



Marine Mammal Survey Report

Stranraer Marina

April 2025

Draft Report - Confidential

Report Prepared For:

Fairhurst Ltd

Project Ref: ECN23 091

Prepared By: James Barclay BSc (Hons) Qualifying member of CIEEM

Reviewed By: John Thompson BSc MSc MCIEEM

Approved By: John Thompson BSc MSc MCIEEM

Date: 28.4.25



Document Control

Version	Date	Changes	Confidentiality	Prep	Rev	Auth
Draft V01	28/4/25	Draft to client	Confidential	JFB	JT	JT

Field Investigations and Data

Where field investigations have been carried out, these have been restricted to a level of detail required to achieve the stated objectives of the work. Where any data supplied by the client or from other sources have been used it has been assumed that the information is correct. No responsibility can be accepted by EcoNorth Ltd for inaccuracies in the data supplied by any other party.

Declaration of Compliance

“The information which we have prepared and provided is true, and has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management’s Code of Professional Conduct. We confirm that the opinions expressed within this document are our true and professional bona fide opinions.”

Copyright

The contents and layout of this report are subject to copyright owned by EcoNorth Ltd (© EcoNorth Ltd 2025).

Third Party Disclaimer

Any disclosure of this report to a third party is subject to this disclaimer. The report was prepared by EcoNorth Ltd at the instruction of, and for use by, our client named on the front of the report. It does not in any way constitute advice to any third party who is able to access it by any means. No other warranty, expressed or implied is made as to the professional advice included in this report.

EcoNorth Ltd
11 Enterprise Court
Cramlington
Northumberland
NE23 1LZ

E: enquiries@econorth.co.uk
T: 01670 735 547
W: www.econorth.co.uk



Registered in England and Wales – Company Number 2274277

Ref: CF.95 Version 8.0 02.01.25



Contents

1. Summary	3
2. Introduction	4
2.1 Background	4
2.2 Site Context.....	4
2.3 Nature of the Proposals.....	6
3. Planning Policy and Legislation	7
3.1 Planning Policy and Guidance.....	7
3.2 Legislation	7
4. Methodology.....	8
4.1 Desk Study	8
4.2 Field Survey.....	9
4.3 Assessment	10
5. Baseline Conditions.....	11
5.1 Desk Study	11
5.2 Field Survey.....	12
5.3 Survey Constraints	13
5.4 Assessment of Value.....	13
5.5 Input into the Design Process	13
5.6 Impact Assessment	13
6. Mitigation and Compensation Strategy	14
7. References	14



Appendix A – Key Legislation	14
Appendix B – Survey Results.....	16
Appendix C – Target Notes and Species Lists	21
Appendix D – Site Photographs	25
Appendix E – Value of Ecological Receptors.....	27
Appendix F – Marine Mammals Identified by the Desk Study	28

1. Summary

EcoNorth Ltd was commissioned by Fairhurst to undertake a marine mammal survey of the marine surroundings at Stranraer Marina, in Dumfries and Galloway, Scotland. It is proposed to upgrade the harbour which will involve dredging the harbour basin, installation of new pontoons, and enlarging of the breakwater at the harbour entrance. The survey was designed to assess the potential use of the loch by marine mammals, to highlight key ecological constraints and support the full planning application etc. and assesses the potential impacts upon marine mammals using the loch.

A desk study comprised most of the survey, utilising data from St Andrews University, Marline Life Information Network Marlin, and Southwest Scotland Environmental Information Center SWSEIC. This desk study highlighted records of common dolphin, bottle-nosed dolphin, common porpoise, grey seal, and harbour seal within 2km of the site boundary, the most recent record of which dates from 2014.

Habitats within the scheme boundary were considered to be of limited quality for marine mammals with much of the existing marina comprising relatively limited water depth and / or is occupied by marina structures. The enclosed nature of the marina means that it is unlikely to be attractive to most marine mammals with the exception of seals and possibly Harbour porpoise. Loch Ryan provides a large, sheltered bay though is relatively shallow which is likely to make it less attractive to a range of larger cetaceans. The southern part of the Loch (based on information available on navigation charts is typically <5m though a deeper channel is present along the route formerly used by ferries and notably at the entrance to the marina entrance. A notably shallow section of the Loch is present where a feature referred to as ‘the spit’ protrudes in a South Easterly direction across parts of the Loch.

Field survey observations resulted in a single observation of grey seal located to the west of the Marina. Anecdotal records of seal pups being washed up and regular seal feeding in the deep water at the entrance to the Marina were received from members of the public throughout the course of survey effort.

A range of precautionary mitigation measures are provided in Section 7 to minimise the risk of marine mammals being adversely affected by the proposals. The client is happy to commit to the implementation of the measures detailed within this report and is aware that these are likely to be made a condition of any planning consent which may be granted.

2. Introduction

2.1 Background

EcoNorth Ltd was commissioned by Fairhurst to undertake a marine mammal survey of the marine surroundings at Stranraer Marina, in Dumfries and Galloway, Scotland. It is proposed to upgrade the harbour which will involve dredging the harbour basin, installation of new pontoons, and enlarging of the breakwater at the harbour entrance. The survey was designed to assess the potential use of the loch by marine mammals, to highlight key ecological constraints and support the full planning application etc. and assesses the potential impacts upon the ecological interests of the site. **This is a draft report and is not currently suitable to support a planning application.**

This report:

- Sets out the results of the survey.
- Analyses the site's value for marine mammals
- Identifies additional survey requirements in order to fully determine the baseline ecological conditions on the site.
- Identifies key avoidance, mitigation and/or compensation measures required to help ensure the proposals do not have an adverse impact upon biodiversity.

2.2 Site Context

The site is located at Stranraer marina, in Dumfries and Galloway, Southwest Scotland. The marina lies on the Southern edge of Loch Ryan. The town of Stranraer is an area of dense residential and commercial development, surrounded by agricultural land and woodland blocks.

Figures 1 and 2 identify the location and extent of the development site.



Figure 1: Indicative Site Location

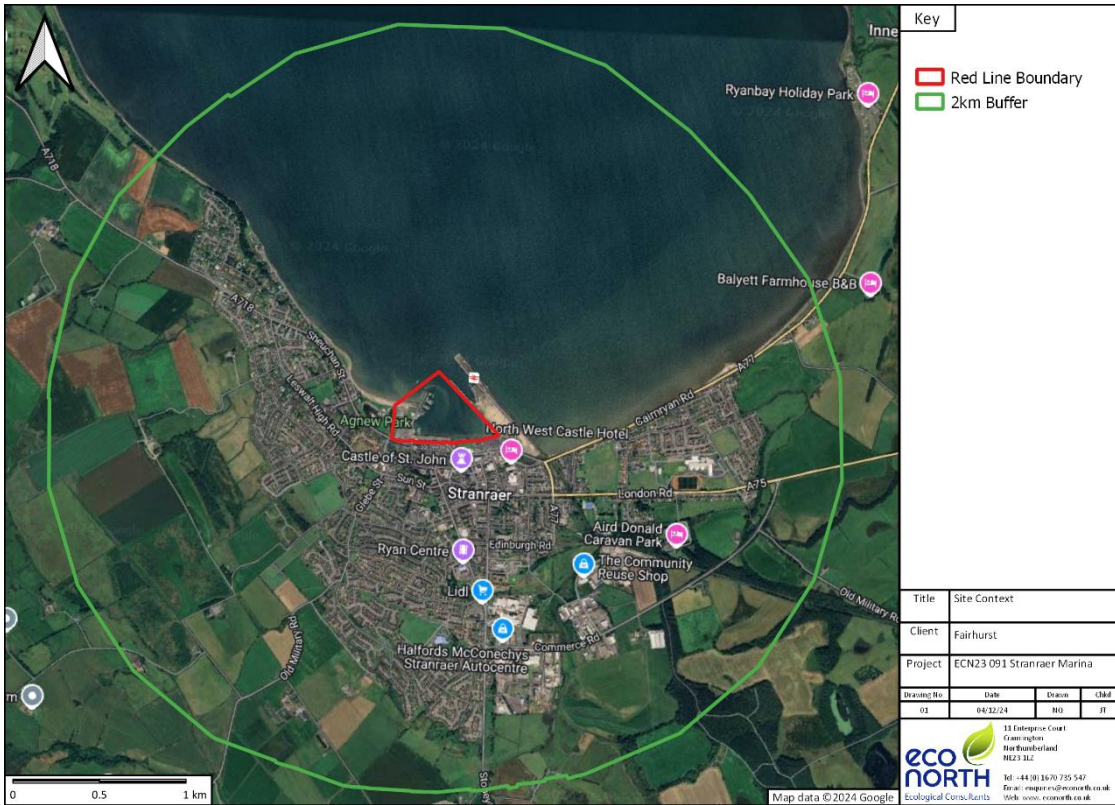


Figure 2: Indicative Site Boundary (boundary outlines in red)



3. Planning Policy and Legislation

3.1 Planning Policy and Guidance

A series of national and local planning policies are in place which are designed to ensure that development works do not have an adverse impact upon biodiversity, at a site or wider level. Such policies ensure that both developers and public bodies must give due consideration to the potential effects of development works upon both ecological receptors (in line with existing wildlife legislation) and biodiversity.

3.1.1 *Scottish Planning Policy (SPP) (2014)*

The SPP outlines the Scottish Government's national planning policies for the development and use of land and operation of the planning system. It is designed to ensure consistency in the application of policies, while taking into account variations in local circumstances across Scotland. Local authorities must take the principles detailed in the document into account when assessing planning applications and appeals, as well as during the production of their own development plans. Paragraphs 193-218 deal with 'Valuing the Natural Environment'. Further details are provided on the Scottish Government's website (<http://www.gov.scot/Resource/0045/00453827.pdf>).

3.1.2 *Habitats and Species of Principal Importance / Biodiversity Action Plans (BAPs)*

The UK BAP was published in 1994 to guide national strategies for the conservation of biodiversity. BAPs were designed to ensure the conservation and re-establishment of natural habitats, and that measures were implemented to aid the conservation and enhancement of habitats and species of local importance, the latter through the development of Local BAPs. The UK BAP was succeeded by the 'UK Post-2010 Biodiversity Framework' in 2012, however, the lists of species and habitats of conservation importance are still considered a valuable tool for identifying features of local and national conservation concern. As such, the potential presence of both Local and UK BAP habitats and species were considered throughout the surveys and assessment.

Species and habitats formerly identified and included within UK BAPs are typically also those which are which the Scottish Ministers consider to be of principal importance for biodiversity conservation in Scotland. Such species are identified on the Scottish Biodiversity List SBL as part of the Nature Conservation Scotland Act (2004). Such species and habitats need to be taken into consideration by a public body when performing any of its functions.

3.2 Legislation

A range of legislation is in place to ensure that habitats and species of conservation importance are protected from both direct and indirect harm. Key legislation includes:

- The Conservation (Natural Habitats, &c.) Regulations 1994 and The Conservation (Natural Habitats, &c.) Amendment (Scotland) Regulations 2012 (The Habitat Regulations).

- The Convention on the Conservation of European Wildlife and Natural Habitats 1979 (The Bern Convention).
- The Wildlife and Countryside Act 1981 (as amended).
- The Nature Conservation (Scotland) Act 2004.
- The Protection of Wild Mammals (Scotland) Act 2002.
- The Conservation of Seals Act (1970)

An overview of the above legislation is provided in Appendix A.

An overview of the legislation and level of protection relating to such species is provided in Appendix A.

4. Methodology

4.1 Desk Study

Contextual information was gathered as part of a desk study undertaken prior to the start of field surveys. Such information can identify protected or notable species which may occur on the proposed development site or in the local area, as well as identifying statutory and non-statutory ecological sites which may have the potential to be affected by the proposals. The location of statutory and non-statutory nature conservation sites designated due to the presence of marine mammals, which lie within 30km of the survey site were obtained from the Multi-Agency Geographic Information for the Countryside (MAGIC) website (www.magic.gov.uk), marine mammal records and information on Local Wildlife Sites within 2km were obtained from South West Scotland Environmental Information Centre (SWSEIC).

Datasets from the University of St Andrews were reviewed, which used aerial photography to calculate the at-sea population density of grey seal *Halichoerus grypus* and harbour seal *Phoca vitulina*. The data was analysed in QGIS and displayed in a graduated symbology to best display the changes in population density.

A second dataset was also analysed from the University of St Andrews, the SCANS-III aerial and shipboard surveys. This data was also input and analysed in a graduated symbology within QGIS. The dataset displayed the density surface modelling for: harbour porpoise *Phocoena phocoena*, bottlenose dolphin *Tursiops truncatus*, white-beaked dolphin *Lagenorhynchus albirostris*, common dolphin *Delphinus delphis*, striped dolphin *Stenella coeruleoalba*, long-finned pilot whale *Globicephala melas*, all beaked whale species combined *Ziphiidae sp.*, minke whale *Balaenoptera acutorostrata*, and fin whale *Balaenoptera physalus*.

MarLIN was used to review known distribution data, accessing their marine mammal section within <https://www.marlin.ac.uk/species/rank/1821/Chordata>, and utilising their interactive map to identify marine mammals which had distributions overlapping Loch Ryan.

It should be noted that an absence of records is likely to reflect an absence of survey data and cannot be taken as confirmation that a particular species is not present in the site or surrounding area.

4.2 Field Survey

4.2.1 Habitat Assessment

An assessment of the potential suitability of the habitats within the site and surrounding area for otter and water vole was undertaken in November 2023, as part of the initial wintering bird / marine mammal survey effort undertaken to inform this report.

A total of >50 hours of observations of the marine environment including waters of the marina and those directly surrounding the existing marina were undertaken in combination with surveys for both overwintering and summer / breeding birds. Surveys were undertaken between November 2023 through to October 2024. With data recorded in 10 months across a 12-month period. The survey dates and times are presented in Table 1 below. Observations are included as a minimum at high and low tide periods.

Table 1: Dates and Times Where Marine Mammal observation effort was undertaken (combined with bird survey effort).

Date	Survey Times	Survey (Low/ Mid/ High)	Tide	Precipitation	Temp. (°C)	Cloud Cover (Oktas)	Wind (Beaufort Scale)	Visibility
09.11.23	14:15 - 17:00	Low	Low @ 15:09	Nil	7	0	1	Good
10.11.23	08:15 – 11:35	High	High @ 10:11	Nil	4	1	1	Good
14.12.23	12:30 – 15:30	High	High @ 12:43	Nil	9	7	3-4	Good
15.12.23	07:50 – 10:15	Low	Low @ 06:45	Nil	9	2	3	Good
11.01.24	14:30 – 17:30	High	Low @ 17:30	Nil	6	7	1-2	Good
12.01.24	10:00 – 13:00	High	High @ 12:24	Nil	7	8	1	Good
08.02.24	13:30 – 16:30	Low	Low @ 16:30	Heavy snow	2	8	5-6	Good
09.02.24	08:30 – 11:30	High	High @ 11:22	Nil	4	6	6	Good
07.03.24	15:15 – 16:30	Low	Low @ 15:22	Nil	6-7	2	4	Good
07.03.24	16:40 – 18:30	Mid	Low @ 15:22	Nil	6-7	2	4	Good
08.03.24	10:15 – 12:40	High	High @ 10:15	Nil	6	3	3-4	Good
23.10.24	11:15 – 13:00	Low	Low @10:44	Nil	12-14	2	S 3	Good
23.10.24	14:00 - 15:15	Mid	Low @10:44 /High @16:46	Nil	14	3-4	SW 3	Good

Date	Survey Times	Survey (Low/ Mid/ High)	Tide	Precipitation	Temp. (°C)	Cloud Cover (Oktas)	Wind (Beaufort Scale)	Visibility
23.10.24	16:00-17:30	High	High @16:46	Nil	14	8	SW 2-2	Good
30.5.24	17:30 – 18:45	High	High@ 18:28 2.75m	Nil	15-16	3	4- 5 NW	Good
31.5.24	11:20 – 12:55	Low	Low @13:04 0.52m	Nil	16-17	2	3-4 NW	Good
31.5.24	07:45-09:20	Mid	Low @13:04 0.52m	Nil	14	2	3-4 NNW	Good
28.6.24	12:00 – 13:30	Low	Low @11:33	Nil	17	4	3-4 WNW	Good
28.6.24	14:30 – 16:00	Mid	High @18:04	Nil	15 - 6	6	WNW 2- 3	Good
28.6.24	16:45 – 18:00	High	High @18:04	Nil	17	6	1-2 N	Good
24.7.25	09:15 – 10:45	Low	Low @08:28	Nil	15	8	2 SW	Moderate
24.7.25	11:30 – 13:15	Mid	High@15:11	Nil	15	8	3 SW	Good
24.7.25	14:00 – 15:20	High	High@15:11	Nil	15-16	8	3 – 4 SW	Good
18.08.24	12:00 – 13:15	High	High @11:38	Nil	18	4	2-3 SW	Good
18.08.24	14:10 – 15:45	Mid	High @11:38	Nil	18-19	2	3 W	Good
18.08.24	16:45 – 18:10	Low	Low @17:19	Nil	17	8	2 W	Good

4.3 Assessment

The value of the site for marine mammals was assessed against the criteria published by the Chartered the Institute of Ecology and Environmental Management (CIEEM) in 2016 (<http://www.cieem.net/ecia-guidelines-terrestrial->). The site was classified as being as one of the following levels of value:

- International.
- National.
- Regional/County.
- City/District/Borough.
- Local/Parish.
- Low.

Examples of different ecological features meeting each of these criteria are outlined in Appendix D.

5. Baseline Conditions

5.1 Desk Study

Data collected from MAGIC shows that there are two Special Areas of Conservation (Marine Components GB) within 30km of the site. Of these only the North Channel SAC is designated for marine mammals.

The North Channel (Northern Ireland) is located approx. 25km west of the site, and approx. 50km if measured over water. The North Channel has been designated SAC for its important population of Harbour Porpoise *Phocoena Phocoena*.

SWSEIC provided records of common dolphin, bottle-nosed dolphin, common porpoise, grey seal, harbour seal within 2km of the site boundary, the most recent record of which is from 2014. Further details are provided in Appendix E.

Data collected from SWSEIC shows that in the last 10 years, no marine mammals have been officially reported within 2km of the site, however this seems more down to a lack of reporting than due to a lack of presence.

Extending the scope of the data search beyond the last 10 years, the most recent recording of a marine mammal was a common dolphin in 2014. Beyond that, records of bottle-nosed dolphin, common porpoise, grey seal, and harbour seal have all been recorded within 2km of the site. Further details are provided in Appendix E.

Data collected from the University of St Andrews suggests that, for the 10km² around the site, about 0.066% of the British Isles' at-sea grey seal population would be present – based upon the mean value of the dataset. However, the upper confidence limit of the dataset suggests a much larger percentage, at 6-8%. This large variation between the mean and upper confidence limit for the area would suggest a high level of uncertainty of the grey seal population density in the area.

The same dataset also displays the at-sea population density of harbour seals. The variation between the mean and upper 95% confidence limit is much closer in this case, being 0.11 % and 0.47% of the British Isles' at-sea harbour seal population. This would suggest a much lower level of uncertainty than the data collected for grey seal. See appendix B for these maps, and the data can be downloaded in full at <https://research-portal.st-andrews.ac.uk/en/datasets/at-sea-density-maps-for-grey-and-harbour-seals-in-the-british-isl>.

Data collected from MarLIN shows that the distribution of short-beaked common dolphin, Risso's dolphin, Atlantic white-sided dolphin, white-beaked dolphin, harbour porpoise, common bottlenose dolphin, Northern bottlenose whale, pygmy sperm whale, and grey seal all encompass Loch Ryan, and therefore potentially the site. This data can be accessed at <https://www.marlin.ac.uk/species/rank/1821/Chordata>.

The data collected from SCANS-III aerial and shipboard surveys was of too low resolution to effectively inform this report, as to be effective it is viewed at a national scale. It can however be used to identify which species are recorded around western Scotland as a whole, if not specifically within Loch Ryan. This dataset can be downloaded in full at <https://scans3.wp.st-andrews.ac.uk/resources/>.

In summary, the records provided by SWSEIC are limited by age and likely underreporting, it does allow us to confirm the suitability and presence of common dolphin, bottle-nosed dolphin, common/ harbour porpoise and harbour seal historically, and grey seal more recently due to observations made during the WBS.

The other datasets reviewed are of too low resolution to be useful in definitely confirming the presence on or around the site, however they do provide evidence to support the ecological suitability of the site for the above species.

5.2 Field Survey

5.2.1 Habitat Assessment

Habitats within the scheme boundary were considered to be of limited quality for marine mammals with much of the existing marina comprising relatively limited water depth and / or is occupied by marina structures. The enclosed nature of the marina means that it is unlikely to be attractive to most marine mammals with the exception of seals and possibly Harbour porpoise. Loch Ryan provides a large, sheltered bay though is relatively shallow especially in the southern half close to the marina which is likely to make it less attractive to a range of larger cetaceans. The southern part of the Loch (based on information available on navigation charts is typically <5m though a deeper channel is present along the route formerly used by ferries and notably at the entrance to the marina entrance. A notably shallow section of the Loch is present where a feature referred to as 'the spit' protrudes in a South Easterly direction across parts of the Loch. The presence of active foraging by bird species such as gannet during the summer months and other fish-eating species such as grebes, shag and cormorant throughout the year indicate that the whole Loch is likely to support prey items suitable for a range of marine mammals.

The limited water depth is likely to prohibit even cetacean species associated with shallower water such harbour porpoise which typically inhabit water ranging from 20 – 200m in depth.

Of the other marine mammal species recorded by SWSEIC, common dolphin are unlikely to be a regular visitor to Loch Ryan, being a more oceanic species associated with areas further offshore. Bottlenose Dolphin are perhaps more likely to occur with some populations being strongly associated with estuaries and harbours. Many estuarine populations are associated with areas of strong tidal currents which provide good hunting opportunities – such features are not known to be present surrounding the proposed development.

5.2.2 Marine Mammal Survey

A single grey seal was recorded in October 2024 located offshore to the west of the marina. The location of this record is illustrated in Figure B6. Anecdotal information regarding a 'seal pup' being observed to the west of the marina was also received while undertaking survey work.

Further anecdotal information was received regarding frequent use of the 'scour hole' an area of deep water at the entrance to the former ferry terminal where seals have been observed feeding by a resident fisherman.

No cetacean species of any kind were recorded during the course of the survey effort.

5.3 Survey Constraints

Records provided by SWSEIC are limited by age and likely underreporting, it does allow us to confirm the suitability and presence of common dolphin, bottle-nosed dolphin, common porpoise and harbour seal historically, and grey seal more recently due to observations made during the WBS.

The other datasets reviewed are of too low resolution to be useful in definitely confirming the presence on or around the site, however they do provide evidence to support the ecological suitability of the site for the above species.

Survey effort has been undertaken across a period of calendar year with observations made in 10/ 12 months. Observations do however represent only a sample, and it is highly possible that observations would not align with the presence of marine mammals while present given the highly mobile nature of all species potentially present.

5.4 Assessment of Value

Based on the results of the desk study and field surveys, the site is considered to be of up to regional value to marine mammals, with both grey and harbour seal likely to be present in the wider area and occasionally in the vicinity of the works area. Small cetaceans such as harbour porpoise and bottlenose dolphin may also be present occasionally however desk based and field survey results indicate they are not routinely present.

5.5 Input into the Design Process

Opportunities to include design elements beneficial to marine mammals are limited however it is recommended that in relation to operational effects that material promoting responsible operations around marine mammals is promoted within interpretive material displayed at the marina.

5.6 Impact Assessment

Based on the proposals as shown in Figure 3, the development will have the following impacts upon the ecological interests of the site:

- Temporary noise and vibration and the effect of such noise or vibration on marine mammals .
- Temporary visual disturbance as a result of people and plant being present during construction.
- Construction stage pollution risks, including chemical or hydrocarbon spills or leakages or mobilisation of sediment .
- Any temporary marine habitat loss considered necessary to construct the proposals as a result of the requirement for structures located in
- Permanent habitat loss as a result of the proposals

- The potential effect of increased vessel traffic on species which use the marina and the wider approach to the marina.

6. Mitigation and Compensation Strategy

The following measures will be implemented in order to minimise the ecological impacts of the proposals, including the residual risk of marine mammals being adversely affected:

- Soft start for all overwater piling operations
- Any chemicals required during the construction works will be stored in appropriate locked containers located at least 30m from the nearest waterbody/watercourse when not in use. Spill kits will be available on site at all times.
- An Ecological Clerk of Works ECoW present during piling and other key marine operations the ECoW should be competent in the identification of cetaceans within a minimum of 1km of the proposed works and be able to communicate requirements to stand down should marine mammals approach the works area

7. References

- Anon (n.d.). *Chordata – Marine Life Information Network*. Marine Biological Association. Available at: <https://www.marlin.ac.uk/species/rank/1821/Chordata> [Accessed 15 Apr. 2025].
- Anon (2021). *National Planning Policy Framework*. Department for Communities and Local Government.
- Carter, M. and Russell, DJF. (2020). *At-sea density maps for grey and harbour seals in the British Isles*. University of St Andrews Research Portal. Available at: <https://research-portal.st-andrews.ac.uk/en/datasets/at-sea-density-maps-for-grey-and-harbour-seals-in-the-british-is/> [Accessed 15 Apr. 2025].
- CIEEM (2016). *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal, 2nd Edition*. Chartered Institute of Ecology and Environmental Management, Winchester.
- Paxton et al. (2016). *SCANS-III Resources*. University of St Andrews. Available at: <https://scans3.wp.st-andrews.ac.uk/resources/> [Accessed 15 Apr. 2025].

Appendix A – Key Legislation

Table A1: Overview of Key Legislation

Legislation	Key Features
<p>The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019</p>	<p>These Regulations consolidate and update the Conservation of Habitats and Species Regulations 2010 (the “Habitats Regulations 2010”). The Conservation of Habitats and Species Regulations 2019 (“the Habitats Regulations 2019”) transpose Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (“the Habitats Directive) and elements of Directive 2009/147/EC on the conservation of wild birds (“the Birds Directive”) in England, Wales and, to a limited extent, Scotland and Northern Ireland. The objective of the Habitats Directive is to protect biodiversity through the conservation of natural habitats and species of wild fauna and flora. The Directive lays down rules for the protection, management and exploitation of such habitats and species.</p> <p>The Habitat Regulations make it an offence (with certain exceptions) to deliberately capture, disturb, kill or trade in those animal species listed in Schedule 2, or to pick, cut, uproot, collect, destroy or trade in those plant species listed in Schedule 4.</p> <p>The EC Birds Directive requires member states to establish and monitor Special Protection Areas (SPAs) for all rare or vulnerable species included in Annex I, as well as for all regularly occurring migratory species, with key focus on wetlands of international importance. Annex I and II of the Habitats Directive respectively list those habitats and species for which a similar network of sites – Special Areas of Conservation (SACs) – must be established and monitored. Collectively, SPAs and SACs form a network of pan-European protected areas which are referred to as ‘Natura 2000’ sites.</p>
<p>The Convention on the Conservation of European Wildlife and Natural Habitats 1979 (Bern Convention)</p>	<p>The Bern Convention was adopted in 1979 and ratified by the UK Government in 1982. The principal aims of the Convention are to ensure the conservation and protection of all wild plant and animal species and their natural habitats (listed in Appendices I and II), to increase cooperation between contracting parties, and to afford special protection to the most vulnerable or threatened species (including migratory species).</p> <p>Members of the European Community meet their obligations via the Birds Directive and the Habitats Directive. These are transposed into UK law by the Wildlife and Countryside Act 1981 (as amended), Nature Conservation (Scotland) Act 2004 (as amended), Wildlife (Northern Ireland) Order 1985, and the Nature Conservation and Amenity Lands (Northern Ireland) Order 1985.</p>
<p>The Wildlife and Countryside Act 1981 (as amended)</p>	<p>The Wildlife and Countryside Act consolidates and amends existing national legislation to implement the requirements of the Bern Convention and the Birds Directive throughout Great Britain. The Act is the primary UK mechanism for the designation of statutory ecological sites - Sites of Special Scientific Interest (SSSIs) - and the protection of individual species listed under Schedules 1, 2, 5, 6 and 8 of the Act, each of which is subject to varying levels of protection.</p> <p>Schedule 9 of the Act also lists those plant species which it is an offence to plant or otherwise cause to grow in the wild, while Schedule 14 prevents the release into the wild or sale of certain plant and animal species which may cause ecological, environmental or socio-economic harm.</p>



Legislation	Key Features
Nature Conservation Scotland Act (2004)	The Nature Conservation Scotland Act places a duty on public bodies to consider and conserve biodiversity through the exercise of their functions and includes a range of measures to strengthen the protection of both habitats and wildlife. Under the Act a series of priority habitats and species are identified under the Scottish Biodiversity list SBL. The Act makes provision in respect of biodiversity, pesticides harmful to wildlife, protection of birds and invasive non-native species.
Conservation of Seals Act 1970	This Act provide for the protection and conservation of seals in England and Wales and Scotland and in the adjacent territorial waters. Under the Act it is an offence to intentionally Kill, Injure or take a seal.



Appendix B – Survey Results

Figure B1 – UK Hab Map

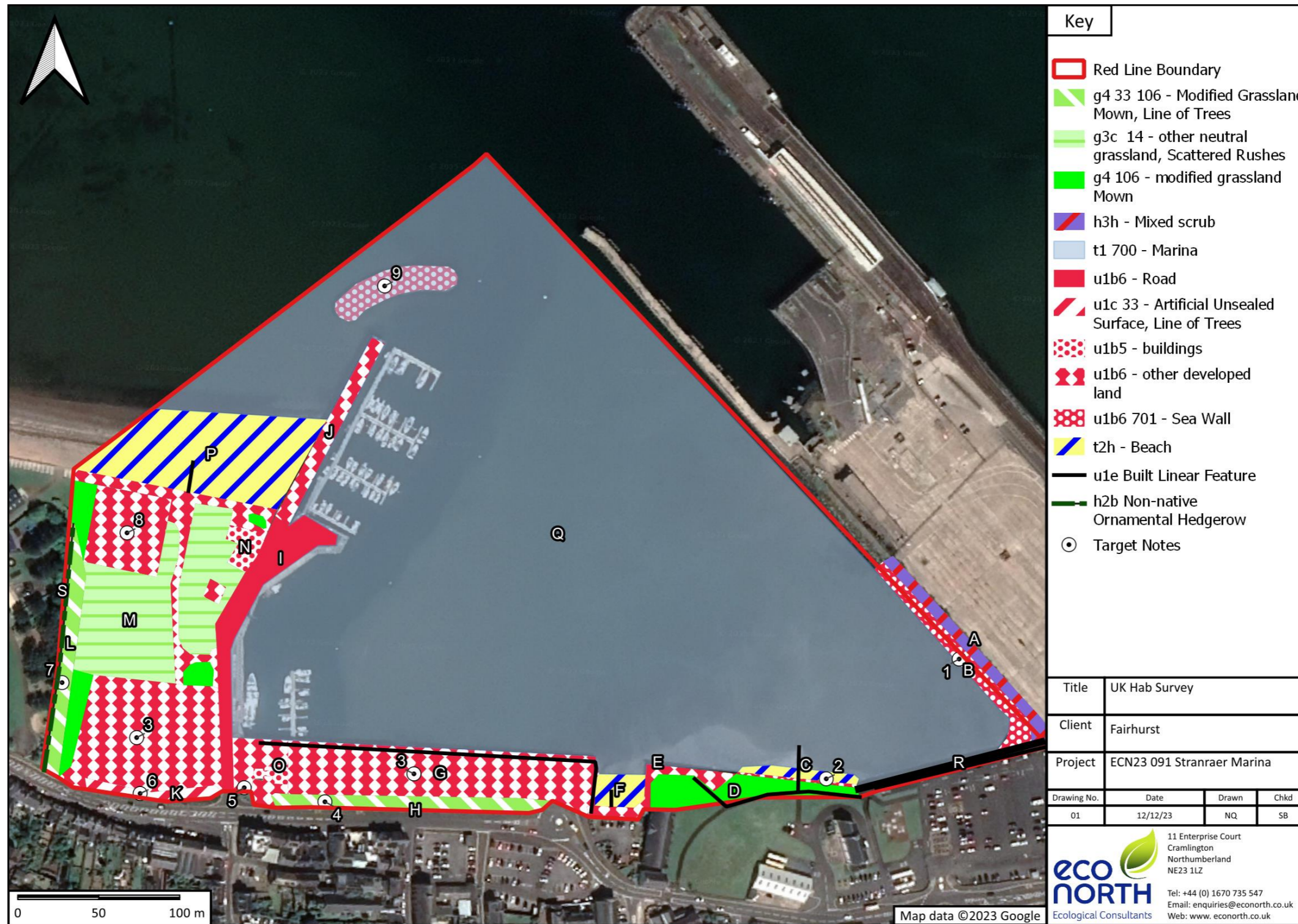




Figure B2: Harbour Seal At-Sea Density Upper 95% Confidence Interval

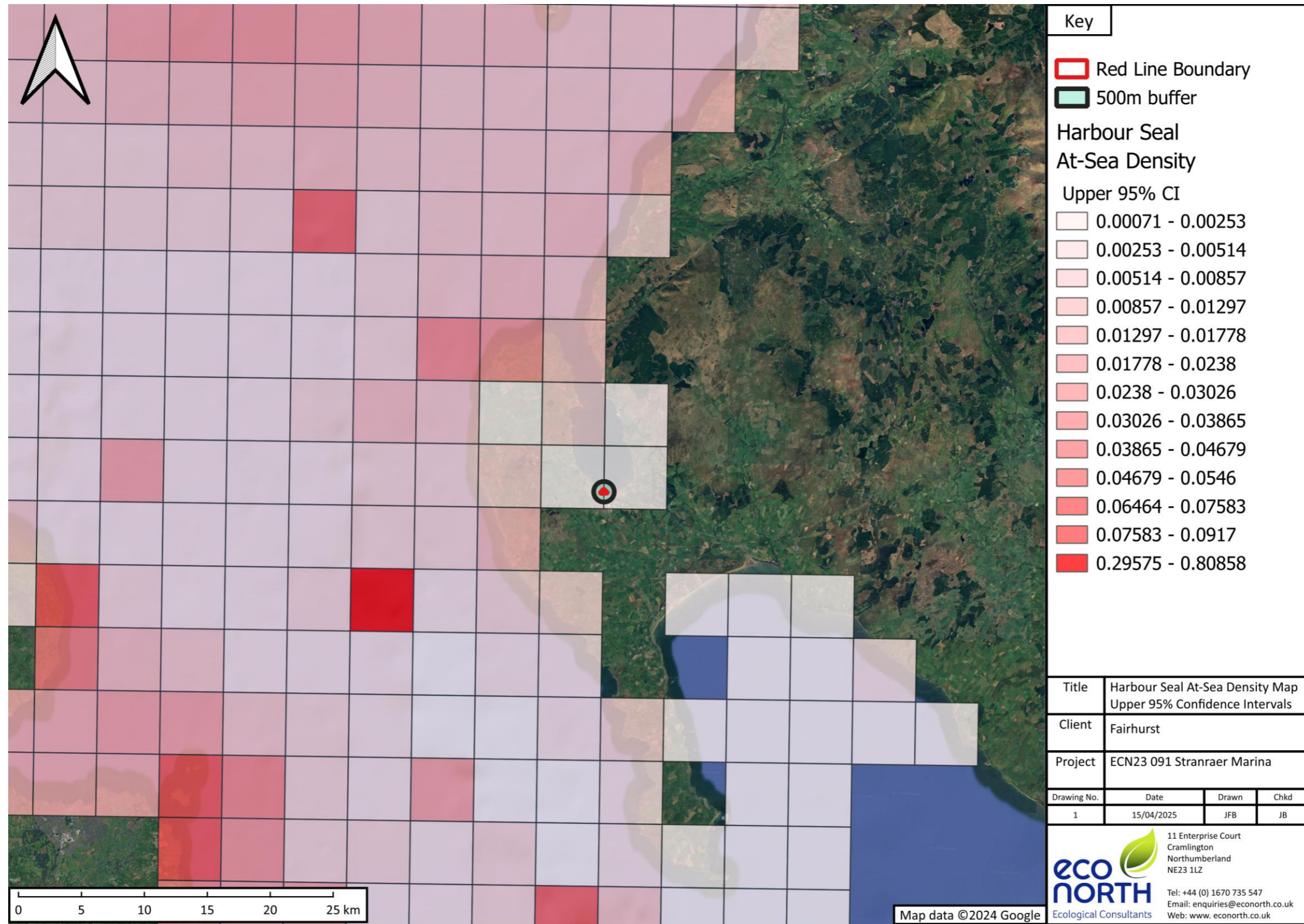




Figure B3: Harbour Seal At-Sea Density Mean Confidence Interval

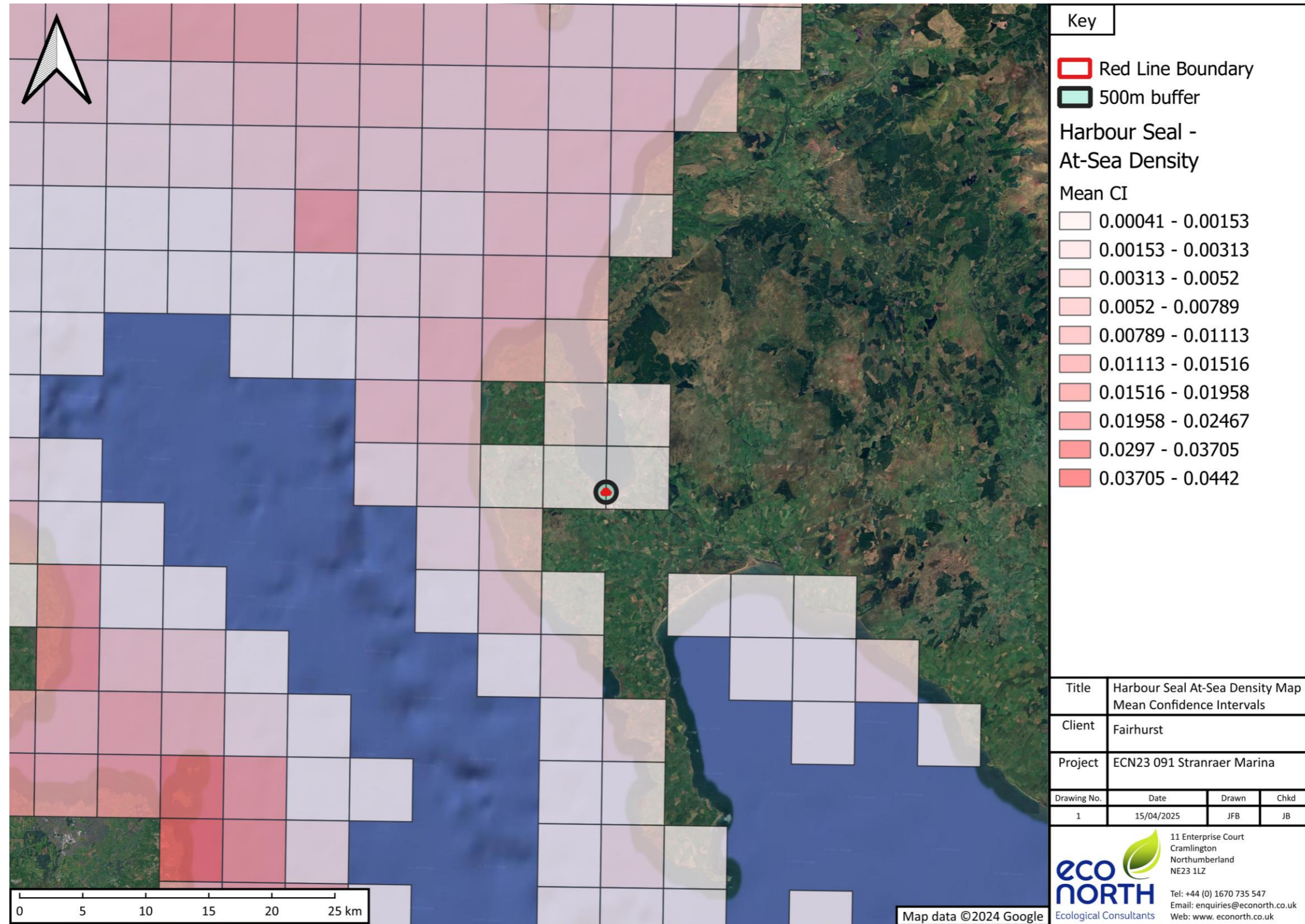




Figure B4: Grey Seal At-Sea Density Upper 95% Confidence Interval

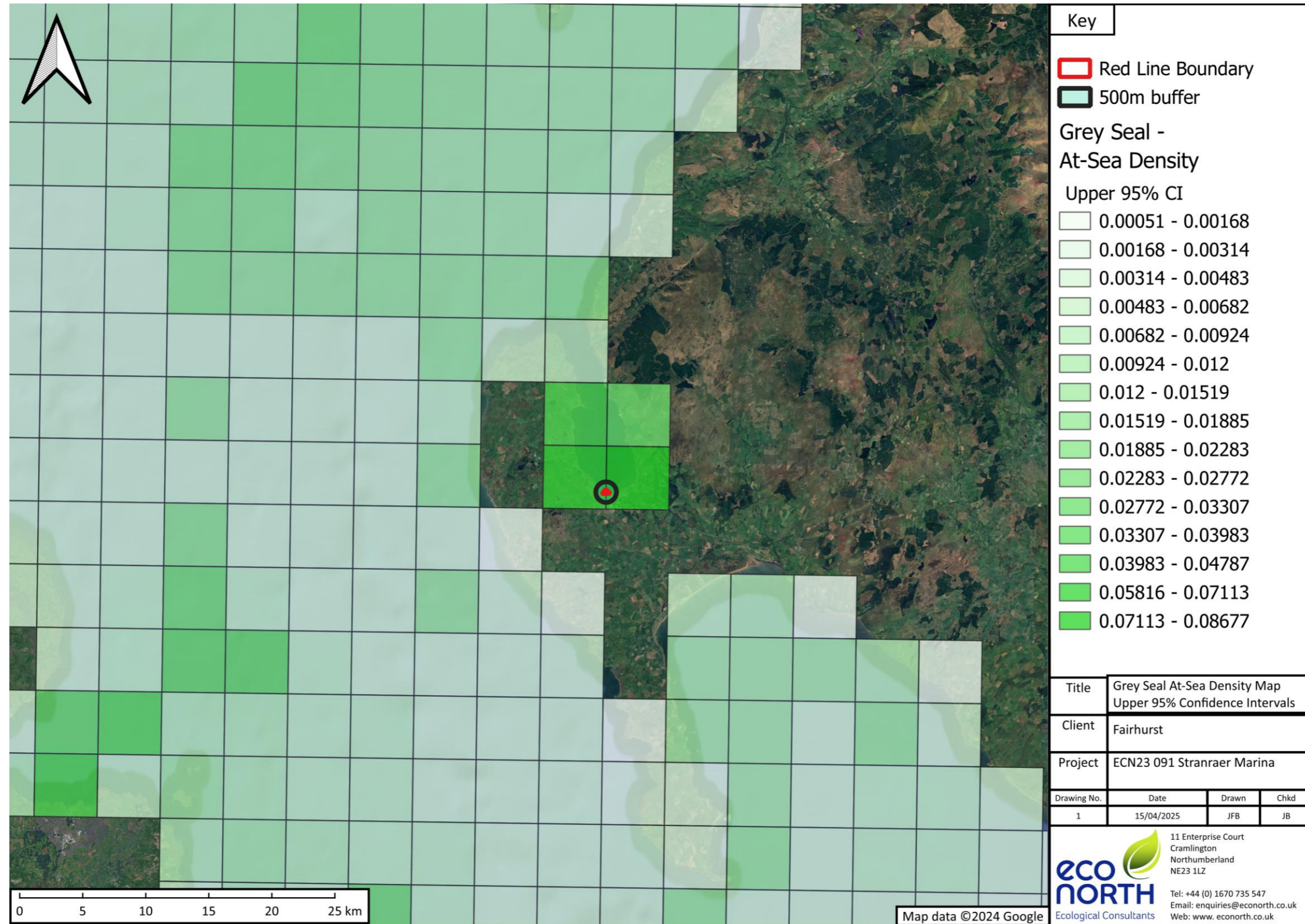




Figure B5: Grey Seal At-Sea Density Mean Confidence Interval

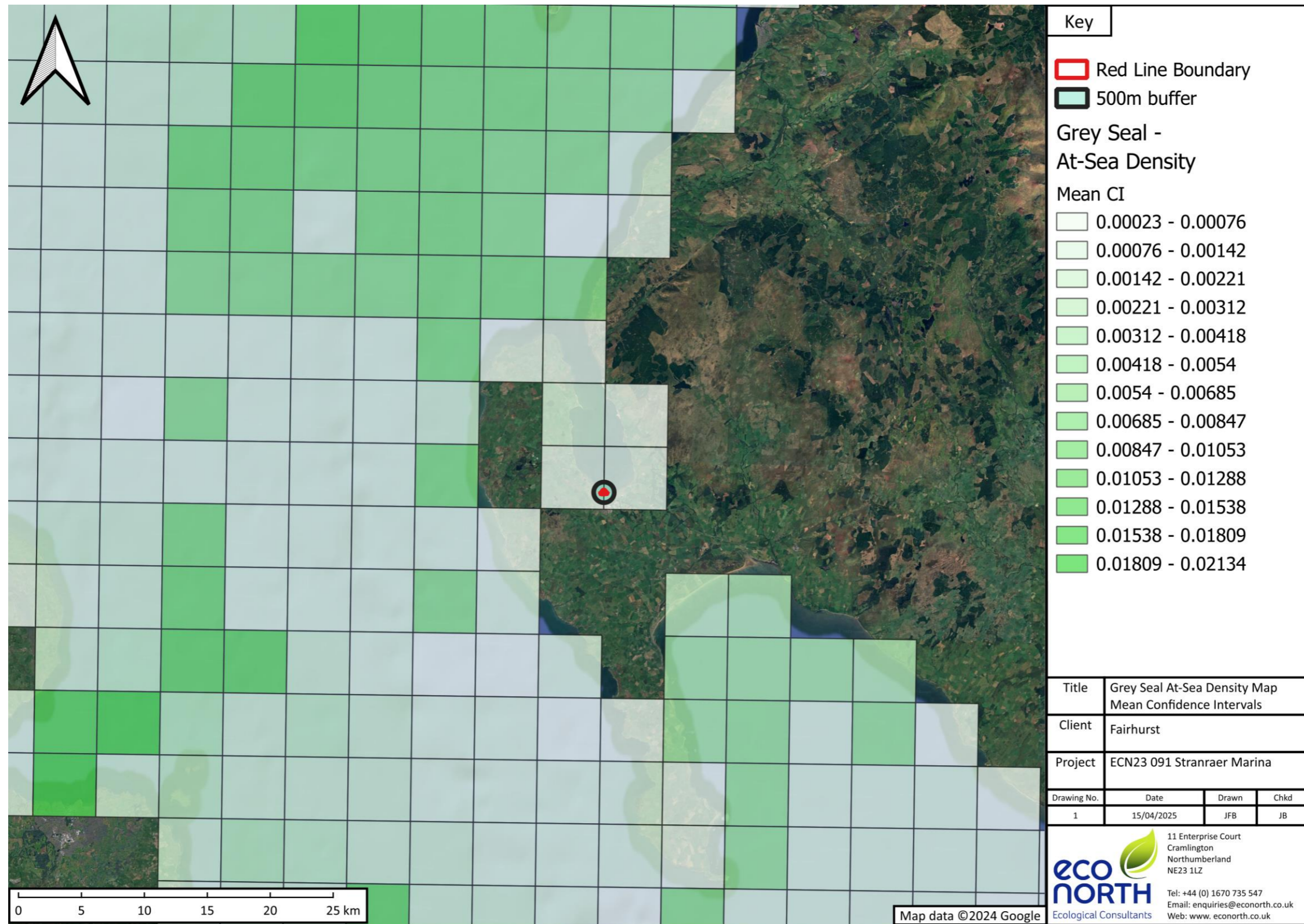




Figure B6: Records of Marine Mammals During Bird Surveys



Appendix C – Target Notes and Species Lists

Table C1: Target Notes Relating to Figure B1 (see Appendix B)

Number/ Area	Description
1	Man-made sea wall constructed with large boulders. Area above high tide line is colonised with lichens. Area below high tide line is colonised with seaweeds.
2	Man-made sea wall constructed with concrete. Area below high tide line is colonised with seaweeds.
3	Car park
4	Planted ornamental flower bed, non-native
5	Planted ornamental flower bed, non-native including Pampus grass and Buddleia
6	Southern perimeter of car park contains a line of 33 planted mature whitebeam trees
7	Line of planted mature Lime trees covered with ivy. Low bat roost suitability.
8	Boatyard
9	Man-made sea wall constructed with large boulders. Isolated structure within the marina itself.
A	Mixed scrub
B	Man-made sea wall constructed with large boulders.
C	Beach - sand and pebble intertidal sediment
D	Modified grassland, mown
E	Artificial sealed pathway constructed with bricks (mosses growing between bricks)
F	Beach – sand and pebble intertidal sediment
G	Artificial sealed surface, car park
H	Modified grassland with line of trees
I	Artificial sealed surface, road
J	Artificial sealed surface, pier
K	Line of trees planted within artificial, unvegetated areas within car park
L	Line of trees covered with ivy
M	Other neutral grassland with scattered rushes
N	Building – Harbour Master’s office
O	Building – Clocktower and Tourist Information Centre
P	Beach
Q	Tidal marina
R	Built linear feature – tarmac path
S	Non-native ornamental hedgerow

Appendix E – Value of Ecological Receptors

Table D1: Examples of Ecological Receptors of Differing Value

Value	Examples
International	<ul style="list-style-type: none"> • An internationally designated site or candidate site (SPA, pSPA, SAC, cSAC, pSAC, Ramsar site) or an area which meets the designation criteria for such sites. • Internationally significant and viable areas of a habitat type listed in Annexe 1 of the Habitats Directive, or smaller areas of such habitat, which are essential to maintain the viability of a larger whole. • Any regularly occurring, globally threatened species. • A regularly occurring population of an internationally important species, which is threatened or rare in the UK, of uncertain conservation status • A regularly occurring, nationally significant population/number of any internationally important species.
National	<ul style="list-style-type: none"> • A nationally designated site (e.g. SSSI, NNR) or a discrete area which meets the published selection criteria for national designation (e.g. SSSI selection guidelines) irrespective of whether or not it has yet been notified. • A viable area of a UK BAP priority habitat, or smaller areas of such habitat which are essential to maintain the viability of a larger whole. • A regularly occurring significant number/population of a nationally important species e.g. listed on the Wildlife and Countryside Act 1981 (as amended). • A regularly occurring population of a nationally important species that is threatened or rare in the county or region. • A feature identified as being of critical importance in the UK BAP.
Regional/County	<ul style="list-style-type: none"> • Viable areas of key habitat identified in the Regional or County BAP or smaller areas of such a habitat, which are essential to maintain the viability of the larger whole. • Regional/county significant and viable areas of key habitat identified as being of regional value in the appropriate English Nature (now Natural England) Natural Area. • A regularly occurring significant population/number of any important species important at a regional/county level. • Any regularly occurring, locally significant population of a species which is listed in a Regional/County Red Data Book or BAP on account of its regional rarity or localisation. • Sites of conservation importance that exceed the district selection criteria but that fall short of SSSI selection guidelines.
City/District/Borough	<ul style="list-style-type: none"> • Areas of habitat identified in a District/City/Borough BAP or in the relevant Natural Area profile. • Sites that the designating authority has determined meet the published ecological selection criteria for designation, including Local Nature Reserves selected on District/City/Borough ecological criteria. • Sites/features that are scarce within the District/City/Borough or which appreciably enrich the District/City/Borough habitat resource. • A diverse and/or ecologically valuable hedgerow network. • A population of a species that is listed in a District/City/Borough BAP because of its rarity in the locality or in the relevant Natural Area profile because of its regional



Value	Examples
	rarity or localisation. <ul style="list-style-type: none"> • A regularly occurring, locally significant number of a District/City/Borough important species during key phases of its life cycle.
Local/Parish	<ul style="list-style-type: none"> • Areas identified in a Local BAP or the relevant natural area profile. • Sites/features which are scarce in the locality or which are considered to appreciably enrich the habitat resource within the local context, e.g. species-rich hedgerows. • Local Nature Reserves selected on Parish/Local ecological criteria. • Significant numbers/population of a locally important species e.g. one which is listed on the Local BAP. • Any species, populations or habitats of local importance.
Low	<ul style="list-style-type: none"> • Habitats of moderate to low diversity which support a range of locally and nationally common species, the loss of which can be easily mitigated.

Appendix F – Marine Mammals Records Identified by the Desk Study

Table E1: Marine Mammal Records within 2km

Species	Number of Records	Most Recent Record	On Site?	Level of Protection		
				HR 2019	WCA 1981	NERC /UK BAP
Common Dolphin	1	2014	No	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Bottle-Nosed Dolphin	1	2001	No	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Common Porpoise	5	1957	No	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Grey Seal	6	1977	No	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Harbour Seal	1	2005	No	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Key: HR 2019 – The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 WCA 1981 – The Wildlife and Countryside Act 1981 (as amended) NERC – The Natural Environment and Rural Communities Act 2006 UK BAP – UK Biodiversity Action Plan						