

AP 33

Technical Advisor's Report

Client:	Aquaculture Licences Appeals Board
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Appeal Ref No. AP33/2019

Aquaculture Licences Appeals Board

Technical Advisor's Report

Description: Assessment of appeal against the Minister's decision to refuse grant of aquaculture and foreshore licences for the cultivation of Pacific oysters by Charles O'Donnell of Keadue, Burtonport, Letterkenny, County Donegal Site Ref T12/513 west of Inishmeal Island, Co. Donegal.

Licence Application

Department Ref No: T12/513

Applicant: Charles O'Donnell

Minister's Decision: Application for aquaculture and foreshore licences refused.

Appeal

Type of Appeal: Appeal against the decision of the Minister for Agriculture, Food and the Marine to refuse to grant aquaculture and foreshore licences for the cultivation of Pacific oysters using bags and trestles west of Inishmeal Island, County Donegal on site T12/513.

Appellant(s): Charles O'Donnell

Observers: Charles O'Donnell

Technical Advisor MERC Consultants

Date of site Inspection: 07/08/2020

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1.0 General Matters / Appeal Details

1.1 Appeal Details & Observer Comments / Submissions

Date Appeal Received: 21/11/2019

Location of Site Appealed: West of Inishmeal Island, South of Burtonport, County Donegal.

1.2 Name of Appellant (s):

Charles O'Donnell, Keadue, Burtonport, Letterkenny, County Donegal

1.3 Name of Observer (s)

Charles O'Donnell, Keadue, Burtonport, Letterkenny, County Donegal

1.4 Grounds for Appeal

Substantive Issues

The Appellant states in the appeal:

- Moulting takes place during a short period in the late summer (July/August)

The Appellant requested a ten (10) month extension to the appeals process in order to support this position. This extension would allow the Appellant to provide:

- A detailed husbandry plan for our site designed to minimise site disruption of seal moulting
- A technical report to validate this approach

No notice was issued to Charles O'Donnell regarding the appeal by the Board pursuant to section 46(1) of the Fisheries Amendment Act. This request for an extension to the appeal period was not permissible under the Act.

Non-substantive issues

The Appellant states in the appeal:

- We were not informed prior to licence determination that this was a concern in relation to our site and we contend that we were not given an adequate opportunity to respond to this concern before the licence was refused
- We are confident that we can amend our husbandry practices to ensure that disturbance does not take place during the harbour seal moulting period while still producing a high quality food product for the home and export markets.

1.5 Minister's submission

Section 44(2) of the Fisheries (Amendment) Act 1997 states that

"The Board shall, as soon as practicable after receiving a notice of appeal, give a copy to each other party to the appeal."

Section 44(2) of the Fisheries (Amendment) Act 1997 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."

The *Notices of Appeal* was forwarded to the Department of Agriculture, Food and Marine on the 10/12/19. While the Department responded within the required time frame and in so doing provided copies of relevant documentation relating to the application and internal process, no Ministerial submission in relation to the appeal was received by the Board within the specified timeframe. It is therefore determined that no Ministerial submission was made in response to the appeal which the Board is required to consider.

1.6 Applicant response

The applicant (as the appellant) may submit responses to appeal submissions under the provision set out in Section 44 (2) of the Fisheries (Amendment Act) 1997. Furthermore, Section 45 provides that any person who is not a party to the appeal may make submissions or observations in writing to the Board in relation to an appeal. The Board may also request a submission from any party to the appeal under Section 46 of the Act.

No appeal submissions were requested from the applicant by the Board and the applicant has not made any appeal submissions though a request for an extension to the appeal submissions period was made. No submissions were received from third parties in relation to the appeal.

2.0 Consideration of Non-Substantive Issues

The non-substantive issues raised were:

- 1) We were not informed prior to licence determination that this was a concern in relation to our site and we contend that we were not given an adequate opportunity to respond to this concern before the licence was refused.

This is considered outside of the scope of this review.

- 2) We are confident that we can amend our husbandry practices to ensure that disturbance does not take place during the harbour seal moulting period while still producing a high quality food product for the home and export markets.

No information was received regarding this statement.

3.0 Oral Hearing Assessment

The appellant requested an oral hearing in the Notice of Appeal. Having reviewed the Ministers File, additional correspondence from the appellant/applicant and Department of Agriculture, Food and the Marine and having carried out a site visit, it is considered that there is sufficient information and documentation available to the technical review in order to make a clear recommendation in relation to the appeal. An oral hearing is therefore not considered necessary in the circumstances.

4.0 Minister's file

Charles O'Donnell (AP33/2019, T12/513)

No	Date	Item
1	21/04/2017	Letter from the Aquaculture and Foreshore Management Division of DAFM to Marine Engineering Division of the Department of Agriculture Food and Marine
2	05/05/2017	Letter from the Commission of Irish Lights, Marine Surveyors Office, Department of Transport, Tourism and Sport to the Aquaculture and Foreshore Management Division of the DAFM
3	09/05/2017	Letter from the Sea Fisheries Protection Authority to the Aquaculture and Foreshore Management Division DAFM concerning application T12/513
4	31/05/2017	Letter from the Commission of Irish Lights, Marine Surveyors Office, Department of Transport, Tourism and Sport to the Aquaculture and Foreshore Management Division of the DAFM
5	20/06/2018	Report from the Marine Engineering Division of DAFM to the Aquaculture and Foreshore Management Division of the DAFM
6	10/04/2019	Email from Marine Engineering Division of DAFM to the Aquaculture and Foreshore Management Division of the DAFM
7	10/06/2019	Letter from the Marine Institute to the Aquaculture and Foreshore Management Division of the DAFM
8	18/06/2019	Email from the Marine Environment and Foreshore Division, Department of Housing, Planning and Local Government to the Aquaculture and Foreshore Management Division of the DAFM
9	02/07/2019	Email from the Development Applications Unit of the Department of Heritage, Culture and Gaeltacht to the Aquaculture and Foreshore Management Division of the DAFM

10	02/08/2019	Email from the Aquaculture and Foreshore Management Division of the DAFM to the Marine Engineering Division of DAFM
11	14/08/2019	Email from the Aquaculture and Foreshore Management Division of the DAFM to the Marine Engineering Division of DAFM
12	21/08/2019	Email from the Marine Institute to the Aquaculture and Foreshore Management Division of the DAFM
13	21/08/2019	Email from the Marine Institute to the Aquaculture and Foreshore Management Division of the DAFM
14	13/09/2019	Letter form the Marine Engineering Division of DAFM to the Aquaculture and Foreshore Management Division of the DAFM
15	30/09/2010	Email from the Marine Engineering Division DAFM to Aquaculture and Foreshore Licensing Division DAFM
16	Undated	Recommendation from the Aquaculture and Foreshore Licensing Division DAFM to the Minister For Agriculture, Food and Marine
17	22/10/2019	Letter informing Charles O'Donnell of the Ministers decision to refuse the licence for aquaculture and foreshore licences at site T12/513 from the Aquaculture and Foreshore Licensing Division DAFM
18	21/11/2019	Form of Appeal from Charles O'Donnell, Keadue, Burtonport, Co Donegal to the Aquaculture Licence Appeals Board
19	21/11/2019	Letter from Charles O'Donnell, Keadue, Burtonport, Co. Donegal to the Aquaculture Licence Appeals Board requesting a 10 month extension to submission for appeal
20	10/12/2019	Letter from the Aquaculture and Foreshore Licensing Division DAFM to the Aquaculture Lincence Appeals Board

5.0 Context of the Area

5.1 Physical descriptions

The proposed aquaculture site is located off the west coast of Inishmeal Island south of Burtonport in County Donegal within the Rutland Island and Sound Special Area of Conservation (SAC). The proposed aquaculture site covers both intertidal and subtidal habitat and has an area of 11.2 hectares (Figure 1).

It should be noted that the application site indicated in Figure 1 has been plotted using a set of eight (8) Irish National Grid Reference co-ordinates as apparently provided by the applicant in the form of an extract from a Dept of Marine & Natural Resources (Engineering Division) document that is dated 19.4.2000. It is not entirely clear where these co-ordinates originated from or in what context they were provided (or to whom), however as plotted in Figure 1 they present a polygon that is positioned significantly further to the east then that which is indicated in the 1:10000 scale drawing included

with the application. A further set of 5 hand written Irish National Grid co-ordinates that are provided on page 4 of the application do not allow for the site boundary to be plotted as the co-ordinates provided represent an insufficient number of points in order to develop the polygon shown in the 1:10000 scale site drawing provided in the aquaculture and foreshore licence application document (for which 8 sets of co-ordinates would be required as a minimum).

The net effect of using the co-ordinates provided in the application to plot the site position is that the site is shifted to the east and north somewhat, meaning that a significant portion of the application site appears to be located on terrestrial habitat of Inishmeal, while it is also moved farther away from known seal haul out sites to the west and southwest. It is unclear how the disparity has arisen, however the technical review process has considered the possible difference in site positioning and the possible error has been considered and is accounted for in the technical evaluation.

The north and central parts of the site are firm sand with underlying rock. The upper shore in this area is rocky and there are low lying areas of reef within the intertidal zone. The southern area of the proposed site T12/513 is characterised by softer sediments with higher silt content and significant areas of rock and boulder.

The depth range over the site ranges from upper intertidal to subtidal and the shore gradients are generally shallow. The site is generally sheltered though there is some exposure to the southwest, however, rock reefs on the site would minimise wave exposure.

Inishmeal island is characterised by improved agricultural grassland and rough grazing used for summer grazing of cattle. The site is located approximately 8 km west of the mouth of the Dungloe River. The discharge of the Dungloe Waste Water Treatment plant is located approximately 8.5 km east of the site under appeal. There is a discharge of untreated sewage from Burtonport via an outfall located at Burtonport pier. This outfall discharges sewage with a population equivalent estimated at 168 persons. The outfall is located 1.7 km to the north of the proposed aquaculture site.

The site is located in a temperate climate with 258 days of rain per annum and an average of over 1500mm of rain per year.



Figure 1. Location of application site T12/513 in the Rutland Island and Sound SAC west of Inishmeal Island and south of Burtonport, County Donegal

5.2 Resource Users

Aquaculture Activity

Currently there are sixteen (16) licensed aquaculture sites operating within Rutland Island and Sound SAC (Figure 2). The licenced aquaculture sites currently operating are found within the Dungloe Bay area around Inisheane Island, site T12/513, the site under review is located approximately 5km northwest of the nearest currently licenced aquaculture site.

All of the currently licenced sites focus on the production of Pacific oysters, *Crassostrea gigas*. The primary method of production is bag and trestle, however, there are a number of sites using a cuboidal cage system. Total oyster production in the Bay is approximately 600 tonnes.

The largest operator in the Bay a French owned company producing in excess of 500 tonnes of oyster annually with seed imported from France. They culture a mixture of half-grown and full grown oysters.

Both diploid and triploid oyster are grown in Dungloe Bay. Seed is imported different from February to June and August to October. Oyster seed is currently obtained from France and the United Kingdom.

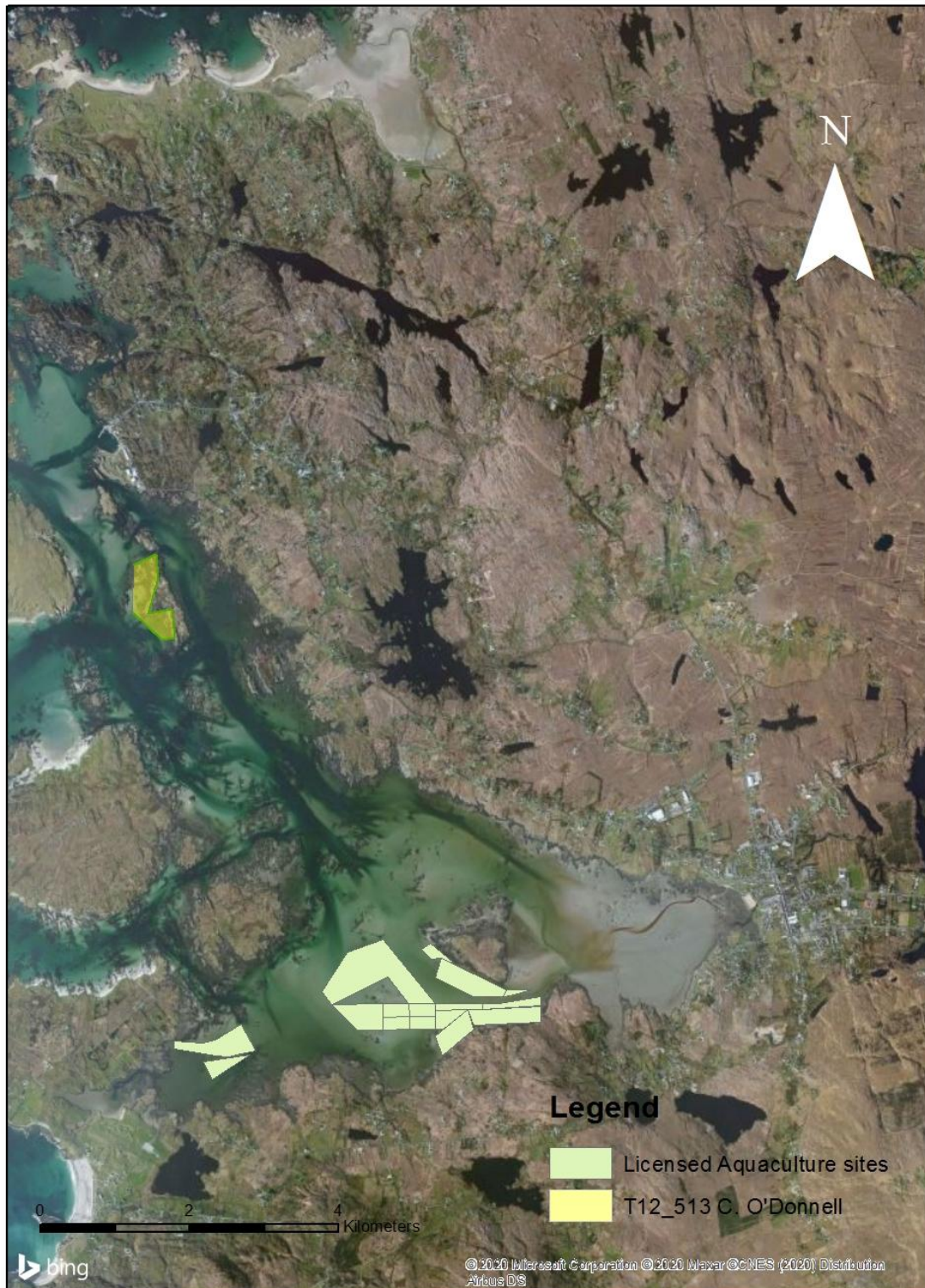


Figure 2. Licensed aquaculture sites within the Dungloe Bay, Rutland Island and Sound SAC and the site under appeal,T12/513.

Angling Activity

There are no known angling marks within the vicinity of the aquaculture site under review. Within Dungloe Bay to the east and south east there are a number of known shore angling marks. Dungloe Pier produces mullet at high water. Five kilometres to the west of the town on the southern shore of the bay is Magehry Strand. A rocky promontory found at the northern end of the beach, Termon, produces mackerel, pollack, sea trout, dab, flounder and wrasse

Burtonport pier 2 km north west of the aquaculture site under review offers fishing for mullet, pollack, coalfish and conger eels. At least on sea angling charter boat operates from Burtonport pier there primary area of operation appears to be the sound and the waters of Arranmore Island.

A locally important fishery for sea trout occurs in the deep water river channel located to the west of Dungloe pier and there is also a small run of Atlantic salmon to Dungloe river.

Tourism

Donegal attracts 650,000 tourists annually including 300,000 overseas visitors. The town of Dungloe 9 km east of the site under review is an important tourist destination both as an attraction itself and as a centre from which the broader Rosses area and beyond can be explored. Dungloe is a centre for freshwater angling in The Rosses with access to a large number of lakes in the surrounding area. The Mary from Dungloe Festival takes place in late July and attracts many visitors to the area. The town of Dungloe has a number of accommodation options for tourists including a hotel on the waterfront. The town of Burtonport approximately two (2) km to the north of the proposed site has a number of accommodation options and holds the Burtonport Summer Festival annually in July.

Agricultural Activity

The Island of Inishmeal to the east and adjacent to the aquaculture site under appeal is used for cattle grazing during the summer months. The surrounding mainland to the north is in the rural district of Glenties. The total number of farms in this district was 1688 in 2010 and the total area farmed was 47000 hectares, 25000 hectares of which was rough grazing.

Sheep are the most farmed livestock in the rural district of Glenties with more than 102,000 animals recorded in 2010. Cattle production is significantly lower at just over 8000 animals. The total land area of crops in this rural district of Glenties was 154 hectares in 2010

Inshore Fishing activity

Fishing activity within Rutland Island and Sound SAC is limited to pot fishing for shrimp, crab and lobster. Ten (10) boats are involved in the shrimp fishery which takes place

within Dungloe Bay and Rutland Sound. There is no information specific to the SAC or bay regarding the number of vessels involved in the lobster and crab fisheries that take place there. However, for NW Donegal, Killybegs to Malin Head, 200 vessels are involved in the lobster fishery fishing 200,000 pots. The brown crab fishery for Donegal involves fifty (50) vessels fishing 50,000 pots. (Tully 2017)

Leisure Users of the water body & surrounding area

There is one commercial enterprise offering watersports including kayaking, stand up paddle boarding and snorkelling, hiking and cycling in the inner Dungloe Bay area located at Maghery Strand seven (7) km to the southeast of the site under appeal. The surrounding area is popular with hill walkers. The Rosses Walking Festival, a two-day event, is based in the town of Dungloe and takes advantage of walking routes within the area. A marked loop walk is located on Arranmore Island to the west of the proposed site.

Sea Safari and heritage tours are offered by a number of tour operators departing from Burtonport. The primary activities are bird, dolphin, seal and basking shark watching. Sea angling and diving trips are also available in the area with departures from Burtonport, seasonally. The primary area of activity of these vessels is the island of Arranmore located 5 km west of the site under review.

Seaweed harvesting

No accurate figures are available for the number of seaweed cutters working within Rutland Island and Sound SAC, Dungloe Bay, or County Donegal. In 1999 it was estimated that approximately ninety (90) full time and two hundred and fifty (250) part time harvesters were involved in the seaweed harvesting industry in Co Donegal (White and Costelloe 1999).

5.3 Environmental Data

Water Quality

Dungloe Bay and Rutland Island and Sound SAC are surrounded by the Gweebarra-Sheephaven catchment. This catchment includes the area drained by all streams entering tidal water in Gweebarra River, Sheephaven Bay and between Rossan Point and Fanad Head, Co. Donegal, a total area of 1,450 km². The largest urban centre in the catchment is Falcarragh. The other main urban centres in this catchment are Glenties, Dungloe, Dunfanaghy, Creeslough and Carrowkeel.

Dungloe Bay is defined as a coastal water body (IE_NW_140_0000). Water quality monitoring and assessments carried out on Irish coastal waters and for the Reporting period 2010-2012 by the EPA have classified the water quality of the coastal water body of Dungloe Bay as 'Unpolluted' (Source <https://gis.epa.ie/EPAMaps/Water>

Water framework directive

The water quality status of transitional and coastal waterbodies assessed under the EU Water Framework Directive (2000/60/EC) is provided under section 5.16. Under the Water Framework Directive an approved risk is also assigned to each feature by catchment scientists. The approved risk for Dungloe Bay coastal water is 'Not at risk'. (Source <https://gis.epa.ie/EPAMaps/Water Framework Directive>).

Waste Water

The Dungloe waste water treatment plant discharge is located approximately 8 km east of the site under review. The discharge undergoes primary and secondary treatment with prior to release into the receiving environment.

Burtonport located 1.7 km to the north west of the proposed aquaculture site discharges untreated sewage with a population equivalent of 168 to the receiving waters from a location at the pier.

Classified bivalve Mollusc Production Waters

Areas of Dungloe Bay to the southeast and east of the proposed site are classified bivalve mollusc production areas. The Classification for these areas is A between February and August and B for the rest of the year.

The Classified Bivalve Mollusc Production Areas in Ireland designates the production areas from which live bivalve molluscs may be taken. Gatherers may only harvest live bivalve molluscs from these production areas which have fixed locations and boundaries and which are classified as being of class A, B or C in accordance with Regulation (EC) No 854/2004. Annex II of Regulation (EC) 854/2004 sets out the requirements for the classification of production and relaying areas, the monitoring of classified relaying and production areas and the recording and exchange of information.

Designated Shellfish Waters ([Directive 2006/113/EC on the environmental quality of shellfish waters](#))

Under S.I. No. 268/2006 - European Communities (Quality of Shellfish Waters) Regulations 2006 as amended by [S.I. No. 464 of 2009](#) and [S.I. No. 55 of 2009](#) , areas of Dungloe Bay to the east and southeast of the proposed site are designated shellfish waters (Figure 3).

The designation under the EU Shellfish Waters Directive:

- Requires all member states, including Ireland, to designate waters that need protection in order to support shellfish life and growth.
- Sets physical, chemical and microbiological requirements that designated shellfish waters must either comply with or try to improve.
- It allows for the establishment of pollution reduction programmes for the designated waters.

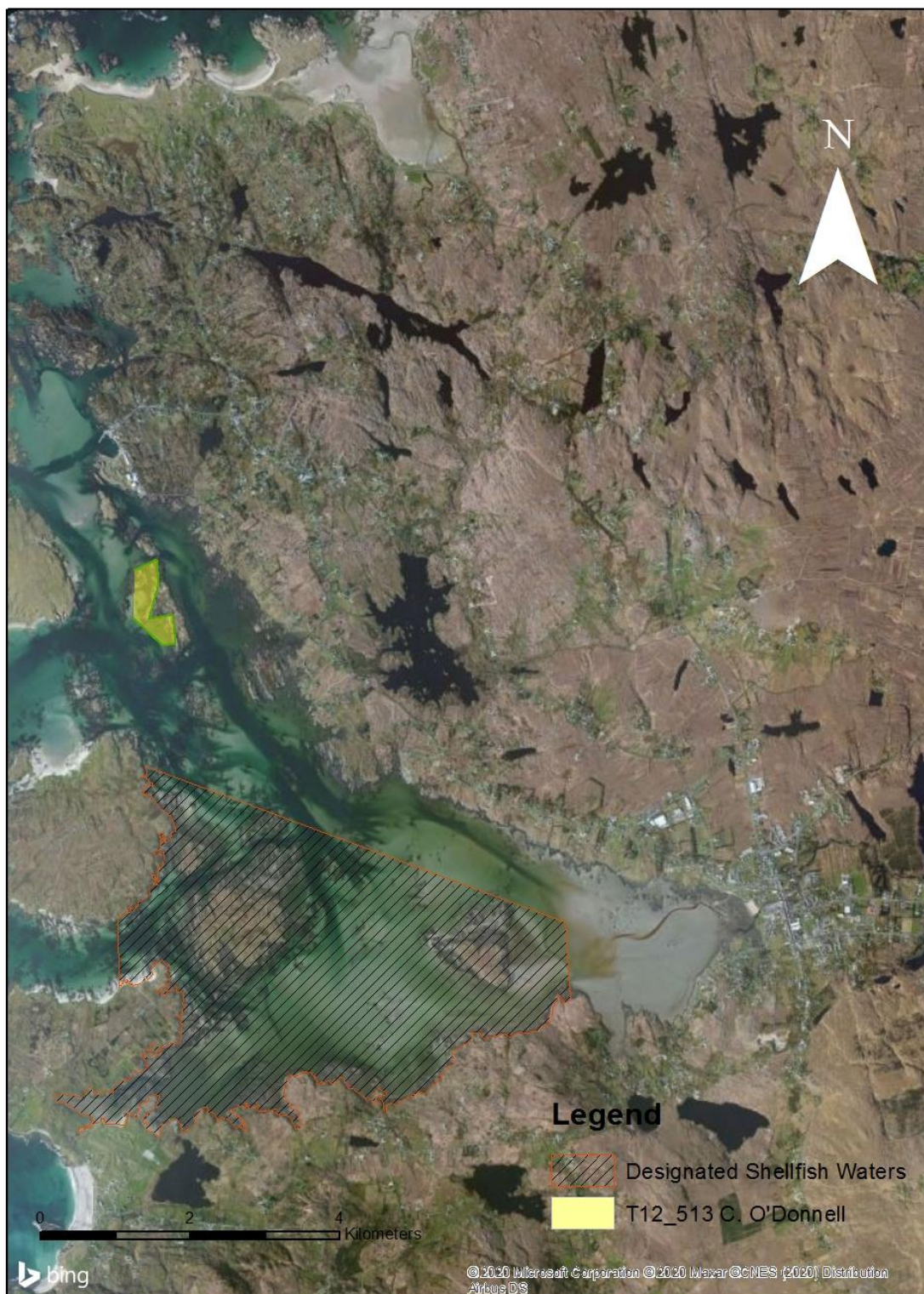


Figure 3. Designated shellfish waters within Dungloe Bay, Rutland Island and Sound SAC and the site under appeal, T12/513.

Nature Conservation Designations

Natura 2000 sites Special Areas of Conservation (SAC's) established under the EU Habitats Directive (92/43/EEC) and Special Protection Areas (SPA's) established under the EU Birds Directive (79/409/EEC). The aquaculture site under appeal is located within the Rutland Island and Sound Special Area of Conservation (Site Code: 002283). See Figure 4.

The site is designated as a SAC owing to a range of coastal and intertidal habitats present. The SAC supports a nationally important population of Harbour seals, *Phoca vitulina* (Table 1). The SAC provides habitat for all aspects of the seals life cycle : resting, moulting, breeding and feeding. Feeding occurs both within the SAC and surrounding coastal waters.

Table 1. Features of Interest within the Rutland Island and Sound SAC.

Rutland Island and Sound SAC (Site Code 002283)
Coastal Lagoons [1150]
Large Shallow inlets and bays [1160]
Annual vegetation of drift lines [1210]
Embryonic shifting dunes [2110]
Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes)
Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]
Humid dune slacks [2190]
<i>Phoca vitulina</i> (Harbour Seal) [1365]

A number of additional Natura 2000 sites lie within a 15km radius of the proposed aquaculture site. Four (4) SAC's and three (3) SPA's lie within a 15km radius of the site T12/513. (See Table 2). The features of interest at Natura 2000 sites within a 15km radius of the proposed aquaculture site are given in Table 3.

Table 2. Additional Natura 2000 sites within a 15 km radius of the aquaculture sites under appeal.

Site Code	Site Name	Distance from aquaculture site (km)
001141	Gweedore Bay and Islands SAC	5.8
002047	Cloghernagore Bog and Glenveigh National Park SAC	10.5
001195	Termon Strand SAC	5.8
000111	Aran Island (Donegal) Cliffs SAC	12.7
004039	Derryveagh And Glendowan Mountains SPA	11.8
004132	Illancrone and Inishkeeragh SPA	5.9
004150	West Donegal Coast SPA	12.7

Table 3. Features of interest for all sites within a 15km radius of the aquaculture sites under appeal.

Gweedore Bay and Islands SAC (Site code: 001141)

Coastal Lagoons [1150]
 Reefs [1170]
 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) [1330]
 Mediterranean salt meadows (*Juncetalia maritima*) [1410]
 Embryonic shifting dunes [2110]
 Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes)
 Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]
 Decalcified fixed dunes with *Empetrum nigrum* [2140]
 Atlantic decalcified fixed dunes (*Salicion arenariae*) [2170]
 Humid dune slacks [2190]
 Machairs (* in Ireland) [21A0]
 Oligotrophic to Mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or *Isoeto-Naojuncetea* [3130]
 European dry heaths [4030]
 Alpine and boreal heaths [4060]
Juniperus communis formations on heaths or calcareous grasslands [5130]
Euphydryas asurinia (Marsh Fritillary) [1065]
Lutra lutra (Otter) [1355]
Petalophyllum ralfsii (Petalwort) [1395]
Najas flexilis (Slender Naiad) [1833]
Cloghernagore Bog and Glenveigh National Park SAC (Site code: 002047)
 Oligotrophic waters containing very few minerals of sandy plains (*Littorelletea uniflorae*) [3110]
 Water courses of plain to montain levels with *Ranunculon fluitantis* and *Callitricho-Batrachion* vegetation [3260]
 Northern Atlantic wet heaths with *Erica tetralix* [4010]
 European dry heaths [4030]
 Alpine and boreal heaths [4060]
Molonia meadows on calcareous, peaty or clayey – silt-laden soils (*Molinion caeruleae*) [6140]
 Blanket bogs (*if active bog) [7130]
 Depressions on peat substrates of the *Rhynchosporion* [7150]
 Old sessile oak woods with *Ilex* nad *Blenchnum* in the British Isles [991A0]
Margaritifera margaritifera (Freshwater pearl mussel) [1029]
Salmo salar (Atlantic salmon) [1106]
Lutra lutra (Otter) [1355]
Trichomanes speciosum (KillarneyFern) [1421]

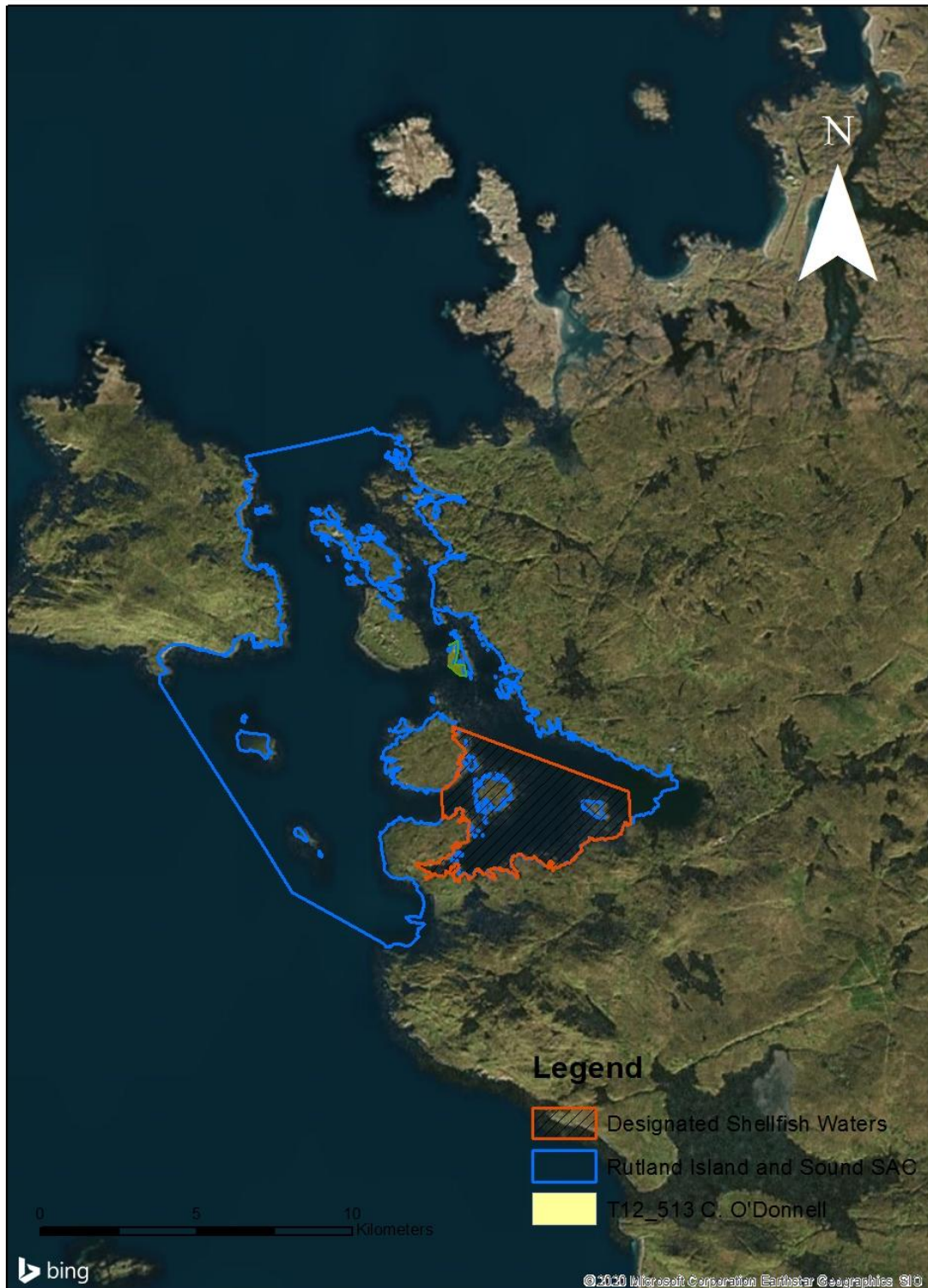


Figure 4. The Rutland Island and Sound SAC boundary, designated shellfish waters and the site under review, T12/513.

Table 3. Features of interest for all sites within a 15km radius of the aquaculture sites under appeal.

Termon Strand SAC (Site code: 001195)

Coastal lagoons [1150]

Aran Island (Donegal) Cliffs SAC (000111)

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

European dry heaths [4030]

Alpine and boreal heaths [4060]

Calcareous rocky slopes with chasmophytic vegetation [8210]

Siliceous rocky slopes with chamophytic vegetation [8220]

Submerged or partially submerged sea caves [8330]

Derryveagh and Glendowan Mountains SPA (Site code: 004039)

Red-throated Diver (*Gavia stellate*) [A001]

Merlin (*Falco columarius*) [A098]

Peregrine (*Falco peregrinus*) [A103]

Golden Plover (*Pluvialis apricaria*) [A140]

Dunlin (*Calidris alpina schinzii*) [A466]

Illancrone and Inishkeeragh SPA (Site code: 004132)

Barnacle Goose (*Brantra leucopsis*) [A045]

Common Tern (*Sterna hirundo*) [A193]

Arctic Tern (*Sterna paradisaea*) [A194]

Little Tern (*Sterna albifrons*) [A195]

West Donegal Coast SPA (Site code: 004150)

Fulmar (*Fulmarus glacialis*) [A0009]

Cormorant (*Phalacrocorax carbo*) [A017]

Shag (*Phalacrocorax aristotellus*) [A018]

Peregrine (*Falco peregrinus*) [A013]

Herring gull (*Larus argentatus*) [A184]

Kittiwake (*Rissa tridactyla*) [A188]

Razorbill (*Alca torda*) [A200]

Chough (*Pyrrhocorax pyrrhocorax*) [A346]

Natural Heritage Areas (NHA's) and Proposed Natural Heritage Areas (pNHA's)

There no NHA's and six (6) pNHA's within a 15km radius of the aquaculture sites under appeal.

Table 4. pNHA's within a 15km radius of the aquaculture sites under appeal

Designation	Site Code	Name
pNHA	000111	Arran Island (Donegal) and Cliffs
pNHA	000148	Illancrone
pNHA	000152	Inishkeeragh
pNHA	001141	Gweedore Bay and Islands
pNHA	001195	Termon Strand
pNHA	002047	Cloghernagore Bog and Glenveigh National Park

Protected Species

Marine Mammals

The 1992 EC Habitats Directive as transposed by the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011) requires that both seal species (Common seal and Grey seal) and all cetaceans occurring in Irish waters are maintained at favourable conservation status. Under Article 12 of the Directive, all cetaceans should receive strict protection within the Exclusive Economic Zone. Under the Wildlife (Amendment) Act 1976-2005, all cetaceans and seals are protected species listed on the 5th Schedule. Under this Act, Natural Heritage Areas (NHAs) may be established to protect habitats or species. Whilst some terrestrial and coastal NHAs may encompass adjacent marine areas, no NHA's have been established for marine mammals to date.

Cetaceans

Twenty-four species of cetacean have been recorded in Ireland to date. Of these 10 are considered to be year-round residents. Those that have been recorded off the west coast include those listed below:

Humpback whales: have been seen off all Irish coasts, though less frequently in the Irish Sea.

Fin Whale: Although they prefer deeper waters along the Continental shelf edge, they can be seen from Irish headlands when inshore feeding opportunities occur. A high-number sightings have been reported along the southern Irish coast, extending from Slea Head, Co. Kerry east towards Hook Head, Co. Wexford.

Minke whale: This is the most frequently recorded baleen whale in Irish waters can be seen off most headlands throughout the year along the entire Irish coast, although most sightings are recorded from the south and west Coasts.

Harbor porpoise: This is the most frequently reported and widespread species in Ireland and can be seen around the entire coast, although they appear to be most abundant off the southwest coast.

Bottlenose Dolphin: This species can be seen inshore on all Irish coasts although they are most frequently recorded off the west coast.

Seals

Site T12/513 under appeal is located in Rutland Island and Sound SAC, the harbour seal (*Phoca vitalina*) is one of the qualifying features for this SAC. All aspects of this species life cycle occur within the SAC, resting, feeding, moulting and pupping.

Harbour seals are found within the SAC year-round. The most recent survey undertaken in 2017 -2018 (Morris and Duck 2019) recorded 284 seals within the SAC. Previous imaging surveys recorded 268 seals in 2003 and 230 seals in 2011/12.

Birds

Illancrone and Inishkeeragh two islands located within the Rutland Island and Sound SAC are approximately 6 km south of the site under appeal. Both islands are important breeding grounds for seabirds. Arctic Tern (224 pairs), Little Tern (13 pairs) and Sandwich Tern (1 pair) Annex I species listed under The EU Birds Directive were recorded in 1995. In 1984 Illancrone had the largest known colony of Arctic Tern in Ireland at 132 nesting pairs.

The SPA also supports important numbers of Barnacle Geese. Roseate Terns, Common Terns, Lesser Black-backed Gulls and Herring Gulls have also been recorded in the SPA. Black Guillemot, Red-throated diver, Curlew and Oystercatcher have been recorded on the island of Inishmeal where the site under review is located. (Walsh 2014).

Otters

Gweedore Bay and Islands SAC, which adjoins the Rutland Island and Sound SAC in the northwest, is designated for the otter (*Lutra lutra*). The conservation status of the otter in the adjoining SAC is considered favourable.

Statutory Plans

West of Inishmeal Island, South of Burtonport, County Donegal the location of the aquaculture site under review is not the subject of a statutory plan in its own right but is covered under the **County Donegal Development Plan 2018-2024**.

Chapter 7 of the County Donegal Development Plan 2018-2024 deals with the Natural and Built Heritage of the county and part of this section is considered relevant to this review. The aim of this part of the Development Plan is to:

'Conserve, protect and enhance the County's natural, built and cultural heritage for future generations and encourage appreciation, access and enjoyment of these resources.'

Section 7.1 of the Donegal County Development Plan deals with Natural Heritage of the county.

The landscape of Donegal has been categorised into three layers of value: 'Especially High Scenic Amenity', areas of 'High Scenic Amenity' and areas of 'Moderate Scenic Amenity'.

Areas of Especially High Scenic Amenity (EHSA)

Areas of EHSA are sublime natural landscapes of the highest quality that are synonymous with the identity of the county. These areas have extremely limited capacity to assimilate additional development.

Areas of high Scenic amenity (HSA)

HAS area are landscapes of significant aesthetic, cultural, heritage and environmental quality and are unique to their locality and are a fundamental element of the landscape and identity of County Donegal, These areas have the capacity to absorb sensitively located development of scale, design and use that will enable assimilation into the receiving landscape and which does not detract from the quality of the landscape.

A number of objectives of the Development Plan are relevant to this review:

NH-O-2: To maintain the conservation value of all existing and proposed SAC's, SPA's, NHA's and Ramsar sites including animal and plant species identified for protection under the EU Habitats Directive (92/43/EEC), EU Birds Directive (79/409/EEC as amended by 2009/147/EC), the Wildlife Acts(1976-2014) and the Flora Protection Order (2015).

NH-O-5: To protect, manage and conserve the character, quality and value of the landscape having regard to proper planning and development of the area, including the consideration of the scenic amenity designations of this plan, the preservation of views and prospects and the amenities of places and features of natural, cultural, social or historic interest.

NH-O-6: To protect the integrity of Designated Shellfish Waters, and Freshwater Pearl mussel basins and to take account of any relevant Shellfish Reduction Program or Freshwater Pearl Mussel Sub-basin Plan.

NH-O-7 To protect the areas of Especially High Scenic Amenity from intrusive and/or unsympathetic developments.

NH-O-10 To maintain and restore ecosystems and to conserve valuable or threatened habitats and species in order to prevent further loss of biodiversity and to meet the EU's target to halt biodiversity loss by 2020.

Relevant Policies in this Chapter include:

Chapter 10 of the County Donegal Development Plan 2018-2024 deals with marine resources and coastal management and is considered relevant to this review. The Council recognises the importance of the aquaculture sector for local employment around the Donegal coastline and states its support for the sustainable development of onshore aquaculture activities.

Donegal County Council set out a number of objectives for their Marine Sector relevant to this review:

MRCM-O-1 TO maximise the social and economic potential of Donegal's marine sector by:

- Consolidating and strengthening our Marine Leisure sector by, protecting the recreational and environmental quality of our coastal area.
- Supporting the fishing and seafood sector by maintaining harbours
- 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.

Donegal County Council Development Plan also set out a number of policies relevant to this review:

MRCM-P-10: It is the policy of the council to ensure development proposals do not compromise the recreational amenity and environmental quality of coastal area including flag beaches, Natura 200 sites and area of Especially high Scenic Amenity.

Water Quality Status

Water Framework Directive

Coastal and Transitional Waterbody Status results are recorded in accordance with European Communities (Water Policy) Regulations 2003 (SI No. 722/2003). The regulation objectives include the attainment of good status in waterbodies that are of lesser status at present and retaining good status or better where such status exists at present by 22nd December 2015. The water quality status of Dungloe coastal waterbody (IE_NW_140_0000) is 'Unassigned' for the 2010-2015 reporting period.

5.5 Man-made heritage

There are a number of recorded national monuments in and around Dungloe Bay and Rutland Island and Sound SAC. Sites and features of importance include burial grounds, a promontory fort and shell middens. Online query of the Historic Environment Viewer of the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs allows access to the Site and Monuments Record database. Data for townlands in close proximity to the licence application sites is presented in Table 5 below. None of the listed features are considered to be close to the licence application under review and are not considered to be vulnerable to effects of the existing or proposed additional aquaculture activity within the area.

Table 5. Sites of interest near the licence application sites.

Monument Identifier	Notes	Class
DG01281	A disused graveyard with a number of 19 th century tombstones	Burial ground
DG01280	A triangular promontory fort.	Coastal

		promontory fort
DG01279	Middens containing shells and fish bones.	Midden
DG02826	A castle recorded in 1835	Fortification

In addition, details of features surrounding Dungloe Bay recorded under the National Inventory of Architectural Heritage are available via the Historic Environment Viewer of the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs. The closest features to the site under review is Dungloe pier approximately 8km to the east. None of the listed features recorded under the National Inventory of Architectural Heritage are considered to be vulnerable to effects of the proposed aquaculture activity.

6.0 Section 61 Assessment

6.1 Site Suitability

The site for which the granting of aquaculture and foreshore licences is under appeal is **suitable** for the growing of oysters in bags on trestles for the following reasons:

- The waters are sheltered except to the Southwest though reefs present on site should minimise any waves from this direction
- Large parts of the site have firm substrates of sand overlying rock
- Oysters have been successfully grown within Dungloe Bay at sixteen (16) licensed sites for a number of years
- The tidal regime at the site is suitable for intertidal oyster growing
- There is a good depth range at the site from subtidal to intertidal allowing culture of seed and mature oysters
- There is no visual impact to the surrounding area impact from licencing the site

The site for which aquaculture and foreshore licence applications are being considered under the present appeal is **not suitable** for the intertidal trestle culture of oysters for the following reasons:

- The site is not located in designated shellfish waters
- The site is not within a classified area for production of live bivalve molluscs
- The application site is located in Rutland Island and Sound Special Area of Conservation. Rutland Island and Sound SAC is of national importance for the

Harbour seal supporting 7% of the national population. All aspects of this species life cycle occur within the SAC, resting, feeding, moulting and pupping. Harbour seals are found within the SAC year-round. The most recent survey undertaken in 2017 -2018 (Morris and Duck 2019) recorded 284 seals within the SAC. Previous imaging surveys recorded 268 seals in 2003 and 230 seals in 2011/12.

- Limited information is available on the harbour seals aquatic habitat use between October and May and as such all suitable aquatic habitat is considered relevant to this species range and requirements at this SAC (NPWS 2013).
- Harbour seals are vulnerable to disturbance during periods spent ashore or in shallow water. Breeding and moulting periods are particularly sensitive times for disturbance. Site T12/513 is located close to a number of known harbour seal moulting sites.
- The moulting process is considered intensive and energetically demanding. Moulting harbour seals have been observed to be reluctant to enter the water due to disturbance (Henry and Hamil 2001). Site T12/513 is located close to a number of known harbour seal moulting sites.
- Knowledge of breeding locations within Rutland Island and Sound are limited.
- The Appropriate Assessment (AA) supporting document completed by the Marine Institute on the behalf of DAFM acknowledged the spatial overlap of previously licenced aquaculture sites and those seeking licencing with important harbour seal habitat.
- The Marine Institute Appropriate Assessment supporting document recognised that disturbance associated with aquaculture activities could potentially negatively impact the conservation status of the harbour seal in the SAC.
- The AA supporting document recommends an approximate buffer zone of 200m between aquaculture sites and access routes and known harbour seal habitat. It further recognises that with some aquaculture licence applications it may not be possible to mitigate or reduce the risk of seal disturbance.
- There are three (3) NPWS recognised harbour seal moulting sites in the vicinity of Inishmeal. Two of these sites are less than two hundred metres from the proposed aquaculture site boundary (Figure 5)
- Licensing of the site is not consistent with the conservation objectives of Rutland Island and Sound SAC with regard to the harbour seal, *Phoca vitulina*.

6.2 Other uses

Tourism and leisure

A range of other users have an interest in Dungloe Bay and Rutland Island and Sound SAC. These include walkers, canoeists, sea kayakers and recreational anglers. This area of Dungloe Bay south of Burtonport is unlikely to be used by bathers due to access issues. There are a small number of commercial users utilising the sound and bay area to offer water based leisure activities, sea safari and heritage water borne tours. Given the location of the site under appeal and the area of operation of the commercial ventures it is unlikely that they would be negatively impacted by licencing the aquaculture venture.

Angling

There are no known shore fishing marks in the vicinity of the aquaculture site under appeal. Boat fishing from Burtonport targets reef areas in the sound and around Arranmore Island primarily. Given the position of site associated structures and their shallow sub-tidal intertidal nature it seems unlikely that the aquaculture site will affect angling in the Dungloe Bay area.

Commercial fisheries

Commercial fishing activity in Dungloe Bay and the SAC is limited to pot fisheries for lobster, crab and shrimp. Ten (10) vessels are involved in the shrimp fishery and an unknown number with the lobster and crab fishery. Given that this aquaculture site has a sub-tidal component there is a possibility that it will displace some commercial pot fishing. However, given the small area of the site likely to overlap with inshore fishing and its mostly intertidal nature it is unlikely that any displacement of fishing activity will negatively impact commercial fishery interests in the area.

Seaweed harvesting

Given the small area of the proposed aquaculture site and the area for potential seaweed harvesting within the SAC it is unlikely that licensing of the site T12/513 would have a significant impact on sea weed harvesting in the SAC

Licensing of the application site does not have potential to impact negatively on other users of Dungloe Bay and Rutland Island and Sound SAC.

6.3 Statutory Status

The proposed aquaculture site is located in Rutland Island and Sound SAC (site code:002283) and is adjacent to Illancrone and Inishkeeragh SPA (site code: 004132) . Special Areas of Conservation (SAC's) are established under the EU Habitats Directive (92/43/EEC). Special Protection Areas (SPA's) established under the EU Birds Directive (79/409/EEC). Both the Habitats Directive and the Birds Directive are transposed into

Irish law by the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011).

Rutland Island and Sound SAC contains a nationally significant population of Harbour seals, *Phoca vitulina*. The most recent survey was conducted in 2017 and 284 animals were counted during the annual moult. All aspects of this species life history take place within the SAC.

Large areas of Dungloe Bay are Classified Bivalve Mollusc Production Areas, in accordance with Regulation (EC) No 854/2004. The classification is A from February to August and B for the rest of the year. Under classification A, live bivalve shellfish can be supplied directly for human consumption. Under Classification B live bivalves can be supplied for human consumption after one of three processes. The options are:

- purification in an approved establishment
- relaying for at least one month in a classified Class A relaying area
- an EC approved heat treatment process

The Directive aims to protect and improve shellfish waters in order to support shellfish life and growth and is designed to protect the aquatic habitat of bivalve and gastropod molluscs, which includes mussels, scallops, clams, oysters and cockles. The Directive requires Member States to designate waters that need protection in order to support shellfish life and growth, and then establish pollution reduction programmes for the designated waters. The European Communities (Quality of Shellfish Waters) Regulations 2006 (as amended)(S.I. No 268 of 2006) gives effect to the Directive in Ireland. The site under review is not located in designated shellfish waters.

Inishmeal Island, Rutland Island and Inishfree Island are designated areas of especially High Scenic Amenity in the County Donegal Development Plan. The mainland to the east of the proposed site is designated as being of High Scenic Amenity. However, there are no designated views that include Inishmeal island or the site under review. Visibility of the site is low from the mainland and any impact to marine views is considered moderate.

Licensing of the aquaculture application site has potential to impact negatively on features that underpin the SAC designations for Rutland Island and Sound.

6.4 Economic effects

The Appellant projects that when in full production the licensed aquaculture site will require two (2) full time and two (2) part time employees. Accordingly the development of this site is likely to have a small positive impact on the local economy.

The granting of the aquaculture and foreshore licence under appeal will have a small positive economic impact on the local economy.

6.5 Ecological Effects

Licensing of the aquaculture site under review within Rutland Island and Sound SAC will have a number of ecological impacts, some of which may be significant.

Fish

Dungloe Bay is likely to act as a nursery for early life stages for a range of marine fishes. Further licensing of aquaculture sites may provide enhanced refuge for fish species that are attracted to the habitat that trestles create.

Mammals

Oyster trestles may provide refuge for certain fish species during immersion and may provide foraging opportunities for seals and otters. Otters a designated species in the adjacent Gweedore Bay and Islands SAC may migrate to Rutland Island and Sound SAC to forage.

Rutland Island and Sound SAC is designated for Harbour seals, *Phoca vitulina*. The SAC supports a nationally important population of Harbour seals. In the most recent national survey, 2017 – 2018, 284 seals were counted, the third highest count in the country.

To maintain the favourable conservation status of *P. vitulina*, the harbour seal, within Rutland Island and Sound SAC a number of targets are defined by the National Parks and Wildlife Service (NPWS 2013) :

Target 1) Species range should not be restricted by artificial barriers.

Proposed activities or operations that will result in permanent exclusion or permanently prevent access to suitable habitat.

Target 2) To conserve the breeding haul-out sites in a natural condition

Target 3) Conserve the moult haul-out sites in a natural condition

This target is relevant to proposed activities or operations resulting in significant disturbance or interference with a) moulting behaviour or b) aquatic/terrestrial/intertidal habitat used during the moult.

Proposed activities or operations that cause displacement from moult haul-out sites or alteration of natural moulting behaviour to an extent that may ultimately interfere with key ecological functions would be regarded as significant.

Target 4) Conserve the resting haul-out sites in natural condition

As for target 3.

Target 5) Human activities should occur at levels that do not adversely affect the harbour seal population at the site

Proposed activities or operations should not introduce man made energy including aerial noise that could result in significant negative impacts to individuals and/or the population of harbour seals within the site. This refers to both the aquatic and terrestrial/intertidal habitats used by the species in addition to important natural behaviours during the species' annual cycle.

This target also relates to proposed activities or operations that may result in the deterioration of key resources (e.g. water quality, feeding, etc) upon which harbour seals depend. In the absence of complete knowledge on the species' ecological requirements in this site, such considerations should be assessed where appropriate on a case-by-case basis.

The AA supporting document completed by the Marine Institute with regard to the impacts of already licenced and proposed aquaculture sites within Rutland Island and Sound SAC on harbour seals noted that no published studies have examined the ecological impacts on harbour seals of aquaculture activities. The AA supporting document acknowledged disturbance associated with aquaculture activities may lead to displacement of seals from suitable habitat and lead to changes in distribution within a site.

With regard to disturbance of seals the AA supporting document notes that published data suggests the distance at which observable disturbance of seals occurs varies from 80m to 1000m. Buffer zones to prevent disturbance vary but in Dutch Wadden Sea a buffer zone of 1500m is set around haul out sites in marine protected areas to prevent seal disturbance. With regard to seal haul out sites in marine Special Areas of Conservation in Ireland the Marine Institute considers 'approximately 200m' to be a large enough buffer to prevent seal disturbance from human activities.

The AA supporting document notes the overlap of aquaculture both licenced and proposed with important harbour seal habitat in the SAC and that these activities are disturbing and have the potential to negatively impact the abundance and distribution of harbour seals in the SAC.

The AA supporting document concludes with regard to new applications: "Many of the proposed aquaculture sites (applications) directly overlap or have access routes that run very close to seal haul-out locations. There would appear to be a strong potential for disturbance and possible access issues if these applications are granted and fully developed. While in some instances the

application sites might be truncated to minimise the potential impact on seal haul-out areas, in others there are no obvious measures possible that might mitigate or reduce the risk, so the impacts on the seal conservation features from these proposed activities **cannot be discounted**, in particular at sites where seals may be naive to development activities.”

The proposed aquaculture site T12/513 has the potential to negatively impact the conservation objectives as set out by the NPWS for Rutland Island and Sound SAC. With regard to specific targets licensing of site T12/513 has:

- the potential to prevent access to suitable moulting habitat on the southern shore of Inishmeal Island
- Cause significant disturbance of moulting behaviour and moulting habitat use at Inishmeal Island due to the overlap of the suggested buffer zone and the proposed site (Figure 5)
- Cause significant disturbance of resting behaviour and resting habitat use at Inishmeal Island

Habitats

An AA supporting document was completed by the Marine Institute in relation to aquaculture impacts at Rutland Island and Sound. A number of Natura 2000 features of interest were screened out of full assessment. A full assessment was then carried out for the likely impacts of aquaculture operations and features of interest for the Annex I habitats Large shallow inlets and Bays (1160) and Reefs (1170).

The impacts of existing and proposed aquaculture activities were considered for the constituent communities of Annex I habitat 1160 that overlaps with the existing and proposed aquaculture sites: Sand with *Tellina sp.* and *Periiculodes longimanus* community complex and intertidal reef community. Published literature considers oyster trestles non-disturbing to sand with *Tellina sp.* and *Periiculodes longimanus* community complex. The AA supporting document conclusion for this community type was that intertidal oyster trestle aquaculture would have no significant impact on this community type.

Oyster trestle culture is considered disturbing to the intertidal reef community due to shading. However, the overlap of existing and proposed aquaculture sites with this community was estimated at 4.87 %, substantially less than the 15 % overlap where this disturbance would be considered significant.

The impacts of existing and proposed aquaculture activities were considered for the constituent communities of Annex I habitat 1170 that overlaps with existing and

proposed aquaculture sites: Intertidal reef community. Oyster trestle culture is considered disturbing to the intertidal reef community due to shading. However, the overlap of existing and proposed aquaculture sites with this community was estimated at 4.87 %, substantially less than the 15 % overlap where this would be considered significant.

Though the AA supporting document also considered the impact of access routes on constituent communities in designated habitats this is not considered of relevance to this review as the proposed access to site T12/513 under review was by sea.

Licensing of the proposed aquaculture site has the potential to have significant impacts on the ecology of Dungloe Bay and Rutland Island and Sound SAC. Significant impacts on the ecology of harbour seals that utilise the site for all aspects of their life history are likely if the proposed activity goes ahead.

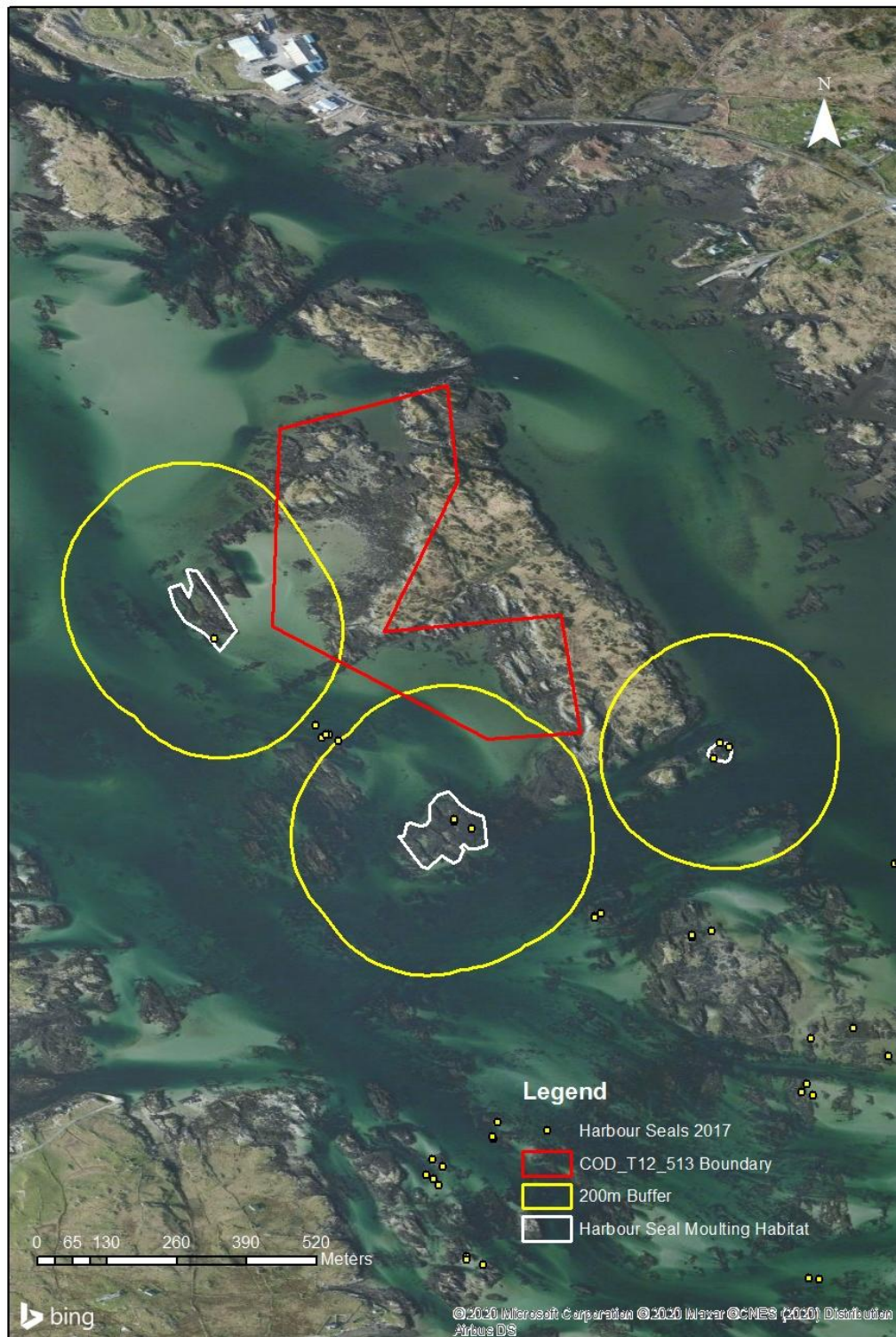


Figure 5. The suggested 200m buffer around seal moulting habitat and its overlap with the site under appeal T12/513.

6.6 General Environmental Effects

- As outlined in the Appropriate Assessment Concluding Statement for Rutland Island and Sound SAC, the culture of large volumes of Pacific oysters may increase the risk of naturalisation of *C. gigas* within Dungloe Bay and Rutland Island and Sound SAC.
- The introduction to Dungloe Bay / Rutland Island and Sound SAC of non-native species as 'hitchhikers' on and among culture stock is also considered a risk.

Licensing of the proposed aquaculture activity could have significant environmental impacts on Rutland Island and Sound SAC.

6.7 Effect on man-made heritage

The proposed licensing of the site being considered in the appeal will not significantly impact the known man-made heritage of the area, including coastal features, intertidal and subtidal features.

Licensing of the application site is unlikely to give rise to significant impacts on the man-made heritage of the area.

6.8 Section 61 Assessment Conclusions

Site Suitability

The site application under appeal is **suitable** for trestle oyster culture for the following reasons:

1. *Dungloe Bay, Rutland Island and Sound SAC has a well-established Pacific oyster aquaculture industry.*
2. *The physical characteristics of the site under review are suitable for the culture of oysters on trestles*
3. *There is no visual impact from the proposed site on the surrounding area due to its location.*

The site application under appeal is **not suitable** for trestle oyster culture for the following reasons:

1. *The application site is located in Rutland Island and Sound Special Area of Conservation. Rutland Island and Sound SAC is of national importance for the Harbour seal, *Phoca vitulina*. All aspects of this species life cycle occur within the SAC, resting, feeding, moulting and pupping. Harbour seals are found within the SAC year-round.*

2. *The AA supporting document recommends an approximate buffer zone of 200m between aquaculture sites and access routes and known harbour seal habitat. It further recognises that with some aquaculture licence applications it may not be possible to mitigate or reduce the risk of seal disturbance.*
3. *The site under review T12/513 is located to the south west of Inishmeal Island in Dungloe Bay. Two recognised harbour seal moulting sites are found on this island and in both cases they are less than two hundred metres from the proposed site boundary*
4. *Licensing of the site is not consistent with the conservation objectives of Rutland Island and Sound SAC*
5. *The proposed site is not located within designated shellfish waters*
6. *The proposed site is not within a SFPA classified area for oyster production*

Other Uses

*The proposed site would have **no significant effect** on other users for the following reasons:*

1. *No other significant use of the site was identified during the technical review*

Statutory Status

The proposed aquaculture site would have a **significant adverse** impact on the statutory status of the area for the following reasons:

1. *The licensing of new aquaculture sites in Rutland Island and Sound SAC (in addition to existing sites) was recognised in the AA to have the potential to adversely impact the conservation objectives for the harbour seal within the SAC*
2. *Two recognised haul out sites are present on Inishmeal Island the location of the proposed site. Disturbance at these sites is contrary to the conservation objectives for the SAC.*

The proposed aquaculture site would have a **non-significant adverse** impact on the statutory status of the area for the following reasons:

1. *Rutland Island and Sound is designated as an SAC for a number of Annex I habitats. Two Annex I habitats have the potential to be impacted by this development, 'Large shallow Inlets and Bays' and 'Reefs'. Communities within these habitats that overlapped with existing and proposed aquaculture activities within the SAC were not considered to be significantly impacted. The area of overlap of these communities with existing and proposed aquaculture activity was substantially less than 15%, the threshold at which overlap is considered significant.*
2. *Various islands within the vicinity of the proposed site are designated scenic amenity areas, however, there are no designated views of Inishmeal Island and*

the proposed aquaculture site. Visibility of the site is low from the mainland and any impact to marine views is considered moderate.

Economic effects

The proposed development would have a **small positive** impact on the local economy for the following reasons:

1. *Two full-time and two part-time positions would be created by the licensing of this development.*

Ecological Effects

Seals

The proposed development would have a **significant adverse** impact on the ecology of the area for the following reasons:

1. *It is likely that displacement of seals from moulting habitat would occur through disturbance from licensing the proposed aquaculture site. The site is less than 200m from known moulting sites.*
2. *Seals would potentially be prevented from accessing moulting and resting habitat by site structures from licensing the proposed aquaculture site*
3. *It is possible that displacement of seals from resting habitat would occur through disturbance from licensing the proposed aquaculture site*

Fish

The proposed development would have a **non-significant beneficial** impact on wild fish for the following reasons:

1. *Placement of additional trestles on the foreshore could lead to the creation of further juvenile fish refuge habitat. Further wetted surfaces may support algal growth and colonisation and therefore foraging opportunities for juvenile fish.*

General Environmental Effects

The proposed development is unlikely to lead to **significant adverse** general environmental effects for the following reasons:

1. *As outlined in the Appropriate Assessment Concluding Statement, all future oyster licences granted in Dungloe Bay will be for culture of triploid seed only.*
2. *The introduction of non-native species as 'hitchhikers'. While there is minimal risk associated with the introduction of hitchhiker species with hatchery reared oyster seed, the risk posed by the introduction of '1/2-grown' or 'wild' seed originating from another jurisdiction (e.g. Britain, France) cannot be discounted. However, as outlined in the AA Concluding Statement, the source of seed and any changes to the source of seed are to be approved by the Department of Agriculture, Food and the Marine in advance, while movement*

of stock in and out of the Rutland Island and Sound SAC should adhere to relevant fish health legislation.

Man-made Heritage

The proposed development would have **no effect** man made heritage effects for the following reasons:

1. *No known sites occur within the vicinity of the proposed development*

6.9 Confirmation re Section 50 Notices

There are no pertinent matters arising outside of the Section 61 assessment which the Board ought to take into account which have not been raised in the appeal documents. It is therefore not necessary to give notice in writing to any parties in accordance with Section 50(2) of the 1997 Act.

7.0 Screening for Environmental Impact Assessment

Under S.I. No. 468/2012 - Aquaculture Appeals (Environmental Impact Assessment) Regulations 2012 an Environmental Impact Statement is required for aquaculture the Board determines would be likely to have significant effects on the environment. The Ministers file does not indicate that a pre-screening for EIA has taken place.

Environmental impact assessment means an assessment, to include an examination, analysis and evaluation to identify, describe and assess the effects of certain public and private projects on the environment including the direct and indirect effects of a proposed development on the following:

- (a) Human beings, flora and fauna
- (b) Soil, water, air, climate and the landscape,
- (c) Material assets and the cultural heritage, and
- (d) The interaction between the factors mentioned in paragraphs (a), (b) and (c) above

Having reviewed the proposed aquaculture licence application in relation to potential impacts on the elements listed above (a to d) and notwithstanding previous determinations with respect to potential impacts on conservation objectives for harbour seals of Rutland Island Special Area of Conservation, it is the opinion of the Technical Advisor that the proposed aquaculture site and its operation is unlikely to have significant effects on the environment by virtue of inter alia, its nature, size or location.

8.0 Screening for Appropriate Assessment.

An Appropriate Assessment was carried out by the Marine Institute on behalf of the Department of Agriculture, Fisheries and Marine to examine the impacts of aquaculture and fisheries on Natura 2000 features for the Rutland Island and Sound SAC (site code 002283).

A number of Natura 2000 features of interest were screened out of full assessment. A full assessment was then carried out for the likely impacts of aquaculture operations and features of interest for the Annex I habitats Large shallow inlets and Bays (1160) and Reefs (1170).

The impacts of existing and proposed aquaculture activities were considered for the constituent communities of Annex I habitat 1160 that overlaps with the existing and proposed aquaculture sites: Sand with *Tellina sp.* and *Periculodes longimanus* community complex and intertidal reef community. Published literature considers oyster trestles non-disturbing to sand with *Tellina sp.* and *Periculodes longimanus* community complex. The AA conclusion for this community type was that intertidal oyster trestle aquaculture would have no significant impact on this community type.

Oyster trestle culture is considered disturbing to the intertidal reef community due to shading. However, the overlap of existing and proposed aquaculture sites with this community was estimated at 4.87 %, substantially less than the 15 % overlap where this disturbance would be considered significant.

The impacts of existing and proposed aquaculture activities were considered for the constituent communities of Annex I habitat 1170 that overlaps with existing and proposed aquaculture sites: Intertidal reef community. Oyster trestle culture is considered disturbing to the intertidal reef community due to shading. However, the overlap of existing and proposed aquaculture sites with this community was estimated at 4.87 %, substantially less than the 15 % overlap where this would be considered significant.

Though the AA supporting document also considered the impact of access routes on constituent communities in designated habitats this is not considered of relevance to this review as the proposed access to site T12/513 under review was by sea.

With regard to harbour seals a qualifying feature of Rutland Island and Sound SAC the AA supporting document concluded:

“Many of the proposed aquaculture sites (applications) directly overlap or have access routes that run very close to seal haul-out locations. There would appear to be a strong potential for disturbance and possible access issues if these applications are granted and fully developed. While in some instances the application sites might be truncated to minimise the potential impact on seal haul-out areas, in others there are no obvious measures possible that might

mitigate or reduce the risk, so the impacts on the seal conservation features from these proposed activities **cannot be discounted**, in particular at sites where seals may be naive to development activities.”

Based on the AA the technical advisors review finds that there is scientific uncertainty as to the impacts on maintaining favourable conservation status for harbour seals within the Rutland Island and Sound SAC by granting new aquaculture licences. Furthermore, it is apparent that no published data are available that confirms that a 200m buffer around suitable seal habitat will eliminate risks of causing disturbance to harbour seals through human activity.

9.0 Technical Advisor’s Evaluation of the Substantive Issues in Respect of Appeal and Submissions/Observations Received

1. Moulting takes place during a short period in the late summer (July/August)

Within the Rutland Island and Sound SAC a nationally important population of harbour seals complete all aspects of their life history: resting, feeding, moulting and breeding. The NPWS acknowledges in the Conservation objectives supporting document for Rutland Island and Sound that:

- Limited information is available on habitat use between October and May within the SAC.
- Information on breeding sites within the SAC is limited, only six breeding sites have been identified within the SAC.
- Information on resting site habitat within the SAC is limited
- Information on moulting site habitat use is based on 3 national surveys

In order to improve the accuracy of seal population estimates the surveys undertaken so far have taken place during the moult, which takes place between August and September. Given that only three surveys have been conducted to estimate harbour seal numbers nationally since 2003 it is our opinion that a thorough understanding of harbour seal habitat use is lacking within Rutland Island And Sound SAC. There is no evidence that harbour seals do not breed or rest at sites identified during previous moult surveys. Though moulting is confined to a two month period of the year, there is no evidence to suggest that reefs identified as moulting habitat in previous surveys are not under constant use as resting haul outs by the harbour seal population.

The conservation objective for harbour seals within Rutland Island and Sound SAC is to maintain favourable conservation condition of the species which is defined by a number of attributes and targets by the NPWS:

1) Species range should not be restricted by artificial barriers.

Large numbers of oyster trestles at the proposed site may impede the movement of seals to and from moulting, breeding or resting habitat at certain states of tide.

2) Conserve breeding habitat in a natural state.

There is no evidence to suggest that breeding does not occur within the vicinity of the proposed site. Licensing of the site would likely cause displacement of breeding animals from the site.

3) Conserve moulting habitat in a natural state.

Moulting occurs at numerous sites around the proposed site. Licensing of the site would likely cause significant disturbance to moulting individuals.

4) Conserve the resting habitat in a natural state

Knowledge of resting sites within the SAC is poor, however, there is no data available that suggests resting haul out sites do not occur within the vicinity of the proposed site. Licensing of the site would likely cause significant disturbance to resting individuals.

There is no evidence that suitable habitat in the vicinity of the proposed site is not used year round for all aspects of the harbour seals life cycle.

10.0 Recommendation of Technical Advisor with Reasons and Considerations.

The grounds for appeal (substantive issues) have been considered, evaluated and responded to in previous sections of the evaluation report. The reasoning and considerations of the Technical Advisor with respect to the appeal are provided below and a final recommendation to the Board follows.

Rutland Island and Sound is a SAC. The SAC supports a nationally important population of the harbour seal, *Phoca vitulina*, and the habitats within the SAC support all aspects of the seals life cycle. There is a high probability that previously licensed aquaculture sites within the SAC have displaced seals from historic habitat.

Habitat use for all aspects of the harbour seals life cycle are poorly understood within the SAC. The proposed aquaculture site under review falls within the buffer zone of a number of recorded seal moulting habitats in the vicinity of Inishmeal Island. It is highly probable that further seal habitats occur in the near vicinity and that suitable sites are used year-round.

Considering the potential for displacement and disturbance of harbour seals and the potential for negative impacts to the conservation status of harbour seals within the SAC it is recommended that the Ministers decision be upheld and that the aquaculture and foreshore licence applications that are the subject of this appeal are not granted.

The recommendation is based on the geographic position of the proposed site as indicated by the polygon represented by the set of 8 Irish National Grid co-ordinates provided on page 13 of the application. These co-ordinates place the site somewhat further east and at a greater distance from nearby harbour seal haul out sites located to the west and southwest of Inishmeal than does the site location as indicated in the 1:10000 scale drawing provided in the application. However, accounting for any disparity in the location of the application site as represented by type written co-ordinates and the application site layout drawing, in either case it is apparent that the site could not be developed whilst heeding the Marine Institute's recommended buffer zone of 200m between aquaculture sites and access routes and known harbour seal habitat. Accordingly, the recommendation to uphold the Ministers decision is made based on the site being located as shown in the 1:10000 scale drawing and as also indicated by the co-ordinates provided on page 13 of the application.

11.0 Draft Determination Refusal /or Grant

It is recommended that the Minister's decision to refuse granting of aquaculture and foreshore licences in respect of the applications for site reference T12/513 be upheld.

Technical Advisor: MERC Consultants

Date: 26/10/2020

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