An Bord Achomharc Um Cheadúnais Dobharshaothraithe
Aquaculture Licences Appeals Board

Aquaculture Licences Appeals Board

Technical Advisor's Report – Shellfish Appeals

Appeal Ref No. AP5/2023

Appeal description:

Appeal of the Minister's decision to grant an application for Aquaculture Licenses to Johnny Neville and Jeanette Brugman T/A Ballyteigue Oysters Ltd., Lacken, Duncormick, Co. Wexford
The application is for the cultivation of Pacific Oysters using bags and trestles on site T03/095A on the foreshore at Ballyteigue Bay, Co. Wexford

Technical Advisor: Dr Kendrew Colhoun

Date of site inspection: 9 September 2023
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Contents

1.0 General Matters / Appeal Details 4
1.1 Licence Application 4
1.2 Appeal Details 4
1.3 Name of Appellant (s): 4
1.4 Name of Observer (s) 4
1.5 Grounds for Appeal 4
1.6 Minister's submission 5
1.7 Applicant response 5
1.8 Consolidation of Appeals 6
2.0 Minister's file 6
2.1 Minister's Reasons for Decision 7
3.0 Context of the Area 7
3.1 Physical descriptions 9
3.1.1 Site location 9
3.1.2 Physical characteristics 11
3.1.3 Meteorological Conditions 12
3.1.4 Local Population 12
3.1.5 Land Use 12
3.1.6 Freshwater Influence 13
3.1.7 Wastewater Treatment 13
3.2 Resource Users 14
3.2.1 Aquaculture activity 14
3.2.2 Angling Activity 14
3.2.3 Tourism and leisure users 15
3.2.4 Commercial fishing activity 15
3.2.5 Agricultural activity 15
3.3 Statutory Status 15
3.3.1 Nature Conservation Designations 15
3.3.2 Protected Species 16
3.3.3 Bird Survey data 18
3.3.4 Natura 2000 Conservation Objectives for the SAC/SPA 20
3.3.5 Statutory Plans 20
3.3.6 Shellfish Designated Areas 21
3.3.7 Shellfish Classified Areas 21

3.4 Man-made heritage 21
4.0 Screening for Environmental Impact Assessment. 22
5.0 Screening for Appropriate Assessment. 22
6.0 Screening for Climate Change Impacts 25
7.0 Section 61 Assessment 25
7.1 Site Suitability 25
7.2 Other uses 28
7.3 Statutory Status 28
7.4 Economic effects 28
7.5 Ecological Effects 28
7.6 General Environmental Effects 29
7.7 Effect on man-made heritage 29
7.8 Section 61 Assessment Conclusions 29
7.9 Confirmation re Section 50 Notices 29
7.10 Section 46 and Section 47 Notices 30
8.0 Technical Advisor's Evaluation of the Issues in Respect of Appeal and Submissions/Observations Received 30
8.1 Appeal issues 30
9.0 Oral Hearing Assessment 32
10.0 Recommendation of Technical Advisor with Reasons and Considerations 32

1.0 General Matters / Appeal Details

1.1 Licence Application

Our ref: AP5/2023

Department Ref No: **T03/095A**

Applicant: J Neville & J Brugman, Danescastle, Wellingtonbridge, Co. Wexford.

Minister's Decision: The Minister granted an application for an Aquaculture Licence for Ballyteigue Oysters Ltd., Danescastle, Co. Wexford. The application is for the cultivation of Pacific Oysters using bags and trestles on Site T03/095A totalling 1.6459ha on the foreshore in Ballyteigue Bay, Co. Wexford.

1.2 Appeal Details

Date Appeals Received: AP5/2023 2 February 2023

Location of Site Appealed: Ballyteigue Bay, Co. Wexford

Consolidation: The Board decided on 6 April 2023 to exercise its discretion pursuant to section 42 of the Fisheries (Amendment) Act 1997 and treat AP4/1/2023 and AP4/2/2023 for Ballyteigue Bay as one appeal since they refer to the same site.

1.3 Name of Appellant (s):

AP5/2023 *Elaine McGoff, Natural Environment Office, An Taisce, Tailors' Hall, Back Lane, Dublin D08 X2A3 8*

1.4 Name of Observer (s)

N/A

1.5 Grounds for Appeal

Issues:

Appellant 1: AP4/1/2023 – An Taisce

- *The Appellant made two submissions on these applications – to DAFM on 14/12/21 and to ALAB on 01/02/23.*

Overall -They dispute the Department's conclusion that the proposed aquaculture activity as licensed is not likely to significantly and adversely affect the integrity of Ballyteigue Burrow SAC/SPA and that licencing would be in contravention of Article 6(3) of the Habitats Directive. In an earlier submission (pg 4 of 2/2/2023 submission) they stated that the proposed aquaculture project [has] potential ex situ impacts on neighbouring SPAs including Bannow Bay and Tachumshin Lake SPA.
Overall, the Appellant feels that in the granting of these licences, the precautionary principle has not been applied and there is insufficient certainty [as to whether the project will have negative effects]

- *Conclusions of the AA – An Taisce identified multiple failings and inadequacies in the information furnished to support the conduct of an AA, chiefly (a) uncertainty of the potential impacts on SCI bird species of Ballyteigue Burrow SPA, or neighbouring SPAs, and (b) reliance on an 'arbitrary' 15% threshold of overlap with Qis, habitats and constituent community types.*
- *Ecological risks –*
  (a) <u>Impacts on Grey Plover</u>: they reiterate SPA/AA report findings that 'measurable' displacement is likely which may be significant when potential displacement due to disturbance is considered; that this species is excluded by trestles; that causal relationships between population trends and aquaculture activity cannot be relied upon; that using available information it is impossible for a decision-maker to conclude beyond reasonable doubt that the integrity of the site will not be impacted and there will be no significant impacts on [this species],
  (b) <u>Impacts on Brent Geese</u>: they state that Brent Geese are disturbed by oyster trestles and that a four-fold increase in area under trestle will undoubtedly impact the species; that the SPA/AA Report outlines that they are unlikely to utilize the trestles and concludes that licensing of this area could lead to significant disturbance [on that species]; and that there is no lawful way for these sites to be licensed in the light of this evidence,
  (c) <u>Impacts on Wigeon:</u> outline the uncertainties associated with understanding impacts of trestle structures on Wigeon due to limited wider evidence, and that, in the light of that, that it is incumbent on the decision-maker to apply the precautionary principle,
  (d) <u>Underestimation of the waterbird occupancy data:</u> they suggest that the statement in the SPA/AA that 'presumed overestimates of sub-site occupancy levels' is in fact opposite to the case (i.e. an underestimate) and therefore the precautionary principle needs to be applied by the decision-maker.
- *Mitigation measures – An Taisce list the Mitigation Measures from the Conclusion Statement and state that 'in no way [do they] ameliorate the potential impacts which have been identified in the SPA/AA report. They highlight the license condition requiring "operators to strictly adhere to identified access routes over intertidal habitat … to minimize habitat disturbance" as being potentially the most relevant for bird impacts and state the current aquaculture activity is potentially disturbing and there are no recommendations to alleviate that impact.*

1.6 Minister's submission

No submission was made by the Minister in relation to these appeals.

1.7 Applicant response

J Neville responded to the appeal by An Taisce with their observations on 31 March 2023 and disputed the grounds of the appeal using the following arguments:

1. *Queries the reliance of limited studies (by the same author – referring to the AA and the earlier trestle/bird study) as a basis for understanding and making definitive statements about the displacement effects on Grey Plover.*
2. *Reiterates that the trend for many waterbird species (short-term) is more positive at Ballyteigue for nine of eleven species than the national trend over the same time period, are apparently therefore 'thriving' at this site even whilst aquaculture activity has increased at the site over the period 2008-16. With respect to Grey Plover specifically, the implication is that whilst aquaculture activity increased, Grey Plover numbers also increased so there is no negative relationship.*
3. *With respect to Grey Plover trends, the applicant states that the 'precautionary principle' is over-cautious as there will never be any certainty as to magnitude of the range of many potential factors which cause population change, such as global warming. He adds that the positive association between Grey Plover and rising temperatures shows a 'high benefit' in Great Britain and should do so similarly in neighbouring SE Ireland. In conclusion, he states that the positive Grey Plover trend during the period of aquaculture expansion within Ballytiegue and potential positive effects of climate change mean that one 'could argue that there has not been and will not be a significant negative impact on them'.*
4. *The applicant questions the inclusion of Wigeon in the assessment as they are neither an SCI species in Ballyteigue or should be linked to the Tacumshin SPA population (where they are an SCI). He makes reference to a number of scientific studies discussing site fidelity, foraging ranges etc – casting doubt on the validity of their inclusion.*
5. *The applicant questions the AA conclusions on potential impacts on Brent Geese – how can there be a positive interaction in Dungarvan but negative one in Bannow? And just because there is a negative association in Bannow, how does that necessarily mean that there is a higher likelihood of negative association in Ballyteigue? He states that Brent Geese regularly feed very close to workers whilst attending trestles and that the green algae provided is a positive as it increases the availability of that resource to the geese.*
6. *The applicant criticizes both the An Taisce appeal response and, in particular, the SPA AA. A lot of that criticism arises from over-cautious conclusions (including displacement analyses) based on a 'lack of real data' and a number of incorrect (and biased) assumptions.*
7. *The applicant emphasizes the potentially positive value of aquaculture in increasing water quality and, reducing the harmful effects of eutrophication and potentially increased biodiversity associated with the trestle structures and 'gentle harvest method employed'.*

1.8 Consolidation of Appeals

n/a

2.0 Minister's file

Details of the file received from the Minster requested under Section 43 are listed here. Copies of the following items were received:

- Application forms, maps and drawings
- Submissions from statutory and technical consultations and applicant submissions in response to these
- Submissions from the Aquaculture on Foreshore Management Division to the Minister
- Notification of the Ministers decision to the applicant

1.1 Minister's Reasons for Decision

"The Minister for Agriculture, Food and the Marine has determined that it is in the public interest to grant an Aquaculture and Foreshore licence for this site. In making his determination, the Minister considered those matters which by virtue of the Fisheries (Amendment) Act, 1997 and other relevant legislation, he was required to have regard. Such matters include any submissions and observations received in accordance with statutory provisions."

The following are the reasons and considerations for the Minister's determination to grant the licence sought:

- "Scientific advice is to the effect that the waters are suitable;
- Public access to recreational and other activities can be accommodated by this project;
- The proposed site should have a positive effect on the economy of the local area;
- All issues raised during Public and Statutory consultation phase;
- There are no effects anticipated on the man-made environment heritage of value in the area;
- No significant effects arise regarding wild fisheries;
- The site is located within the Ballyteigue Special Area of Conservation (SAC) and Special Protection Area. An Article 6 Appropriate Assessment has been carried out in relation to aquaculture activities in the SAC and SPA. That Licencing Authority's Conclusion Statement (available on the Department's website) outlines how aquaculture activities including this site, are being licenced and managed so as not to significantly and adversely affect the integrity of the Ballyteigue Bay SAC and SPA;
- Scientific observations related to the Appropriate Assessment received during the licencing consultation process are addressed in the Licencing Authority's Appropriate Assessment Conclusion Statement;
- Taking account of the recommendations of the Appropriate Assessment the aquaculture activity at this site is consistent with the conservation objectives for the SAC/SPA;
- No significant impacts on the marine environment and the quality status of the area will not be adversely impacted;
- The updated Aquaculture licence contains terms and conditions which reflect the environmental protection required under EU and national law."

3.0 Context of the Area

The general layout of the broader area of Ballyteigue Bay is shown in aerial images looking eastwards (Figure 1), and westwards (Figure 2).

There are existing aquaculture structures within the bay at Lacken and in the various submissions (including those of the applicant) reference is made to activity having been underway since the 1980s. One of the current applications appears to include the area under current aquaculture (bags/trestles) whilst a second would be immediately adjacent to the current structures (Figure 4).

Figure 1: Aerial image of Ballyteigue Bay looking SE towards Kilmore and The Saltee Islands, September 2023.

Figure 2: Aerial image of Ballyteigue Bay looking W towards Bannow Bay, September 2023.

Figure 3: Image of the foreshore where extant aquaculture structures (trestles) are located on the north foreshore of Ballyteigue Bay; the trestles lie ~60m from the high-water mark.

Figure 4: Google Earth map (April 2021) showing existing (as per background image) aquaculture activity and the approximate areas for which the two new applications refer. The blue polygon thus approximates to the location of a new application for an existing area of oyster trestle structures (T/03/38A), whilst the red area approximates to the location of the separate application T/03/095A – the subject of this report.

3.1 Physical descriptions

3.1.1 Site location

The proposed developments are located in Ballyteigue Burrow, located on the south Wexford coast between the towns of Cullenstown and Kilmore. The bay is one of a series of coastal estuaries which run from Bannow Bay eastwards to Rosslare/Carnsore Point, including Tacumshin, and Lady's Island Lake. The general locations are shown in Figures 4 and 5 and the extant aquaculture trestles are shown in Figures 3 and 6.

Figure 5: General location of Ballyteigue Burrow in S Wexford. The approximate location and extent of the area is highlighted in blue.

Figure 6: Ballyteigue Burrow. The estuary lies behind the Burrow sand dune system, with the exit channel shown on the NW side of the site.

Figure 7: Close-up Google Earth image of Ballyteigue Bay. The extent and location of extant aquaculture trestles are clearly visible on the northern foreshore.

Figure 8: Image of extant trestle structures at Ballyteigue; image taken by K Colhoun in September 2023.

3.1.2 Physical characteristics

Ballyteigue Bay extends westwards and northwards from the village of Kilmore Quay to Cullenstown in South County Wexford. The area comprises approximately 170ha of state-owned foreshore and seabed. The bay itself comprises a tidal sea inlet (also known as The Cull) which is the estuary of the Duncormick River, the outlet of the Bridgetown Canal and a number of additional drainage channels and streams from the surrounding landscape. To the east is an extensive area of reclaimed polder which is intensively farmed; on the western side there is more semi-natural habitat which includes a range of Annex 1 habitats including sand and mudflats, sand dunes and saltmarsh. Separating Ballyteigue Bay from the sea is an important 8km long sand dune system (known as the Burrow) which is orientated SE/NW. The exit of the bay comprises a narrow channel in the NW corner of the site at the western tip of the Burrow.

3.1.3 Meteorological Conditions

Johnstown Castle is the nearest weather station to Ballyteigue Bay, lying some 13.5km NE. The area has a mild-oceanic climate. The long-term average daily temperatures range between 6 and 16 degrees C (Figure 8).
Long-term average cumulative rainfall is ~1025mm.

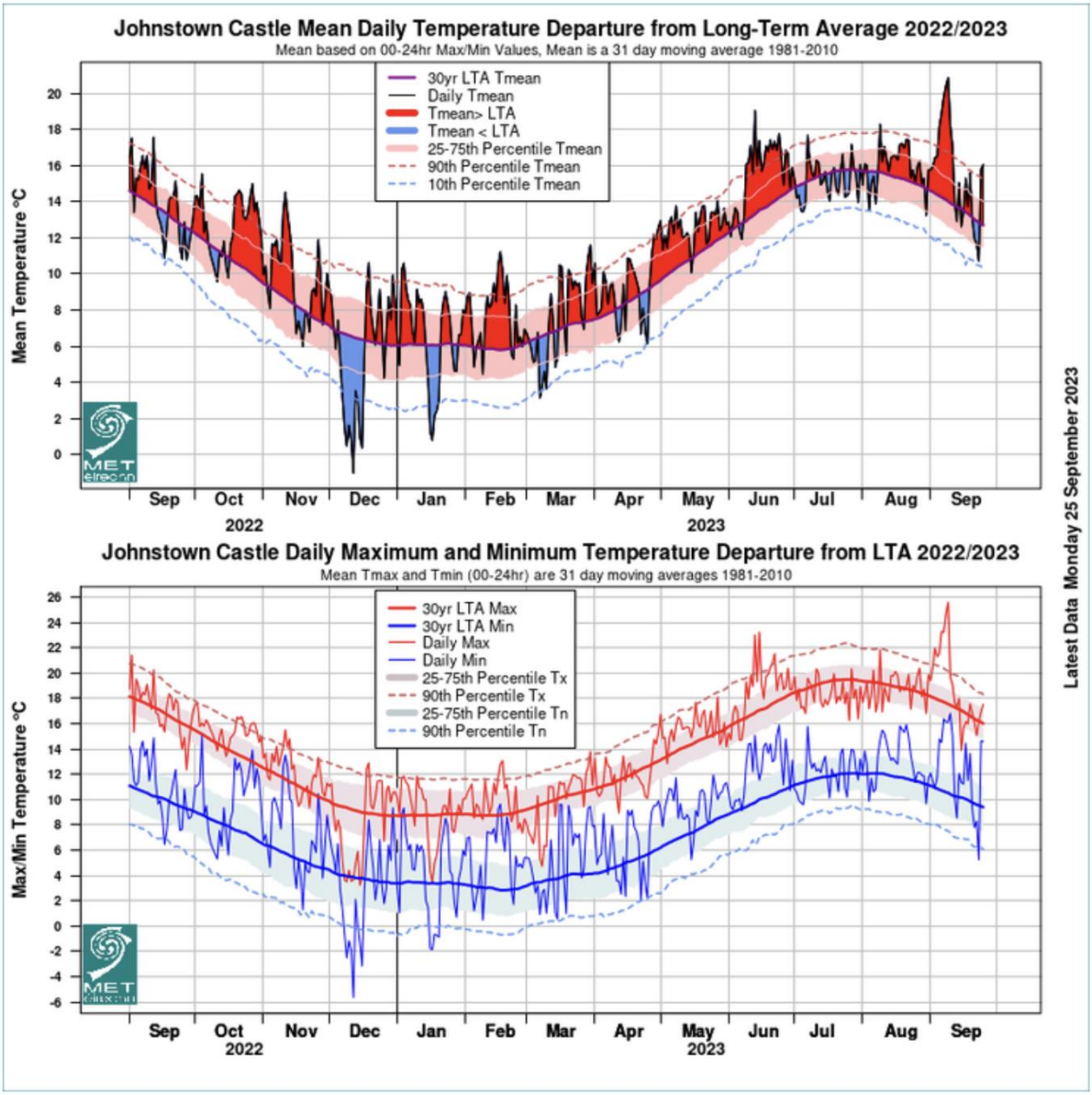

Figure 9: Temperature statistics for Johnstown Castle, Wexford (www.met.ie)

3.1.4 Local Population

The area beside the proposed development a sparsely populated and rural with 1km grid cells adjacent holding ~34 people (Census 2022; CSO online statistics). The main population centres nearby are Duncormick (1.5km NNE) and Kilmore Quay (6.5km ESE). In holiday periods the area attracts visitors and the population increases for short periods.

3.1.5 Land Use

The area and no locality of the proposed sites is primarily agricultural.

3.1.6 Freshwater Influence

The primary freshwater influences on the site are the Duncormick River and the outlet of the Bridgetown Canal. There are a number of smaller streams and storm drains entering the bay from the northern side.
The area lies within the Ballyteigue-Bannow drainage catchment (EPA ID: WFD #13) which comprises an area of 660.05km^2. The specific proposed development area lies in the Corock_SC-010 sub-catchment. Ballyteigue Bay has a 'Moderate' status under the Water Framework Directive (2016-2021[1]).

3.1.7 Wastewater Treatment

The primary wastewater treatment discharge location is at nearby Kilmore Quay, discharging into the offshore area. Planning permission for upgrade WwTP works in Kimore was granted in February 2020 in two phases.

[1] https://gis.epa.ie/EPAmaps/Water

3.2 Resource Users

3.2.1 Aquaculture activity

There is some current foreshore (possibly unlicenced) aquaculture (oysters on trestles) on the northern side of Ballyteigue Bay, adjacent to the areas proposed in this application. These do not appear on the Marine Institute online viewer as licensed aquaculture sites (https://dafm-maps.marine.ie/aquaculture-viewer/) nor on the listing of recent[2] or historical licences[3] on DAFM shellfish licence county listings.

The extent of these extant aquaculture trestle structures has varied between (approximately) 0.1 - <1ha[4]. Figures 4 show a series of Google Earth images of the area.

Figure 10: Close-up satellite imagery of the area of extant aquaculture within Ballytiegue Bay- top image: June 2010; bottom image: April 2021. Source Google Earth.

3.2.2 Angling Activity

Some angling activity occurs within Ballyteigue Bay and the coastal areas adjacent, with Sea Bass being the most sought after. Anglers were seen within the area during the three site visits in August and September 2023.

[2] https://www.gov.ie/en/collection/03190-shellfish-licences-wexford/

[3] https://wayback.archive-it.org/11501/20201125155126/https://www.agriculture.gov.ie/seafood/aquacultureforeshoremanagement/aquaculturelicencing/shellfishlicences/wexford/ (though note that the website states that "it does not as yet display all the Shellfish Licences"

[4] Based on approximate measurements from Google Earth historical imagery

3.2.3 Tourism and leisure users

The south-east region (Wexford/Wicklow) is a popular tourist destination. In the areas of Kilmore a number of coastal locations are frequented by tourists including Kilmore Quay, Fethard-on-Sea and Duncannon. Sea bass fishing is specifically mentioned in the context of Ballyteigue. Boat-based activity for ecotourism visits to The Saltee Islands is common in the summer months.

3.2.4 Commercial fishing activity

The primary inshore fishing activity is pot fishing which occurs >1 km off the outer shoreline (Ballyteigue Burrow and adjacent coast).

3.2.5 Agricultural activity

Agricultural activity in the area comprises a mixture of intensive/improved grassland and arable. This occurs on all of the adjacent farmland areas and is not limited to the polderland which lies to the east of Ballyteigue Bay.

3.3 Statutory Status

3.3.1 Nature Conservation Designations

European nature conservation designations (Natura 2000) sites are areas designated under the Habitats and Birds Directives. There are two types: Special Areas of Conservation (SAC; habitats and species) and Special Protection Areas (SPAs). Special Areas of Conservation are amongst the most important 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.
Ballyteigue Bay is designated as both an SAC (00696; 703ha) and an SPA (004020; 526ha). The closest SPAs (within a 15km radius of Ballyteigue Bay), include the Keeragh Islands SPA (~5km SW; 004118), Bannow Bay SPA (8km NW;004033), Tachumshin Lake SPA (10km E; 004092) and the Saltee Islands SPA (10km SE; 004002).
The closest SACs are Bannow Bay SAC (000697), Hook Head SAC (000764), Lower River Suir SAC (002137) River Barrow and Nore SAC (002162),Saltee Islands SAC (000707), and Tacumshin Lake SAC (000709).
These sites are considered in the AA screenings by Atkins (February 2020) and Aquafact (April 2020).

Ballyteigue Bay is also designated as a Nature Reserve (Ballyteigue Burrow Nature Reserve; 227ha), designated in 1987.
The site is also designated as an Important Bird Area (IBA No. IE098).
The Marine Institute on behalf of the Department of Agriculture Food and the Marine produced Appropriate Assessment Screening Reports for aquaculture activity in this area in relation to both the SAC and the SPA.

The primary features of interest at this site are the range of coastal Annex 1 habitats present (which underpin the SAC designation) and waterbird species (which underpin the SPA designation). Further details are shown in Sect 3.3.2 below.

3.3.2 Protected Species

A range of species and habitats are recorded/present at the site and underpin the sites importance and designations nationally and internationally.
Table 1 shows the Qualifying Interests of the site which form the basis of the designations.

Table 1. Qualifying interests of Ballyteigue Bay forming the basis of SPA and SAC designations.

Qualifying Interests (SAC)	Qualifying Interests (SPA)		
Estuaries [1130]	Light-bellied Brent Goose [A046]		
Mudflats and sandflats not covered by seawater at low tide [1140]	Shelduck [A048]		
Coastal lagoons [1150]	Golden plover [A141]		
Annual vegetation of drift lines [1210]	Grey Plover [A141]		
Perennial vegetation of stony banks [1220]	Lapwing [A142]		
Salicornia and other annuals colonising mud and sand [1310]	Black-tailed Godwit [A156]		
Spartina swards [1320]	Bar-tailed Godwit [A157]		
Atlantic salt meadows [1330]	Waders & Waterbirds [A999]		
Mediterranean salt meadows [1410] Mediterranean and thermos-Atlantic halophilous scrubs [1420]			
Embryonic shifting dunes [2110]			
Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) [2120]			
Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130]			
Atlantic decalcified fixed dunes [2150]			

A search of Biodiversity Ireland (https://maps.biodiversityireland.ie/map; accessed 17 September 2023) shows a number of species of interest. Our search was confined to the 1km grid square centred on the proposed development area (S9107), shown in Table 2.

Table 2. Species which have been recorded in 1km grid square S9107 (source Biodiversity Ireland) within the last 10 years.

Species	Record count	Date of last record	Status	Birds of Conservation Concern
Barn Swallow (*Hirundo rustica*)	1	22/07/2017	Protected	Amber
Light-bellied Brent Goose (*Branta bernicla hrota*)	2	26/11/2017	Protected	Amber
European Shag (*Phalacrocorax aristotelis*)	1	26/11/2017	Protected	Amber
Great Black-backed Gull (*Larus marinus*)	1	26/11/2017	Protected	Amber

Grey Heron (*Ardea cineria*)	2	26/11/2017	Protected	Green
Herring Gull (*Larus argentatus*)	1	26/11/2017	Protected	Red
Little Egret (*Egretta garzetta*)	1	22/7/2017	Protected	Amber
Northern Lapwing (*Vanellus vanellus*)	1	12/11/2017	Protected	Red
Whooper Swan (*Cygnus cygnus*)	1	12/11/2017	Protected	Amber
Bugloss (*Anchusa arvensis*)	1	31/7/1990	Threatened Species: near threatened	
Irish Sorrel (*Rumex acestosa subs hibernicus*)	2	18/04/2011	Threatened Species: near threatened	
Perennial Glasswort (*Sarcocornia perennis*)	1	31/07/1990	Threatened Species: Vulnerable	
Wild Asparagus (*Asparagus prostrates*)	7	22/07/2017	Threatened Species: Endangered	
Yellow Horned poppy (*Glaucium flavum*)	1	18/04/2011	Threatened Species: near threatened	
Dark Green Fritillary (*Argynnis aglaja*)	2	22/07/2017	Threatened Species: Vulnerable	
Large Red-Tailed Bumble Bee (*Bombus (Melanobombus) lapidaries*)	1	22/07/2017	Threatened Species: near threatened	
Moss Carder Bee (*Bombus (Thiracombus) muscorum)*	1	22/07/2017	Threatened Species: near threatened	
Osmia (*Helicosmia) aurulenta*)	2	27/07/2019	Threatened Species: near threatened	

3.3.3 Bird Survey data

BirdWatch Ireland undertook an analysis of trends in waterbird populations[5], analysing the trends of those species for which sufficient data was available over the period 1994/95-2019/20 (last updated 17/08/2023). Shown in Table 3 for 15 species (10 waders; 5 other), these indicate long-term declines for nine species, six of which are waders. At the site all waders except Grey Plover, Oystercatcher and Ringed Plover exhibit a long-term (23-year) decline, with the trend in the remainder >= -24% over the same period. Over the short-term (5-year) and medium-term (12-year) periods, trends show stability or increase in only four of the ten wader species with declines of intermediate or greater in Grey Plover, Ringed Plover and Redshank over one of these time intervals.

More recent I-WeBS data (to include the 2020/21 season) shows generally fewer of all wader species compared to 2019/20 with the exception of Golden Plover – but coverage or count-specific anomalies (e.g. weather) could explain such an inter-annual variation.

[5] Kennedy *et al*. (2023) Irish Wetland Bird Survey: I-WeBS National and Site Trends Report 1994/95 – 2019/20. BirdWatch Ireland Waterbird Report to NPWS. BirdWatch Ireland, Wicklow. https://birdwatchireland.ie/app/uploads/2023/08/iwebs_trends_report.html)

Table 3. **Trends in abundance of selected species at Ballyteigue over short-, medium- and long-time period.**

Species	5-year trend (%) 2014/15-2019/20	12-year trend (%) 2007/08-2019/20	23-year trend (%) 1996/97-2019/20	Classification (long-term)[6]	National trend (22 year)[7]
Golden Plover	-33.9	-87.2	-77.0	Large Decline	-43.4
Lapwing	-13.7	-66.8	-76.7	Large Decline	-67.6
Bar-tailed Godwit	-59.6	-21.6	-47.2	Moderate Decline	+31.7
Wigeon	-9.3	-37.1	-43.6	Moderate Decline	-39.2
Black-tailed Godwit	-47.6	-63.5	-43.3	Moderate Decline	+77.7
Curlew	+4.6	+1.5	-43.3	Moderate Decline	-41.0
Shelduck	-9.0	-12.6	-40.0	Moderate Decline	-23.0
Dunlin	+10.0	+27.5	-24.1	Intermediate Decline	-63.0
Light-bellied Brent Goose	-34.1	-41.7	-12.4	Intermediate Decline	+96.1
Grey Plover	-14.9	-3.9	0.0	Stable/Increasing	-61.8
Oystercatcher	+24.4	+2.0	+4.1	Stable/Increasing	+21.5
Ringed Plover	-31.2	+140.9	+35.9	Stable/Increasing	-6.6
Redshank	+38.6	-17.7	+46.3	Stable/Increasing	+11.2
Mallard	+72.6	+409.5	+10.98	Stable/Increasing	-26.1
Teal	+28.6	+230.0	+135.7	Stable/Increasing	+4.1

[6] As used in the I-WeBS Trends report, the classification relates to the 23-year trend, assigning trends as follows: red (decline > 50%), dark amber (decline between 25 and 50%), light amber (decline between 1 and 25%) and green (decline less than 1%)

[7] Lewis, L *et al*. (2019). Irish Wetland Bird Survey: waterbird status and distribution 2009/10-2015/16. *Irish Wildlife Manuals*, No. 106. National Parks & Wildlife Service, Department of Culture, Heritage and the Gaeltacht, Ireland.

3.3.4 Natura 2000 Conservation Objectives for the SAC/SPA

Qualifying interest species in the Ballyteigue Burrow SPA (004020) are: Light-bellied Brent Goose *Branta bernicla hrota*, Shelduck *Tadorna tadorna*, Golden plover *Pluvialis apricaria*, Grey Plover Pluvialis squatarola, Lapwing *Vanellus vanellus*, Black-tailed Godwit *Limosa limosa*, Bar-tailed Godwit *Limosa lapponica* and the wetland/waterbird assemblage.

The Conservation Objectives (most recent version 2014) aim to maintain the favourable conservation condition of these species in Ballyteigue Burrow SPA, and to maintain the wetlands habitat at the site in favourable condition as a resource for the regularly occurring migratory birds that utilize it (target the permanent area occupied by the wetland habitat should be stable and not significantly less than the 559ha, other than that occurring from natural patterns of variation[8]).

The Qualifying Interests of the Ballyteigue Burrow SAC (000696) are: Estuaries [1130], Mudflats and sandflats not covered by seawater at low tide [1140], Coastal Lagoons [1150], Annual vegetation of drift lines [1210], Perennial vegetation of stony banks [1220], *Salicornia* and other annuals colonising mud and sand [1310], *Spartina* swards [1320], Atlantic salt meadows [1330], Mediterranean salt meadows [1410]
Mediterranean and thermos-Atlantic halophilous scrubs [1420], Embryonic shifting dunes [2110], Shifting dunes along the shoreline with *Ammophila arenaria* (white dunes) [2120], Fixed coastal dunes with herbaceous vegetation (grey dunes) [2130] and Atlantic decalcified fixed dunes [2150].

The Conservation Objectives (most recent version 2014) are to maintain the favourable conservation condition of these habitats, typically defined by attributes and targets related to parameters including *inter alia* the habitat area (is stable or increasing subject to natural processes), community distribution (conserve specific communities), habitat distribution, connectivity, typical animal species, vegetation composition: negative indicators, vegetation composition: typical species and sub-communities, physical structure: functionality and sediment supply.

3.3.5 Statutory Plans

Ballyteigue Bay is not the subject of a statutory plan in its own right but is covered under the most recent county development plan for Wexford (2022-28). This plan has the following relevant objectives:

- **Coastal Zone Management**: Coastal areas are home to vibrant coastal communities, attractive coastal settlements, coastal landscapes and seascapes of intrinsic natural amenity value and a diverse range of coastal habitats, some of which are of international and national importance, protected by conservation designations. These areas are also home to a variety of land uses including ports, harbours, fishing and aquaculture, tourism, leisure and amenity, all of which make a valuable economic contribution to local communities and the county.
  The plan sets out the spatial planning framework for future development and the county's coastal areas. The policy approach responds to the challenges facing these areas, controlling the scale and rate of development which can be accommodated without damaging or detracting from the qualities and attractions of the coast. It also focuses on bringing water to at least *good* status and protecting and restoring habitats and species to *favourable* conservation status, while maximising the economic development potential of these areas

[8] Https://www.npws.ie/sites/default/files/protected-sites/conmservation_objectives/CO004020.pdf

to create employment for the local community and to further enhance these areas as attractive places to live, visit and to work.

- **Tourism**: the council strongly supports the development of tourism as a key pillar of economic growth for the county but recognises that there is a need to protect and manage the County's tourism assets and resources to ensure their long-term sustainability. The Council's enhanced role and economic development will see it focus predominantly on tourism product development, coordination and facilitation of the tourism industry within the County. As a planning authority, the council must ensure that public and private tourism and related developments are in accordance with the proper planning and sustainable development of the county including considerations relating to location, scale, siting, access, design and protection of the environment, heritage and amenity of host communities.
- **Environmental Management**: Clean air, safe drinking water and healthy food are fundamental assets that need protection to benefit human health and also the wider economy. A high-quality clean and safe environment is important for the economic development of the County, in particular, tourism, agriculture, forestry and services. The council is committed to protecting our environment and promoting the health and well-being of residents and visitors. As a local authority, the Council has many related responsibilities such as protecting water and air quality and managing noise and light pollution. As a planning authority, the Council statutory land use plans must include objectives to conserve and protect the environment, promote compliance with environmental standards and objectives established for surface water bodies and groundwater bodies.
- **Biodiversity**: the aim of the county Wexford Biodiversity Action Plan (2013) is to create and promote an increased knowledge, awareness and appreciation of the natural heritage and biodiversity of county Wexford, and to conserve it for future generations to enjoy

3.3.6 Shellfish Designated Areas

The nearest Shellfish Designated Area is Bannow Bay. Ballyteigue Bay is not a designated area for shellfish aquaculture and is not listed in the 2006 or 2009 Regulations

3.3.7 Shellfish Classified Areas

The Sea-Fisheries Protection Authority lists Ballyteigue Bay (Ballymadder Point to Crossfarnoge Point) under its 2023/24 List of Classified Bivavle Mollusc Production Areas (with species Oysters and class B).

3.4 Man-made heritage

There are no built-heritage features of note in the areas adjacent to the proposed development area, with none in the townland of Lacken. The nearest feature of note is a Windmill west of Duncormick (Ref: WX046-082) which is situated on a fairly level landscape and comprises a conical tower with no surviving internal features.

4.0 Screening for Environmental Impact Assessment.

There is no evidence from the Minister's file that the site were assessed for environmental impact of the proposed developments. The Board's Technical Advisor considered the projects proposed in the Applications for Aquaculture Licences under the requirements of the Aquaculture Appeals (Environmental Impact Assessment) Regulations (2012) and the EIA Directive (2011/92/EU) and concluded that this type of aquaculture falls outside the regulations for EIA.

Therefore, the Technical Advisor is satisfied that the direct and indirect effects of the proposed activity at the Sites on the following factors:

(a) population and human health;
(b) biodiversity, with particular attention to species and habitats protected under the Birds and Habitats Directives;
(c) land, soil, water, air, and climate;
(d) material assets, cultural heritage and the landscape; and
(e) the interaction between the factors referred to in points (a) and (d)

will not have significant effects on the environment including the factors listed in A and E by virtue of inter alia its nature size or location.

5.0 Screening for Appropriate Assessment.

The Marine Institute on behalf of the Department of Agriculture, Food and the Marine (DAFM) produced Appropriate Assessment Screenings for aquaculture activity in Ballyteigue Bay in respect of both the SPA and the SAC.

The Atkins SPA AA considered "The potential impact of the proposed development at these aquaculture sites on the Special Conservation Interests (SCIs) of the Ballyteigue Burrow SPA and of the SCIs of the other SPAs where these SPIs may have connectivity with Ballyteigue Burrow SPA and also assesses the potential for cumulative impacts from development of these aquaculture sites in-combination with other relevant activities and plans.
The in-combination activities and plans assessed included shoreline access for recreation and shellfish collecting, and discharges from a nearby wastewater treatment plant. They concluded that there is likely to be a measurable displacement impact *to Grey Plover*, and this *may be significant* when *potential displacement due to disturbance is factored in*. The predicted displacement impact to *Light-bellied Brent Goose and Wigeon are significant*. However, there is a *high level of uncertainty about these predictions due to the variable nature of their responses to oyster trestle cultivation*, and the *likely significant overestimation of subsite occupancy levels in the displacement calculations*. The predicted displacement impacts to *Shelduck, Lapwing, Curlew, Black-tailed Godwit, Bar-tailed Godwit, Dunlin, Redshank are not significant*.
The predicted displacement impact to *Golden Plover is negligible*. The limited data that was available for this assessment means that there is a *moderate level of uncertainty about these predictions*. For two of the species (Curlew and Redshank) there may be no net displacement impact due to the variable nature of the response to Oyster trestle cultivation.

The authors conclude that oyster trestle cultivation is likely to have *neutral or positive impacts on prey resources for Cormorants* and that this species will only utilise the areas around the aquaculture sites at high tide when no husband activity will be taking place. Therefore, *no negative impacts* are predicted for this species.

No potentially significant cumulative impacts were identified from the in-combination assessment.

The Technical Advisor makes the following observations:

- The SPA Appropriate Assessment identifies that there was very limited information available on the current and proposed aquaculture activities at Ballyteigue Bay in the preparation of their report. Consequently, they have based some of their predictions on potential impacts (e.g. displacement) based on their experience of interactions of waterbirds and trestle structures from other sites. Further, they highlight this is a particular issue for the assessment of potential disturbance impacts which are related to site-specific behaviour stroke husbandry operations.
  The absence of site-specific information on aquaculture husbandry activities (e.g., timing, extent, frequency, scale etc.) does limit the ability to understand/predict the potential effects of the proposed developments on the SCI and other species. This is due to the potential additive impact of disturbance (above loss of habitat within the 'footprint' of the trestle structures) which has the potential to cause significant displacement effects.
- The AA identified that there was very limited waterbird data available for the assessment. In particular, there was no-fine scale spatial data available to understand distributional patterns within the site as a whole other than one season of data (from 2011/12).
  Understanding the potential effects of potentially-impacting activities at waterbird sites requires fine-scale, within-site, information in order to understand potential effects. For example, repeated counts across multiple months/years, recording abundance and behaviour at sub-site scales within sites, make it possible to identify the most/least important areas for all/most or individual species. It is also often possible to understand the relationship between behaviour and activity patterns in relation to tide levels, weather, and other factors (e.g., disturbance) on distribution.
- The AA assessment undertook the displacement analysis based on count data from four months in one year. They identify that, in doing so, there is a high degree of uncertainty and the inferences arising.
  Given the large number of factors which determine the spatio-temporal variability of waterbird usage within a site (for example, effects of season, tidal conditions, disturbance, temperature, food availability, competition etc), undertaking robust analyses such as was attempted for the AA assessment requires multiple surveys, across multiple months/years/tidal states, and as described above, collecting data on abundance, activity/behaviour for all species at fine spatial scale.
  The Technical Advisor suggests that reaching conclusions on, for example, potential displacement effects in the absence of such data, is fraught with so much uncertainty as to be questionable.
- The AA concluded that there is likely to be a measurable displacement impact to Grey Plover which may be significant when potential displacement due to disturbance is considered. They also note that the population trend data for this species does not show any evidence of impacts from increasing levels of oyster trestles during the period 2008-16. On this basis, it is likely the displacement impact will be substantially lower than the calculated impacts for the two sites assessed. As mitigation they recommend that site activities are confined within the licenced blocks as well as maintaining strict adherence to access routes.
  Notwithstanding the previous observations with respect to the inadequacy of data on which displacement effects were calculated, a number of factors are relevant with respect to this species. These include (a) a rate of national decline amongst the highest of all wader species, (b) the fact that individuals are highly site-faithful in wintering grounds (where they defend

wintering territories), (c) a well-documented avoidance of trestle structures, and (d) sensitivity to disturbance.

- The predicted displacement impacts to Light-bellied Brent Goose and Wigeon were described as significant. However, there was a high level of uncertainty about the prediction, due to the variable nature of the responses of these species to oyster trestle cultivation.
  The view of the Technical Advisor is that the effects on Light-bellied Brent Geese are indeed less clear/variable, with good evidence from many sites that the species exploits green algae on or near trestle structures and do indeed habituate, to some extent, to aquaculture husbandry activities. However, in the absence of detailed energetic calculations it is impossible to understand whether the net effects of foraging on/near aquaculture structures is neutral, positive or negative for this species.
  With respect to Wigeon, it is the Technical Advisors opinion that, whilst this species has a similar ecology to Light-bellied Brent Geese, their higher sensitivity to disturbance means that they are less likely to habituate to disturbance and, therefore, to respond positively to aquaculture structures.
- The predicted displacement impacts to all other spaces are either negligible or not significant. The authors conclude that the limitations of data availability means that there is a moderate level of uncertainty about these predictions.
  As described above, the inadequacies of the available data (with respect to the spatio-temporal availability of count information), makes it difficult to generate robust displacement assessments and therefore generate conclusions about the potential impacts of the proposed developments.
  Overall, the many inadequacies highlighted in the Appropriate Assessment are so significant that many of the conclusions are unreliable. The many uncertainties expressed within the AA in this regard arise from the lack of sufficient data. In such circumstances it is simply impossible to conclude, beyond all reasonable scientific doubt, that the proposed activities will not have negative impacts on the QIs of the SPA. Case C-258/11/Sweetman & others v An Bord Pleanala & others, the CJEU held that: 'authorisation for a plan or project …may therefore be given only on condition that the competent authorities….are certain that the plan or project will not have lasting adverse effects on the integrity of the site. That is so where no reasonable scientific doubt remains as to the absence of such effects.'

Aquafact undertook AA screening for the Ballyteigue SAC on behalf of the Marine Institute (Aquafact (2020). They made the following observations:

- Aerial imagery shows that oyster trestle activity has been taking place in Ballytiegue since at least 1995. They state that prior to 2005, four operators were active, but only one since then and that '[the two applications] are classified as applications, although there is current oyster cultivation at one of the sites (T03/038A).
- With respect to their primary findings (section on aquaculture and habitats), they conclude that 'based on the spatial scale of the overlap between the 2 Annex 1 habitat community types … the scale of the spatial overlap and the relatively high tolerance levels of the habitats and species therein .. that consideration be given to licencing (existing and applications) in the Annex 1 habitats 1130 and 1140.
- They add, that the risk from reintroduction of non-native (alien) species should and can be managed through adherence to best practice guidelines under the relevant legislation.

The Technical Advisor makes the following observations:

- **These conclusions are likely sound. Unlike the SPA AA they are not based on a paucity of site-specific data and it seems likely that the impacts on habitats are within tolerable limits and would not directly impact the Annex 1 habitats to a large extent (and thus impact the site conservation objectives).**

6.0 Screening for Climate Change Impacts

The 2023 Climate Change Action Plan does not specify any particular actions to be required for aquaculture.

7.0 Section 61 Assessment

Section 61 (a-e) of the Act outlines the matters which the licensing authority shall take account of when an application for or an appeal regarding an aquaculture licence is being considered. This section is used to assess the impact of the proposed aquaculture development under these headings, which are listed in 6.1 – 6.7 below.

7.1 Site Suitability

Section 61 (a) considers the suitability of the site at or in which the aquaculture is proposed to take place. Ballyteigue Bay is an enclosed bay on the south Wexford coast in an area popular with inshore anglers and tourists. The majority of tourist activity is most likely to occur on the outer (seaward) side of Ballyteigue Burrow, rather than within Ballyteigue Bay itself. The proposed developments are relatively close to existing aquaculture structures on the northern shoreline of Ballyteigue Bay, are not used for fishing or marine leisure, and will not have a significant visual impact (as assessed by the Marine Engineering Division). The location of T03/095A lies just (< ~100m) to East of the area of the location of existing aquaculture (which is described on the licence application (T03/095A) map appendix as '"application lapsed" and appears to tbe subject of application T/03/038A; Figure 9).

Figure 11: Google Earth image showing the northern side of Ballyteigue Bay. Existing trestle structures are visible (image dated April 2021 and outlined in white) and approximate locations of applications T03/095A (red polygon; 1.6459ha in application), T03/038A (blue polygon; 1.698ha in application) are shown. The area shown in the blue polygon (new application T03/038A) approximates to the area of existing aquaculture (oyster trestles/bags present) and is described in the licence application T03/095A map annexes as 'application lapsed'.

There are no concerns regarding water quality, given the proposed developments' distance from primary wastewater discharges and the status of Ballyteigue Bay under the Water Framework Directive. Irish Water note that the Department may wish to consider the proximity of the discharge points to the proposed aquaculture developments when making a decision on these applications.

The Marine Survey Office has no objection to the proposed development from a navigational viewpoint. A similar view is taken by the Commissioners of Irish Lights.

SFPA stated no significant impacts anticipated on existing fisheries in the area or on shellfish growing areas adjacent to or within the areas. Ballyteigue is classified for the production of oysters and as such the food safety risk is defined.

The Marine Institute observe that the proposed development is located within the Ballyteigue Bay Bivalve molluscan production area. Oysters at this site currently have a 'B' classification. The site is not located within any Shellfish Growing Waters. The Marine Institute state that, considering the location, nature and scale of the proposed aquaculture activity, and in deference to their remit under the Marine Institute Act, and the considerations implicit to sections 61(e) and (f)of the Fisheries Amendment Act (1997), they are of view that there will be no significant impact on the marine environment and that the quality status of the area would not be adversely impacted.
Further the Marine Institute state that, in making the final determination with respect to the application, it is recommended that the Department of Agriculture, Food and The Marine take full account of any conclusions and recommendations of the Appropriate Assessment report and any proposed mitigation measures set out and the department's draft Natura Conclusion Statement.

BIM and Wexford County Council have no objection.

The Department of Housing, Local Government and Heritage observed that, given the available information and the absence of certainty that the Grey Plover will not be negatively affected, it is recommended that a licence only be provided for existing aquaculture operations within the bay. They also recommend that any licence includes conditions for strict adherence to licenced/approved access ways.

The view of Technical Advisor is as follows:

- The two sites (T03/095A and T03/038A) under consideration are in such close proximity to make it necessary to consider them together from an ecological standpoint. **One of these sites (T03/038A) appears to be an application for what is an area of existing aquaculture with bags and trestles** but no evidence of attendance during the short multiple visits made. As such this application would appear to be, on the whole, a retrospective licence for an aquaculture site already in existence (operational status unknown). The second application (T03/095A), would appear to propose to have an easting at the western extremity of ca. 50m from the easterly extent of the existing trestles, running for approximately 350m ESE.
- If the existing structures are not being managed then their presence has reduced the available habitat area for some SCI species (especially Grey Plover) and may therefore have a displacement effect on that species (they cannot use the area but there is no data available prior to the trestles being put in place to know whether it was utilised). If the existing structures are being managed currently, then there would, without doubt, be some additional displacement effects during aquaculture management operations due to disturbance.
- The general principle of allowing an application to proceed when there is scientific uncertainty as to the potential impacts would apply, as it does for any application. In my opinion, there is inadequate information to underpin a decision on this, and that precautionary principle must apply.
- Whilst potentially beyond my remit, I wonder if authorising an existing trestle site to operate under a licence (where none apparently existing currently), sets an unwanted precedent.

The sites are **suitable** for the proposed development for the following reasons:

- The area of the proposed development is in close proximity to existing structures, has little or no additional visual impact and does not impact navigation.
- The proposed site location would not have a significant impact on recreational activity including shore angling.

The sites are **not suitable** for the proposed development for the following reasons:

- The competent authority for the Habitats and Birds Directives (DHLGH) are of the view that only existing aquaculture be licenced, not new development such as proposed via this application (T03/095A). They conclude that there is a lack of certainty with respect to the potential negative displacement effects on Grey Plover.
- The Appellant, An Taisce, contest that many of the conclusions of the AA are flawed and most significantly that the many uncertainties give arise to it being impossible to conclude beyond all reasonable scientific doubt that the proposed developments will not have a negative impact on the QIs of the site, in particular Grey Plover.

7.2 Other uses

Section 61 (b) takes account of other beneficial uses, both in existence or future in the area and / or waters of the proposed site. The other users identified all of the sites under appeal are inshore anglers. As described elsewhere it appears likely that there will be no significant negative impact of the proposed development on inshore angling. The proposed developments would, therefore, **not have a significant negative effect** on other possible users of the area.

7.3 Statutory Status

Section 61 (c) considers the statutory status of the area under consideration including the provisions of any development plan. There are no specific statutory or development plans for Ballyteigue Bay. The County Wexford Development Plan promotes sustainable economic development, tourism and environmental protection, and reference is made under the headings *Coastal Zone Management*, *Tourism, Environmental Management* and *Biodiversity* which are relevant in this regard.

Appropriate assessment screenings were undertaken on the potential effects of aquaculture on the SAC and the SPA. They highlighted potentially negative effects (via displacement) of SCI species amongst other potential impacts, noting some uncertainty about their conclusions.
There is no specific development plan for Ballyteigue Bay and, consequently, it does not appear that the proposed development has any implications for the County Development Plan.

It is the considered opinion of the Technical Advisor that the proposed plan **does not have a significant impact with regard to the County Development Plan**.

It is the considered opinion of the Technical Advisor that there is sufficient uncertainty that it **cannot be established beyond all reasonable scientific doubt that the proposed development will not have a significant negative impact on the qualifying interest of the SPA**.

7.4 Economic effects

Section 61 (d) takes into account the likely effect a proposed aquaculture development (or its amendment / revocation) would have on the economy of the area in which the aquaculture is to be located. It seems likely that the proposed development would have direct and indirect benefits for the local economy.

Overall, these developments are likely to have a **positive economic impact** given that the activity at the site(s) would be expected to create employment and associated economic benefits. It seems unlikely that there would be any direct negative economic effects (e.g. on other sectors of the local economy).

7.5 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. DHLGH and two Appellants highlighted significant inadequacies in data which gave rise, at least in part, to significant uncertainties and the concomitant conclusions of the SPA Appropriate Assessment. For these parties, this uncertainty was sufficient for them to conclude that they could not rule out significant negative ecological impacts on SCI bird species. Overall, the absence of information to prove beyond all reasonable scientific doubt

as to there being no negative impacts led these organisations/individuals to conclude that **the proposed developments would have a significant impact on the ecology of the area**.

It is the considered opinion of the technical advisor that this is indeed the case.

7.6 General Environmental Effects

Section 61 (f) considers any other effects on the environment in general that could occur in the vicinity of the area where the proposed site is to be located.
There are possibly some positive effects of the proposed activity on water quality (through filtration) through removing excess nutrients from agricultural runoff and wastewater discharges. However, Ballyteigue Bay is classified as 'moderate' water quality status and it is unknown if the scale of the proposed developments would significantly improve that status.
Whilst the existing/new trestle structures have the potential to increase food for foraging birds (e.g. green algae accumulation which could be eaten by herbivorous waterfowl including Wigeon and Brent Geese), this is likely a small and limited benefit which it outweighed by the direct (loss of area under trestles) and indirect (loss of buffer area around/beyond trestles impacted by disturbance) negative effects which extend beyond the footprint of the proposed developments.

Whilst there may some positive effects of the proposed development it is **considered that these would be relatively minor and insignificant**; a **likely net significant negative environmental effect (intertidal habitat loss)** is more likely.

7.7 Effect on man-made heritage

Section 61 (g) considers the effect or likely effect on the man-made environment of heritage value in the vicinity of the place or waters. There is no predicted impact on known terrestrial or marine man-made heritage sites located around Ballytiegue Bay. There would be **no effect on the man-made heritage** value in the area as a result of the proposed operations

7.8 Section 61 Assessment Conclusions

In conclusion, the section 61 assessment finds that the proposed development is deemed unsuitable for the proposed development on the grounds of site suitability, statutory status, ecological and environmental impact as outlined in Sections 7.1, 7.3, 7.5 & 7.6 above.

7.9 Confirmation re Section 50 Notices

Under Section 50 of the Fisheries (Amendment) Act the Board has the power to consider any issues, other than those raised in the appeals documents, if they are matters to which, under Section 61, the Board may have regard. However, the same section also obliges the Board, if it does not intend to take into account such other issues apart from those raised in the appeal documents, to give notice in writing to the parties and to persons who made submissions and observations, in accordance with section 50 (2) of the 1997 Act.
The Technical Advisor is of the opinion that there are not matters which arise in Section 61 which the board ought to take into account which have not been raised in the appeal documents, and it is not necessary to give notice in writing to any parties in accordance with section 50 (2) of the 1997 Act.

7.10 Section 46 and Section 47 Notices

Section 46 of the Act provides for the Board to request that a party to the appeal who has already made submissions/observations to the Board make further submission /observations in relation to a matter which has arisen in the course of the appeal. We are unaware of any additional information which exists and which we could request.

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

8.1 Appeal issues

Appeal AP5/2023		
Issue	**Appellant Comments**	**Technical Advisor's Response**
Ecological impacts	Reliability/paucity of data – robust conclusions cannot be drawn and correlation does not equal causation	Available data for this site is poor and I believe robust conclusions cannot be drawn on any aspects of this project as a consequence
	Legal framework – case law has established that approval can only be granted for plans and projects when it has been established beyond all reasonable scientific doubt that the proposal will not adversely impact any Natura 2000 site	A key point here is the uncertainty upon which decision-making is based. The evidence-base is poor and the paucity of site-specific data so poor that robust conclusions cannot be drawn. It cannot be established, therefore, beyond all reasonable scientific doubt that the proposed activities will not have an adverse impact on the site. Indeed the presence of the current (apparently unlicenced) aquaculture structures may already be having an adverse impact on the site and by inference be contributing to the recent population trends at the site.
	Potential negative impact on Grey Plover (the AA states potentially significantly negative)	The AA identifies potential displacement effects and some uncertainty surrounding that. The paucity of data indicates that there is

		sufficient uncertainty that a licence should not be granted
	Potential negative effects on Brent Geese – the appellant concurs that whilst a variable response between aquaculture and Brent Geese has been noted, that the AA concludes that there is potential for significant impacts	The response of Brent Geese is indeed variable, with geese certainly exploiting green algae but access to this being constrained by disturbing activities. Whilst this species habituates to human activities, it is hard to assess whether the overall impact is positive or negative. It seems likely that responses are site-specific and relate to a combination of human factors (such as number of persons, distribution around the site, whether in vehicles or on foot, their behaviour etc) and site-specific factors (such as location of marine or terrestrial feeding opportunities, other activities that may be occurring on the site, the scale and location of aquaculture sites relative to these). There is sufficient doubt (cannot be sure of no negative effect) that we should not assume no negative effect.
	Waterbird occupancy data – AA conclusions drawn could be incorrect, underestimating the true spatial importance of areas; mostly impacted by paucity of data	Whilst the AA has done its best with the data available, the paucity of data is such that robust conclusions cannot be drawn.
	Potential impacts on Wigeon – evidence of effects is poor but precautionary principle should apply	Paucity of data in this case and including wider studies of potential impacts means that there is sufficient uncertainty to not rule out negative effects
	Mitigation measures – do not ameliorate the potential negative impacts identified in the AA report	The mitigation measures indicated are standard (e.g. access routes etc) but the key questions are whether the impact of more trestles on the site will have significant negative impacts on the site –

		which we do not know the answer to beyond doubt.

9.0 Oral Hearing Assessment

In line with Section 49 of the Fisheries Amendment Act (1997) an oral hearing may be conducted by the ALAB regarding the licence appeals.

An oral hearing was requested by An Taisce.

It is considered by the Technical Advisor, that an Oral Hearing is not required for this application as it cannot be established beyond all reasonable scientific doubt, that the proposed developments will not have significant negative effects on QI species in the SPA.

10.0 Recommendation of Technical Advisor with Reasons and Considerations

It is the recommendation of the Technical Advisor to **overturn the decision of the Minister and refuse the granting of licences** for sites T03/095A for the reasons below:

These sites are **not suitable** for the proposed developments for the following reason:

- Section 61 assessment findings conclude that the proposed development is not suitable for aquaculture on the grounds of site suitability, statutory status, ecological and environmental impacts.
- It is not possible, based on existing information, to conclude beyond reasonable scientific doubt that the proposed developments will not significantly impact the qualifying interests of the SPA, in particular the potential displacement effects on Grey Plover, but also potentially on other species.
  This conclusion is based on and inadequacy of data which formed the basis of the AA and not the flawed interpretation of the limited data that exists *per se*.

Technical Advisor: **Dr Kendrew Colhoun**

Date: **26/09/2023**