ASTER ENVIRONMENTAL CONSULTANTS LTD

AA Conclusion Statement Ballyteigue

Summary of Findings

In order to calculate impact pf oyster farming on birds Atkins refer to studies at Bannow bay and Dungarvan harbour in which observations were made of various bird species to disturbance and the presence of trestles. The findings in relation to Bannow Bay are summarised in Atkins table 7.1 appendix see column called “Overall response”

These and other data collated from Dungarvan was used by Atkins to estimate displacement by oyster cultivation. Table 7.3 in appendix (source Atkins NIS) show the highest max count of waterbirds in the subsections used by Birds of Conservation Concern. These are related then to area occupied by trestle (exclusion area) and disturbance impacts (husbandary etc). It is worth noting that this table below is based on just three low tide counts in a single wintering period

It can be seen that this section the population of the birds recorded are those specifically located in the subsites of the bay containing the aquaculture sites (T03/095A and T03/038A). The numbers are high with notable highs of 430 Brent geese in this area, Wigeon 395, Grey Plover 71. These all represent a significant proportion of these birds in this section of the bay during low tide.

The appropriate assessment deals with specific species and their conservation objectives. For Ballyteigue these Special Conservation Interest Species are listed in Table 1 below

Special Conservation Interest Species Ballyteigue Burrow SPA	Potentially Significant Displacement predicted by Atkins	% displacement
Brent Goose	Yes	6.7-7%
Shelduck	No	
Golden Plover	No	
Grey Plover	Yes	4.6-4.9%
Lapwing	No	
Black Tailed Godwit	No	
Bar Tailed Godwit	No	

Table 1 Special Conservation Interest Species Ballyteigue Burrow

Therefore, there is potential to displace both Brent Geese, and Grey Plover as a result of proposed aquaculture. No distinction in the Atkins report was made between existing and proposed oyster trestles.

Exclusion due to the presence of trestles makes up around 50% of the overall predicted impact and disturbance the remainder.

Mitigation is not possible in the case of exclusion and is unenforceable in relation to disturbance due to husbandry activities.

Therefore in relation to Ballyteigue Burrow alone the impacts cannot be entirely mitigated against and the project must be refused on potential impacts on these species alone

Cumulative Impacts

The predicted displacement of these birds may result in higher numbers of the displaced birds in nearby sites such Tacumshin lake . These SPAS may act like one site. However the degree of connectivity between sites is unknown. The possibility is that the population could be increased at these sites if displacement occurs from Ballyteigue

For Tacumshin lake a Special Conservation Interest is Wigeon and so there is a potential to interfere with the conservation objective to maintain the population of Wigeon on site

Special Conservation Interest Species Tacumshin Lake SPA	Potentially Significant Displacement predicted from Ballyteigue	% displacement from Ballyteigue (potentially to Tacumshin lake
Wigeon	Yes	6.7-7%

Table 2: Special Conservation Interest Species Tacumshin Lake SPA

Displacement would potentially increase numbers of Wigeon at Tacumshin with possible negative implications for their conservation in terms of survival for example additional competition for resources

Concluding statement

In conclusion displacement of Grey plover and Brent geese are predicted at a level incompatible with the conservation objectives for these species at Ballyteigue Burrow SPA. Wigeon populations at Tacumshin Lake SPA may also be impacted as a result of displacement from Ballyteigue. Thus the project incompatible with the Conservation Objectives for the Natura 2000 network and not compatible with the provisions of the Habitats Directive.

However absent in the assessment is the consideration of two types of oyster cultivation sites

1. T03/095A Proposed cultivation
2. T03/038A existing oyster cultivation

Purely from an ecological perspective these are different proposals. T03/038A has existed since the mid 1980s We do not have any data before the farm existed so we have no way of determining displacement 40 years ago. Regular IWeBS counts only commenced in 1994. As the farm exists we cannot analyse these birds currently using the site in relation to predicted exclusion /disturbance impacts in the past (see table 7.3) as presumably this has already happened.

Therefore I conclude that no significant ecological impact on the conservation objectives of Ballyteigue Burrow SPA will result with continuation of use of this site T03/038A.

In contrast T03/095A is a new application. Displacement impacts on the Natura 2000 network are predicted in relation to Grey Plover, Brent and Wigeon. These birds all favour the subsite in which aquaculture licencing is proposed. It is worth noting that 0OL06 the subsection in which the T03/095A lies was the second most important area within the entire Ballyteigue site (see Table 5.6 atkins) for both Brent and Grey Plover during the WSP counts.

Overall, the assessment suffers from weak data however the likelihood of impact on these three species is accepted with impacts on the SCI also of Tacumshin lake. The mitigation proposed is not adequate to result in a finding of no significant impact with mitigation.

Trends of the bird numbers on site was a consideration by Atkins in their assessment. In my opinion although Grey plover is increasing on site (Table 3 appendix I) . There are other factors which make them particularly vulnerable. In particular it is known that they return to the exact same area within an estuary annually and as they are known to particularly use this subsite (0Ol06) (see table 5.6 appendix I) it would appear that additional oyster cultivation is incompatible with the designation. Therefore, Oyster Cultivation, an activity with potential to displace them could not be permitted in this SPA with a conservation objective to “maintain their (Grey Plover) favourable conservation condition”. This is in line with the precautionary principle enshrined in the Habitats Directive

Brent Geese are decreasing on site which is contrary to the national trend. Nationally Brent Geese numbers have doubled but declined at Ballyteigue (Table 3 appendix 1) . Therefore, an activity with potential to displace them could not be permitted within an SPA with a conservation objective to “maintain their favourable conservation condition”.

Therefore this application (T03/095A) does not reach the bar required in the habitats directive and must be refused.

Technical Advisor: Marie Louise Heffernan Aster Environmental Consultants Ltd

Date: 19/06/2024

Appendix I

Bird	Trend at Ballyteige (23 years)	Trend nationally 22 years
Golden Plover	-77%	-43.4%
Grey Plover	0	-61.8%
Bar tailed Godwit	-47.2%	+31.7
Blacktailed godwit	-43.3%	+77%
Lapwing	-76.7	-67.6
Shelduck	-40%	-23%
Brent geese	-12%	+96%

Table 3. Trends in abundance of selected species at Ballyteigue over short-, medium- and long-time period. (Summary of Table 3 Technical advisor KC report

Table 5.6 – Mean waterbird densities (birds/ha) in the 2010/11 WSP low tide counts.

Species	Outer	Mid		Estuary	The Cull	
	0OL05	0OL04	0OL06	0OL03	0OL07	0OL08
Light-bellied Brent Goose	1.9	0.2	4.7	0.6	21.1	0.3
Shelduck	0.0	0.0	0.1	0.0	0.0	1.5
Wigeon	0.6	3.8	1.7	1.2	0.0	1.7
Golden Plover	0.0	0.0	0.4	49.4	309.2	119.0
Grey Plover	0.0	0.2	0.5	0.3	0.9	0.2
Lapwing	4.4	5.1	13.2	32.0	35.7	59.1
Curlew	3.7	0.8	0.9	0.7	4.7	3.5
Black-tailed Godwit	0.0	0.1	0.6	5.4	0.2	4.2
Bar-tailed Godwit	0.0	0.1	0.3	1.0	0.7	2.2
Dunlin	0.0	0.0	1.3	1.3	9.9	10.3
Redshank	0.0	0.1	0.6	3.3	2.3	3.8

Data source: 2011/12 Waterbird Survey Programme as undertaken by the National Parks & Wildlife Service.

Sample sizes: n = 4 for all species, except Shelduck (n = 2), and Light-bellied Brent Goose, Wigeon, Grey Plover, Lapwing and Black-tailed Godwit (n =3).

Table 7.1 - Summary of patterns of association with oyster trestles at Bannow Bay.

Species	Overall response	Jacobs index (D) values for Bannow Bay							
		All sectors				Close sectors			
		D sum	D min	D max	n	D sum	D max	D min	n
Light-bellied Brent Goose	Variable	-0.86	-0.69	-1.00	2	-0.92	-0.81	-1.00	2
Shelduck	(Negative)	-	-	-	-	-	-	-	-
Wigeon	-	-	-	-	-	-	-	-	-
Golden Plover	-	-	-	-	-	-	-	-	-
Grey Plover	Exclusion	-	-	-	-	-	-	-	-
Lapwing	(Negative)	-	-1.00	-1.00	3	-	-1.00	-1.00	2
Knot	Exclusion	-	-	-	-	-	-	-	-
Dunlin	Negative	-1.00	-1.00	-1.00	4	-1.00	-1.00	-1.00	4
Black-tailed Godwit	(Negative)	-1.00	-1.00	-1.00	2	-	-	-	-
Bar-tailed Godwit	Negative	-0.78	-0.67	-0.87	4	-0.60	-0.40	-0.81	3
Curlew	Variable	-0.66	-0.58	-0.95	3	-0.33	-0.39	-0.91	2
Redshank	Neutral/ positive	-0.76	-0.69	-0.95	3	-0.74	-0.59	-0.90	3

Note: Overall response is as classified by Gittings and O'Donoghue (2012), with the exception of Curlew (see text).

Table 7.3 - Predicted displacement (% of total Ballyteige Bay population).

Species	Waterbird occupancy		Displacement impact		
	Count	Percentage	Exclusion	Disturbance	Overall
Light-bellied Brent Goose	430	98%	3.4%	3.2-3.5%	6.7-7.0%
Shelduck	5	23%	0.8%	0.7-0.8%	1.5-1.6%
Wigeon	395	100%	3.4%	3.2-3.5%	6.7-7.0%
Golden Plover	18	0%	0.0%	0.0%	0.0%
Grey Plover	71	69%	2.4%	2.2-2.5%	4.6-4.9%
Lapwing	1809	35%	1.2%	1.1-1.2%	2.3-2.5%
Curlew	147	36%	1.2%	1.2-1.3%	2.4-2.6%
Black-tailed Godwit	73	21%	0.7%	0.7%	1.4-1.5%
Bar-tailed Godwit	35	33%	1.1%	1.1-1.2%	2.2-2.3%
Dunlin	80	16%	0.6%	0.5-0.6%	1.1-1.2%
Redshank	66	38%	1.3%	1.2-1.4%	2.6-2.7%

Note: The waterbird occupancy columns show the maximum counts, and maximum percentages of the total Ballyteige Bay counts, recorded in the subsites containing the aquaculture sites during the WSP low tide counts. The displacement impact columns show the predicted displacement impacts caused by displacement of birds from the aquaculture sites (exclusion), and by disturbance to birds in adjacent areas of tidal habitat (disturbance). The range of values for the disturbance impact represent the variation between the displacement predicted using disturbance buffers generated by point sources in the centre of the aquaculture sites and displacement impacts generated by disturbance buffers generated using quarter segments of the aquaculture sites (see Chapter 2).