# ASTER ENVIRONMENTAL CONSULTANTS LTD



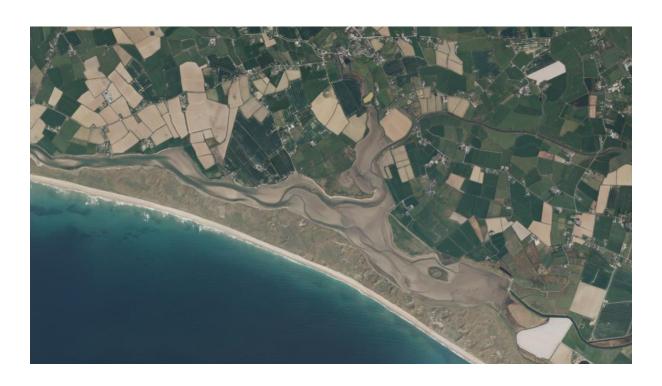


# Aquaculture Licences Appeals Board



# 19/06/2024

# Compilation Report Ballyteigue Burrow



## 1.0 Intro and Background

The proposed licences for oyster cultivation 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. 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.

### 1.1 Licence Application

Our ref: AP4/1-2/2023

Department Ref No: T03/038A

Applicant: Noel Roche, Ballyteigue Oysters Ltd., Lacken, Duncormick, Co. Wexford.

Minister's Decision: The Minister granted an application for an Aquaculture Licence for Ballyteigue Oysters Ltd., Lacken, Duncormick, Co. Wexford. The application is for the cultivation of Pacific Oysters using bags and trestles on Site T03/038A totalling 1.698ha on the foreshore

in Ballyteigue Bay, Co. Wexford. Existing oyster cultivation.

Our ref: AP5/2023

Department Ref No: T03/095A Applicant: Neville and Brugman

Minister's Decision: The Minister granted an application for an Aquaculture Licence for Danescastle wellington Bridge Co. Wexford. The application is for the cultivation of Pacific Oysters using bags and trestles on the foreshore in Ballyteigue Bay, Co. Wexford.

#### 1.2 Appeal Details

AP4/1-2/2023 2 February 2023

Appellants An Taisce and Jim Hurley

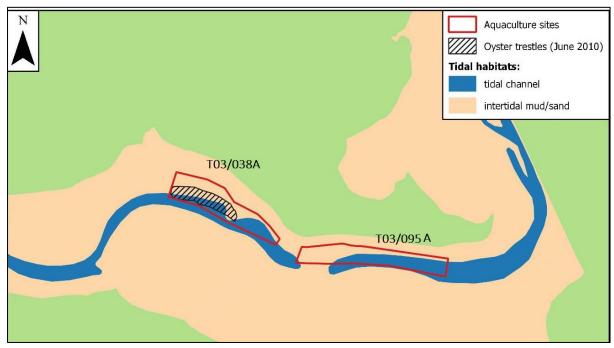
AP5/2023 2 February 2023

Appellants An Taisce

# 2.0 Project Scope Description

### 2.1 Scope

Aster Environmental Consultants, as the Contractor, are required to undertake a desk-based review and complete a comparison of documents received by the Board to date for the sites at Ballyteigue Bay, Co. Wexford.



Map 1: Location of licensed area (source Atkins 2020

The following documents are being considered

- 1. Atkins NIS for the SPA
- 2. Aguafact AAS for the SAC
- 3. An Taisce submissions
- 4. Jim Hurley Submission
- 5. Mr Neville Submission
- 6. Mr Roche Submissions (2023 and 2024)
- 7. INIS Ballyteigue Burrow Waterbird Survey Winter 2018-19, 2019-20 & 2020-21 Bird Survey Report June 2021

I do not attempt to address all the issues raised only those where there are contentious issues and or those with several differing opinions. My aim is to clarify the main issues raised and to distil the opinions of the various parties in order that a decision may be made.

# 3.0 Main Issues Arising

1. Special Protection Area Concerns

Uncertainty and Inadequacy of Data:

Impacts on Specific Bird Species:

Concerns on Conclusions of NIS

2. Special Area of Conservation

Impact on the Habitats

Use of the 15%

3. Legal and Regulatory Concerns:

### 3.1 Special Protection Area Concerns

- 1. Impacts on Specific Bird Species:
- 2. Uncertainty and Inadequacy of Data:
- 3. Concerns on Conclusions of NIS

#### 3.1.1 Impacts on Specific Bird Species:

These are

- 1. Grey Plover
- 2. Brent Geese
- 3. Wigeon

#### **GREY PLOVER**

The format follows the various comments, submissions and conclusions in respect of Grey plover from the appellants, applicants, consultants and technical experts.

An Taisce state the following; in respect of Impacts on Grey Plover: 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],

Jim Hurley states that he objects to the pacific oyster farm as "The proposed development is not compatible with the nature conservation objectives. He also states that "The SPA AA accepts that species of wild bird that the site is designated for could be disturbed" and "Consequently ....the precautionary principle must apply and the applications refused to conservae the integrity of the designated Natura 2000 site"

**Mr Neville** an applicant notes that Grey Plover, most expected to be negatively impacted by oyster farming, saw a significant population increase in Ballyteige during this period, contrary to national declines. He also states that : An Taisce suggests a decrease in oyster farming during the period of increased Grey Plover populations, despite evidence and personal testimony indicating increased production.

Mr Roche applicant for existing aquaculture on site (03/038A) makes the case for licencing his existing aquaculture (15/01/24). According to Mr Roche the potential displacement of Grey Plover in Ballyteigue Bay due to aquaculture activities is minimal, estimated at only 4.6-4.9% even in the worst-case scenario. Bird counts and studies show that Grey Plover numbers remain stable and even perform well in Ballyteigue, despite national and flyway trends showing declines. Other reports and surveys in similar areas like Bannow Bay and Dungarvan Harbour suggest that fluctuations in bird numbers may be due to natural factors, such as tidal

movements, rather than the impact of aquaculture. In his opinion Local oyster farming appears to have no significant detrimental effect on Grey Plover populations.

#### Inis Report

Mr Roche commissioned INIS environmental an experienced and well recognised consultancy to carry out bird surveys of Ballyteigue. They state "Peak counts of Grey Plover within the study area have exceeded the threshold for national importance in all three recent winters and during the winter of 2011/12. Numbers across the study area therefore appear to be stable, and they also appear stable across the entire SPA when comparing recent five year mean peak numbers with those from the baseline period (mid 1990's). This contrasts to the national trend; nationally, the species has been in decline over the long-term (Lewis et al., 2019) while INIS Environmental Consultants Ltd Ballyteigue Burrow Winter Waterbird Survey Report 27 the flyway trend is also for decline (Wetlands International, 2017). As a consequence, Grey Plover is now red-listed as a wintering species (Gilbert et al., 2021). Although peak numbers were recorded in all three subsites (including OOLO4 where this cultivation is located), OOLO6 (site TO3/095A) appeared to be favoured by Grey Plover during low tide. Of the three subsites, OOLO6 is the only one to have been ranked as 'very high' during winter 2011/12 (NPWS, 2014b) therefore the observed species distribution is consistent with these earlier results, a decade later."

Atkins NIS 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. Specifically Atkins state "Grey Plover is one of the species that shows the strongest negative response to oyster trestle cultivation, and it appears to be completely excluded from areas occupied by oyster trestles. Therefore, it is highly likely that development of the aquaculture sites in Ballyteige Bay will cause some level of displacement impact to Grey Plover.

Analysis of Grey Plover densities in the low tide counts indicates that they were fairly evenly spread across the intertidal habitat in Ballyteige Bay, apart from the lower part of the bay (subsite OOLO5), and the flock mapping data appears to support this pattern. The subsites containing the aquaculture sites hold around 60% of the intertidal habitat within Ballyteige Bay, so the subsite occupancy figure used for the displacement calculations may be a reasonable estimate of the overall mean subsite occupancy across the season.

At Dungarvan Harbour, we have recorded several instances of Grey Plover in intertidal habitat being flushed by husbandry activity in adjacent aquaculture sites at distances of up to 300 m, so a measurable level of displacement due to disturbance is also likely to occur. However, the actual displacement impact due to disturbance will depend upon the distribution and timing of the husbandry activities in the aquaculture sites.

Conclusion There is likely to be a measurable displacement impact to Grey Plover, and this may be significant when potential displacement due to disturbance is considered. It should, however, be noted that the population trend data for Grey Plover does not show any evidence of impacts from increasing levels of oyster trestles culture over the period 2008-2016. On this basis, it is

likely the displacement impact will be substantially lower than the calculated impacts for the two sites assessed (Table 7.5). Notwithstanding, it is recommended that site activities are confined within the licence blocks as well as maintaining strict adherence to access routes"

The Technical advisor Kendrew Colhoun states that ..., a number of factors are relevant with respect to this species (Grey Plover). 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.

#### Summary

- Significant risk of displacement, exclusion and disturbance to Grey Plover from presence of trestles and husbandry practices
- Grey plover populations concentrated in intertidal 60% of which is located in aquaculture subsites (00L04 and 00L06). This finding is recurrent in the Inis 2021 survey.
- Very vulnerable to displacement as they are highly site-faithful to a specific area within an estuary in winter. If this area is excluded by trestles the birds will be displaced.
- Population Increase: Grey Plover populations increased significantly in Ballyteigue during the period of oyster farming, contrary to national trends.
- Management and Mitigation: According to Atkins proper site management, including confining activities within licensed blocks and adhering to access routes, can reduce negative impacts.

#### **Legal Position**

Grey plover are particularly vulnerable to disturbance. Ballyteigue is designated to protect them. Oyster cultivation is a real risk for this species and the new proposed oyster cultivation (T03/095A) is likely to displace them from their favoured area (00L06). This is recognised in the NIS as significant and so mitigation is proposed. The mitigation as proposed is insufficient to have a finding of no significant impact.

#### **Brent Geese**

An Taisce 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.

Jim Hurley states that he objects to the pacific oyster farm as "The proposed development is not compatible with the nature conservation objectives. He also states that "The SPA AA accepts that species of wild bird that the site is designated for could be disturbed" and "Consequently ....the precautionary principle must apply and the applications refused to conserve the integrity of the designated Natura 2000 site"

**Mr Roche in his 2023 submission** refutes the findings of the SPA AA that the impact on Brent Geese is significant – when the trestles actually provide green algae food for them and they feed undisturbed in proximity to trestles when being managed.

In his 2024 submission he in summary states that evidence suggests Brent Gese adapt well to aquaculture. Studies, including a 2020 report from Carlingford Lough, indicate that these geese forage on and around trestles, using the algae that grows on oyster structures. He notes that the Technical Advisor raises concerns about the energetic impact, though observations and studies show that Brent Geese consistently use these areas for feeding, suggesting the presence of the oyster structures benefits them.

*Mr Neville* states that Light-bellied Brent Geese feed on algae-covered oyster bags, contrary to the SPA AA's claims of negative interactions with oyster farms in similar areas.

**Atkins** considered that "The predicted displacement impacts to Light-bellied Brent Goose and Wigeon are significant. However, there is a high level of uncertainty about this prediction 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"

At Ballyteige Bay, the small size of the aquaculture sites may limit their potential exploitation by Light-bellied Brent Goose and Wigeon due to disturbance from husbandry activities. However, this will not affect their exploitation on ebb and flood tides before/after any husbandry activity takes place and on low tides when no husbandry activity takes place. It also seems certain that the figure for the waterbird occupancy of the subsites containing the aquaculture sites is a large overestimate of the mean waterbird occupancy levels of these subsites.

However, the location of the aquaculture sites along the main tidal channel may increase the potential for disturbance impacts from husbandry activity as Light-bellied Brent Goose and Wigeon may gather along this channel at low tide. Overall, while the predicted displacement impacts for Light-bellied Brent Goose and Wigeon are relatively high, there is uncertainty about whether oyster trestle cultivation will have any net displacement impact on Light-bellied Brent Goose at Ballyteige Bay. If a net displacement impact occurs, the predicted displacement impact is likely to be a significant overestimate of the likely displacement

#### Inis Report 2021

They found that "Light-bellied Brent Goose During the baseline data period used for SPA designation, Light-bellied Brent Goose occurred in numbers of international importance across Ballyteigue Bay SPA. It is notable therefore, that numbers of international importance occurred within the area covered by the three subsites (OOLO2, OOLO4, OOLO6) used during the current winter surveys, a much smaller area than the entire SPA. While peak counts within the study area in recent years exceed those of 2011/12, numbers appear to have dropped slightly in recent winters, consistent with the national trend over five- and ten-years (Lewis et al. 2019). Of the three subsites, numbers of geese have been consistently higher in OOLO6 [where the new aquaculture T03/095A is proposed] during low tide surveys in recent winters, although it is clear that all three subsites can support peak numbers on occasion. Across the entire SPA site, numbers were ranked as 'very high' in the low tide surveys of 2011/12 (NPWS, 2014b), so recent results are consistent with these earlier findings."

**Technical advisor Kendrew Colhoun** states "The predicted displacement impacts to Light-bellied Brent Goose ... 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.

### Summary

The area of aquaculture sites corresponds with very high max numbers of Brent geese in the WSP data provided in the Atkins assessment. In particular the Inis report shows the same pattern usage of the site as previously reported by Atkins with subsections OOL04 and OOL06 areas with existing cultivation (T03/038) and proposed cultivation (T03/095A) particularly favoured by Brent geese. Although there is evidence that these birds may feed on the trestles there is significant lacunae in the assessment so as to cast doubt on the impacts. Given the high numbers using this area there is significant potential for disturbance and displacement

#### Wigeon

**An Taisce** state "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"

**Mr Neville states that** Wigeon, not a conservation objective for Ballyteige Burrow SPA, were included in the SPA AA despite questionable relevance due to distance from their main habitat, Tacumshin Lake, and their feeding habits

Jim Hurley Identifies issues within the SPA/AA report including (i) that the proposed sites are within the SPA, (ii) that there are significant constraints associated with the AA (as described by the authors), (iii) that the AA states significant (S) displacement impacts on wintering SCI species –Wigeon He states that he objects to the pacific oyster farm as "The proposed development is not compatible with the nature conservation objectives. He also states that "The SPA AA accepts that species of wild bird that the site is designated for could be disturbed" and "Consequently ....the precautionary principle must apply and the applications refused to conservae the integrity of the designated Natura 2000 site"

**Mr Roche** in his 15/01/24 submission states that Wigeon are not a Special Conservation Interest (SCI) species for Ballyteigue Bay but for Tacumshin Lake, which is over 10 km away, beyond Wigeon's typical foraging range of 5-8 km. He also emphasizes that his oyster farm, by fostering algae growth on trestles, provides additional food resources for geese and other waterfowl, including Brent Geese. Therefore, he suggests that removing the farm, as would actually have a negative impact on these birds.

#### Inis Report

The Inis report states little about Wigeon. They note "Numbers of several species across the past decade appear stable including Light-bellied Brent Goose, Wigeon..."

**Technical advisor Kendrew Colhoun** states "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, (less likely) to respond positively to aquaculture structures."

**Atkins SPA NIS** considered that "The predicted displacement impact .... 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."

At Ballyteige Bay, the small size of the aquaculture sites may limit their potential exploitation by Light-bellied Brent Goose and Wigeon due to disturbance from husbandry activities. However, this will not affect their exploitation on ebb and flood tides before/after any husbandry activity takes place and on low tides when no husbandry activity takes place. It also seems certain that the figure for the waterbird occupancy of the subsites containing the aquaculture sites is a large overestimate of the mean waterbird occupancy levels of these subsites.

However, the location of the aquaculture sites along the main tidal channel may increase the potential for disturbance impacts from husbandry activity as Light-bellied Brent Goose and Wigeon may gather along this channel at low tide. .... the predicted displacement impacts for Light-bellied Brent Goose and Wigeon are relatively high

"There is potential for full occupation of the aquaculture sites to cause significant displacement impacts to this species within the Ballyteige Burrow SPA. However, there is a high level of

uncertainty about the likelihood of this impact as this species may not be adversely affected by oyster trestle cultivation.

The effects of any such impacts on the conservation objectives for the Tacumshin Lake SPA would depend upon the connectivity between the two sites. If their connectivity is high, the two sites would effectively support a single population and it is possible that major displacement impacts within the Ballyteige Burrow SPA would affect attribute 1 (population trend) of the conservation objectives for the Tacumshin Lake SPA."

#### Summary

Wigeon are not a species for which Ballyteigue Burrow is designated as a Special Protection Area. In terms of Appropriate Assessment, it is of significant as an ex situ impact on a neighbouring SPA Tacumshin Lake. If the Wigeon are displaced there is potential for them to relocate here which may in turn make them more vulnerable to disturbance and susceptible to low food availability. The assessment states that ".... the predicted displacement impacts for Light-bellied Brent Goose and Wigeon are relatively high" however they caution this maybe an overestimate. The technical advisor notes that wigeon are more sensitive to disturbance than Brent Geese and are unlikely to "respond positively to trestles". Again the precautionary principle applies and expansion of aquaculture here is not deemed compatible with the Habitats directive.

#### 3.1.2: Uncertainty and Inadequacy of Data:

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. An Taisce questions the reliability of the data and states that in some cases it is "scientifically flawed" as the data is does not support the conclusions drawn. They question the Waterbird Occupancy Data in particular the SPA/AA statement of 'presumed overestimates of sub-site occupancy levels' is contested, suggesting an underestimation. Absence of site-specific information on aquaculture is also noted

Jim Hurley noted Significant constraints associated with the AA. These are acknowledged by Atkins consultants. Mr Hurley states that the Ministers' decision is unsound due to incomplete information in the NIS reports. Absence of site-specific information on aquaculture is noted.

Mr Neville does not specifically ref to the data used in the assessment but states that the majority of birds "between 2006/07-2010/11 and 2011/12-2015/16, oyster trestle cultivation in Ballyteige Burrow SPA increased, yet nine of eleven waterbird species had better population trends compared to the national trends". He also states that "The SPA AA is criticized for using overly cautious assumptions and worst-case scenarios to assess the impact of oyster farming on bird populations, potentially skewing the results against aquaculture"

Atkins NIS states in repect of the quality of their data for this assessment of bird impacts in the SPA " This assessment is based on a desktop review of existing information. Where relevant, it identifies information gaps that may affect the reliability of the conclusions of this assessment. ... There was very limited information available on the current and proposed aquaculture activities in Ballyteige Bay. This has meant that we have had to make assumptions about details of the activities, based on experience of oyster trestle cultivation at other Irish coastal sites. This is a particular issue for the assessment of potential disturbance impacts, where the predicted impacts are sensitive to the assumptions made about the likely patterns of husbandry activities. There was also very limited waterbird data available for this assessment.

The Irish Wetland Bird Survey counts the Ballyteige Burrow SPA as a single count unit, so I-WeBS data cannot be used to examine waterbird distribution patterns within the SPA. We made efforts to consult with the I-WeBS counter, but these were unsuccessful. Our assessment has relied mainly on data from the 2011/12 Waterbird Survey Programme counts. This means that we had a very limited dataset of four low tide counts from one winter to use for out displacement analyses. Therefore, a high degree of uncertainty applies to inferring detailed distribution patterns of waterbirds within Ballyteige Bay from these counts

At other sites where we have carried out similar assessments, we have had datasets based on a relatively large number of counts over several seasons (e.g., Gittings and O'Donoghue, 2014b), or we have had alternative methods of assessing displacement that can be compared with the occupancy ... For the present assessment, the only data that we have on waterbird distribution within Ballyteige Bay is from the WSP low tide counts. There were only four low tide counts carried out, and for several of the SCI species the effective sample size is only two or three counts, as they were absent, or only present in very low numbers on one or two of the low tide counts.

We do not have any other data that can be used to evaluate whether the distribution recorded in the WSP low tide counts was representative of typical low tide distribution patterns. A sample size of 2-4 counts is too low for calculations of meaningful occupancy levels using the means of the counts. There would be a high risk of any such calculated means underrepresenting the actual mean occupancy levels due to sampling effects. Therefore, as a precautionary measure, we have used the maximum waterbird occupancies for the calculation of displacement impacts."

**Technical advisor Kendrew Colhoun** makes the following points in relation to the poor quality data

- Absence of site-specific information on aquaculture husbandry activities (timing, extent, frequency, scale) limits understanding/predicting potential effects on the SCI and other species.
- The AA identified limited waterbird data for assessment, with only one season of data (2011/12) available, lacking fine-scale spatial distribution patterns. Understanding potential effects at waterbird sites requires fine-scale, within-site information, such as repeated counts over multiple months/years, recording abundance and behaviour at sub-site scales.
- Displacement analysis in the AA was based on count data from four months in one year, leading to high uncertainty in the inferences.
- Reaching conclusions on potential displacement effects without sufficient data is fraught with uncertainty.
- Predicted displacement impacts to other species are negligible or not significant, with moderate uncertainty due to data limitations.
- Inadequacies in data make it difficult to generate robust displacement assessments and conclusions about potential impacts of proposed developments.
- Overall, the AA's conclusions are unreliable due to significant data inadequacies and uncertainties.

#### Summary

The data too weak for a finding of no significant impact especially as the potential for significant impact on Brent Geese and Grey Plover at Ballyteigue has been identified as well as potential Ex situ impacts on Wigeon at Tacumshin Lake . The precautionary principal means that if the impacts are uncertain then the project cannot proceed. There is considerable uncertainty in respect of this assessment.

Since the conclusion of the TAR and NIS the Inis Report commissioned by Noel Roche was prepared to address this data deficit.

This report states "Ballyteigue Burrow Waterbird Survey for Winters 2018-2019, 2019-20 and 2020-2021 was considered post TAR report. Their findings were that "The recent three winters of low and high tide surveys are, to our knowledge, the first such surveys undertaken since the winter of 2011/12 when NPWS undertook the Waterbird Survey Programme. A decade on, it is therefore timely that a comparison be made between the results of these surveys. On the whole, the distribution of waterbird species between the three subsites remained relatively consistent

with that recorded during the winter surveys of 2011/12. This goes to show a good degree of subsite faithfulness, and also highlights that waterbirds' patterns of distribution are not random, rather species distribute for a reason, be it food resources or other factors such as shelter from prevailing winds or protection from predators" This data would be required to be input to the Atkins (2020) model to affect a result in terms of subsite usage and interpretation of impact. However, the trends of site usage are the same as shown previously and the ecology of the species has informed the conclusions therefore this new data does not change the overall decision.

#### 3.1.3 Concerns on Conclusions of NIS

An Taisce raised some issues with this application. An Taisce stated that there was uncertainty for the Special Protected Area (SPA). It maintained it could adversely effect the Grey Plover, Light-bellied Brent Geese and Wigeon. They state that the impacts to other species are discounted. There is potential for full occupation of the aquaculture sites to cause significant displacement impacts to the Light- bellied Brent Goose and to Wigeon and Grey Plover. They also stated that there are no adequate mitigation measures provided to offset any of the identified potential impacts, that the SPA report is a "catalogue of clearly expressed uncertainties" and based on the data provided in the documentation "it would be an impossibility for the relevant authority to lawfully reach a conclusion of no adverse impacts on the relevant SPAs." Impacts on specific bird species

Jim Hurley Identifies issues within the SPA/AA report. He states "The proposed development is not compatible with the nature conservation objectives. He also states that "The SPA AA accepts that species of wild bird that the site is designated for could be disturbed" and "Consequently ....the precautionary principle must apply and the applications refused to conserve the integrity of the designated Natura 2000 site"

Mr Neville notes in respect of the Precautionary principle ...he states that this is no longer relevant since the claimed negative impacts have not occurred; to the contrary the aquaculture activity to date has protected the ecosystem and that 'the precautionary principle would be better used to prevent his removal as there could be unknown negative impacts of a much more serious manner if (his) farm was removed'. He adds that if his activities to date were so harmful why would the authorities (NPWS) not have sought cessation to avoid 'the catastrophic impacts such as SWC/My Hurley refer to'.

**Noel Roche** states in 2023 that Despite the harsh assessment, the Licensing Authority concluded that proposed aquaculture operations in Ballyteige Burrow SAC/SPA are not likely to significantly and adversely affect the area's integrity, supporting the continuation of oyster farming. In 2024 he states "There have been no lasting adverse effects from the presence of my oyster farm on the shore in Ballyteigue since 1985. .... their (Atkins) AA conclusion statement does rule out significant negative impacts and thus the DAFM granted a licence. Follow up studies of managed oyster farming in Bannow Bay and Dungarvan Harbour reassure the MI that aquaculture is not causing lasting significant negative impacts and indeed there are other larger scale factors as the trends are not significantly different from site to national scale."

#### **Technical advisor Kendrew Colhoun** makes the following points

"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."

#### Summary

The Atkins data show a potential significant impact on Ballyteigue Burrow SPA through disturbance and displacement of Grey Plover and Brent Geese. These species are confirmed to favour the areas of the estuary where the applications for oyster cultivation have been made. In particular the Inis report shows significant usage of subsections OOL04 and OOL06 by Grey Plover and Brent Geese. The subsite OOL06 is the most favoured area of the estuary by Brent and by Grey Plover this is corresponds to the application area for new cultivation of oysters T03/095A.

The Habitats Directive require that projects that significantly interfere with the conservation objectives of the Natura 2000 network must be refused unless the impact can be wholly mitigated against. Successful mitigation is not likely against exclusion and displacement.

#### 3.2 Special Area of Conservation concerns

An Taisce 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. 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.

Jim Hurley Cites the SAC AA including (i) absence of specific details about the existing or proposed details of aquaculture at Ballyteigue Burrow, (ii) accept potentially damaging effects of oyster cultivation on the surrounding biological and physical environment, (iii) that the two proposed applications are within two Annex 1 habitats which are QIs for the SAC, (iv) query the scientific/legal basis of the 15% threshold between disturbing activity and a habitat

**Mr Roche** refutes the Appellant's assertion that the State's assessment is flawed; rather stating that in their opinion aquaculture is subject to 'rigorous and I would say harsh' AA, that the 15% rule is stricter than the EC guideline 25% rule.

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

**Technical advisor Kendrew Colhoun** makes the following points "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)"

#### Summary

The impacts on habitats are within tolerable limits and would not directly impact the Annex 1 habitats to a significant degree in respect of the Sites Conservation Objectives.

#### 3.3 Legal Status

There are contributions in respect of the fact that Ballyteigue Burrow is not a Designated Shellfish Waters Area or a Special Unified Marking Schemes and that it is a Nature Reserve. However it is my opinion that the most pressing legal aspect is the fact that the site T03/038A is not licenced.

**Technical advisor Kendrew Colhoun** "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."

Jim Hurley states that "The issue of unauthorised aquaculture as the appeal sites has been the subject of controversy for 40 years since the early 1980s unauthorized agriculture has been practiced with state support by several interests on the foreshore (at Ballyteigue bay)"

**Noel Roche**"The Applicant" states that his oyster farming activities pre-date the SPA and SAC designations and questions the possible MPA status (and if that were the case, that no activity can take place within it). He adds that if his activities to date were so harmful why would the authorities (NPWS) not have sought cessation to avoid 'the catastrophic impacts such as SWC/My Hurley refer to'

#### Summary

The Site is proposed as an SPA since March 1990 code IE0004020 and the Ballyteigue Burrow Nature Reserve was designated in 1987 Ballyteigue Burrow Nature Reserve

Under Section 6 of the <u>Fisheries (Amendment) Act, 1997 (as amended)</u>, it is illegal to engage in aquaculture without an appropriate Aquaculture Licence. Aquaculture includes the culture or farming of fish, aquatic invertebrates.

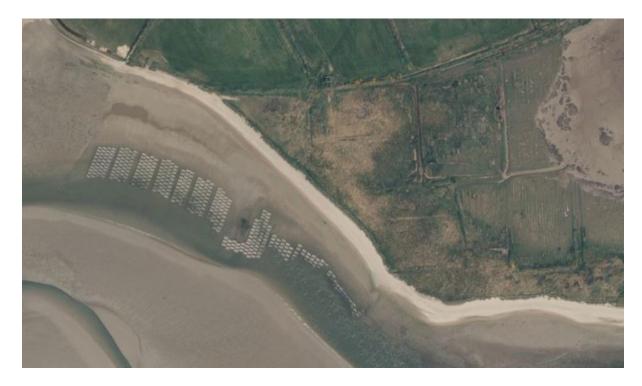
However the operation existed since the early 1980s this predates the act. In fact there appears to have been continuous use of the site since then.



Map 2: Oyster cultivation since 1995 (source Geohive aerials)

Green 1995, purple 1996, red 2006, blue 2013-2018, background photo 2011-13

Aerial photos date back to 1995 and it can be seen that aquaculture has been present in the area of licence application T03/038A since at least that time.



Map 3: Bing maps 2021

### Recommendation

I recommend that the Ministers decision to grant a licence to T03/038A is upheld because it predates the SPA designation 1990, the Nature reserve designation 1987 and the Fisheries Act 1997. In addition given the lack of data on bird use of the estuary before this aquaculture was put in place we have no evidence of significant negative impact upon which to refuse permission. Granting permission will enable more control as the boundaries will be defined and the operator will be subject to husbandry recommendations and other constraints as per licence conditions.

I recommend that the Ministers decision to grant a licence to T03/095A be rescinded. There is clearly the potential for impact at Ballyteigue Burrow which would conflict with the conservation objectives for Grey Plover and Brent Geese. Ex situ impacts are also possible in respect of Wigeon at Tacumshin lake. The mitigation measures proposed could not reduce this risk to a non significant level. Therefore to permit this licence would be in contravention of the Habitats Directive.

Technical Advisor: Marie Louise Heffernan Aster Environmental Consultants Ltd

Date: 19/06/2024