



Appeal Ref No. AP09/2018

Aquaculture Licences Appeals Board



Technical Advisor's Report T05/545

Ballymacoda

Final Version

February 28th 2020



Summary

Description	Appeal against the decision of the Minister of Agriculture, Food and Marine to refuse an Aquaculture licence to Mr Killian Tighe, Mr Marc Perdriel and Mr Michael Mousset for the cultivation of Pacific Oysters using bags and trestles at Ballymacoda Bay Co Cork
Licence Application	T05/545
Appeal Reference	AP9/2018
Department Reference No.	00413-18
Applicant	Mr Killian Tighe, Mr Marc Perdriel and Mr Michael Mousset
Minister's Decision	The decision of the Minister of Agriculture, Food and Marine was to refuse an Aquaculture licence to Mr Killian Tighe, Mr Marc Perdriel and Mr Michael Mousset for the cultivation of Pacific Oysters using bags and trestles at Ballymacoda Bay Co Cork
Appeal	Appeal by Mr. Killian Tighe and Mr Marc Perdriel against the decision of the Minister of Agriculture, Food and Marine to refuse the licence applied for T05/545
Appellant	Mr Killian Tighe and Mr Marc Perdriel
Technical Advisor	Marie Louise Heffernan CEnv, MCIEEM, MSc Aster Environmental Consultants Limited www.aster.ie
Site Inspection	11/04/2019

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1.0 General Matters / Appeal Details

1.1 Appeal Details & Observer Comments / Submissions

Date Appeal Received: 23/08/18
Location of Site Appealed: Ballymacoda Co. Cork

1.2 Name of Appellant

Marc Perdriel, La Dune, H230 France

Killian Tighe, Rossleague, Cobh, Co.Cork and 3 Harbour Row, Cobh, Co. Cork

Note Mr Michael Mousset an applicant is not named as an appellant

1.3 Name of Observer

No observers

1.4 Grounds for Appeal

The grounds for appeal are, in summary:

1. The site is suitable for aquaculture and the applicants have been farming adjoining areas since 2006
2. This application is in deep water partially exposed for only part of the tidal cycle and they feel it is compatible with bird conservation.

Substantive Issues

1. Site Suitability

The appellant has been growing oysters at Ballymacoda successfully since 2006

2. Unsuitability of site for birds

The appellant has stated that the area is located in deep water and generally not exposed during the tidal cycle and thus they consider it unsuitable for birds. They also state that birds will feed on trestles, bags and ground presumably within the licenced area.

Non Substantive Issues

There were no issues arising

1.5 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 were received from the Minister or any other party in respect of this appeal.

1.6 Applicant response

As per Section 44 part 2 of the Fisheries" Amendment Act 1997 which states "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."

It should be noted that the Appellant is also the Applicant, as the appeal is in relation to the refusal of the Minister to grant aquaculture and Foreshore licences.

2.0 Consideration of Non-Substantive Issues

Each issue raised by the appellants is considered substantive and has been reviewed.

3.0 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 Appeal, the Minister's File, and carried out a site visit, there is sufficient evidence in this technical report to make a clear decision in relation to the appeal. As a result, it is felt that an Oral Hearing is not required in this case.

4.0 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:

1. Copy of the Application Form with maps, charts, co-ordinates and drawings
2. Copy of the Appropriate Assessment Report including Annex I and Annex II
4. Copy of submission to the Minister
5. Copy of relevant observations from technical advisors to the Minister
6. Copy of objections to Public Notice
7. Copy of the Minister's decision
8. Copy of Notification to the Applicant of Minister's Decision
9. Copy of the advertisement of Minister's Decision

5.0 Context of the Area

5.1 Physical descriptions

This bay is located north-east from Ballymacoda village to within about 6 km of the town of Youghal, Co. Cork. The bay is the estuary of the Womanagh River, a substantial river which drains a large agricultural catchment and divides the outer bay into two sections.



Photo 1: Ballymacoda Bay (Bing Maps)

The inner part of the estuary is well sheltered by a stabilized sandy peninsula (Ring peninsula). Intertidal mudflats and sandflats dominate and the sediment types vary from muds to muddy sands in the inner part, to fine rippled sands in the outer exposed part.



Photo 2: Rippled Sands of the outer bay (Adrian Heffernan Photography)

In the more sheltered areas the intertidal flats are colonised by mats of green algae (mostly *Enteromorpha* spp.), with brown seaweeds occurring on the rocky shores of the shingle spits. The main channel is flanked by saltmarshes and wet fields, much of the latter being improved for agriculture.

Ballymacoda village is small with just 185 people living there. Youghal is much larger at 7,101 individuals in the 2016 census.

Ballymacoda has a mid oceanic climate. Relatively speaking it is a dry part of Ireland with 976m of rain on average a year. As can be seen from the charts below the temperature is mild throughout the year normally ranging between 4 and 18 degrees.

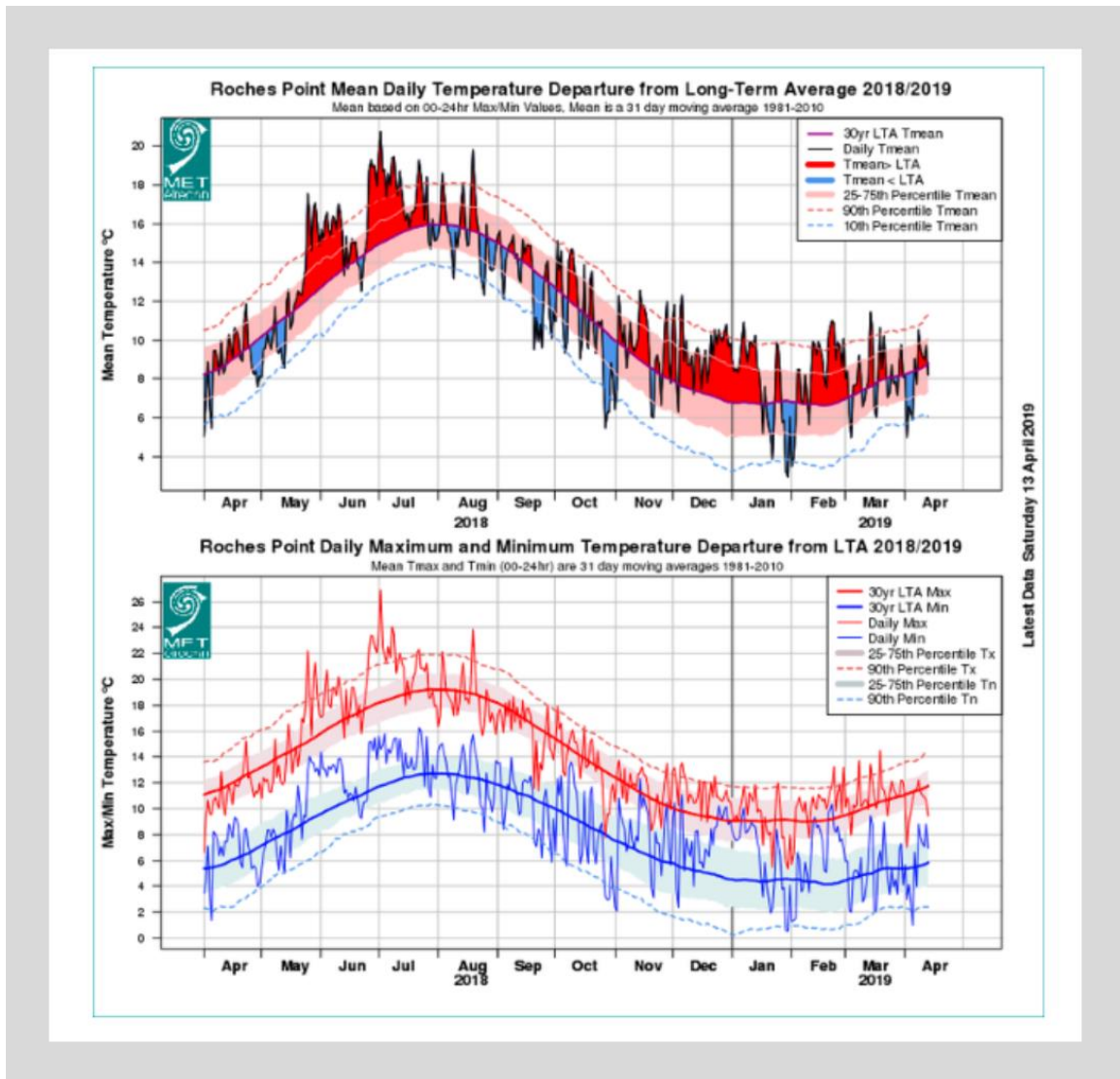
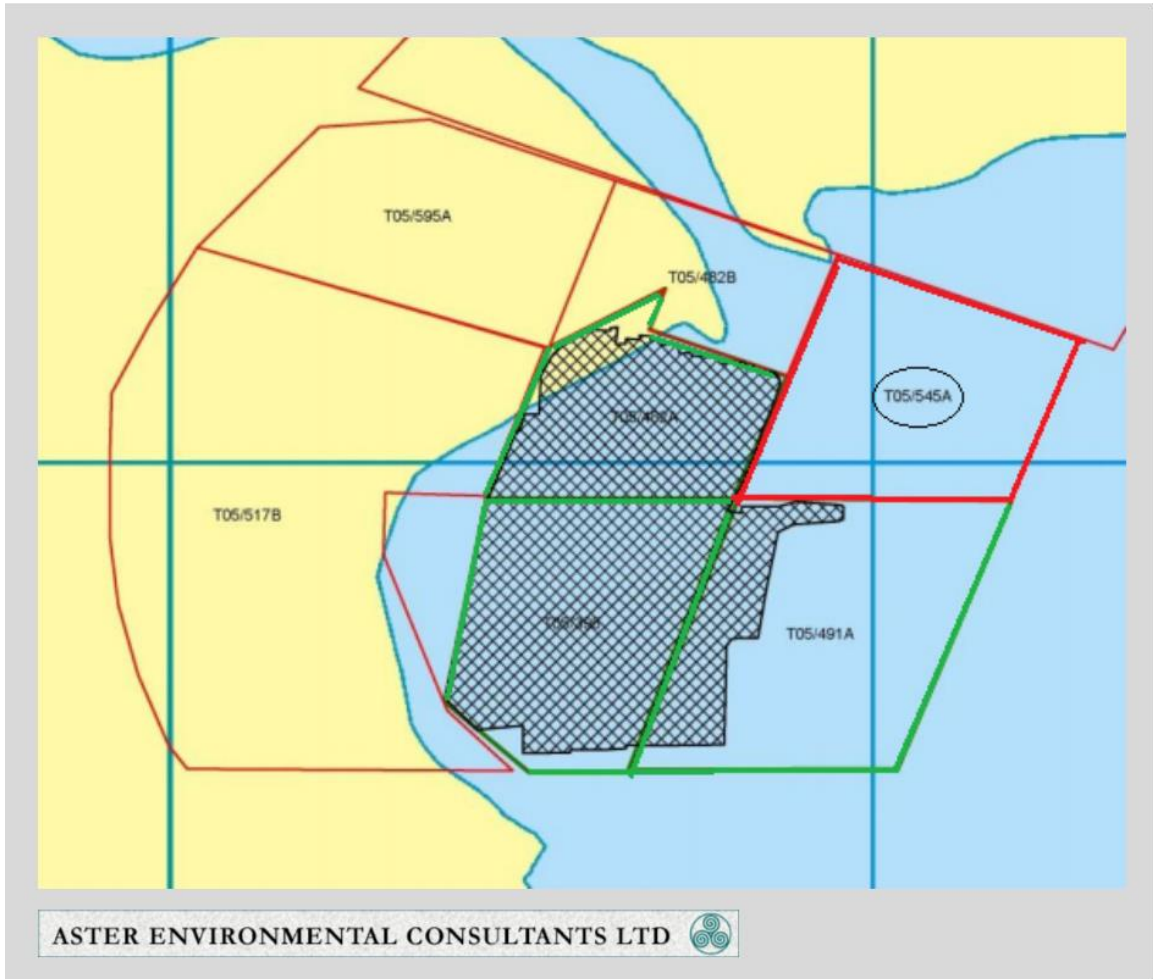


Figure 1: Temperature Data Roches Point

5.2 Resource Users

Aquaculture Activity

The Aquaculture Profile (BIM, 2016) notes that there have been licences issued dating back to 1997 for oysters and clams but none of these are now active. There has been ongoing oyster aquaculture on site since 2006.



Map 1: Footprint of trestles at Ballymacoda 2015 – source BIM (2016). Note renewal licences outlined in green and application T05/545 heavy red outline. Other licences to the west of these have been refused.

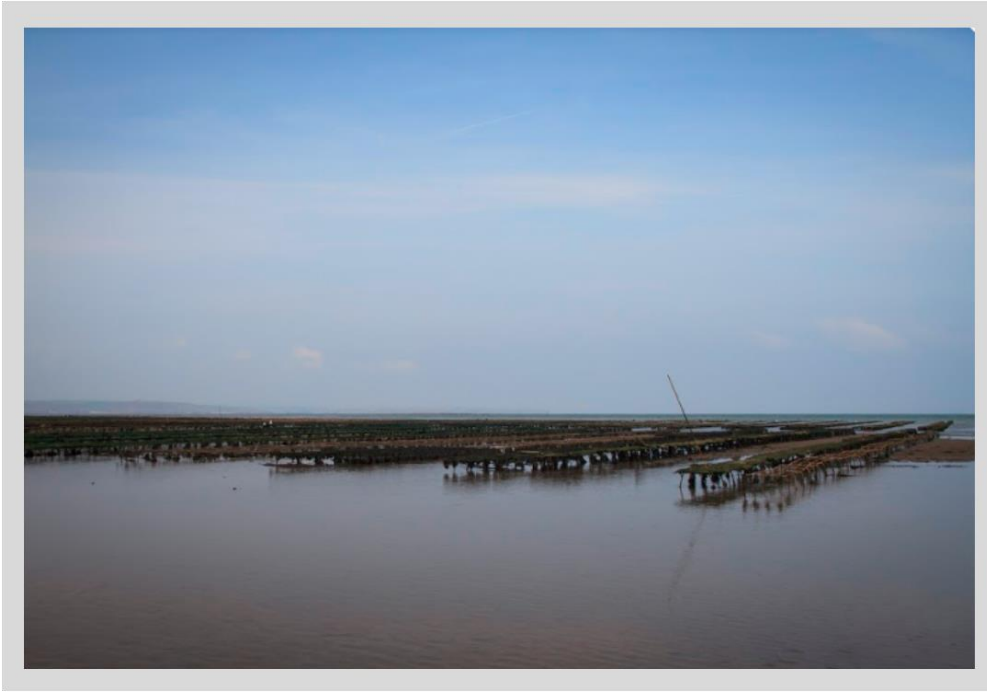


Photo 3: Trestles in rows intertidal Ballymacoda (Adrian Heffernan Photography)

Here pacific oysters are grown in bags on steel support called trestles in the intertidal zone. They are normally only accessible on low tides and during this tidal window the oysters are graded and rebagged to ensure optimum growth.

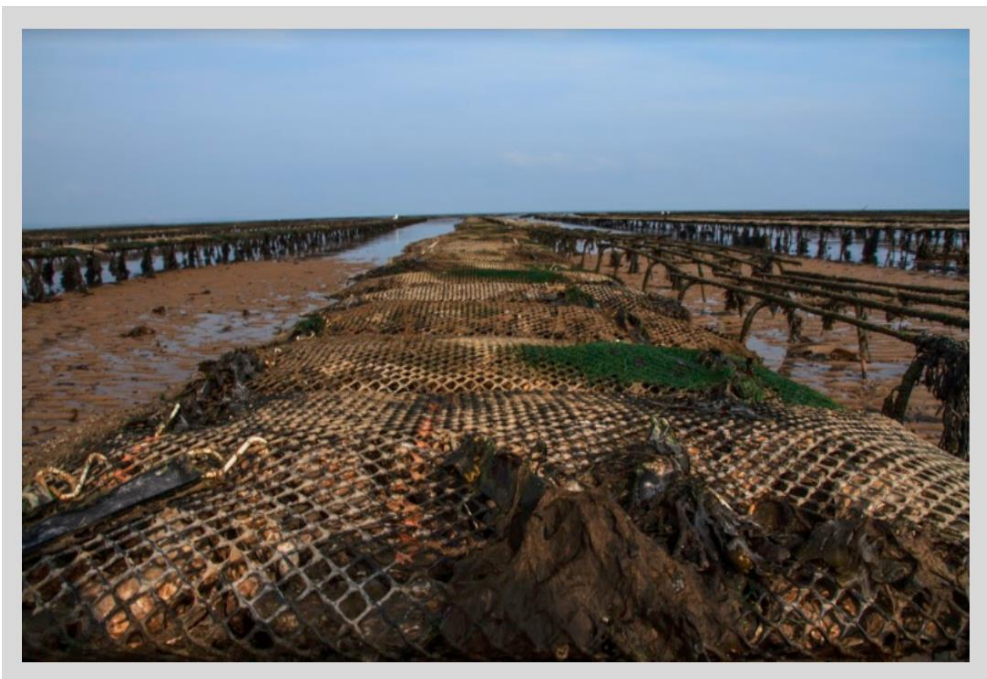


Photo 4: Close up view bags of oysters on trestles, Ballymacoda (Adrian Heffernan Photography)

Angling Activity

Angling activity consists of surf and bottom fishing for flounder plaice, dabs, black sole and dogfish. Codling and coalfish are also taken from the waters of Ballymacoda Bay in winter. There are occasional records of bass being caught.

According to Inland Fisheries Ireland the Womanagh River is used by salmonids. These may also be fished by anglers.

Inshore fishing Commercial

Various commercial inshore fishing activities are likely to occur adjacent to the site. Line fishing and other static methods (e.g. pots) are widespread within the bay (DoEHLG, 2009/Marine Institute 2019).



Map 2: Fishing Activity at Ballymacoda (source Marine Institute)

Bait Digging/Periwinkle picking

Bait digging is known from Ballymacoda bay. Target species are lugworm and ragworm and there are extracted by digging at low tide. Map 2 above shows dredge or cockle fishing and there is some periwinkle harvesting in the bay.

Leisure Users of the water body & surrounding area

The sandy outer sub-sites of Ballymacoda Bay are used widely for recreational walking including with dogs. A small amount of horse-riding also takes place in some of the same sandy outer sub-sites. Recreational shore angling is carried out at a number of locations around Ballymacoda Bay including at Ring Strand.

Tourism

The south west of Ireland is the most visited place for tourists with the greatest revenues outside Dublin. The Cork region attracts some 1.6million tourists annually and over 1.1 million domestic trips. The revenue from both is in the region of 830 million euro.

Agricultural Activity

The land in this area of Cork is very rich and productive. In 2010 the CSO carried out a detailed agricultural census by rural district. The data from the CSO 2010 in relation to Youghal area which encompasses Ballymacoda is as follows. In the Rural District Youghal No. 1 (CSO Area Code RD CK17) there are 275 farms of which 80 are greater than 50 ha in size. Total area farmed is 10,315 ha. Total crops grown occupy 1,380 ha with land given over to silage and hay 3,350 ha and grazing land around 5,700 ha.

The high level of pasture and silage/hay production reflects the fact that this is a dairy region with 21,327 cattle. Sheep numbers are considerably lower with just 3,706 recorded.

Total numbers of people working on the farms are 590 with only 21% of the landholders under 44 years old.

5.3 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.

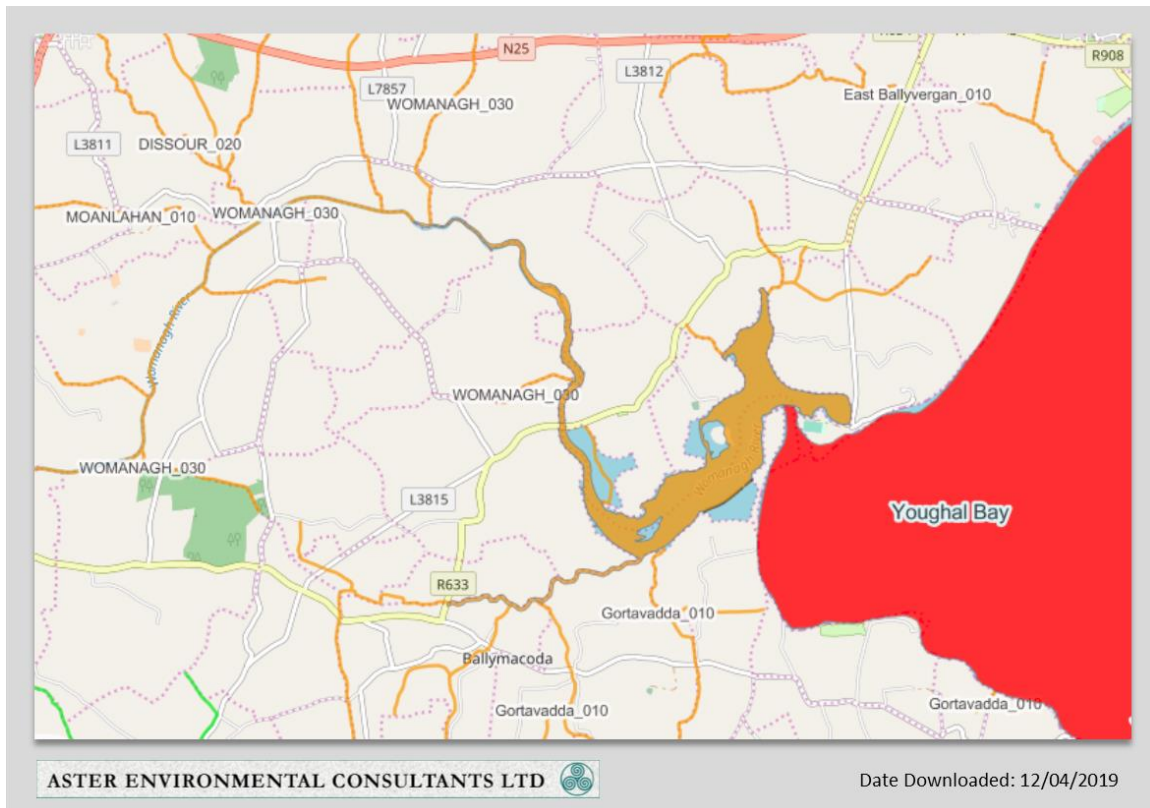
These are called River Basin Management Plans (RBMP's). RBMPs are plans to protect and improve the water environment. They are prepared and reviewed every six years. The first RBMPs covered the period 2010 to 2015. The second cycle plan covers the period 2018-2021 and was published by the Government on 17 April 2018. These plans include the rivers in the catchment of Ballymacoda Bay

The South Western River Basin District (SWRBD) River Basin Management Plan 2011 – 2015 covered the implementation of the Water Framework Directive (WFD) (2000/60/EEC) for the south-west coast of Ireland and covers Ballymacoda Bay and its inflowing rivers and streams (SWRBD, 2010a). This plan has some information relevant to the appeal area. The water quality status of Ballymacoda Estuary is 'moderate' according to the South Western River Basin Transitional and Coastal Waters Action Programme (SWRBD, 2010b) and therefore fails to meet the required standards as set by the Water Framework Directive.

Some insight to causative factors is given in the Womagh Water Management Unit Action Plan (SWRBD, 2010c) where the Womagh River itself was assigned a poor status in its lower reaches based on EPA water quality monitoring (Q-Index). The principal suspected causes of the less than satisfactory water in the catchment are discharges, principally of nutrients, from agricultural activities (diffuse pressures), septic tanks (diffuse source), and from waste water treatment plants (WWTP) (point source pressures)(DOHELG, 2009).

For the 2nd phase of the Water Framework Directive, the Eastern, South Eastern, South Western, Western and Shannon River Basin Districts have been merged to form one national River Basin District. No specific information on this catchment is presented (River Basin Management Plan for Ireland 2018 – 2021).

Water Framework Directive



Map 3: Water quality in the Ballymacoda Bay Catchment (Source EPA Maps)

WFD Monitoring Programme

Ballymacoda Bay has two substantial rivers entering it and several smaller ones. All are classified as WFD status poor. High water quality is blue, good quality is green, moderate is yellow and poor quality is orange.

The coastal waters of Youghal Bay are considered to be “at risk” under the Water Framework Directive.

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.

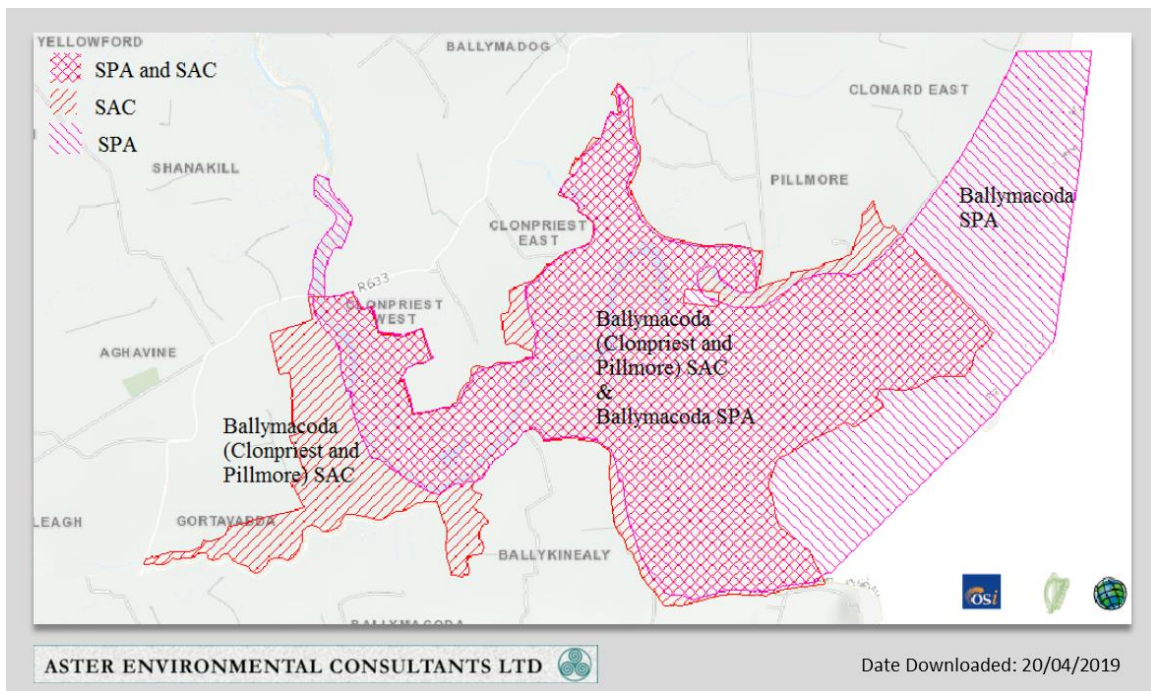
Shellfish production areas in Ireland are categorised based on the level of treatment that shellfish require prior to being sold. The best category (Class A) is where shellfish can be sold directly with no pretreatment. Class B requires purification for 48 hours, while Class C is the lowest category 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)). In 2018/2019 List of Classified Bivalve Mollusc Production Areas in Ireland (26 June 2018) Ballymacoda Bay is classified as Class B.

5.4 Statutory Status

Nature Conservation Designations

The proposed licenced area is within the Ballymacoda Bay SPA (Site code 004023) is just outside the Ballymacoda (Clonpriest and Pillmore) SAC (Site code. 000077).



Map 4: Map of Natura 2000 sites at Ballymacoda Bay (Source NPWS.ie)

Special Protection Area

Ireland is required under the terms of the EU Birds Directive (2009/147/EC) to designate Special Protection Areas (SPAs) for the protection of endangered species of wild birds. In particular

- Listed rare and vulnerable species
- Regularly occurring migratory species, such as ducks, geese and waders.
- Wetlands, especially those of international importance, which attract large numbers of migratory birds each year.

Ballymacoda Bay SPA (Site code 004023) is a wetland of international importance particularly for migratory waders and wildfowl and is selected for the protection of the following bird species

- Wigeon (*Anas penelope*) [A050]
- Teal (*Anas crecca*) [A052]
- Ringed Plover (*Charadrius hiaticula*) [A137]
- Golden Plover (*Pluvialis apricaria*) [A140]
- Grey Plover (*Pluvialis squatarola*) [A141]
- Lapwing (*Vanellus vanellus*) [A142]
- Sanderling (*Calidris alba*) [A144]
- Dunlin (*Calidris alpina*) [A149]
- Black-tailed Godwit (*Limosa limosa*) [A156]
- Bar-tailed Godwit (*Limosa lapponica*) [A157]
- Curlew (*Numenius arquata*) [A160]
- Redshank (*Tringa totanus*) [A162]
- Turnstone (*Arenaria interpres*) [A169]
- Black-headed Gull (*Chroicocephalus ridibundus*) [A179]
- Common Gull (*Larus canus*) [A182]
- Lesser Black-backed Gull (*Larus fuscus*) [A183]

It is also selected for Wetland and Waterbirds [A999]

Ballymacoda Bay is also listed as a Ramsar site or wetland of international importance on www.ramsar.org

Special Area of Conservation

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.

Ballymacoda (Clonpriest & Pillmore) SAC is designated for the following habitats and species (NPWS 2015a), as listed in Annex I and Annex II of the Habitats Directive:

- Estuaries (1130)
- Mudflats and sandflats not covered by seawater at low tide (1140)
- Salicornia and other annuals colonizing mud and sand (1310)
- Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*) (1330)

5.5 Protected Species

Birds

The proposed aquaculture site is within a Special Protection Area (Birds Directive) and a Ramsar site. However other birds of interest have been recorded off shore here since 2011. The data is extracted from Biodiversity maps. It is data from hectad X07. Which is a ten km grid square encompassing the aquaculture licence application. These birds, as listed, are ones relevant to the application such as offshore divers, gulls and predatory birds.

Other birds of interest

Bird Name	Amber/red species	list	EU Birds Directive
Little Egret (<i>Egretta garzetta</i>)			Annex I Bird Species
Great Cormorant (<i>Phalacrocorax carbo</i>)	Amber List		
Great Crested Grebe (<i>Podiceps cristatus</i>)	Amber List		
Black-throated Diver (<i>Gavia arctica</i>)	Amber List		Annex I Bird Species
Common Guillemot (<i>Uria aalge</i>)	Amber List		
Little Grebe (<i>Tachybaptus ruficollis</i>)	Amber List		
Red-breasted Merganser (<i>Mergus serrator</i>)			
Red-throated Diver (<i>Gavia stellata</i>)	Amber List		Annex I Bird Species
Slavonian Grebe (<i>Podiceps auritus</i>)	Amber List		
Common Scoter (<i>Melanitta nigra</i>)	Red List		
Hen Harrier (<i>Circus cyaneus</i>)	Amber List		Annex I Bird Species
Merlin (<i>Falco columbarius</i>)	Amber List		Annex I Bird Species
Kestrel. (<i>Falco tinnunculus</i>).	Amber List		
Peregrine Falcon (<i>Falco peregrinus</i>)			Annex I Bird Species

Table 1: Table of other birds of Interest and their conservation status

The birds shaded in darker grey are all diving birds/ducks which are likely to dive in the proposed aquaculture area when there is sufficient depth of water. Little egret an annex I species of the birds directive is noted regularly foraging at Ballymacoda albeit in low numbers. The area is frequented by several birds of prey – Peregrines, Hen harriers, kestrel and Merlin are all known from the area undoubtedly attracted by the high numbers of prey.

Otter -

Otters *Lutra lutra* are designated under Annex II EU Habitats Directive. There is a record of 18 Otters from the Biodiversity Ireland maps April 2017 these counts were recorded during the Mammals of Ireland survey 2016-2025. The habitat in the bay is suitable and is likely to be used by foraging otters in the intertidal area.

Seals

Grey seals (*Halichoerus grypus*) are designated under Annex II EU Habitats Directive and there is a record on biodiversity Ireland of 5 individuals sighted in Ballymacoda/Youghal Bay in August 2017.

Cetaceans

The seas around Cork are ecologically very rich and known for large numbers of whales and dolphins. Many are far off shore but there are occasional sightings from shore or close to shore. These records (table 2) presented below are post 1995 and were collected by the Irish Whale and Dolphin Group Cetacean Sightings (www.iwdg.ie).

Name	Habitats Directive
Bottle-nosed Dolphin (<i>Tursiops truncatus</i>)	Annex II
Common Porpoise (<i>Phocoena phocoena</i>)	Annex II
Common Dolphin (<i>Delphinus delphis</i>)	Annex IV
Risso's Dolphin (<i>Grampus griseus</i>)	Annex IV
Striped Dolphin (<i>Stenella coeruleoalba</i>)	Annex IV
Sperm Whale (<i>Physeter macrocephalus</i>)	Annex IV
Long-finned Pilot Whale (<i>Globicephala melas</i>)	Annex IV

Table 2: Post 1995 sightings of Whales at Dolphins in vicinity of Ballymacoda Bay

It is unlikely that cetaceans would visit the aquaculture site given the fact that the majority of this site is intertidal in nature.

5.6 Statutory Plans

Ballymacoda is not the subject of a statutory plan in its own right but is covered under the most recent County Development Plan for Cork

2014 Cork County Development Plan

Business Development

“County Development Plan Objective EE 9-1: Business Development in Rural Areas

The development of appropriate new businesses in rural areas will normally be encouraged Especially where:

- The scale and nature of the proposed new business are appropriate to the rural area,
- The development will enhance the strength and diversity of the local rural economy,
- The proposal will not adversely affect the character and appearance of the landscape,
- The existing or planned local road network and other essential infrastructure can accommodate extra demand generated by the proposal,
- The proposal has a mobility plan for employees home to work transportation,
- Where possible the proposal involves the reuse of redundant or underused buildings that are of value to the rural scene; and
- The provision of adequate water services infrastructure.”

Fishing and Aquaculture “Commercial Fishing and Aquaculture represent an important economic activity in rural coastal areas. This plan supports the provision of appropriate harbour infrastructure that facilitates a modern and innovative fishing industry.” “

6.11.2 The Council recognises and will continue to support the sustainable development of the aquaculture industry in order to maximise its contribution to employment and the economic wellbeing of rural coastal communities and the economic wellbeing of the county. This plan also recognises the important role aquaculture can play in the diversification of rural areas.

County Development Plan Objective; EE 11-1: Fishing and Aquaculture

- a) Support the use of existing port facilities for the catching and processing of fish as an economic activity that contributes to the food industry in the County.
- b) Support and protect designated shellfish areas as an important economic and employment sector.

5.7 Man-made heritage

National Monuments Service data of recorded National Monuments in the area was accessed and the map is presented below is of the closest located to Ballymacoda bay and thus licence application area.



Map 5: National Monuments in the vicinity of Ballymacoda Bay Source (Reproduced under OSI Licence number EN 0070910)

1. National Monument Record Reference CO078-030

Description: Enclosure

Townland: AGHAVINE

Roughly circular, enclosure (diam. c. 30m), set above scarps leading down to tributary of Womanagh river. Marks in interior possibly indicating souterrains

2. National Monument Record Reference CO078-001002

Description: Church

Townland: CLONPRIEST EAST

On south side of road, overlooking estuary of Womanagh river; roughly rectangular graveyard (c. 50m E-W; c. 35m N-S), in occasional use. Headstones date from 1730s. In centre, fragmentary ruins of Clonpriest parish church (CO078-00102-).

3. National Monument Record Reference Reg. No. 20907802

Description: Aghavine House dated 1800 - 1840

4 National Monument Record Reference CO078-034

Description: Burnt mound

Townland: BALLYKINEALY

In tillage, on low-lying level ground c. 350m W of Youghal Bay. A circular spread (30m E-W; c. 30m N-S) of heat-shattered stones and charcoal-enriched soil.

5. National Monument Record Reference Reg. No. 20907804

Sign post dated 1930 - 1950

6.0 National Monument Record Reference Reg. No. 20907809

Coastguard station dated from 1860 - 1870

Note the closest to the application site is located 600 m away and is the old coastguard station.

6.0 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.”

6.1 Site Suitability

The site T05/545 under appeal *is* suitable for the intended purpose for the following reasons:

1. The adjoining areas are already successfully cultivated for Pacific Oyster
2. The applicants have been farming the adjoining areas since 2006
3. The general area here is solid under foot and will support trestles and workers.
4. The proposed development is not close to National Monuments in the area.
5. The access routes to the farm are substantially the same as existing licenced routes
6. Although a proportion of the site may be classified as subtidal in nature the applicant has an adjoining site to the south which is as deep and he cultivates oysters successfully here.

6.2 Other uses

Tourism/ Leisure /Recreation

The main activities regarding tourism leisure and recreation are dog walking, pony riding and accommodation provision in the area. The Trestles are a long distance from shore. The application area T05/545 is 1.4km to the west shoreline and 600m to the southern shoreline. Most of these activities take place in the upper beach area.

The issue of littering of the beach was raised by accommodation providers. Evidence of abandoned bags and bands were found on-site inspection.

The new application area has existing areas licenced located to the west and the south If licenced it will appear continuous with these areas.

There will be **no significant impact visually or spatially** in respect of tourism or recreation on site.

Fishing/ bait digging

The fishing is mainly from the areas to the West and the site is mainly intertidal, and as a result would be difficult to fish, except from only the smallest of inshore boats at high tide. It is suspected that they would avoid this area due to the presence of trestles.

The Inland fisheries raised concerns that increasing aquaculture at Ballymacoda “may pose a physical impediment to both ascending and descending salmonids from the Womanagh River at critical times”.

It should be noted that the opening of channel of the river has moved north from the mapped 6inch maps and thus no conflict with the aquaculture licence and channel is foreseen. See map below



Map 6: Route of the Womanagh River (light blue former route, dark blue present)

Bait digging occurs at Ballymacoda but bait diggers would be deterred from digging in this area T05/545 due to the presence of trestles shore side of this application area and the difficulty thus of access. No impact on fishing or bait digging is foreseen

The proposed aquaculture site will **not significantly impact** on harvesting users or the fisheries of the area.

Navigation

Marine Engineering Division noted that “licensing of this site (Ballymacoda generally) would cause navigational issues on the Womanagh River channel for small craft vessels. The shift of the channel north coupled with navigational markers would enable safe navigation of the channel.

The proposed aquaculture site will **not significantly impact** on navigation the area.

6.3 Statutory Status

County Development Plan

As previously stated “the Council recognises and will continue to support the sustainable development of the aquaculture industry in order to maximise its contribution to employment and the economic wellbeing of rural coastal communities and the economic wellbeing of the county. The proposed aquaculture site does **not have the potential to significantly impact** on the statutory status of the area.

Special Area of Conservation

This project screens out for Appropriate Assessment in respect of impact on the SAC Ballymacoda Bay (Clonpriest and Pillmore) SAC.

Special Protection Area

According to the Minister's refusal the licence was refused “for the reasons set out in the Detailed Information Section below (essentially the proposed aquaculture activities pose a potential significant negative impact to a number of bird species in the SPA). Therefore it would interfere with the statutory status of the Ballymacoda Bay SPA.

The AA screening carried out by APEM (2016) looked at all new applications for oyster cultivation in Ballymacoda Bay. The conclusion was that there would be significant displacement of many birds from the new licence areas. Such a conclusion was considered inevitable, as the combined new applications proposed 154.97 ha of new oyster cultivation. This large area would be occupied by trestles within a wetland of 602 ha of intertidal habitat. This licence area under appeal T05/545 is relatively small at 11.2439 ha less than 2% of the 602 ha of wetland habitat identified for the Special Protection Area. Therefore a further Appropriate Assessment Screening was commissioned by ALAB and prepared by Gittings (2019) for the application area alone.

Gittings (2019) found that Sanderling in particular would be negatively impacted by T05/545. It is accepted by APEM and Gittings that

“Impacts [are] ... assessed as potentially having a significant negative impact on a species’ use of areas within the SPA if they are predicted to cause: displacement of 5% or more of the population of any particular SCI species in the SPA.”

Sanderling are an SCI (Special Conservation Interest) species for which Ballymacoda is selected as a European Special Protection Area.

Although impacts from this application alone, according to Gittings, fall shy of this threshold the cumulative impacts are significant. The Habitats Directive specifically refers to in combination or cumulative impacts in article 6(3) APEM identify two SCI (Special Conservation Interest) species as having been impacted on by development to date. Their

calculations show 20% of the population of Sanderling and also 7.4% of the Black tailed Godwit population having being displaced by the existing licences. Gittings states that “The development of aquaculture site T05/545A is likely to cause increased impacts to Qualifying Interests [SCI species] of the Ballymacoda Bay SPA which have already been subject to significant impacts from the [existing] licensed aquaculture sites”.

The past displacement of birds from a key valuable habitat in the intertidal, an area designated for their protection, effectively means that any additional development of this bay for oyster cultivation would be contrary to the provisions of the directive. Therefore the project cannot proceed on the basis of cumulative impact.

6.4 Economic effects

The proposed aquaculture is significant in output according to the application capable of a 30% return. However it would only be expected to benefit the applicant and several individuals who would work on the farm. One of the applicants is based outside the state in France. The licensing of proposed site is likely to have a **non-significant positive effect** on the local economy of the area.

6.5 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.

AA Screening

Appropriate Assessment screening found that the proposed aquaculture activity at this site is not consistent with the Conservation Objectives for the SPA. According to APEM new applications (154 ha) have the potential to result in significant adverse impact on the following SCI species of the Ballymacoda Bay SPA: Wigeon, Ringed Plover, Grey Plover, Sanderling, Black-tailed Godwit and Bar-tailed Godwit. Thus, the licensing of aquaculture activity at this site would adversely impact the conservation objectives of Ballymacoda Bay SPA.

Gittings (2019) Appropriate Assessment Screening findings agreed with the conclusion of the APEM report and identified potential significant impacts of this site T05/545 in combination with the existing three licences at Ballymacoda as having potential significant cumulative impacts on the Conservation Objectives of Ballymacoda Bay SPA. He specifically identified additional impact, resulting from T05/545 on one of the Special Conservation interest Species Sanderling. APEM calculated that 20% of the Sanderling population were already displaced by existing licences. Therefore, as Gittings (2019) concluded any further cumulative impact would be an unacceptable on a protected species within an area selected for its conservation. Therefore this project cannot proceed under the provisions of the Habitats Directive.

Other protected species

Cetaceans. Although a variety of cetaceans including Annex II Bottlenose Dolphins and harbour porpoise are known offshore the licensed area is too shallow for these species and no interactions are predicted. The proposed licensed site will have a **no significant negative** impact on these species.

Other Birds

Divers, diving ducks, grebes and cormorants are recorded in the area and are likely to use the site for foraging. It is not foreseen that trestles in this will have a negative impact on

these birds. Predatory birds such as Peregrine, Merlin, Kestrel and Hen Harrier will not likely be impacted on as there are many thousands of wild birds and other wildlife to prey on within the area.

The proposed licensed site will have **no significant negative** impact on these species.

6.6 General Environmental Effects

Results of the Shellfish Waters Directive do not indicate any water quality issues in the vicinity of the proposed licensed areas.

The production of faeces and pseudofaeces by oysters and the impact of the deposition is likely to be minimal. This is because the site is well flushed and buildup of excess organic matter in this bay is considered unlikely.

The implementation of proper waste management procedures will ensure the removal of any trestles, bags, rubbers and other material associated with the cultivation process.

It was noted that there is a risk of introduction of alien taxa with ½ grown oysters from France. This may already be a risk given the existence of oyster cultivation on site. Other invasives known to be associated with oyster cultivation are *Bonamia* and *Saragassum*. Generally adherence to licence conditions will help prevent such introductions.

Three licences have recently been granted bordering the application area T05/545. These are owned by Baile Mhic Coda Iascliogain Teoranta T05/482A (granted Sept 2018), Baile Mhic Coda Iascliogain Teoranta T05/491A (granted July 2018) and Marc Pedriel T05/395 (granted July 2018). All three licences have the same condition under schedule 4 which is "initial source of seed and other sources which may be used in the future should be approved by the minister.

However the most significant Environmental impact is the displacement impact. Some Birds are unable to feed on the intertidal habitat due to the presence of trestles. Existing oyster cultivation has displaced a significant percentage of two Special Conservation Interest species Bar tailed Godwit and Sanderling (APEM, 2016). Additional aquaculture at T05/545 is predicted to increase impact on Sanderling (Gittings, 2019) and so must be refused on the basis of cumulative impact as per Article 6 (3) Habitats Directive.

6.7 Effect on man-made heritage

Although the area has a number of national monuments present the footprint of the farm and route does not spatially overlap these heritage sites. The proposed aquaculture site will **not significantly impact** on known man-made heritage of the Area

6.8 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 an Aquaculture licence to Mr Killian Tighe, Mr Marc Perdriel and Mr Michael Mousset for the cultivation of Pacific Oysters using bags and trestles at Ballymacoda Bay Co Cork. The following summarizes the findings.

Site Suitability

The site under appeal is suitable for the intended purpose for the following reasons;

1. Oysters are already being cultivated in the bay successfully adjacent to the proposed site.

Other Uses

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

1. Located away from main areas of activity on the beach
2. No spatial overlap with fishery or harvesting interests

Statutory Status

The proposed development has a significant impact on some aspects of the statutory status of the area for the following reasons;

1. The APEM AA screening identified a significant adverse impact on the Natura 2000 site from all new licence applications together (154ha). Gittings (2019) prepared a site specific assessment and identified potential for adverse cumulative impact from application T05/545 (11.2ha).

No significant impact was identified from T05/545 in relation to

2. The aims of Cork County Council Development Plan 2014.
3. The objectives of the Special Area of Conservation Ballymacoda Bay (Clonpriest and Pillmore) SAC. The AA screening for the SAC found no significant impact on the conservation status of the site.

Economic effects

There would be a non-significant positive effect on the economy of the area, if the proposed farm were granted, for the following reasons:

1. Small oyster farm with ability to support a few local jobs only

2. Owners located in Ireland and France so likely that profits will also be so dispersed.

Ecological Effects

No significant impacts on natural habitats, wild fisheries and fauna and flora of the area were found as a result of the proposed operation for the following reasons;

1. No impacts on other birds or cetaceans were identified

See above under Statutory Status for the impact on SPA/SACs

General Environmental Effects

There are no significant general environmental effects predicted as a result of the proposed development. None were identified in terms of invasive species, water quality or any other.

Man-made Heritage

There is no effect predicted on the man-made heritage of value in the area as a result of the proposed operation for the following reasons;

1. Nearest national monument is a coastguard station 600m south of this application

These were the findings of the technical expert.

6.9 Confirmation re Section 50 Notices

We confirm there are no matters which arise 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.

7.0 Screening for Environmental Impact Assessment.

An EIA screening was prepared and the conclusion was that no EIA was required in respect of this application.

8.0 Screening for Appropriate Assessment.

There were two screening assessments carried out for the renewal of existing licences and the consideration of new areas at Ballymacoda Bay

8.1 Ballymacoda Bay (Clonpriest and Pillmore) SAC

A full assessment was carried out on the likely interactions between existing and proposed culture operations and the Annex 1 Qualifying Interest habitat of 1140 Mudflats and sandflats not covered by seawater at low tide. The likely effects of the aquaculture activities (species, structures, access routes) were considered in light of the sensitivity of one (of two) constituent habitats and species of the Annex 1 habitat, namely, Sand with polychaetes and bivalves community complex.

Based upon the scale of spatial overlap of current and proposed aquaculture activities and the relatively high tolerance levels of the habitats and associated species, the general conclusion is that current activities are non-disturbing to the Qualifying Interest habitat of 1140 Mudflats and sandflats not covered by seawater at low tide and its constituent communities.

It was noted that there is a risk of introduction of alien taxa with ½ grown oysters from France.

The technical advisor agrees with the conclusion of this SAC screening report.

8.2 Ballymacoda Bay SPA

The APEM negative AA screening showing adverse impacts as a result of the displacement of birds from the new aquaculture licenced areas was the principle reason for refusal of this licence. The following are the reasons and considerations for the Minister's determination to **refuse** the licence sought: -

The site is located within Ballymacoda Bay Special Protection Area (SPA) *...An Article 6 Assessment has been carried out in relation to aquaculture activities in Ballymacoda Bay (SPA) According to APEM the proposed aquaculture activity at this site is not consistent with the Conservation Objectives for the SPA. This is a new application and new applications alone have the potential to result in significant adverse impact on the following SCI species of the Ballymacoda Bay SPA:*

- Wigeon
- Ringed Plover
- Grey Plover
- Sanderling
- Black-tailed Godwit
- Bar-tailed Godwit"

It was the Technical Advisors opinion is that the screening for Appropriate Assessment prepared by APEM was not adequate as it looked at all applications together. ALAB

commissioned a further AA screening report (Gittings 2019) specifically to look at T05/545 alone.

According to Gittings 2019 his “methods differ from those used in the Ballymacoda Bay SPA AA report (APEM, 2016) in a number of ways. calculations use data from the Trestle Study counts to provide finer spatial resolution of waterbird distribution patterns in the Bay Zone, compared to the APEM calculations which used the single WSP subsite covering the whole of Ring Strand. Also, it takes into account of the patterns of tidal exposure of the aquaculture site and adjoining intertidal habitat and include potential disturbance impacts outside the aquaculture site. The calculation also differ from the APEM calculations by using waterbird population sizes in 2010/11 as the denominator in calculating percentages, rather than the baseline population sizes from the 1990s used in the APEM calculations which are more appropriate as the conservation objectives explicitly refer to waterbird distribution patterns in 2010/11”.

Gitting 2019 specifically looked at the association with trestles as referred to by the appellants and notes only redshank and turnstone are positively associated with these structures. All other birds for which the site is selected listed in Table 6 below have a negative association with them.

The calculations resulted in the following table

Species	Predicted displacement (% of the total Ballymacoda Bay population)		
	Occupancy	Disturbance	Total
Wigeon	0.6% (0.1-1.0%)	1.4% (0.2-2.3%)	2.0% (0.2-3.3%)
Teal	0.0%	0.1%	0.1%
Golden Plover	0.0%	0.0%	0.0%
Grey Plover	0.7% (0.2-1.2%)	1.5% (0.5-2.6%)	2.2% (0.7-3.8%)
Lapwing	0.0%	0.0%	0.0%
Ringed Plover	0.3%	0.6%	0.9%
Curlew	0.1% (0-0.1%)	0.1% (0-0.3%)	0.2% (0-0.4%)
Black-tailed Godwit	0.0%	0.0%	0.0%
Bar-tailed Godwit	0.3% (0.1-0.5%)	0.7% (0.3-1.0%)	1.0% (0.4-1.5%)
Sanderling	1.0% (0.0-2.0%)	2.2% (0.0-4.5%)	3.2% (0.0-6.4%)
Dunlin	0.5% (0.0-1.1%)	1.1% (0.0-2.5%)	1.6% (0.0-3.6%)
Black-headed Gull	0.4% (0.0-0.7%)	0.8% (0.1-1.5%)	1.1% (0.1-2.2%)
Common Gull	0.2% (0.0-0.4%)	0.4% (0.1-0.8%)	0.6% (0.1-1.1%)
Lesser Black-backed Gull	0.3%	0.6%	0.8%

Table 6 Predicted displacement impacts due to exclusion of birds from aquaculture site T05/545A (occupancy) and disturbance of birds in adjacent intertidal habitat (disturbance).

95% confidence intervals are included for the species where the CS2% was calculated using means.

According to Gittings 2019. *“The highest predicted impact is to Sanderling, with a calculated displacement impact of 3.2%, and with an upper 95% confidence limit of 6.4%. However, as the calculation method is likely to overestimate disturbance displacement for Sanderling, I consider that it is unlikely that the actual displacement impact for Sanderling would exceed the 5% threshold that I have used for assessing significance”*.

None of the other species assessed have displacement impacts close to or, or exceeding the 5% threshold. Therefore, development of aquaculture site T05/545A, by itself, is not likely to cause significant displacement impacts to any of the QI species of the Ballymacoda Bay SPA.

Development of the existing licensed sites is likely to have caused significant displacement impacts to some of the QI species of the Ballymacoda Bay SPA. Therefore, the cumulative impact of the development of aquaculture site T05/545A in combination with the existing

development of the licensed sites is likely to cause increases to already significant displacement impacts to some of the QI species.

The conclusion of this report was that although by itself the *“T05/545A is not likely to cause significant displacement impacts to any of the QI species of the Ballymacoda Bay SPA”* but in combination with existing licenced areas the cumulative impact had the potential to be significant in respect of the protection of the birds of Ballymacoda SPA.

Thus following the precautionary principle enshrined in the habitats directive this licence must be refused.

It must be noted that Gittings following the national guidelines “screened in” this project for Appropriate Assessment and stated in his conclusion that “ A Stage 2 Appropriate Assessment is required”. This means that significant impacts from the project cannot be excluded. Normally mitigation can be proposed which counter the significant effects and a Stage 2 Appropriate Assessment (or Natura Impact Statement as is the correct terminology) would present the project with mitigation. However in this case the impacts are derived from occupation of foreshore habitat and disturbance during farming activities. These are integral parts of the project and thus no mitigation that is compatible with the aquaculture licence can be proposed. Thus under the habitats directive (Article 6(3)) the project legally cannot proceed.

Thus in light of the findings of the Gittings (2019) report the Minister’s refusal is still valid.

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

The two issues raised by the applicant/appellant were as follows

1. Site Suitability. The appellant has been growing oysters at Ballymacoda successfully since 2006

2. Unsuitability of site for birds the appellant has stated that the area is located in deep water and generally not exposed during the tidal cycle and thus they consider it unsuitable for birds. They also state that birds will feed on trestles, bags and ground presumably within the licenced area.

It was concluded that the appeal was valid and the questions posed by the appellant specifically in relation to the use of the site by birds and the birds association with trestles have been fully addressed by Gittings (2019)

10.0 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, it is recommended **to refuse the licence for the site.**

Both appropriate assessment screenings APEM 2016 and Gittings 2019 identify a negative impact, through licencing of this site, on the conservation objectives of Ballymacoda Bay SPA. Thus in line with the Habitats Directive the application for T05/545 must be refused.

11.0 Draft Determination

It is recommended to refuse a licence for this site in light of the conclusions of the APEM 2016 and Gittings 2019 Appropriate Assessment Screenings

Technical Advisor: Marie Louise Heffernan Aster Environmental Consultants Ltd

Date: 28/02/2020

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