



Aquaculture Licences Appeals Board



Final Version 20/03/24

Technical Advisor's Report



Summary

| | |
|--------------------------|--|
| Description | Aquaculture licence appeal against the decision of the Minister of Agriculture, Food and Marine to refuse a licence to Foylantic Ltd Cultivation of Pacific Oysters using bags and trestles on site T12/572A on the foreshore in Trawbreaga Bay, Co. Donegal |
| Licence Application | T12/572 |
| Appeal Reference | Trawbreaga AP3 23 |
| Department Reference No. | AGR 01386-22 |
| Applicant | Foylantic Ltd |
| Ministers Decision | To refuse an aquaculture licence to Foylantic Ltd in respect of T12/572 |
| Technical Advisor | Marie Louise Heffernan CEnv, MCIEEM, MSc Aster Environmental Consultants Limited www.aster.ie <i>Maps reproduced under OSI Licence number EN 0070910</i> |
| Site Inspection | 23/08/2023 |

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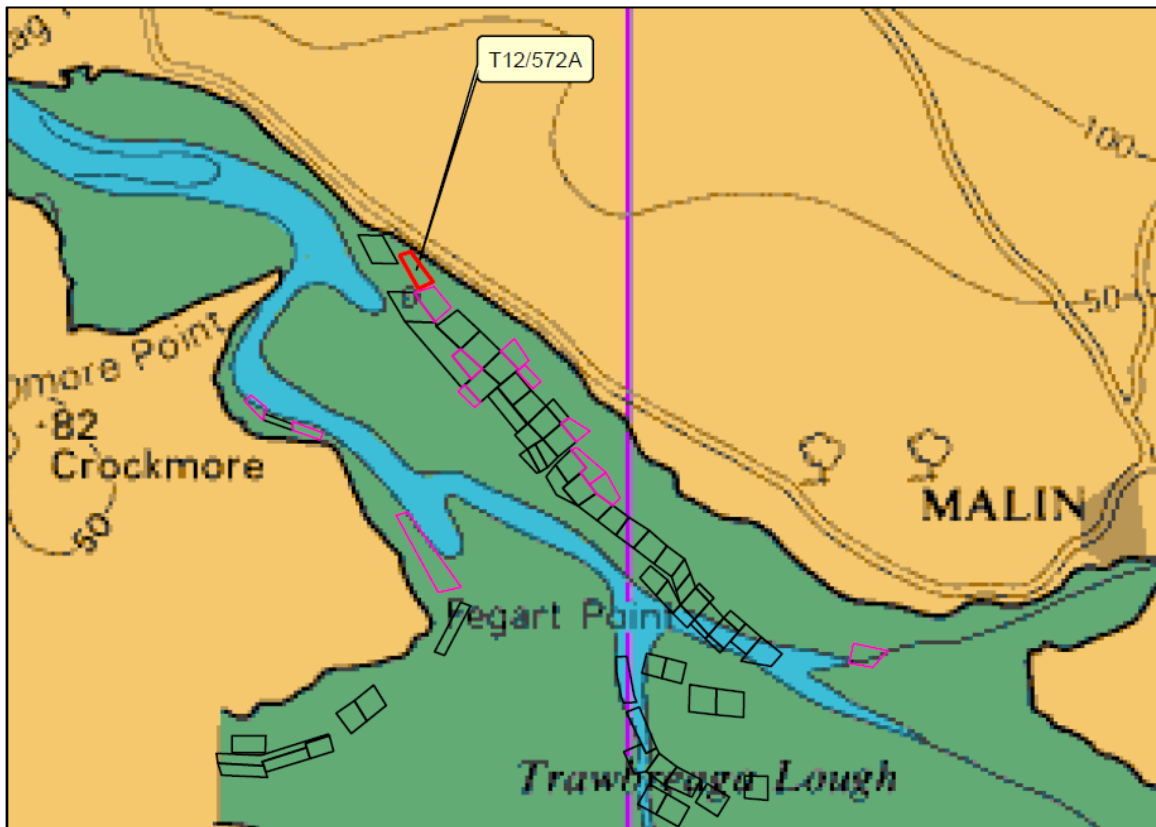
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1.0 General Matters / Appeal Details

1.1 Licence Application and Ministers Decision

Location of Site Appealed: Trawbreaga Bay Co. Donegal

| Appeal Number | Reference number | Applicant Name | Applicant Address | Minister for Agriculture, Food and the Marine decision |
|---------------|------------------|------------------|---|--|
| AP3 - 2023 | T12/572 | Cathal McCorkell | Foylantic Ltd Cuan na Mara Carrowtrasna Greencastle Co. Donegal | To refuse to grant licence |



Map 1: Location of site under appeal

1.2 Appeal Details

| Appeal Number | Reference number | Date Appeal Received: | Location of Site Appealed |
|---------------|------------------|-----------------------|---------------------------|
| AP3 - 2023 | T12/572 | 01/02/2023 | Trawbreaga Bay |

1.3 Name of Appellant (s):

| Appeal Number | Reference number | Name and address |
|---------------|------------------|---|
| AP3 - 2023 | T12/572 | Cathal McCorkell Foylantic Ltd Cuan na Mara Carrowtrasna Greencastle Co. Donegal |

1.4 Name of Observers

No observers are noted in respect of this appeal

1.5 Grounds for Appeal

| Appeal Number | Reference number | Grounds for Appeal |
|---------------|------------------|--|
| AP3 - 2023 | T12/572 | <p>In summary The applicant expresses dissatisfaction with the decision-making process regarding their application, claiming it's unjust to base decisions on “factors that cannot be discounted”. They question the lack of supporting evidence for the refusal. Additionally, they raise discrepancies in bird count data, seeking clarification.</p> <p>The applicant emphasizes the positive impact of their sustainable business in generating employment and aiding the local economy and highlight the need for additional space for product preparation.</p> |

| | | |
|--|--|--|
| | | <p>They propose mitigating concerns about access by reducing site size and states that given the small relative site size that “little to no visual Impact applies”</p> <p>Overall, they advocate for a fair assessment of their application based on substantial evidence</p> |
|--|--|--|

Issues

The issues in the case of the appeal are as follows

1. Justice
2. Concern on lack of data underpinning decision
3. Access
4. Visual Impact

1.6 Minister’s submission

Section 44 of the Fisheries (Amendment) Act 1997 part 2 states that “The Minister and each other party except the appellant may make submissions or observations in writing to the Board in relation to the appeal within a period of one month beginning on the day on which a copy of the notice of appeal is sent to that party by the Board and any submissions or observations received by the Board after the expiration of that period shall not be considered by it’

No submissions are enclosed from the Minister or any other party in light of this appeal.

1.7 Applicant response

This section should reflect accurately any response received from the applicant in response to a request for a submission under Section 44 of the Act.

| Appeal Number | | Response |
|---------------|---------|---|
| AP3 - 2023 | T12/572 | No response as the appellant is the applicant |

2.0 Oral Hearing Assessment

Following Section 49 of the Fisheries Amendment Act 1997 an oral hearing may be conducted by the ALAB regarding the licence appeals.

Having reviewed the Ministers File, correspondence from the appellant/applicant/ Department of Agriculture, Food and the Marine and carried out a site visit, there is sufficient evidence in this technical report to make a clear decision in relation to the appeal.

3.0 Minister's file

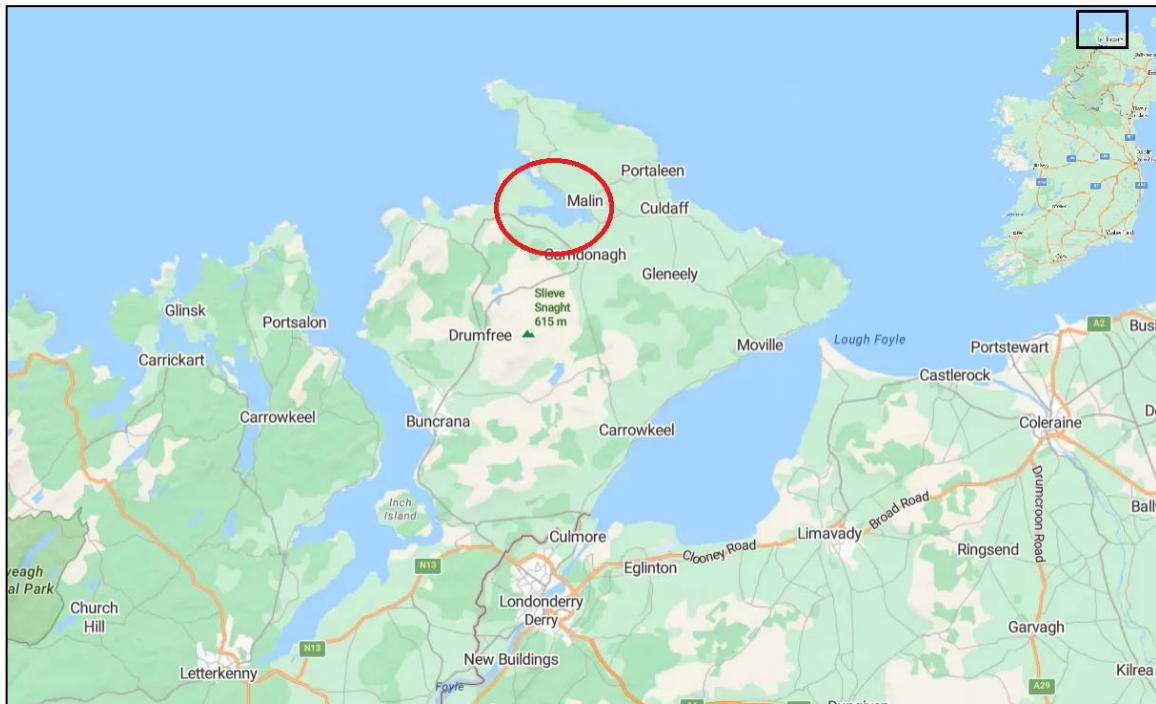
Following Section 43 of the Fisheries Amendment Act 1997 the following documented items were sent to the ALAB from the Minister and were reviewed:

| | AP3-2023 | Date if any |
|--|-------------------------------|------------------------------|
| | T12/572 | |
| 1. Copy of the Application Form with maps, charts, co-ordinates and drawings | Yes | 19 June 2020 |
| 2. Copy of the Appropriate Assessment Report including Annex I and Annex II | Yes | 8 th August 2021 |
| 4. Copy of submission to the Minister | Yes | undated |
| 5. Copy of relevant observations from technical advisors | Yes | undated |
| 6. Copy of objections at Public Notice | None | None |
| 7. Copy of the Ministers decision | Yes | 3 rd January 2023 |
| 8. Copy of Notification to the Applicant of Ministers Decision | Yes | 3 rd January 2023 |
| 9. Copy of the advertisement of Ministers Decision | Copy of text to be advertised | 23/12/2022 |

4.0 Context of the Area numbers

4.1 Physical descriptions

Trawbreaga Bay is a well-sheltered sea bay situated on the north-western coast of the Inishowen Peninsula, Co. Donegal. Doagh Isle, a low-lying, sandy promontory, stretches across the mouth of the bay, leaving only a narrow strait to the open sea. The bay is fed by a number of small rivers and streams, chiefly the Ballyboe, Donagh and Glennagannon rivers. The village of Malin is situated on the eastern shore of the bay.



Map 2: Trawbreaga Bay (Bing Maps)

Population

Malin village is a small sized settlement with a population of 154 people according to the 2022 census. The area of the town is 0.1915 km² Area with a population density of 804 people/km² (1).

Weather

Malin Head is the nearest weather station some 10km North Northwest of the site and has a mid-oceanic climate. Relatively speaking it is a wet part of Ireland with a Long Term average (LTA) of 1107 mm of rain on average a year. As can be seen from the charts below the temperature is mild throughout the year normally ranging between 6 and 17 degrees (2).

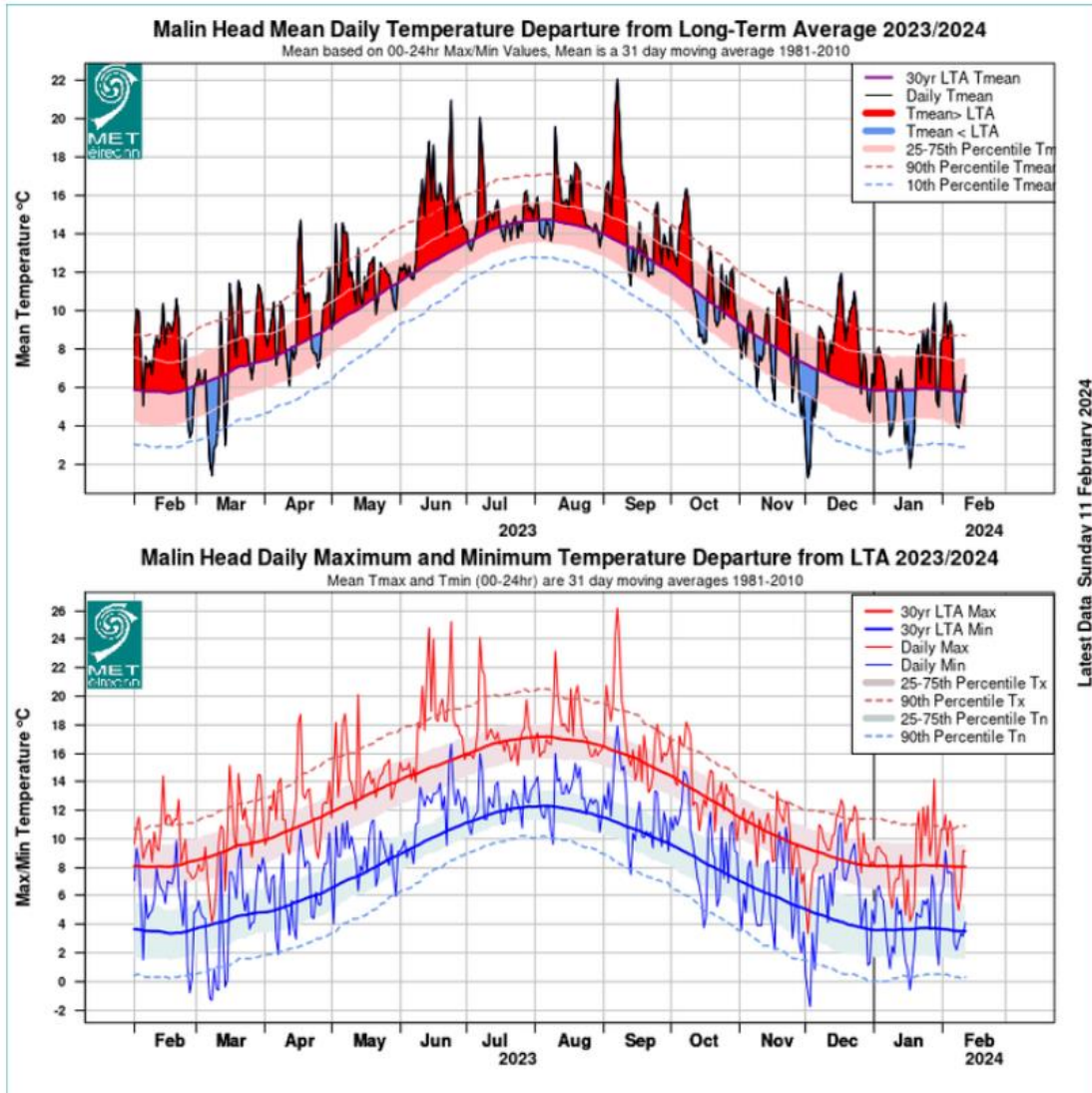
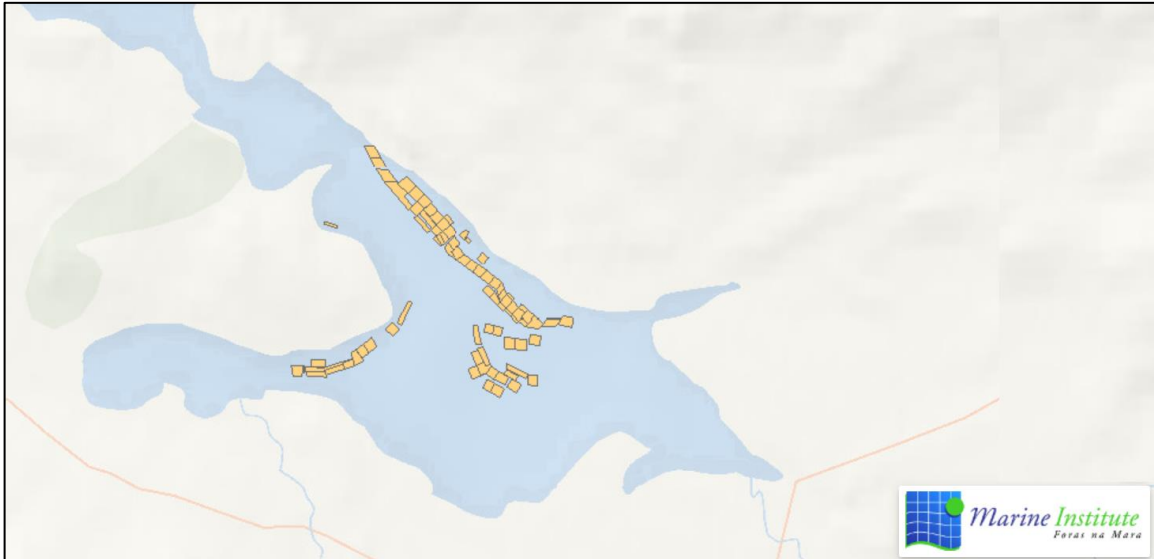


Figure 1: Temperature Data Malin Weather station

4.2 Resource Users

Aquaculture Activity

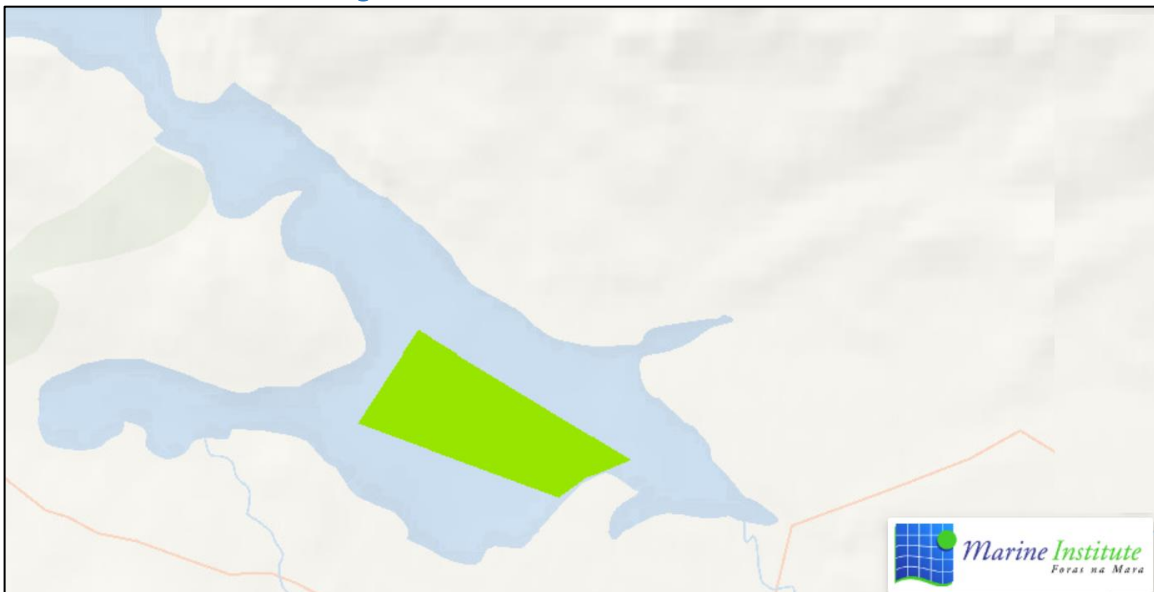
According to the Marine Institute Maps there are licences for oyster cultivation in the bay no other type of aquaculture at Trawbreaga is reported.



Map 3 Aquaculture Activity in Trawbreaga Bay Source Marine Institute)

The area is dominated by oyster cultivation which has been in place since the 1990s (5).

Inshore and Offshore Fishing



Map 4 Dredge Fishing in Trawbreaga Bay (Source Marine Institute)

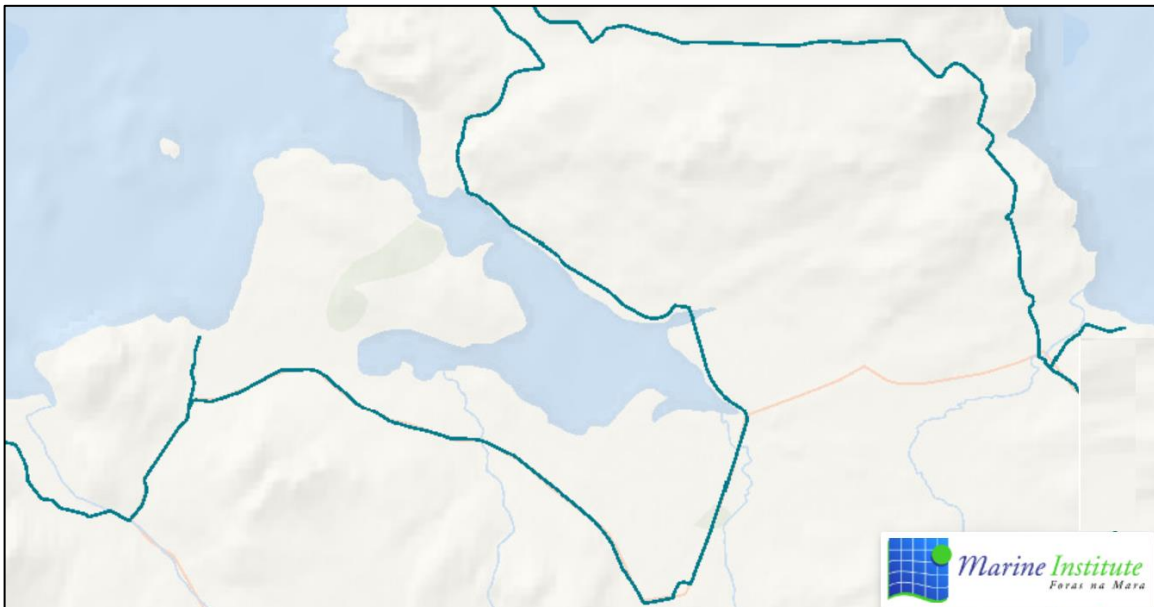
The main fishing activity is dredge fishing mapped by the Marine Institute (3,4,5). No other fishing effort recorded by Marine Institute within the bay.

Leisure Users of the water body & surrounding area

Trawbreaga Bay, has no sailing, marinas or designated bathing area. There is a small amount of boating activity within the bay and shore walking.

Tourism

According to Failte Ireland, the border region of Ireland receives the least number of tourists compared to other areas in the country, with only 7% of holidaymakers choosing to visit. Trawbreaga Bay is on the Wild Atlantic Way and so it would be expected to attract a higher number of these tourists than adjoining areas (6,7,8). In 2019 Failte Ireland recorded 3.4 million overseas tourists on the Wild Atlantic Way and 5 million domestic visitors (7)



Map 5 Wild Atlantic way route (Failte Ireland) main map source Marine Institute

Agricultural Activity

In 2020 the CSO carried out a detailed agricultural census by rural district. The data from the CSO 2020 is in relation to Malin area unit which is adjacent to the site under appeal.

In Malin the total area farmed is 1877.2ha. It is entirely grassland used for pasture and rough grazing. The area is dominated by mixed grazing with 1412 cattle and 6846 sheep recorded in the 2020 census. The average farm size is 26.1ha and the average age of the farmer is 56 years old.

4.3 Environmental Data

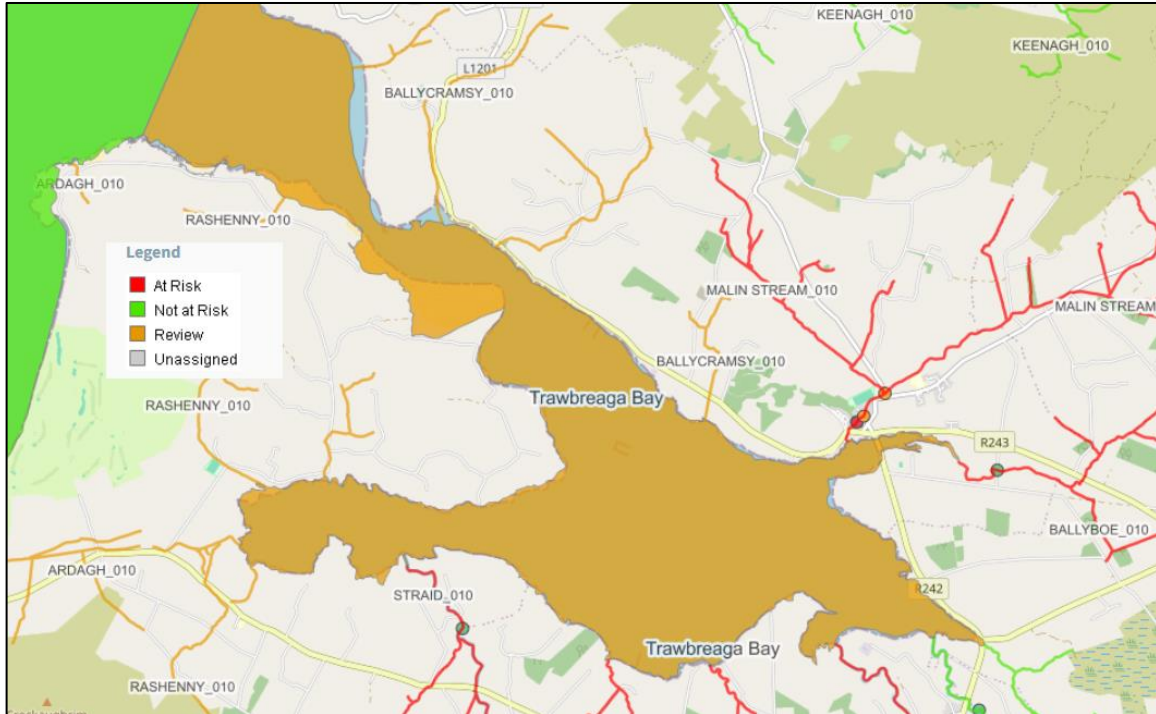
Water quality and the Water Framework Directive

The EU Water Framework Directive (2000/60/EC) requires all Member States to protect and improve water quality in all waters so that we achieve good ecological status by 2015 or, at the latest, by 2027. The Directive requires that management plans be prepared on a river basin basis and specifies a structured method for developing these plans.

These are called River Basin Management Plans (RBMP's). RBMPs are plans to protect and improve the water environment. They are prepared and reviewed every six years. The first RBMPs covered the period 2010 to 2015. The second cycle plan covers the period 2018-2021 and the third cycle is 2022 to 2028.

There are 40 catchments listed under the new Draft River Basin Management Plan for Ireland 2022 - 2027 covered the implementation of the Water Framework Directive (WFD) (2000/60/EEC). The catchment in which Trawbreaga sits is No 40 The Donagh-Moville catchment.

This catchment includes the area drained by the river Donagh and all streams entering tidal water between Dunaff Head and Culmore Point, Co. Derry, draining a total area of 507km². The largest urban centre in the catchment is Carndonagh. The other main urban centre in this catchment is Moville. The total population of the catchment is approximately 18,338 with a population density of 36 people per km². The catchment is largely mountainous and is entirely underlain by metamorphic rocks that provide limited groundwater resources.



Map 5: Coastal bodies and Rivers at Risk (EPA Water Framework maps)

The Ballycramsey river is the closest river to the appeal site discharging to the bay

| Year | Rating |
|-----------|------------|
| 2016-2021 | Moderate |
| 2018-2018 | poor |
| 2010-2015 | Unassigned |
| 2010-2012 | Unassigned |
| 2007-2009 | Unassigned |

Table 1: Ballycramsey River Ecological status WFD

| Year | Rating |
|-----------|------------|
| 2016-2021 | Good |
| 2018-2018 | Good |
| 2010-2015 | Unassigned |
| 2010-2012 | Unassigned |
| 2007-2009 | Unassigned |

Table 2: Trawbreaga Coastal Ecological status or potential WFD

Shellfish Flesh Monitoring Programme

Sea-Fisheries Protection Authority (SFPA) carries out a number of functions, including protecting and conserving fisheries resources for long-term use; promoting compliance with sea-fisheries legislation; and ensuring seafood safety. They sample the bays and classify them according to the finding of sampling.

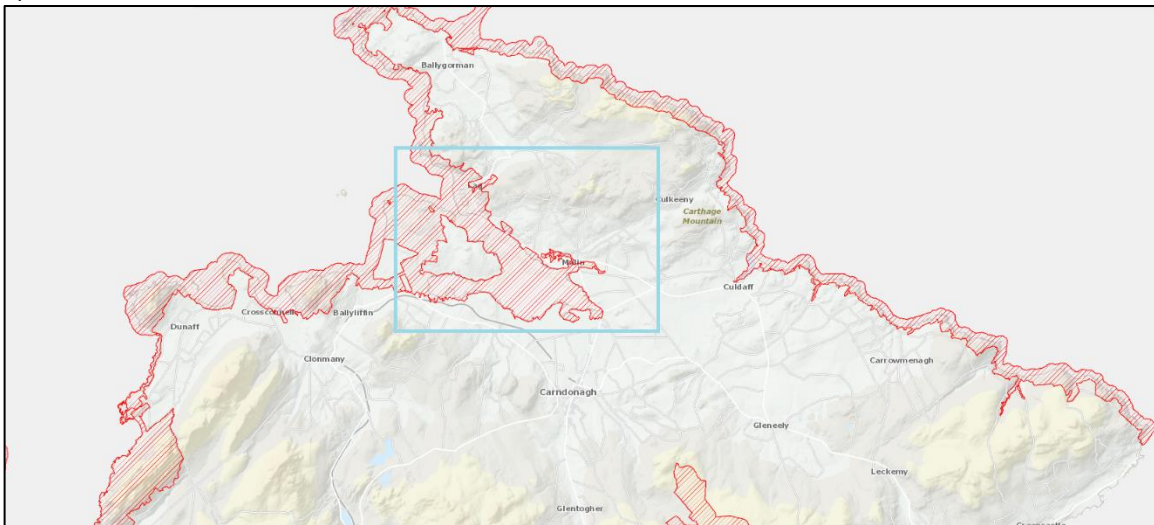
Shellfish production areas in Ireland are categorised based on the level of treatment that shellfish require prior to being sold. The best category (Class A) is where shellfish can be sold directly with no pretreatment. Class B requires purification for 48 hours, while Class C is the lowest category and requires the shellfish to be relayed in clean water for a two month period.

Shellfish flesh classifications are carried out under the European Communities (Live Bivalve Molluscs) (Health Conditions for Production and Placing on the Market) Regulations, 1996 (S.I. No. 147 of 1996)). According to the SFPA the 2023/2024 List of Classified Bivalve Mollusc Production Areas in Ireland (28th July 2023) include Trawbreaga from Malin Head to Dunaff Head at Classification B for oysters (11)

4.4 Statutory Status

Nature Conservation Designations Natura 2000 are sites designated under the Habitats Directive. There are two types of Special Areas of Conservation (Habitats and species) and Special Protection Areas (birds). Trawbreaga Bay is designated as both.

Special Area of Conservation



Map 6: Map of designated North Inishowen Coast SAC (Trawbreaga boxed in blue)

Special Areas of Conservation are prime wildlife conservation areas in the country, considered to be important on a European as well as Irish level.

The Habitats Directive lists certain habitats and species that must be protected within SACs. Irish habitats include raised bogs, blanket bogs, turloughs, sand dunes, machair (flat sandy plains on the north and west coasts), heaths, lakes, rivers, woodlands, estuaries and sea inlets. The 25 Irish species which must be afforded protection include Salmon, Otter, Freshwater Pearl Mussel, Bottlenose Dolphin and Killarney Fern (13).

The North Inishowen Coast SAC stretches from Crummies Bay in the west up to Malin Head and back down to Inishowen Head to the east. It encompasses an excellent variety of coastal habitats including high rocky cliffs, offshore islands, sand dunes, saltmarsh, a large intertidal bay, and rocky, shingle and sand beaches as well as Trawbreaga Bay. Trawbreaga Bay is a very sheltered sea bay with a narrow strait to the open sea at the north end. It is fed by a number of small rivers or streams. An estimated 80% of the bay area is exposed at each low tide to expose a mixture of mudflats, sandbanks and stony/rocky substrates. In the inner reaches of the bay, the substrate consists of muddy sand and coarse sediments with an infaunal community of polychaetes, oligochaetes and crustaceans. Within the narrow strait, the community is comprised of bivalves and polychaetes within a sandy substrate. The polychaete *Arenicola marina* is a conspicuous species within the intertidal soft sediments of the bay. Beds of Dwarf Eelgrass (*Zostera noltii*) display temporal variation in occurrence within the bay; they were recorded on the shore at Doaghmore and currently present south west of Glassagh Point. Mats of green algae occur on the open flats. Some areas of saltmarsh fringe the bay. Throughout the site, exposed sandy beaches occur in embayments and in coves bordered by bedrock and in the outer reaches of Trawbreaga Bay. Here a sand community with crustaceans and polychaetes occurs. Where the intertidal reef is present on exposed shores the community consists of the bivalve *Mytilus edulis* and barnacles. In such areas where reef extends into the subtidal the kelp *Laminaria hyperborea* occurs. In the less exposed areas and within Trawbreaga Bay the brown algae *Pelvetia canaliculata*, *Fucus vesiculosus*, *F. spiralis* and *Ascophyllum nodosum* are found. Otter is regularly seen along the shoreline and may breed within the site.

North Inishowen Coast SAC 002012, is selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes):

Mudflats and sandflats not covered by seawater at low tide [1140]

Perennial vegetation of stony banks [1220]

Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]

Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]

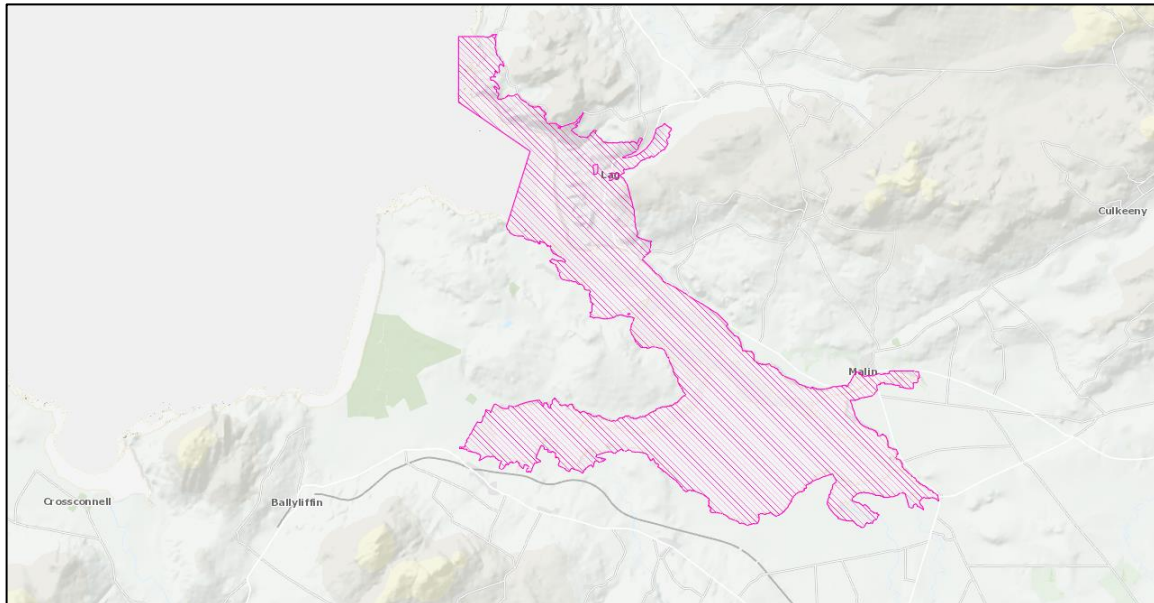
Machairs (* in Ireland) [21A0]

European dry heaths [4030]

Vertigo angustior (Narrow-mouthed Whorl Snail) [1014]

Lutra lutra (Otter) [1355]

Special Protection Areas



Map 7 Trawbreaga Bay SPA 004043 Special Protection Areas for birds

The E.U. Birds Directive pays particular attention to wetlands, and as these form part of this SPA, the site and its associated waterbirds are of special conservation interest for Wetland & Waterbirds. Trawbreaga Bay supports a good diversity of wintering waterfowl though numbers of most species are relatively low. The main importance of the site lies in the

The reason for designation of a site of international conservation importance in 1994 was principally the Barnacle Goose (236 – 4 surveys mean between 1993 and 2004) and Light-bellied Brent Goose (362 - five year mean peak count for the winters 1995/96 to 1999/2000) populations. The Light-bellied Brent Goose population at that time was internationally important.

This site is designated a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species:

Barnacle Goose (*Branta leucopsis*) [A045]

Light-bellied Brent Goose (*Branta bernicla hrota*) [A046]

Chough (*Pyrrhocorax pyrrhocorax*) [A346]

Wetland and Waterbirds [A999]

See Below (Photo 1) for overview of shellfish cultivation and access tracks at Trawbreaga



Photo 1: View from T12/572 towards the south

4.5 Protected Species

Birds

| SPECIES | 1% NATIONAL | 1% INTERNATIONAL | 2011/12 | 2012/13 | 2017/18 | 2019/20 |
|---------------------------|-------------|------------------|---------|------------|---------|---------|
| Greylag goose | 35 | 980 | | 7 | | 4 |
| Barnacle Goose | 160 | 810 | 1300* | 518 | 512 | 27 |
| Light-bellied Brent Goose | 350 | 400 | | 573 | 113 | 129 |
| Shelduck | 100 | 2500 | 10* | | 7 | 6 |
| Wigeon | 560 | 14000 | 4* | 83 | 92 | 121 |
| Teal | 360 | 5000 | 3* | | | 43 |
| Mallard | 280 | 53000 | 1* | 2 | 37 | 43 |
| Eider | 55 | 9800 | | | | 3 |
| Goldeneye | 40 | 11400 | | 7 | 9 | |
| Red-breasted Merganser | 25 | 860 | | 6 | 4 | 1 |
| Great Northern Diver | 20 | 50 | | 3 | 1 | 5 |
| Cormorant | 110 | 1200 | | 14 | 11 | 4 |
| Little Egret | 20 | 1100 | | 2 | 6 | 10 |
| Grey Heron | 25 | 5000 | | 8 | | 2 |
| Oystercatcher | 610 | 8200 | | 70 | 169 | 134 |
| Lapwing | 850 | 72300 | | 6 | 101 | |
| Sanderling | 85 | 2000 | | | 2 | 1 |
| Snipe | | | | | 1 | 2 |
| Curlew | 350 | 7600 | 100* | 6 | 219 | 151 |
| Redshank | 240 | 2400 | 3* | 3 | 8 | 17 |
| Greenshank | 20 | 3300 | | 1 | 5 | 2 |
| Turnstone | 95 | 1400 | | | 8 | |
| Black-headed Gull | | | | 4 | 71 | 50 |
| Common Gull | | | | | 64 | 34 |
| Lesser Black-backed Gull | | | | | | 6 |
| Herring Gull | | | | | 12 | 33 |
| Great Black-backed Gull | | | | 1 | 6 | 1 |

Table 3: IWEBS data (Note International and national numbers in bold) Years not counted omitted as are single species record

IWEBS data gives a good overview of the use of the site. Counts have not been consistent as it relies to a degree on voluntary effort. Additional data is presented in respect of

Brent in the assessment section of this report. However, this data gives a good overview of the usage of the bay by a wide variety of birds albeit in relatively small numbers.

Otter -

One of the qualifying interests of Inishowen Peninsula SAC is Otters *Lutra lutra* an Annex II species of the EU Habitats Directive. There is a record of 2 Otters within Trawbreaga bay from the Biodiversity Ireland maps in 2011 these counts were recorded during the Mammals of Ireland survey 2010-2015.

Seals

Common Seal (*Phoca vitulina*) are protected under Annex II EU Habitats Directive and there is a record on biodiversity Ireland of 4 individuals sighted in Trawbreaga Bay in 2021 and 1 record of Grey Seal (*Halichoerus grypus*) in 2011.

Cetaceans

The seas around the north Donegal Coast are ecologically very rich. These records (table 2) presented below are post 1995 and were collected by the Irish Whale and Dolphin Group Cetacean Sightings and downloaded from the Biodiversity Ireland database (15).

| Record | No | date | Database | significance |
|--|----|------------|-----------------------------------|--|
| Bottle-nosed Dolphin (<i>Tursiops truncatus</i>) | 2 | 17/09/2020 | IWDG Casual Cetacean Sightings | Protected Species: EU Habitats Directive Annex II Directive Wildlife Acts |
| Common Dolphin (<i>Delphinus delphis</i>) | 1 | 01/10/2018 | IWDG Cetacean Strandings Database | Protected Species: EU Habitats Directive Annex IV Directive Wildlife Acts |
| Long-finned Pilot Whale (<i>Globicephala melas</i>) | 2 | 23/07/2009 | IWDG Cetacean Strandings Database | Protected Species: EU Habitats Directive Annex IV Directive Wildlife Acts |
| Striped Dolphin (<i>Stenella coeruleoalba</i>) | 1 | 27/12/2017 | IWDG Cetacean Strandings Database | Protected Species: EU Habitats Directive Annex IV Directive Wildlife Acts |
| True's Beaked Whale (<i>Mesoplodon mirus</i>) | 2 | 14/05/2013 | IWDG Cetacean Strandings Database | Protected Species: EU Habitats Directive Annex IV Directive Wildlife Acts |
| White-beaked Dolphin (<i>Lagenorhynchus albirostris</i>) | 1 | 19/03/2013 | IWDG Cetacean Strandings Database | Protected Species: EU Habitats Directive Annex IV Directive Wildlife Acts |

Table 4 Sightings of Cetaceans within Trawbreaga Bay

4.6 Statutory Plans

Trawbreaga is not the subject of a statutory plan in its own right but is covered under the most recent County Donegal Development Plan 2018-2024

The policies below are relevant to this plan

MRCM-O-1: To maximise the social and economic potential of Donegal's marine sector by: Supporting the fishing and seafood sector by maintaining and improving harbour infrastructure (in accordance with the Councils Marine Services Capital Investment Programme) and facilitating seafood processing industries and ancillary service developments.

Supporting the offshore primary production sector of the aquaculture industry, subject to adequate environmental assessments and safeguards being provided to the satisfaction of the Council and to the avoidance of the development giving rise to an overbearing visual impact on the locality in which it is proposed.

MRCM-O-2: To safeguard and improve and the health of our Marine ecosystem by: Protecting the qualifying habitat and species of Natura 2000 sites through Appropriate Assessment of development proposals.

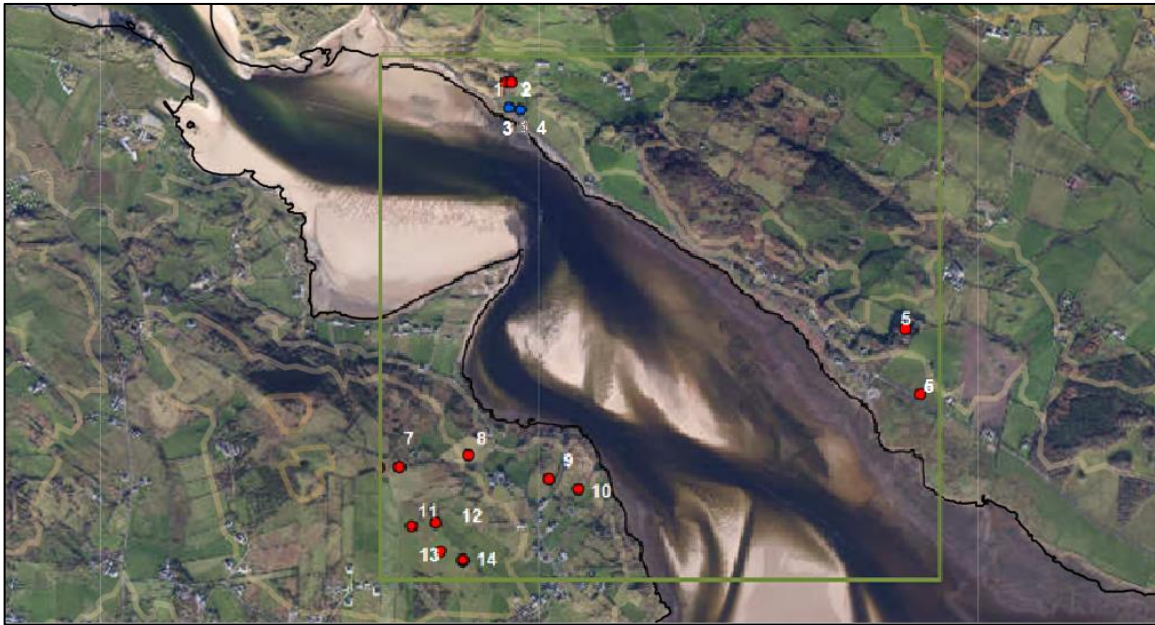
MRCM-P-10: It is a policy of the Council to ensure that development proposals do not adversely compromise the recreational amenity and environmental quality of coastal areas including Flag Beaches, Natura 2000 sites and areas of Especially High Scenic Amenity

ED-P-14: It is a policy of the Council that any proposal for economic development use, in addition to other policy provisions of this Plan, will be required to meet all the following criteria; (a) It is compatible with surrounding land uses existing or approved; (b) It would not be detrimental to the character of any area designated as being of especially high scenic amenity (ehsa); (c) It does not harm the amenities of nearby residents; (d) There is existing or programmed capacity in the water infrastructure (supply and/or effluent disposal) or suitable developer-led improvements can be identified and delivered; (e) The existing road network can safely handle any extra vehicular traffic generated by the proposed development or suitable developer-led improvements are identified and delivered to overcome any road problems; (f) Adequate access arrangements, parking, manoeuvring and servicing areas are provided in line with the development and technical standards set out in this plan or as otherwise agreed in writing with the planning authority; (g) It does not create a noise nuisance; (h) It is capable of dealing satisfactorily with any emission(s); (i) It does not adversely affect important features of the built heritage or natural heritage including natura 2000 sites; (j) It is not located in an area at flood risk and/or will not cause or exacerbate flooding; (k) The site layout, building design, associated infrastructure and landscaping arrangements are of high quality and assist the promotion of sustainability and biodiversity; (l) Appropriate boundary treatment and means of enclosure are provided and any areas of outside storage proposed are adequately

screened from public view; (m) In the case of proposals in the countryside, there are satisfactory measures to assist integration into the landscape; (n) It does not compromise water quality nor conflict with the programme of measures contained within the current north western river basin (nwirbd) management

4.7 Man-made heritage

National Monuments Service data of recorded National Monuments in the area was accessed in respect of man-made heritage and Map 6 presented below is of National Monuments within 1km of the area under appeal (12)



Map 8: National Monuments in the vicinity of appeal site T12/572 (Reproduced under OSI Licence number EN 0070910)

The following national monuments and historic sites are numbered in Map 6 and described below.

1.0 National Monument Record Reference DG004-018

Flat cemetery: DRUNG (Malin ED)

Description: Three cist graves were excavated here containing the remains of an adult male, an adult female and an infant.

2.0 National Monument Record Reference DG004-019----:

Midden: DRUNG (Malin ED)

Description: A shell midden here produced a number of flints implements.

3.0 National Monument Record 40900450: Meeting House Bridge: bridge

4.0 National Monument Record 40900408: Malin Presbyterian Meeting House: church/chapel

5.0 DG004-022----: Bullaun stone: BALLEELAGHAN

Description: The Archaeological Survey of Ireland (ASI) is in the process of providing information on all monuments on The Historic Environment Viewer (HEV). Currently the information for this record has not been uploaded.

6.0 DG004-023----: Mound: BALLEELAGHAN

Description: Not previously noted this site consists of a subrectangular mound (probably earthen). There are some stones visible on top.

7.0 National Monument Record Reference Reg. G004-088001- : Rock art: FEGART

Description: In the N half of a pasture field, on elevated ground at the NE edge of Doagh Island. Abundant cupmarks and cup-in-ring motifs are dispersed on a relatively flat, smooth fine-grain bedrock surface which is flush with ground level.

8.0 National Monument Record Reference Reg. KE108-005----

DG004-082----: Rock art: FEGART

Description: Large rock outcrop in field overlooking Trawbreaga Bay which has single shallow cup mark on its surface.

9. DG004-042----: Standing stone: FEGART

Description: A standing stone 1.85m high × 1.05m wide at base; E-W. Set in a field wall on good land. The above description was derived from the 'Archaeological Survey of County Donegal. A description of the field antiquities of the County from the Mesolithic Period to the 17th century.

,

10.0 DG004-043----: Standing stone: FEGART

Description: The Archaeological Survey of Ireland (ASI) is in the process of providing information on all monuments on The Historic Environment Viewer (HEV).

11.0 DG004-073----: Rock art: MAGHERANAUL

Description: Situated on rock outcrop on S facing slope of reclaimed land with nearby wedge tomb (DG004-041) decorated with rock art 140m to the SE. Sheet of rock outcrop

with 2 deep cup marks) with a single deep cup mark with ring (diam. 0.23m). There are a further 3 shallower cup marks 1.75m to SE.

12.0 DG004-074----: Rock art: MAGHERANAUL

Description: Situated on E facing slope of in E corner of wet rushy reclaimed field with good views to the E and NE. nearby panel of rock art (DG004-073) located 90m to the W and nearby wedge tomb (DG004-042) decorated with rock art 115m to the S. Sheet of rock outcrop with faint shallow cup marks on its surface.

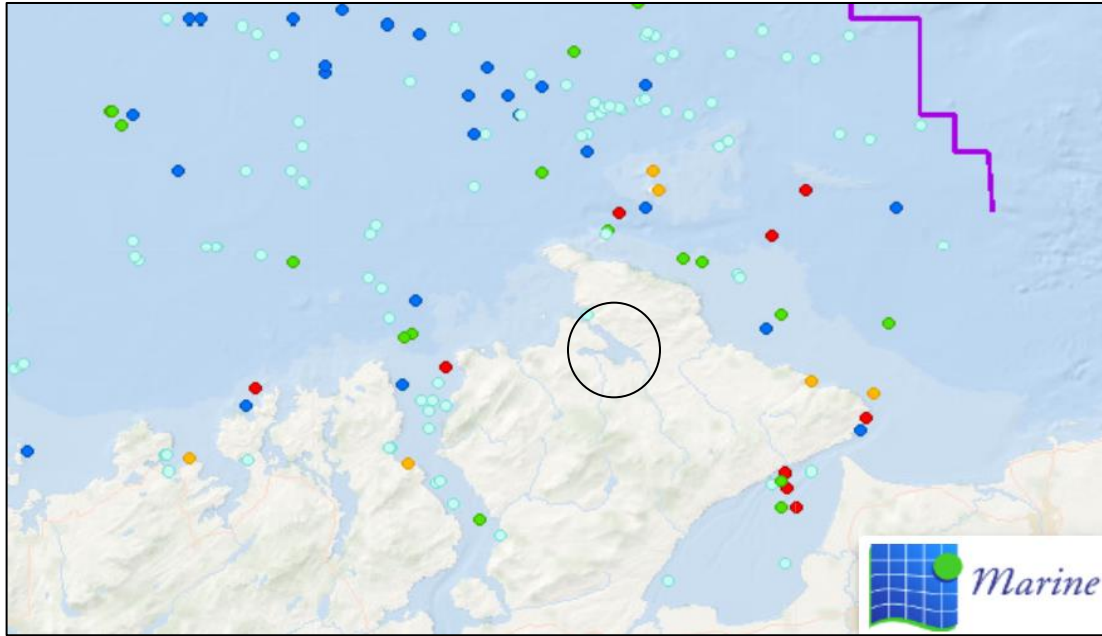
13 G004-041----: Megalithic tomb - wedge tomb: MAGHERANAUL

Description: The monument stands on level ground toward the eastern end of Doagh Isle peninsula and c. 500m N of the western end of Trawbreaga Bay. To the N the ground rises gradually to Crockmore (282 feet OD), the highest point of the peninsula. The view to the S is limited by a range of hills, 3.5km distant. The tomb stands on pasture broken by occasional rock outcrops. The monument, aligned almost WNW-ESE, consists of a short wedge-shaped gallery, around the sides and back of which is outer-walling.

14 DG004-075001- : Rock art: MAGHERANAUL

Description: Situated on S facing slope of rising ground with panel of rock art (DG004-075) 10m to the N and wedge tomb (DG004-041) decorated with rock art 95m to the NW. Sheet of weathered bedrock with 2 faint cup marks visible on the surface of the rock.

The Marine Institute maps were consulted in relation to man made heritage in the intertidal and subtidal zone. Specifically, shipwrecks. As can be seen in map 7 below no shipwrecks are known from Trawbreaga bay.



Map 9: Shipwrecks in Irish Waters (marine.ie marine maps) (light blue -means no data)

5.0 Section 61 Assessment

Section 61 of the Fisheries Amendment Act 1997

states that “The licensing authority, in considering an application for an aquaculture licence or an appeal against a decision on an application for a licence or 11 revocation or amendment of a licence, shall take account, as may be appropriate in the circumstances of the particular case, of- (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.”

5.1 Site Suitability

The site under appeal *is generally suitable* for the intended purpose for the following reasons:

- According to Marine Engineering Division “The appeal site is located on upper-level intertidal foreshore. Because of its elevation it would seem suitable as an area for holding already developed stock or slowing down growth. MED report that the substrate was firm and had suitable bearing capacity for trestles”
- The bay is well developed for oyster cultivation and is classified by SFPA as shellfish classification B

5.2 Other uses

Tourism/ Leisure /Recreation

There is a small amount of shore walking in Trawbreaga. The north corner of the site is 30m from high water mark and the ground between the site and high-water mark is stony and rough. According to the MED *“This high section of intertidal foreshore is not readily passed over on foot. Longshore access at a lower level on shore is easier. Development of the site as applied for could therefore impede public access along the shore area between high water mark and licensed trestle covered area”*

There is a **potential conflict** with longshore access. However according to MED this could be accommodated by a site revision and a reduced area considered for licencing.

Navigation

There is a small amount of boating activity within the bay and The Commissioners for Irish Lights commented on this application. *“Commissioner of Irish Lights (CIL): CIL has no objection to this development. It is important to ensure that no navigable inter-tidal channels are impeded by the site. If a licence is granted, all structures must be clearly marked as required by Regulations and Licensing Permit conditions and to the approval of the Nautical Surveyor with the Marine Survey Office.”*

However, MED noted *“It is also important to ensure that a clear corridor to the sea is allowed for from high water to low water line at this shoreline location to allow for access by boats to the Bay from land and vice versa. If not provided for there is a risk of a continuous length of trestle blocked shoreline of trestles cutting off access. MED recommend that a clear way of minimum width 20m be provided for between the site and north boundary of next proposed site. In order to mitigate the foregoing public and boat access issues and also for orderly development of oyster farming in this specific part of the Bay”*

There are **potential** issues with this application in respect of boat navigation on site. However according to MED this could be accommodated by a site revision and a reduced area considered for licencing.

Dredge Fishing

The cockle dredge fishing is within the centre bay to the south according to the Marine Institute maps.

The proposed aquaculture appeal site will have **no significant impact** on fisheries of the area.

Man made heritage

No overlap with manmade heritage was noted.

The proposed aquaculture site will **not significantly impact** on the manmade heritage of the area.

5.3 Statutory Status

County Development Plan

The main potential conflict with the Donegal County Development Plan is on Visual /Habitats Directive impact as per the two policies below.

MRCM-P-8: It is a policy of the council not to permit development proposals for, or carry out coastal protection/flood prevention works, where such works; would damage the **visual**, scenic or environmental amenities of the area.

MRCM-P-10: It is a policy of the Council to ensure that development proposals do not adversely compromise the recreational amenity and **environmental quality** of coastal areas including Flag Beaches, **Natura 2000 sites** and areas of Especially High Scenic Amenity impacts.

Concerns were raised in respect of both visual impact and Natura 2000 sites.

Visual Impact

The Marine Engineering Division stated *“Visual Impact- In cumulative impact terms though the placement of trestles on the site will amplify the existing magnitude of impact by bringing impact closer to the R242 viewpoints (closer than any site licensed to date in the Bay) and extending that impact higher up intertidal shore/over a longer period of tidal cycle. In cumulative visual impact terms this may be an incremental change too far. I anticipate*

that cumulative visual impact of substantial significance could arise if the site were to be licensed as applied for”

Impact on Natura 2000 sites

The final Appropriate Assessment Conclusion Statement by Licensing Authority for aquaculture activities in North Inishowen Coast Special Area of Conservation (SAC) (Natura 2000 Site Code: 002012), and Trawbreaga Bay Special Protection Area (SPA) (Natura 2000 Site Code: 004034) had the following as part of their conclusions Given the conclusions of the Appropriate Assessment process carried out by the licencing authority. Two major concerns were raised

1. In relation to Trawbreaga Bay SPA

“Due to the uncertainty in relation to population decline/displacement of the Light-bellied Brent Goose in Trawbreaga Bay, at present and the need for verification of the population, the potential for negative impacts cannot be discounted”

2. In relation to North Inishowen Coast Special Area of Conservation (SAC)

“Based on the requirement identified above for monitoring in relation to the potential effects of further aquaculture sites and their access routes on the qualifying interest 1140 of the North Inishowen Coast SAC (Muddy sand to coarse sediment with Pygospio elegans community complex and on the Sandwith Angulus tenuis and Scoloplos (Scoloplos) armiger community complex), the potential for negative impacts cannot be discounted.”

Therefore, the proposed oyster cultivation site T12/572 site are considered likely to impact on the visual amenity of the area and on Natura 2000 sites.

The technical advisor anticipates that there is some **potential significant conflict** with the Donegal County Development Plan in terms of **visual and natura 2000 impact**. Natura 2000 impact is reviewed in section 5.5. In respect of Visual impact, the MED states that as nearby sites “have been granted, in combination with these sites the likelihood is that stand alone impact of also developing site T12/572A would be less and may well be considered more acceptable in that context.”

5.4 Economic effects

The farmed Pacific or Gigas oyster sector continued to expand modestly by 2.4% in volume in 2018, reaching 10,122 tonnes. The overall value of oysters increased by 2.3% to €44.3 million, the unit value nationally remained unchanged at €4,380 per tonne (18)

The licensing of proposed sites is likely to have a **non-significant positive effect** on the local economy of the area.

5.5 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.

5.5.1 North Inishowen Coast Special Area of Conservation (SAC)

In relation to North Inishowen Coast Special Area of Conservation (SAC) the refusal for permission stated the following

“Based on the requirement identified above for monitoring in relation to the potential effects of further aquaculture sites and their access routes on the qualifying interest 1140 of the North Inishowen Coast SAC (Muddy sand to coarse sediment with Pygospio elegans community complex and on the Sandwith Angulus tenuis and Scoloplos (Scoloplos) armiger community complex), the potential for negative impacts cannot be discounted.”

According to the Marine institute (2021) *“The risk of significant adverse depositional and organic enrichment effects of aquaculture sites on the muddy sand to coarse sediment with Pygospio elegans community complex cannot be discounted, because this community complex has never been studied in relation to the effects of oyster trestle cultivation. The risk of significant adverse sediment compaction effects along access routes on the muddy sand to coarse sediment with Pygospio elegans community complex cannot be discounted. However, the current levels of effect are below the 15% disturbance threshold for this community complex (Marine institute 2021).”* See Photo 3 access route



Photo 2: Access route

In conclusion the Marine Institute recognise that there is a risk of impact from aquaculture on this Muddy sand to coarse sediment with *Pygospio elegans* community. The risk of negative impact is from

1. Organic enrichment due to biodeposition
2. Compaction of the habitat on the farm access routes

Embedded within the habitats directive is the precautionary principle and so if significant negative impact of a project (as is the case here) is known or suspected then the project cannot be permitted.

The technical advisors opinion is that given that the disturbance levels of this community type are below the 15% threshold set by NPWS in the Conservation Objectives **that no significant impact** would be anticipated with the grant of permission for T12/572 on North Inishowen Coast Special Area of Conservation (SAC)

5.5.2 Trawbreaga Bay SPA

In relation to Trawbreaga Bay SPA the refusal for T12/572 states

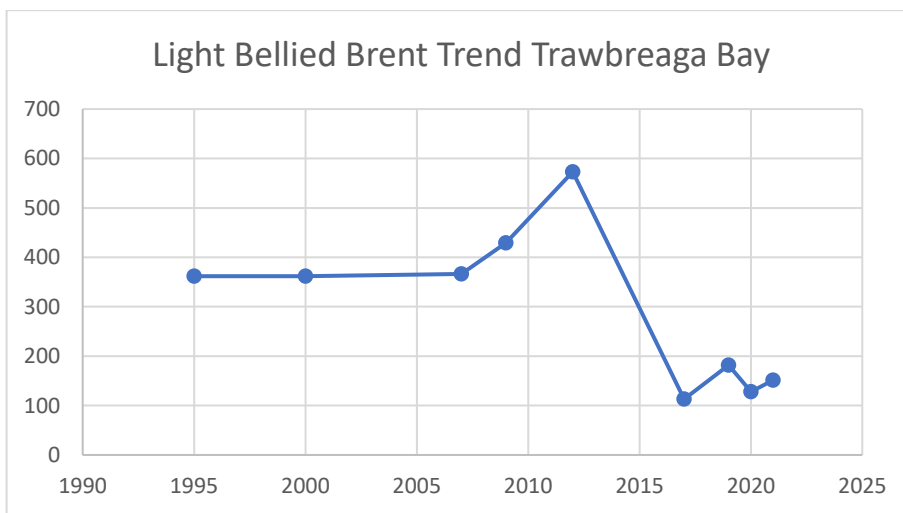
“Due to the uncertainty in relation to population decline/displacement of the Light-bellied Brent Goose in Trawbreaga Bay, at present and the need for verification of the population, the potential for negative impacts cannot be discounted”

This is a key point of the appeal as the Applicant queried the data and the conclusion of *“potential for negative impacts cannot be discounted”*. In order to address this the most up to date geese counts have been sourced through IWeBS, from the Atkins NIS (2021) and from the ranger Lee McDaid. These are presented in table 5 below.

| Date | Numbers | Relative to 1% |
|--------------------|---------|---|
| 1995/98 to 1999/00 | 362 | Baseline IWeBS data |
| 2007-2009 | 366 | (NPWS, 2014b/c). |
| 2009/10 | 429 | Lewis <i>et al.</i> , 2018 |
| 20012/13 | 573 | Lewis <i>et al.</i> , 2018 |
| 2017/18 | 113 | IWEBS data |
| 2019 | 182 | Lee McDaid Pers comm. (|
| 2020 | 128 | Lee McDaid Pers comm * |
| 2021 | 151 | Atkins NIS 2021 |
| 2023 | 60* | Lee McDaid Pers comm *(possible incomplete count) |

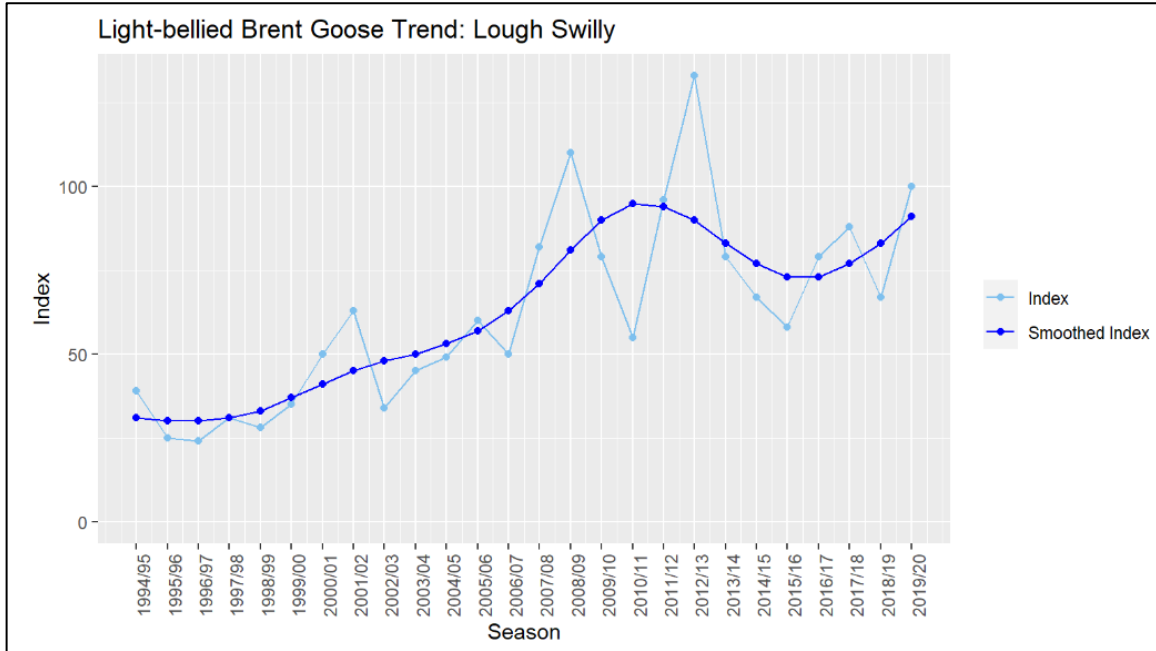
Table 5: Counts of Brent Geese at Trawbreaga Bay (1995 to 2023)

The overall pattern of Brent Trawbreaga is one of decline (Graph 1)

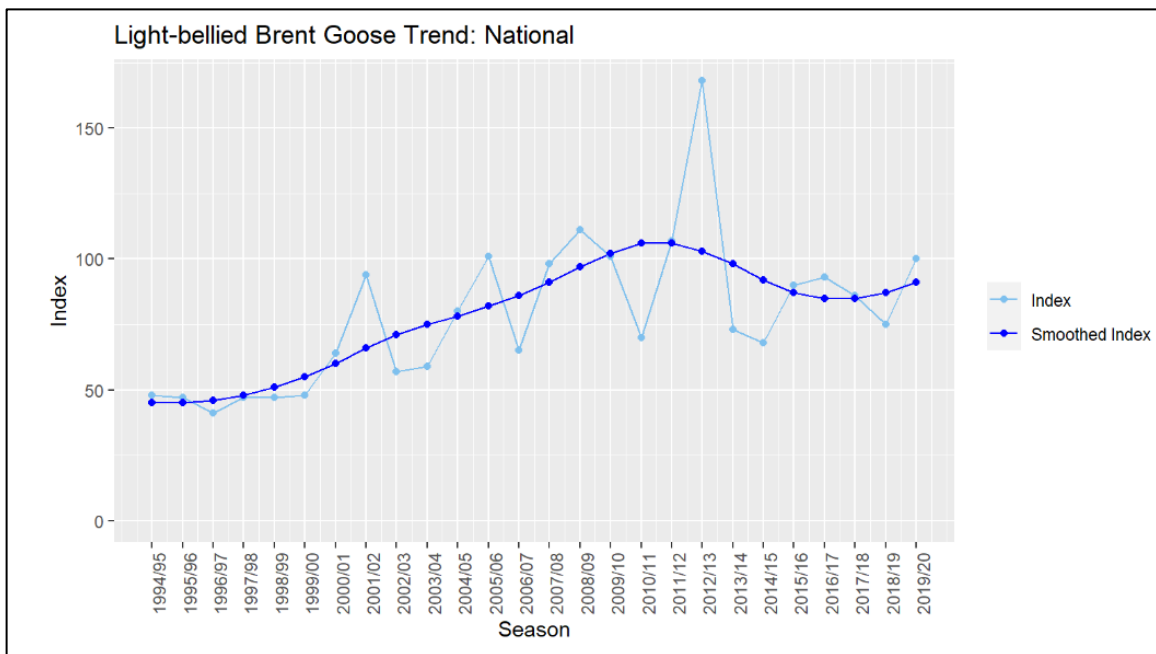


Graph 1: Peaks Number of LBB at Trawbreaga 1995-2021

This decline is not seen in Lough Swilly some 20km SW (Graph 2) or in the national trend data (Graph 3)



Graph 2. Lough Swilly Trend of light Bellied Brent



Graph 3. National Trend of light Bellied Brent

Trawbreaga Bay SPA is designated to protect specific species in this case Barnacle Goose (*Branta leucopsis*) [A045], Light-bellied Brent Goose (*Branta bernicla hrota*) [A046] and Chough (*Pyrhcorax pyrrhcorax*) [A346] as well as Wetland and Waterbirds [A999]

Of these Barnacle geese are grass feeders, Chough feed on insects associated with coastal grasslands. Brent geese are the only one of these birds associated with the intertidal zone. Thus, these are potentially at risk from increased oyster cultivation in terms of displacement.

The importance of the intertidal areas to Brent Geese post migration cannot be overstated. Brent Geese arrive in in September and feed almost exclusively on *Zostera* (eelgrass). They also feed on green seaweeds including green algae (*Enteromorpha*) that are found in the intertidal zone (Photo 3).



Photo 3: Green algae (*Enteromorpha*) on the shore close

Brent uses different resources at different times of the wintering period. A study of Brent in Strangford Lough indicated that by December the *Zostera* is much depleted, and birds switch to saltmarshes and pasture¹. This pattern is well known for Brent.²

¹ Mathers, R. G., and W. I. Montgomery. "Quality of Food Consumed by over Wintering Pale-Bellied Brent Geese *Branta Bernicla Hrota* and Wigeon *Anas Penelope*." *Biology and Environment: Proceedings of the Royal Irish Academy*, vol. 97B, no. 1, 1997, pp. 81–89. JSTOR, <http://www.jstor.org/stable/20499986>. Accessed 25 Aug. 2023.

This site Trawbreaga Bay SPA was designated in 1994³ because it met the level of 1% of an international population of these migratory species at this site. At the time the light bellied brent goose population was around 20,000⁴ and the qualifying number for designation was c200 birds. The site easily met this 1% criteria. In recent years the national Brent goose population has increased now to 40,000 and the threshold for numbers of international importance has increased (i.e. 400;). It can be seen that the national trend and indeed the trend at Lough Swilly some 20km south west (Graphs 2 and 3) shows an overall increase as expected unlike the decline at Trawbreaga (Graph 1).

The average number of Light-bellied Brent Geese recorded at Trawbreaga suggests a large recent decline in numbers. Light-bellied Brent Goose is categorised as amber listed on the Birds of Conservation Concern in Ireland This classification is based on the fact that the species conservation status has been listed as unfavourable on the Species of European Conservation Concern (SPEC). In addition, further attributes contributing to the amber list status includes the fact that Brent Geese has a localised wintering population, i.e. where 50 percent of the Irish population are located in 10 or fewer sites. The localised nature of the wintering groups makes them vulnerable and are so included on the amber list. The fact that the trend at Trawbreaga is in decline compared to the national and local trend indicates a probable bay specific issue.

In addition, it would appear that Brent favours this general part of the bay (close to T12/572) from the evidence available. The NIS (Atkins, 2021) carried out surveys of Trawbreaga and produced the map below.

In addition, Lee Mc Daid (NPWS) specifically states that referring to the area some 500m NW of the appeal site “The Brent Geese use this area and are most often found here at the exit of the waters from Trawbreaga Bay on both sides of the outlet”.

³ <https://econservation.jrc.ec.europa.eu/site/4380>

⁴ <https://www.irishbrentgoose.com/about-brent-geese/>



Map 10. Bird Usage Map of Trawbreaga (Atkins, 2021) blue is location of brent. Red arrow is appeal area T12/572

At the same time as Brent numbers have decreased Oyster cultivation has increased considerably. In 1995 15.5 ha of oyster cultivation were estimated at Trawbreaga, by Heffernan (1995). This has increased to an estimated 45 ha (based on current measurements of aerial photographs – Bing Maps).

Conclusion

The Conservation Objective for Brent at Trawbreaga is “To maintain the favourable conservation condition of Light-bellied Brent Goose in Trawbreaga Bay SPA, which is defined by the target “Long term population trend stable or increasing “The site is designated as a representative site holding 1% or more of the international population. This is around 400 birds. Current numbers at Trawbreaga are less than 200.

Clearly the Conservation Objectives for the bay for Brent are not being reached and the potential conflict with aquaculture has been identified in the NIS. Therefore, to allow further aquaculture in this area would be in contravention of the Habitats Directive.

In conclusion there is clear evidence in relation to population decline/displacement of the Light-bellied Brent Goose in Trawbreaga Bay since 2017/18 which is contrary to the trends at neighbouring sites and the national trend. The increase in aquaculture at this location over the past 30 years coupled with the reliance of Brent on the intertidal habitat would indicate a potential causal relationship. Embedded within the habitats directive is the

precautionary principle and so if significant negative impact of a project is known or suspected then the project cannot be permitted.

The proposed aquaculture site has the **potential to significantly impact** on the Designated status of the area specifically Trawbreaga Bay SPA

Other protected species

Cetaceans.

Although a variety of Dolphins are recorded in the harbour, the sightings are very infrequent, and no interactions are predicted. The proposed licensed site will have a **no significant negative** impact on these species.

Otter

Although Otter is recorded in the harbour no significant interactions with licence T12/572 is predicted. The proposed licensed site will have a **no significant negative** impact on this species.

Other Birds

Several waders species such as Oystercatcher, Lapwing, Sanderling, Bar-tailed Godwit Curlew, Redshank, Greenshank and Turnstone are known to feed in Trawbreaga. These birds may lose foraging area to oyster cultivation and may be disturbed during harvesting and grading operations.

The proposed licensed site has some potential for **negative** impact on these species, but it is unlikely to be significant.

Phytoplankton /carrying Capacity

Marine Engineering Division (MED): states *“Licensing the site would increase by a small margin the Bay's total licensed oyster production capacity and standing stock. There is a question about whether the continuing issue of new licences is advisable in this Bay as the licensed area has expanded significantly in recent years which may lead to overstretching the oyster culture carrying capacity of Trawbreaga Bay”*

MED having reviewed the public and statutory comments and made the following additional comments

“Carrying Capacity - MED support the Marine Institute's specific recommendation on this issue (made in Appropriate Assessment North Inishowen Coast SAC, June 2021) that ecological carrying capacity be investigated so that future licensing decisions can take this into account”

The Irish Wildlife Trust submission states that *“National Strategic Plan for Sustainable Aquaculture Development (2015) and to this end intends on investigating carrying capacity*

further in Trawbreaga Bay and other bays around Ireland. The findings of any such investigations will be incorporated into advice provision in relation to AA and aquaculture licensing in the future”

The Technical advisor notes that given the extent of oyster cultivation in the harbour proposed aquaculture appeal has the potential to **significantly impact** the phytoplankton availability in the harbour due to cumulative impacts.

5.6 Environmental Effects

The Environmental Impacts of oyster cultivation were examined by Heffernan (1999). There are many ways in which the area immediately surrounding the oyster farm could be affected by the cultivation.

1. Biodeposition and the benthos.
2. Competition for phytoplankton.
3. Competition for space on the intertidal
4. Displacement of birds

There is limited phytoplankton in the harbour, limited space on the intertidal and potential for disturbance of brent geese (in particular) as well as impacts on the habitat present in the intertidal zone. The issue of biodeposition and organic enrichment was raised as a concern by the Marine Institute (2021)

The proposed aquaculture appeals have the potential to have **environmental effects** on Trawbreaga Bay.

5.7 Effect on man-made heritage

Although the area has a number of national monuments present the footprint of these licences do not spatially overlap these heritage sites. Also, there are no archaeological ship wrecks in the area

The proposed aquaculture site will **not significantly impact** on known man-made heritage of the area.

5.8 Conclusion

A technical review was carried out by Aster Environmental Consultants Ltd in relation to an aquaculture licence appeal against the decision of the Minister of Agriculture, Food and Marine to refuse to grant an application to Foylantic Ltd T12/572.

The main findings of this review are as follows.

Navigation and access

The proposed development T12/572 has the potential to impact negatively on public access on this shoreline as well as small boat access to waters from shore and from water to shore in this locality would potentially be **significantly** hindered by this proposed development.

Visual Impact

The proposed development T12/572 has the potential to impact negatively visually this could **potentially be significant** but depends on number and location of other licenced sites.

Statutory Status (County Development Plan)

The proposed development has a **potentially significant impact** on the statutory status of the area for the following reasons.

Potential conflict with the aims of Donegal County Council Development Plan was identified in respect of visual amenity and protection of Natura 2000 sites.

The proposed development T12/572 has a **potential significant impact** on the statutory status of the area.

Statutory Status (Natura 2000 Designations)

In relation to Trawbreaga Bay Special Protection Area

Clearly the Conservation Objectives for the bay for Light Bellied Brent are not being reached and the potential conflict with aquaculture has been identified in the NIS. Therefore, to allow further aquaculture in this area would be in contravention of the Habitats Directive.

In relation to the Inishowen North Coast Special Area of Conservation the Marine Institute recognise that there is a risk of impact from aquaculture on the annex I habitat *Muddy*

sand to coarse sediment with Pygospio elegans community. The risk of negative impact is from

1. Organic enrichment due to biodeposition
2. Compaction of the habitat on the farm access routes

Despite the level not reaching the 15% specified as threshold in the conservation objectives embedded within the habitats directive is the precautionary principle and so if significant negative impact of a project (as is the case here) is known or suspected then the project cannot be permitted.

The proposed development T12/572 has a **potential significant impact** on the statutory status of the area.

T12/572 General Environmental Effects

There are **some potential significant** general environmental effects predicted as a result of the proposed development for the following reasons. Concern has been raised in relation to the carrying capacity of the bay.

T12/572 Man-made Heritage

There is **no predicted impact** on the man-made heritage of value in the area as a result of the proposed operation for the following reasons. National monuments are situated outside the intertidal and subtidal area of the bay.

Summary T12/572

The issues raised by the various authorities in relation to T12/572 are access, visual impact carrying capacity of the bay and impacts on Natura 2000 sites

5.9 Confirmation re Section 50 Notices

We confirm there are no matters which arise in section 61 which the Board ought to take into account which have not been raised in the appeal documents, and therefore it is not necessary to give notice in writing to any parties in accordance with section 50 (2) of the 1997 Act.

6.0 Screening for Environmental Impact Assessment.

S.I. No. 468/2012 - Aquaculture Appeals (Environmental Impact Assessment) Regulations 2012.

These states

3) An environmental impact statement shall be submitted with all appeals (other than reviews where the Board is satisfied that there is no environmental impact for any proposed change) for aquaculture referred to in paragraph 2(a) and shall also be

submitted where the Board determines that an application for aquaculture referred to in paragraph 2(b) would be likely to have significant effects on the environment.

(4) The Board shall, in deciding whether aquaculture referred to in paragraph 2(b) would be likely to have a significant effect on the environment, have regard to the criteria specified in Annex III to Council Directive.

SELECTION CRITERIA REFERRED TO IN ARTICLE 4(3) (CRITERIA TO DETERMINE WHETHER THE PROJECTS LISTED IN ANNEX II SHOULD BE SUBJECT TO AN ENVIRONMENTAL IMPACT ASSESSMENT)

1. Characteristics of projects the characteristics of projects must be considered, with particular regard to:

- (a) the size and design of the whole project.
- (b) cumulation with other existing and/or approved projects.
- (c) the use of natural resources, in particular land, soil, water and biodiversity.
- (d) the production of waste.
- (e) pollution and nuisances.
- (f) the risk of major accidents and/or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge.
- (g) the risks to human health (for example due to water contamination or air pollution).

2. The environmental sensitivity of geographical areas likely to be affected by projects must be considered, with particular regard to:

- (a) the existing and approved land use.
- (b) the relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground; (c) the absorption capacity of the natural environment, paying particular attention to the following areas:
 - (i) wetlands, riparian areas, river mouths.
 - (ii) coastal zones and the marine environment.
 - (iii) mountain and forest areas.
 - (iv) nature reserves and parks.
 - (v) areas classified or protected under national legislation; Natura 2000 areas designated by Member States pursuant to Directive 92/43/EEC and Directive 2009/147/EC; (vi) areas in which there has already been a failure to meet the environmental quality standards, laid down in Union legislation and relevant to the project, or in which it is considered that there is such a failure;
 - (vii) densely populated areas.
 - (viii) landscapes and sites of historical, cultural or archaeological significance.

3. Type and characteristics of the potential impact the likely significant effects of projects on the environment must be considered in relation to criteria set out in points 1 and 2 of

this Annex, with regard to the impact of the project on the factors specified in Article 3(1), taking into account:

- (a) the magnitude and spatial extent of the impact (for example geographical area and size of the population likely to be affected).
- (b) the nature of the impact.
- (c) the transboundary nature of the impact.
- (d) the intensity and complexity of the impact.
- (e) the probability of the impact.
- (f) the expected onset, duration, frequency and reversibility of the impact.
- (g) the cumulation of the impact with the impact of other existing and/or approved projects.
- (h) the possibility of effectively reducing the impact.

The relevant elements of the above are

- (a) the size and design of the whole project. This whole project should be seen as oyster cultivation within the harbour as a whole.
- (b) The environmental sensitivity of geographical areas likely to be affected by projects must be considered, with particular regard to: Coastal zones and the marine environment where this project lies.
- (c) The EIA directive 2014 also refers to Natura 2000 areas designated by Member States pursuant to Directive 92/43/EEC and Directive 2009/147/EC.

Despite the fact that it is a relatively large oyster growing area within a Natura 2000 site designated for coastal and marine habitats given the nature of the impact from oyster farming the technical advisor **does NOT recommend a Screening for EIA**. It should be noted that EIA Directive does not have shellfish cultivation listed on the list of Annex II projects.

7.0 Screening for Appropriate Assessment.

Atkins Consultants (2021) prepared an Appropriate Assessment for the Marine Institute in respect of oyster aquaculture with Trawbreaga Bay SPA, and the Marine Institute prepared an Appropriate Assessment in respect of North Coast Inishowen SAC (2021).

These reports and their findings were used to inform the Final Appropriate Assessment Conclusion Statement by Licensing Authority for aquaculture activities in North Inishowen Coast Special Area of Conservation (SAC) (Natura 2000 Site Code: 002012), and Trawbreaga Bay Special Protection Area (SPA) (Natura 2000 Site Code: 004034).

7.1 Appropriate Assessment Conclusion Statement by Licensing Authority (SAC)

Findings of the Appropriate Assessment of Aquaculture in relation to the North Inishowen Coast Special Area of Conservation

“5.1. Potential effects on Qualifying Interest Mudflats and sandflats not covered by seawater at low tide [1140] in Trawbreaga Bay

5.1.1 Qualifying Interest 1140 covers an area of 988.31ha within Trawbreaga Bay in Site 002012 hosts four benthic community types:

- Fine to medium sand with *Eurydice pulchra* community complex (234.79ha)*
- Muddy sand to coarse sediment with *Pygospio elegans* community complex (542.99ha)*
- Sand with *Angulus tenuis* and *Scoloplos (Scoloplos) armiger* community complex (208.99ha)*
- *Zostera*-dominated community (1.91ha)*

*5.1.2 Muddy sand to coarse sediment with *Pygospio elegans* community complex and, Sand with *Angulus tenuis* and *Scoloplos (Scoloplos) armiger* community 4 complex. constituent communities of the Qualifying Interest 1140 are overlapped by the aquaculture sites and access routes.*

*5.1.3 Given the evidence on the resilience of the Sand with *Angulus tenuis* and *Scoloplos (Scoloplos) armiger* community to depositional and organic enrichment effects the existing and proposed overlap of trestles **will not result in significant adverse effects or disturbance.***

*5.1.4 The level of overlap between oyster trestle sites and the Muddy sand to coarse sediment with *Pygospio elegans* community complex are low (current levels = 3.82% and proposed levels = 5.46%). However, there is no existing data for Trawbreaga Bay on the sensitivity of this community type to depositional and organic enrichment effects. Given that the Muddy sand to coarse sediment with *Pygospio elegans* community complex has not been studied in Trawbreaga Bay in terms of its resilience it cannot be determined if this community is resilient to depositional and organic enrichment effects.*

*5.1.5 Given this lack of information the risk of depositional and organic enrichment effects arising from the overlap between aquaculture sites and the Muddy sand to coarse sediment with *Pygospio elegans* community complex the risk of adverse effects **cannot be discounted.***

5.1.6 For the previous AA reports prepared by the Marine Institute to support DAFM aquaculture licensing decisions, the Marine Institute has concluded that the activity at access routes is non-disturbing to intertidal habitats where the spatial overlap is less than the disturbance thresholds identified by NPWS in Conservation Objectives (i.e. where overlap is below 15%). In the case of Trawbreaga the access routes overlap 2.05% and

3.66% respectively of the Muddy sand to coarse sediment with Pygospio elegans community complex and, Sand with Angulus tenuis and Scoloplos (Scoloplos) armiger community complex. The level of overlap of access routes is below the disturbance threshold.”

Technical expert view on impacts on North Inishowen Coast SAC. The level of overlap between oyster trestle sites and access routes and the habitat Muddy sand to coarse sediment with Pygospio elegans community complex are estimated at a maximum of c9% this is well below the disturbance thresholds identified by NPWS in Conservation Objectives (*i.e.* where overlap is below 15%). **This is not, in my opinion, significant and is not a valid reason to refuse site T12/572**

7.2 Appropriate Assessment Conclusion Statement by Licensing Authority (SPA)

Findings of the Appropriate Assessment of Aquaculture in Trawbreaga Bay Special Protection Area

No significant impacts on the Special Conservation Interest Species Chough or Barnacle Geese were identified

Light-bellied Brent Geese

“9.3.1 The site conservation condition for Light-bellied Brent Goose at Trawbreaga Bay SPA has been assessed as favourable based on the increasing population. However, when compared to historic site counts, recent counts undertaken in 2019 and 2021 suggest a large recent decline in numbers of Light-bellied Brent Goose at Trawbreaga. Thus, on the basis of these declining numbers the conservation condition of Light-bellied Brent Geese has been considered as unfavourable in Trawbreaga Bay in this assessment.

9.3.2 Based upon the NPWS low tide surveys (2009/10), the proposed applications being assessed in this report would result in displacement of up to 5.36% of the geese using Trawbreaga Bay SPA and represents a significant negative impact on the conservation status of Light-bellied Brent Geese using Trawbreaga Bay SPA.

9.3.3 However, the 2 counts undertaken in 2021 suggest that the number of areas within the bay being used by geese has declined, with smaller numbers of geese being located within a more confined area from Fegart Point to Lagg Beach.

9.3.4 The decline in Trawbreaga would appear to be higher than the current national trend which is a -15.5% (5 year; 2012 census); -10.2% (10 year; 2007 census) and +96 % (20 year;

1997 census). Unlike Barnacle geese, Light-bellied Brent Geese feed both on the foreshore and in areas of improved grassland. It is not clear whether birds are, i) preferentially moved to feed on grassland; ii) being displaced from the foreshore and forced to feed on grassland or, iii) being displaced entirely from Trawbreaga Bay SPA to another site, such as Lough Swilly. While there is evidence of field feeding, the numbers involved is unknown. There is anecdotal evidence that numbers of Light-bellied Brent geese at Lough Swilly have increased.

9.3.5 Introduction of trestles to sand / mudflats provides a 3-dimensional structure upon which a range of algal species can grow; especially green algae favoured by Light-bellied Brent Geese. The species type and density of growth is influenced by the level of site maintenance. Where little maintenance occurs, a furoid community can however develop; at this stage the trestles provide feeding opportunities for species such as Herring Gull, Oystercatcher and Hooded Crow which target associated invertebrate fauna. Higher levels of maintenance favour the smaller green and purple algae; growth will also be influenced by nutrient levels within the estuary and water temperature and thus this resource can be quite substantial in autumn when birds first arrive.

9.3.6 It is noted that Light-bellied Brent Goose do feed on terrestrial grassland, though the degree to which this is undertaken at Trawbreaga has not been established.

9.3.7 It cannot be stated at this time whether the reduced number of observed birds can be explained by birds moving to feed terrestrially or whether birds have vacated the site.

9.3.8 The continuation of the existing licence conditions in relation to dogs on licensed sites, vehicles maintenance and that unused equipment (e.g. trestles; bags etc.) are removed from the foreshore will all continue to help in the reduction of disturbance to birds.

In-combination effects of aquaculture and other activities

10.1. The Appropriate Assessment reports considered the cumulative impacts of the combined effects of the aquaculture and other activities within the SAC/SPA, notably fisheries, seaweed harvesting, residential and recreational developments, hand collection of shellfish, bait digging and effluent discharge.

10.2. Given that interactions between Qualifying Interest 1140 and fishing activities are unlikely to occur, in-combination effects of fishery aquaculture activities are **screened out**.

10.3. Given that seaweed harvesting is confined to reefs combination effects of seaweed harvesting activities are **screened out**.

10.4. Given the pressure resulting from point discharge location such as the urban wastewater treatment and/or combined sewer outfalls would likely impact on physico-chemical

parameters in the water column, any in-combination effects with aquaculture activities are screened out. “

Overall, the licencing authority identified in particular that impacts on Brent Geese have potential for significant impact on Trawbreaga Bay SPA. According to their assessment “Based upon the NPWS low tide surveys (2009/10), the proposed applications being assessed in this report would result in displacement of up to 5.36% of the geese using Trawbreaga Bay SPA and represents a significant negative impact on the conservation status of Light-bellied Brent Geese using Trawbreaga Bay SPA.” **The technical advisor agrees and as given that the trend is declining at this site any further declines are not in compliance with Habitats Directive. Therefore, further licencing of T12/572 is not advised.**

8.0 Technical Advisor's Evaluation of the Issues in Respect of Appeal

| The issues raised by the appellant were as follows | Technical Advisor's Evaluation |
|--|--|
| Impact on the SPA (Brent Geese) | <p>The conservation objective for Brent at Trawbreaga is "To maintain the favourable conservation condition of Light-bellied Brent Goose in Trawbreaga Bay SPA, which is defined by the target "Long term population trend stable or increasing "The site is designated as a representative site holding 1% or more of the international population. This is around 400 birds. Current numbers at Trawbreaga are less than 200.</p> <p>Clearly the Conservation Objectives for the bay for Brent are not being reached and the potential conflict with aquaculture has been identified in the NIS. Therefore, to allow further aquaculture in this area would be in contravention of the Habitats Directive.</p> |
| Impact on the SAC | <p>In relation to the Inishowen North Coast Special Area of Conservation the Marine Institute recognise that there is a risk of impact from aquaculture on the annex I habitat <i>Muddy sand to coarse sediment with Pygospio elegans community</i>.</p> <p>The level of disturbance or impact on this habitat type is estimated at c9% bases on the marine Institute figures This is well below the 15% level as specified by NPWS as the threshold in the conservation objectives for this SAC.</p> <p>It is my opinion that this is not a valid reason for refusal</p> |
| Visual Impact | <p>There is potential significant cumulative visual impact noted as an impact in relation to this application. Although visual impact was raised given the amount of aquaculture already licenced in this section it is not significant enough to warrant a refusal of T12/572</p> |
| Shore Access | <p>Shore access by foot and by boat appears to be compromised by this application. This could be remedied as suggested by MED a smaller site and so this is not significant enough to warrant a refusal of the entire application T12/572</p> |

It is concluded that the questions posed by the appellants have been fully addressed in this report.

9.0 Recommendation of Technical advisor with reasons and Considerations

Having carried out an inspection of the proposed site, reviewed the appropriate literature and in (accordance with Sections 59 & 61 of the Fisheries (Amendment) Act 1997 and reviewed the grounds for appeal.

Recommendation T12/572

The issues raised by the various authorities in relation to T12/572 are in the following categories

- Access to shore
- Visual Impact
- Carrying capacity
- Impact on Light Bellied Brent Geese
- Impact on mudflat *Pygospio elegans* community

The appeal was brought in relation to access to shore, visual impact and impact on the Natura 2000 sites (SAC and SPA). The overall finding was that the impact in respect of visual, access and Impact on mudflat *Pygospio elegans* community of the SAC were not found to be significant.

However, the finding in relation to Brent Geese and Trawbreaga Bay SPA is that the population is in serious decline here in contrast to the local and national trend for this species. Brent relies on the intertidal zone for feeding and it is likely that they have been displaced by oyster cultivation here. Thus, to grant permission for this additional aquaculture in an area notably favoured by Brent would be in contravention of the habitat's directive

The recommendation is to uphold the minister's decision to refuse to grant an aquaculture licence to Foylantic Ltd for site T12/572

Technical Advisor: Marie Louise Heffernan Aster Environmental Consultants Ltd

Date: 20/03/2024

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