

Technical Advisor's input into Shellfish Appeals Appeal Ref No. AP3-16/2020 with specific input into distance from Seal Haulout site.



Appeal description: Appeal against the decision of the Minister for Agriculture, Food and the Marine to grant Aquaculture and Foreshore licences in November 2019, for the cultivation of Pacific Oysters using bags and trestles and for the cultivation of Clams at fourteen sites in Ballyness Bay, County Donegal.

30/04/24

Prepared by: Bryan Deegan (MCIEEM) of Altemar Ltd.

On behalf of: ALAB

Introduction

Background

A technical advisor report was prepared by Dr Ciar O'Toole on 10/04/2024 in relation to appeals in relation to fourteen aquaculture sites in Ballyness Bay, County Donegal, The Recommendation of the Technical Advisor with Reasons and Considerations were outlined as follows:

- 1) "It is the technical advisors recommendation to grant a licence for appeal sites AP3/2020, AP4/1-2/2020, AP6/2020, AP7/2020, AP8/2020, AP9/2020, AP10/2020, AP11/2020, AP12/2020, AP15/2020 and AP16/1-3/2020. These sites are suitable for the proposed development for the following reasons:
- There are no objections from a technical perspective as the sites are suitable for trestle culture, being in an area with a firm substrate of sand and a good tidal range for the intertidal culture of oysters.
- An alternative access route has been identified which does not pose a risk to the Annex 1 habitat (2130);
 Fixed coastal dunes with herbaceous vegetation (grey dunes) which forms part of the Ballyness Bay SAC.
- Although the sites are not in a Designated Shellfish Area or a Classified Bivalve Mollusc Production Area, this does not preclude the site from being licenced.
- The area used by the sites do not utilise more than the 15% habitat use threshold identified for disturbance of a conservation interest within a SAC.
- The Sites are a suitable distance from the known seal haul-out site identified in the bay.
- The sites will have a positive impact on the local economy.
- The sites will not have a significant negative impact on the statutory status, ecology or environment of the bay.
- The sites will not have a negative impact on the man-made heritage of the area.
- Visual impact of the Site from nearby roads will be minimal due to distance although there will be some visual impact for recreational users at low tide due to the flat, open nature of the bay, but this is not considered significant.
- Potential risk to recreational users e.g. kayakers, windsurfers if the locations of the trestles are not marked at high tide, but the technical advisor recommends that suitable marking be made a condition of any licence granted.
- 2) It is the technical advisors recommendation to grant a licence for part of the site for appeal site AP5/2020. This site was granted with variation by the Minister, effectively splitting it into two sites. The TA advises granting T12/409B1 for the same reasons outlined above and granting with variation T12/409B2, removing the portion that overlaps with the 200m limit from seal haul out sites as shown in the accompanying maps.
- 3) It is the technical advisors recommendation to refuse a licence for appeal site AP13/1-3/2020 and AP14/2020. The sites are not suitable for the proposed development as they are not a suitable distance from seal haul out sites in the bay and therefore have the risk of causing a significant negative impact under site suitability, statutory status and ecological impact."

Study Objectives

The objectives of this Technical input are to:

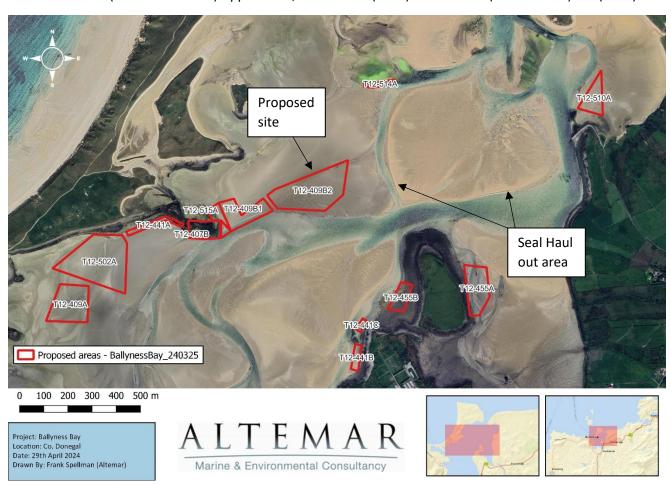
1) Provide technical assistance in relation to the revised co-ordinates for T12/409B2 in compliance with consultation with NPWS.

Altemar Ltd.

Since its inception in 2001, Altemar has been delivering ecological and environmental services to a broad range of clients. Operational areas include: residential; infrastructural; renewable; oil & gas; private industry; Local Authorities; EC projects; and, State/semi-State Departments. Bryan Deegan, the managing director of Altemar, is an Environmental Scientist and Marine Biologist with 30 years' experience working in Irish terrestrial and aquatic environments, providing services to the State, Semi-State and industry. He is currently contracted to Inland Fisheries Ireland as the sole "External Expert" to environmentally assess internal and external projects. He is also chair of an internal IFI working group on environmental assessment. Bryan Deegan (MCIEEM) holds a MSc in Environmental Science, BSc (Hons.) in Applied Marine Biology, NCEA National Diploma in Applied Aquatic Science and a NCEA National Certificate in Science (Aquaculture).

Assessment

The proposed site at Ballyness Bay was visited on 26th April 2024. As per the Technical Advisor's Report, a seal haul out site has been identified on a sand bank within Ballyness Bay to the north east of T12/409B20. Harbour seals were present on the haul out area during the site visit. Seals in Ireland are protected under the Habitats Directive (92/43/EEC), Annex II, Annex V, Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) Appendix III, Wildlife Act (1976) and Wildlife (Amendment) Act (2000).



A 200m buffer was recommended by NPWS around this haul out site in relation to aquaculture sites to help prevent disturbance of the haul area on the sandbank. During the site visit GPS coordinates were taken along the channel running along the western boundary of the haul out site to compare the real time location with the most up to date satellite imagery (June 2023) (Figure 1) and georeferenced imagery back to 1996. The channels surrounding the sandflats within the Bay are temporally mobile and see significant changes over time. As a result, the perimeter of the defined seal haul out area alters over time. GPS coordinates indicated a shift in this channel by up to 42m within this timeframe (1996-2023). It can be expected that the precise location of the sand bank identified as a seal haul out site had shifted accordingly in this area. In order to set a 200m buffer within the boundaries of future potential movements of sand banks within the strand, historic maps were compared for years 1996 (GeoHive), 2006 (GeoHive), 2013 (GeoHive), 2022 (Google Earth Pro) and 2023 (Google Earth Pro). These years showed the highest varianve. The boundaries of the identified seal haul out site for each year were mapped. The mapped western bank of the channel along the western boundary of the seal haul out site was also included (2024). A 200m buffer was drawn around each boundary, and the 200m buffer which protruded the most into the proposed designated areas within the bay, in particular area T12-409B2, were minimised according to these buffers to provide new proposed areas.

Areas T12-409B2 should be required to be reduced in size in order to accommodate a 200m buffer when historic shifts in the sand bank identified as a seal haul out site are taken into account. The coordinates for which these areas are crossed by maximum historic 200m buffer (based on 1996 orthophotography) are listed in table 1.

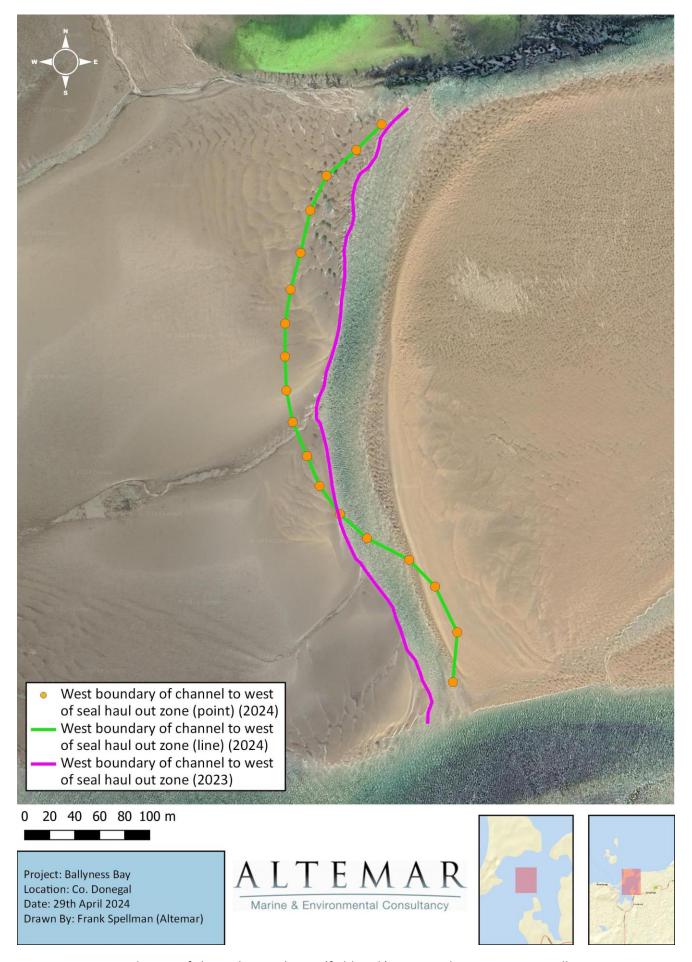


Figure 1. GPS Co-ordinates of channel in April 2024 (fieldwork) compared to June 2023 Satellite imagery.

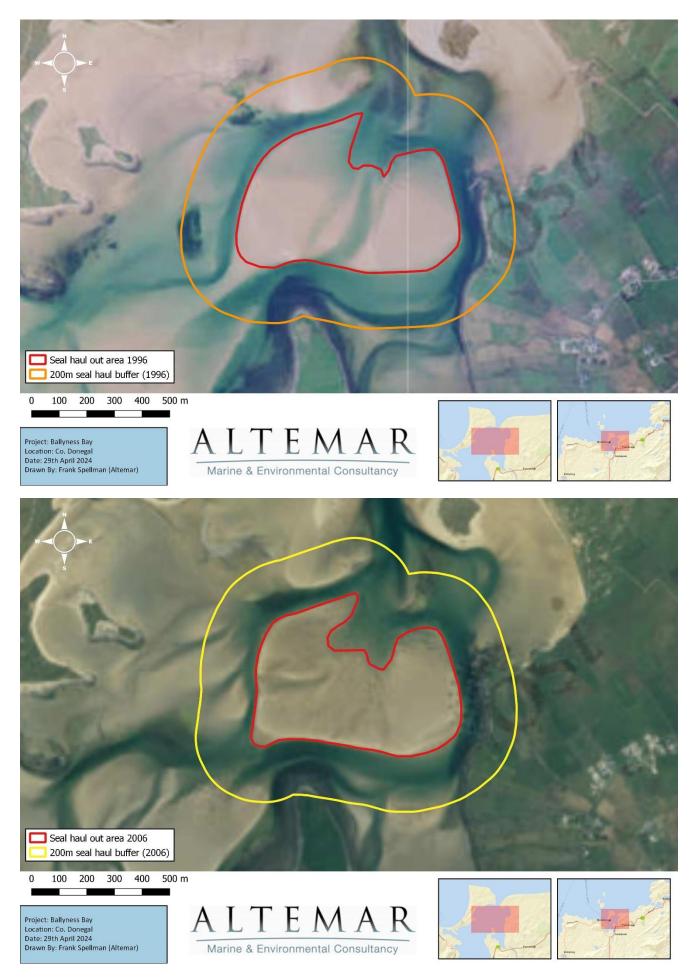


Figure 2. Buffer based on 1996 and 2006 Satellite imagery.

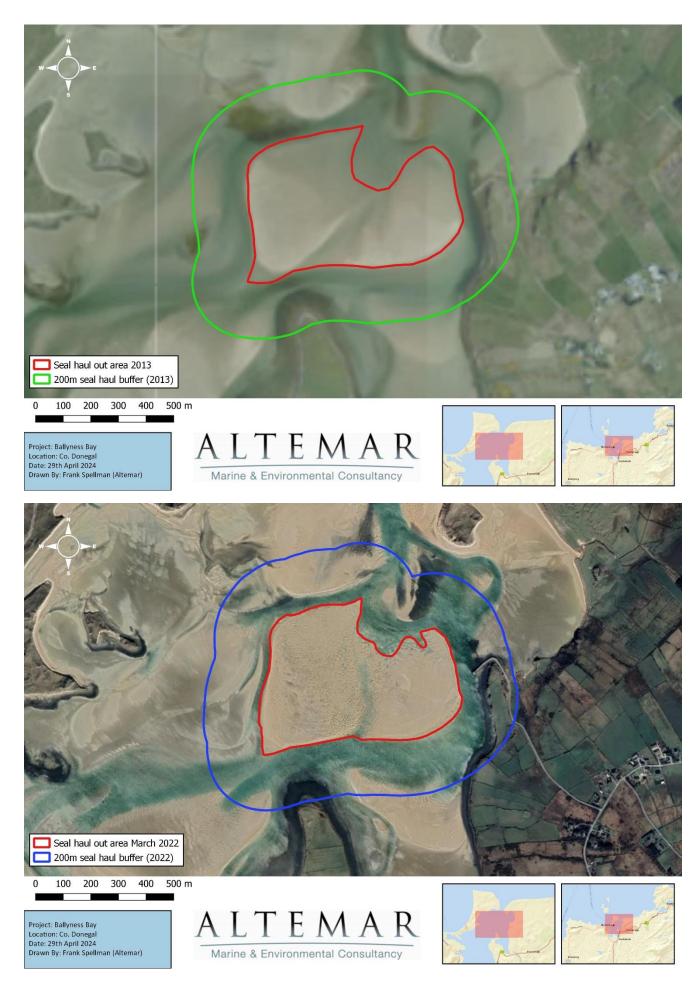


Figure 3. Buffer based on 2013 and 2022 Satellite imagery.

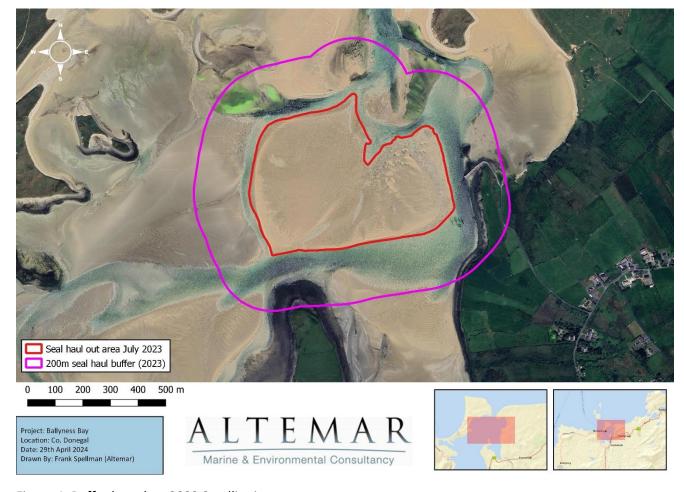


Figure 4. Buffer based on 2023 Satellite imagery.

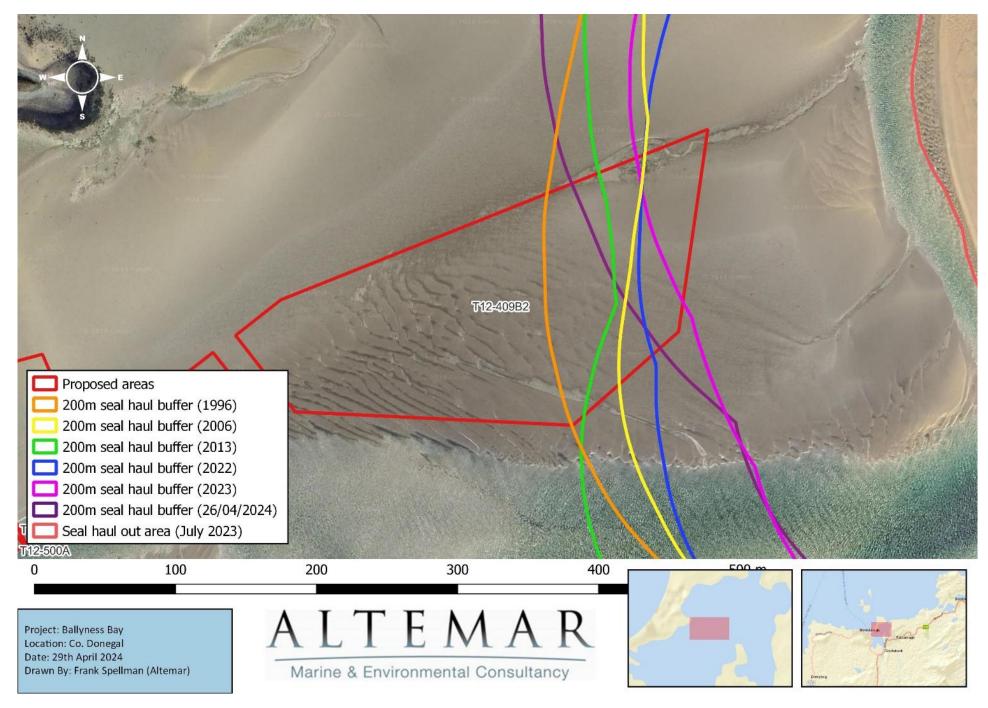


Figure 5. Seal Haul Out 200m buffers based on georeferenced satellite imagery (1996-2023). Buffer based on 1996 (orange line).

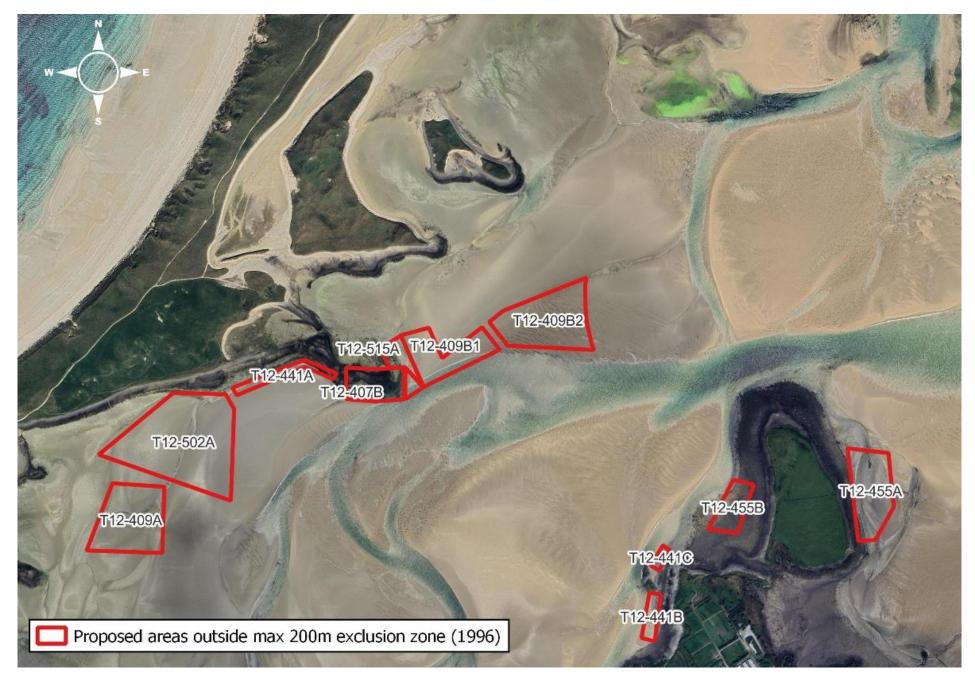


Figure 6. Revised Seal Haul Out 200m buffers based on georeferenced satellite imagery (1996)

Table 1: New proposed coordinates of proposed areas along maximum mapped 200m buffer from seal haul out site.

Area	Point (N-S)	Latitude	Longitude
T12-409B2	1	55° 8'53.65"N	8° 8'21.33"W
T12-409B2	2	55° 8'53.33"N	8° 8'21.41"W
T12-409B2	3	55° 8'53.00"N	8° 8'21.46"W
T12-409B2	4	55° 8'52.47"N	8° 8'21.46"W
T12-409B2	5	55° 8'51.89"N	8° 8'21.43"W
T12-409B2	6	55° 8'51.31"N	8° 8'21.41"W
T12-409B2	7	55° 8'50.84"N	8° 8'21.36"W
T12-409B2	8	55° 8'50.38"N	8° 8'21.26"W
T12-409B2	9	55° 8'49.51"N	8° 8'20.93"W
T12-409B2	10	55° 8'49.16"N	8° 8'20.79"W
T12-409B2	11	55° 8'48.71"N	8° 8'20.56"W
T12-409B2	12	55° 8'48.36"N	8° 8'20.35"W