoise population in Roaringwater Bay is considered negligible.<br><br>A significant negative impact of the operation on the population of Harbour Porpoise in the SAC is not expected. |
| | Halichoerus grypus (Grey Seal) [1364] | The boundary of the SAC is 30km by sea from the site of the proposed project.<br><br>The Grey Seal is known to be a mobile species with a large range. The site area is 15.74ha. The area of Dunmanus Bay is 77km$^2$, 7700ha. The site occupies |

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| | | 0.2% of the surface area of Dunmanus Bay.<br><br>Due to the distance from the site to the SAC, the small area occupied by the site relative to the area available to Grey Seals, the low impact activities onsite (in terms of area, season and number of days) the potential impact of the operation of this site on the Grey Seal population in Roaringwater Bay is considered negligible.<br><br>A significant negative impact of the operation on the population of Grey Seal in the SAC is not expected. |
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| **004156**<br><br>**Sheep's Head to Toe Head SPA** | Peregrine (Falco peregrinus) [A103] | The shortest distance from the boundary of the site to the boundary of the SPA is 50m. The furthest distance is 37km as the SPA covers a linear coastal location as far SE as Toe Head. The area of the SPA is 2500ha.<br><br>The site will be operated during daylight hours, by boat. The number of days for activities such as harvesting will be 10 days over an 8 week period. During most weeks of the year activity onsite will be limited to a single visit. The activity at sea will be similar to the current activity in Dunmanus Bay, such as commercial fishing, boat landings to the pier, leisure trips and activities such as skiing and diving from small boats.<br><br>The operation of the site will not exclude the use of the site for Peregrine. The site is available as a feeding range for the majority of the year. Operations onsite which might disturb the use of the site by the population of peregrine from the SPA will be limited to daylight hours, be of low impact activities similar to fishing and leisure activities, be seasonally limited and limited by number of days activity onsite. |

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| | | The SPA is 2500ha in area, the site is 15.74ha. The area of Dunmanus Bay is 77km$^2$, 7700ha therefore the area occupied by the site is 0.2% of the area of Dunmanus Bay.<br><br>The site does not overlap but is adjacent to and close to the boundary of the SPA. Due to the low impact of the farming activity in terms of area, days operating, noise and disturbance onsite, seasons operating, limited visits, activities such as harvesting and deployment being conducted from a pier 14km distant, the potential for the site to impact on the population of Peregrine within the SPA is considered negligible.<br><br>A significant negative impact of the operation on the population of Peregrine in the SPA is not expected. |
| | Chough (Pyrrhocorax pyrrhocorax) [A346] | The shortest distance from the boundary of the site to the boundary of the SPA is 50m. The furthest distance is 37km as the SPA covers a linear coastal location as far SE as Toe Head. The area of the SPA is 2500ha.<br><br>The site will be operated during daylight hours, by boat. The number of days for activities such as harvesting will be 10 days over an 8 week period. During most weeks the visits to the site will be limited to a single visit. The activity at sea will be similar to the current activity in Dunmanus Bay, such as commercial fishing, boat landings to the pier, leisure trips and activities such as skiing and diving from small boats.<br><br>The operation of the site will not exclude the use of the site or the shoreline adjacent to the site for chough. Operations onsite which might disturb the |

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| | | use of the site by the population of chough from the SPA will be limited to day light hours, be of low impact activities similar to fishing and leisure activities, be seasonally limited and limited by number of days activity onsite.<br><br>The SPA is 2500ha in area, the site is 15.74ha. The area of Dunmanus Bay is 77km$^2$, 7700ha therefore the area occupied by the site is 0.2% of the area of Dunmanus Bay.<br><br>Due to the low impact of the activity in terms of area, days operating, noise and disturbance onsite, seasons operating, limited visits, activities such as harvesting and deployment being conducted from a pier 14km distant the potential for the site to impact on the population of chough within the SPA is considered negligible.<br><br>A significant negative impact of the operation on the population of Chough in the SPA is not expected. |
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| **004155**<br><br>**Beara Peninsula SPA** | Chough (Pyrrhocorax pyrrhocorax) [A346] | The shortest distance from the boundary of the site to the boundary of the SPA is 9.8km. The area of the SPA is 2612ha.<br><br>Due to the distance from the site to the SPA and due to the low impact of the activity in terms of area, days operating, noise and disturbance onsite, seasons operating, limited visits, activities such as harvesting and deployment being conducted from a pier 14km distant, the potential for the site to impact on the population of chough within the SPA is considered negligible.<br><br>A significant negative impact of the operation on the |

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| | | population of Chough in the SPA is not expected. |
| | Fulmar (Fulmarus glacialis) [A009] | The shortest distance from the boundary of the site to the boundary of the SPA is 9.8km. The area of the SPA is 2612ha.<br><br>Due to the distance from the site to the SPA and due to the low impact of the activity in terms of area, days operating, noise and disturbance onsite, seasons operating, limited visits, activities such as harvesting and deployment being conducted from a pier 14km distant, the potential for the site to impact on the population of fulmar within the SPA is considered negligible.<br><br>A significant negative impact of the operation on the population of Fulmar in the SPA is not expected. |

**Table 2-6: Listing the qualifying interests of each of the identified SACs and SPAs which were not screened out at stage 1 and the associated Stage 2 Appropriate Assessment comment**

## 2.7 Cetaceans / basking sharks:

Concerns have been raised about the potential negative impact of the applicants seaweed farm operations on the population of whales, dolphins, seals and basking shark which have been recorded in the area.

Data from the Irish Whale and Dolphin Group (IWDG) was made available (assessed with thanks to the IWDG). Sightings data was made available for the Dunmanus Bay area for the years 2004 – 2024. Records for Dunmanus Bay indicate that cetaceans, seals and basking shark have been sighted in the area during this time. Bottlenose dolphins have been recorded 3 times, up to 15 animals; Common dolphin have been recorded 46 times with one sighting estimating the pod to number 300 animals; fin whale have been recorded just once; harbour porpoise have been recoded 5 times, up to 6 animals at one sighting; humpback whales have been recorded 4 times, up to 3 individuals at one time; minke whale have been recorded 38 times over 20 years, with up to 30 animals estimated in a pod; Rissos dolphin have been recorded just once with 4 individuals spotted at that time.

The potential impact of the operation on the population of harbour porpoise, designated as a QI in the Roaringwater Bay and Islands SAC has been assessed as not significant. The assessment for other cetacean species and basking shark would be considered to be similar due to the following factors:

The area of Dunmanus Bay is 77km$^2$, 7700ha, the area of the site is 15.74ha. The area occupied by the site is 0.2% of the area of Dunmanus Bay. The activities onsite are low impact, similar to leisure and commercial boat activity currently operating in the area. Increased traffic volume due to the development will be low, usually 1 visit per week. The location of the farm is in shallow water, inshore and close to a busy pier. The equipment on a seaweed farm consists of ropes, buoys and anchors and these are readily visible to cetaceans and basking shark. Normal procedures on farms, keeping rope tensioned correctly, reduces entanglement risk should a large animal encounter the farm.

No significant negative impact on cetaceans and basking shark is expected.

## 2.8 In-combination assessment

The appropriate assessment process includes the requirement to assess the potential impact of the proposed activity in combination with other activities in the area. In this way accumulative effects can be assessed.

### 2.8.1 Aquaculture Activity:

Activities in the area include other aquaculture operations, see figure 1.1 for a map of the licensed sites in Dunmanus Bay. The nearest licensed site is 4500m to the SE, also a seaweed growing operation. The activity on this distant site is likely to be similar to that expected on the applicant's site. Sites further to the East are licensed for the production of urchins, mussels, seaweed and oysters. The distance between the applicant's site and the other licensed sites makes any cumulative negative impact on the SACs / SPAs identified highly unlikely. In combination / cumulative impacts from other aquaculture in the bay can be ruled out.

No significant negative impact of the operation, in combination with other aquaculture activity in the bay, on the QIs of the SACs and SPAs identified is expected.

### 2.8.2 Commercial fishing:

Fishing is another activity which takes place within Dunmanus Bay. The activity includes potting, scallop fishing, handlining, trawling and collecting along the shore. The fishing activities are spread over the entire area of Dunmanus Bay. The activity on the applicant's seaweed farming site is of a similar nature, the use of boats and cranes to tend to the in-water equipment. The activity onsite will be in the region of 1 day per week for most weeks of the year and during periods of harvesting and seeding this is expected to increase to 2 or 3 days per week, during daylight hours. A single boat, operating within a defined area, landing to Dooneen Pier once per week and the pier near Durrus during more active periods is not considered to be a considerable increase in boat traffic for this area. Cumulative impacts on the QIs of the identified SACs and SPAs from the aquaculture activity on the applicants site in combination with the fishing activity in the bay can ruled out.

No significant negative impact of the operation, in combination with fishing activity in the bay, on the QIs of the SACs and SPAs identified is expected.

### 2.8.3 Leisure activities:

Dunmanus Bay is well used for shore angling, swimming, sailing, kayaking, diving and other similar leisure activities. Dooneen Pier is reported to be a well used and active site for these activities, concentrated in the summer months. Farming activity on the applicants site will be limited to 1 day per week, during daylight hours for most of the year. A single visit to the pier by a small vehicle combined with a single boat visit to the site will be a normal days activity. During more active periods the activity onsite is expected to be in the region of 2 – 3 days per week but the boat will be operated from a distant pier to the east.

The level of activity at sea, resulting from the proposed development, is not considered to be a significant increase in boating activity for this area. The low level of additional road transport is not considered to be a significant increase for this area. In-combination / cumulative impacts of activity on the applicants site with local leisure activity is not thought to have the potential to negatively impact on the QIs of the SACs and SPAs identified and can therefore be ruled out.

No significant negative impact of the operation, in combination with leisure activity in the bay, on the QIs of the SACs and SPAs identified is expected.

### 2.8.4 Land-based activities:

The activities on land in this area include tourism, transport and the livelihoods of the local population and local agriculture. The landbased activities associated with the operation of the seaweed farm is thought to be low, with minimal visits to Dooneen Pier. The additional road traffic and activity on the pier arising from the operation of the site is not thought to be a considerable or significant increase in the current traffic and activity in the area. Therefore, negative impacts on the SACs and SPAs identified, of the applicants operation in-combination with the current land-based traffic and activity in the area, can be ruled out.

No significant negative impact of the operation, in combination with land-based activity in the bay, on the QIs of the SACs and SPAs identified is expected.

## 2.9 Potential for introduction of non-native species

The applicant operates a research facility at a site in Gearhies, Bantry Bay. The species of seaweed included in the license application are all native and common in this area. All seeded rope will be sourced from local broodstock, produced in a local hatchery. All equipment will be sourced locally and if reused will be used for similar activities in Bantry Bay or Dunmanus Bay. Local boats will be used for operations onsite. The activities pose little risk of importing non-native species or of establishing populations of invasive alien species (IAS) in the area.

# 3 Appropriate Assessment - Conclusion:

The proposed activities involved in establishing and operating a seaweed farm at the site near Dooneen Pier in Dunmanus have been assessed for any potential negative impact on Natura 2000 sites in the area. No negative impact is predicted on the conservation objectives and qualifying interests of the identified designated sites. The granting of a license for this activity should in no way negatively impact the habitats and species designated for protection in the SACs and SPAs identified within the potential sphere of influence of the proposed farm.

This assessment and therefore this conclusion has been based on information available at this time and the operation as described in the application together with the proposal by the applicant that seeding and harvesting activity, resulting in increased visits to the site during these periods, will operate from an alternative pier and not Dooneen Pier.

Fergal Guilfoyle, ALAB Technical Advisor, 14th September 2024

# 4 References

Report Supporting Appropriate Assessment of Extensive Aquaculture in Dunmanus Bay, Co Cork; Marine Institute Version: June 2022

Guidance on Appropriate Assessment of Plans and Projects in Ireland; Department of Environment, Heritage and Local Government (DEHLG), 2009

Natura 2000 Site documents available on: https://www.npws.ie/maps-and-data

Aquaculture license information available on: https://dafm-maps.marine.ie/aquaculture-viewer/

ALAB documents available on: https://www.alab.ie/activeappeals/

Data from the Irish Whale and Dolphin Group (www.iwdg.ie)– with thanks.