

A photograph showing the backs of two people wearing high-visibility yellow-green jackets and hard hats (one white, one yellow) looking out over a calm sea under a cloudy sky. The person on the left is wearing a white hard hat with 'Concept' written on it. The person on the right is wearing a yellow hard hat.

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cleaner energy future

Environmental Impact Assessment Report
Volume 3, Appendix 23.1: Ecological Desk Study
MarramWind Offshore Wind Farm

December 2025

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Approved by:	MarramWind Limited

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1. Introduction

1.1 Purpose of this baseline report

- 1.1.1.1 This Appendix presents the full methods and results of the desk study undertaken to inform the Ecological Impact Assessment (EclA) relevant to the Project.
- 1.1.1.2 Baseline data has been collected from a desk-based review of existing information. Specifically, this Appendix presents the methods and results of the ecological desk study in relation to the Study Area which is the same as the Onshore Red Line Boundary (hereafter referred to as the 'Red Line Boundary').

1.1.2 Supporting documents

- 1.1.2.1 This Appendix should be read in conjunction with **Volume 1, Chapter 4: Project Description** for full details of the Project.
- 1.1.2.2 This Appendix supports the EclA (**Volume 1, Chapter 23: Terrestrial Ecology and Ornithology**) in addition to the following Appendices:
- **Appendix 23.2: Habitats and Vegetation Survey Report;**
 - **Appendix 23.3: Protected Species Survey Report;**
 - **Appendix 23.4: Breeding Birds Report 2023;**
 - **Appendix 23.5: Breeding Birds Survey Report 2024;**
 - **Appendix 23.6: Winter Bird Report 2022/2023; and**
 - **Appendix 23.7: Winter Bird Report 2023/2024.**
- 1.1.2.3 This Appendix is supported by the following figures:
- **Figure 1: Statutory designated sites within 20km of the Red Line Boundary (only European sites of ornithological interest);**
 - **Figure 2: Statutory designated sites within 5km of the Red Line Boundary (Special Areas of Conservation (SACs) and Sites of Special Scientific Interest (SSSIs) only); and**
 - **Figure 3: Non-statutory designated sites within 2km of the Red Line Boundary (Local Nature Conservation Sites, ancient woodland, Class 1 and Class 2 peatland).**

2. Methodology

- 2.1.1.1 The desk-based study was carried in accordance with the Chartered Institute of Ecology and Environmental Management (CIEEM) best practice guidelines (CIEEM, 2018). Information was collected regarding statutory and non-statutory sites designated for nature conservation purposes and protected or notable species including those on the Scottish Biodiversity List (SBL) (NatureScot, 2025), and the Local Biodiversity Action Plan, which is overseen by the North East Scotland Biodiversity Partnership (North East Scotland Biodiversity Partnership, no date)¹. The desk study features of interest are summarised in **Table 2.1**. The study area is illustrated in **Volume 2, Figure 23.1: Ecological study areas**.

Table 2.1 Statutory and non-statutory sites of nature conservation value

Ecological feature	Example / description	Study area
Statutory sites designated under international conventions or European legislation	Wetlands of International Importance (also known as Ramsar sites).	20km buffer around Onshore Red Line Boundary.
	Special Protection Areas (SPAs).	
	Special Areas of Conservation (SACs).	10km buffer around Onshore Red Line Boundary.
Statutory sites designated under national legislation	Sites of Special Scientific Interest (SSSIs). National Nature Reserves (NNRs).	5km buffer around Onshore Red Line Boundary.
Locally designated sites	Local Nature Reserves (LNRs); and Non-statutory conservation sites including: <ul style="list-style-type: none"> Local Nature Conservation Sites (LNCS); Scottish Wildlife Trust (SWT) reserves; and woodlands included under the Ancient Woodland Inventory (AWI). 	2km buffer around Onshore Red Line Boundary.
Scottish Biodiversity List, Red listed species and legally protected species	Flora, fauna and habitats of principal importance for the conservation of biodiversity in Scotland (Scottish Government, 2020). Red-listed Birds of Conservation Concern (Stanbury <i>et al.</i> 2021). Legally protected bird species include those listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended in Scotland). Species recorded on the International Union for Conservation of Nature's Red List of Threatened Species (International Union for Conservation of Nature, no date).	2km buffer around Onshore Red Line Boundary.

¹ Following the recommendations in the report 'Biodiversity: The UK Action Plan', the North East Scotland Biodiversity Partnership was established, and builds on the previous North East Scotland Local Biodiversity Action Plan Habitat and Species Plans.

Ecological feature	Example / description	Study area
	<p>Local Red Lists for the UK or relevant sub-units (for instance regions or counties).</p> <p>Legally protected habitats and species including those listed on:</p> <ul style="list-style-type: none"> Schedules 1, 5 and 8 of the Wildlife and Countryside Act 1981 (as amended). Schedules 2 and 5 of the Habitats Regulations. Protection of Badgers Act 1992. Hedgerows Regulations 1997 respectively. 	
Legally controlled species	Legally controlled species including those listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended).	2km buffer around Onshore Red Line Boundary.

- 2.1.1.2 A desk-based search for statutory and non-statutory designated sites, legally protected and notable species was carried out as follows:
- information regarding statutory and non-statutory designated sites within 20km, 5km and 2km buffers of the Onshore Red Line Boundary were acquired using the NatureScot Sitelink web-based application (NatureScot, 2025);
 - commercially available records of protected and / or notable species post-2000 were searched within the National Biodiversity Atlas (NBN) database (NBN Atlas Partnership, 2025); and
 - a data request for records of protected and / or notable species within a 2km radius of the Onshore Red Line Boundary (extended to 5km for bat species) was submitted to North-East Scotland Biological Records Centre (NESBReC).
- 2.1.1.3 The following resources have also been used to aid in the identification of potentially sensitive ecological features:
- AWI (Scottish Government, 2025); and
 - Carbon and Peatland 2016 Map (Scottish Government, 2016).
- 2.1.1.4 In addition to national and local planning policy, the desk study has been carried out with reference to the following relevant guidance:
- NatureScot: Advising on Peatland, Carbon-Rich Soils and Priority Peatland Habitats in Development Management (NatureScot, 2023);
 - North-East Scotland Biodiversity Partnership's Local Biodiversity Action Plan (Aberdeen City Council, 2012); and
 - Aberdeenshire Council (2023). Local Development Plan. Appendix 12: Local Nature Conservation Sites (Aberdeenshire Council, 2023).
- 2.1.1.5 The above guidance and resources have been incorporated into the desk study to ensure all ecological constraints have been considered as far as reasonably practicable.

3. Results

3.1 Statutory designated sites

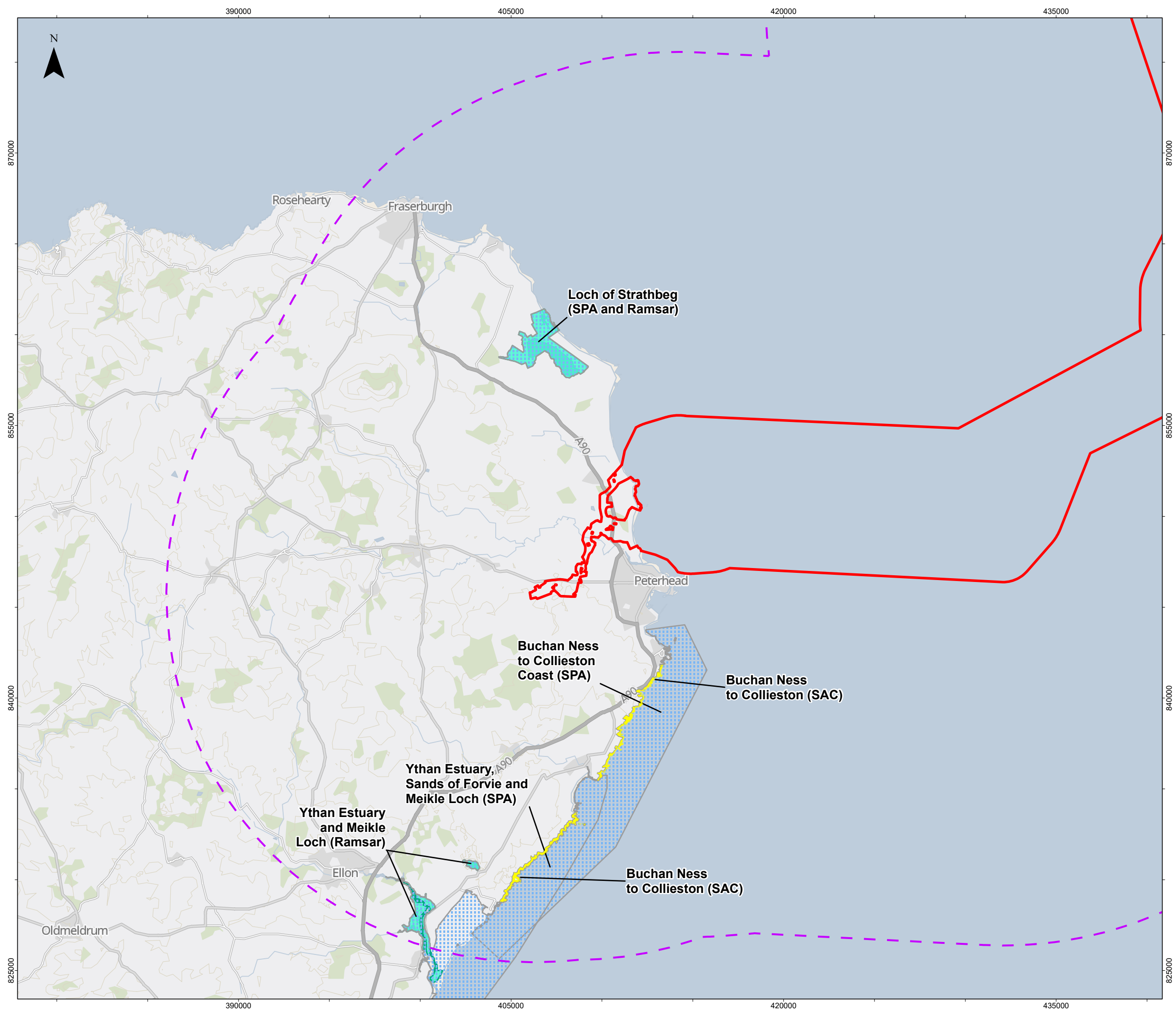
3.1.1.1 Statutory designated sites within 20km of the Onshore Red Line Boundary are listed in **Table 3.1**.

3.1.1.2 **Figure 1** illustrates only European sites of ecological or ornithological interest.

Table 3.1 Statutory designated sites within 20km of Onshore Red Line Boundary

Site name	Designation	Qualifying / notable features	Distance and direction from nearest point of Onshore Red Line Boundary
Buchan Ness to Collieston Coast	SPA	Qualifying features of the SPA: <ul style="list-style-type: none"> • Black-legged kittiwake (breeding); • Common guillemot (breeding); • Herring gull (breeding); • European shag (breeding); and • Northern fulmar (breeding). 	4.4km, south.
Buchan Ness to Collieston	SAC	Annex I habitats that are a primary reason for selection of this site: <ul style="list-style-type: none"> • vegetated sea cliffs of the Atlantic and Baltic Coasts. 	5.1km, south.
Loch of Strathbeg	SPA and Ramsar	Qualifying features of the SPA: <ul style="list-style-type: none"> • Barnacle goose (non-breeding); • Greylag goose (non-breeding); • Pink-footed goose (non-breeding); • Sandwich tern (breeding); • Teal (non-breeding); • Whooper swan (non-breeding); • Goldeneye(non-breeding); and • Waterfowl assemblage (non-breeding). Qualifying features of the Ramsar site: <ul style="list-style-type: none"> • Barnacle goose (non-breeding – wintering); • Pink-footed goose (non-breeding – passage); and • Whooper swan (non-breeding – wintering). 	5.5km, north.
Ythan Estuary, Sands of Forvie and Meikle Loch	SPA	Qualifying features of the SPA and Ramsar sites: <ul style="list-style-type: none"> • Sandwich tern (breeding); • Common tern (breeding); 	10km, south.

Site name	Designation	Qualifying / notable features	Distance and direction from nearest point of Onshore Red Line Boundary
Ythan Estuary and Meikle Loch	Ramsar	<ul style="list-style-type: none"> • Little tern (breeding); • Pink-footed goose (non-breeding); • Waterbird assemblage (non-breeding); • Eider (breeding); • Lapwing (non-breeding); and • Redshank (non-breeding). 	15km, south.



Red Line Boundary

20km Buffer Search

Ramsar Site

Special Area of Conservation (SAC)

Special Protection Area (SPA)

0246810

Kilometres

Firth

199

Scale: 1:2,500,000

	ddmm/yyyy	--	--	--	--
2	22/09/2025	EH	LT	AM	MW
1	06/06/2025	EH	LT	AM	MW
REV	REV DATE	GIS CREATOR	GIS REVIEWER	TECHNICAL CHECKER	TECHNICAL APPROVER

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808368-WEIS-IA-E5-FG-T4-41298

MarramWind DRAWING NUMBER

MAR-GEN-ENV-MAP-WSP-000316

DATUM	OSGB 1936	PROJECTION	British National Grid
SCALE	1:200,000	PAGE SIZE	A3

PROJECT TITLE

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Figure 1 Statutory designated sites within 20km of Onshore Red Line Boundary
Environmental Impact Assessment Report
Appendix 23.1

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Data Sources: Designated sites from NatureScot (2025)
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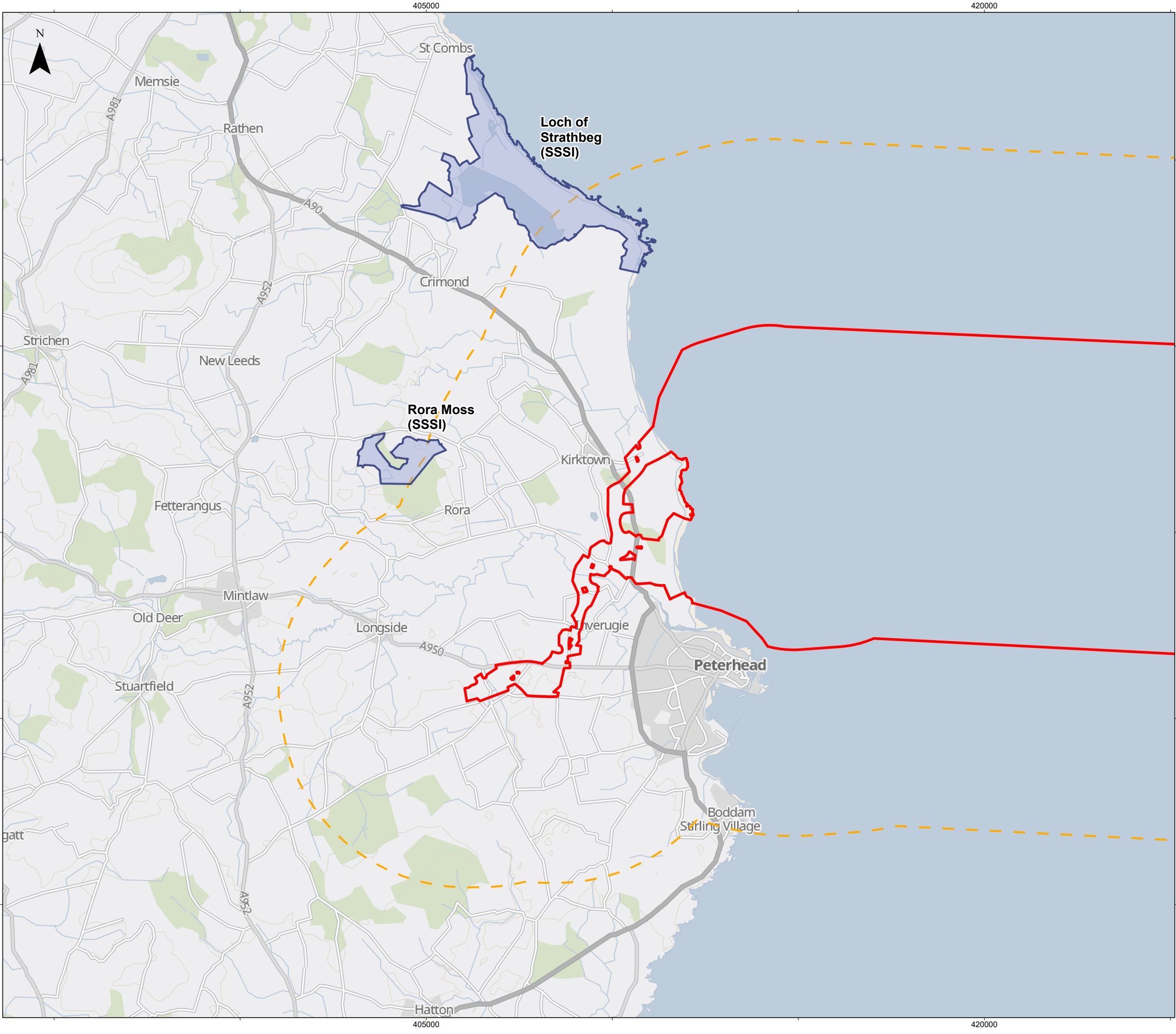
- 3.1.1.3 Statutory designated sites of national interest within 5km of the Onshore Red Line Boundary are listed in **Table 3.2** and shown in **Figure 2**.

Table 3.2 Statutory Designated Sites within 5km of the Onshore Red Line Boundary

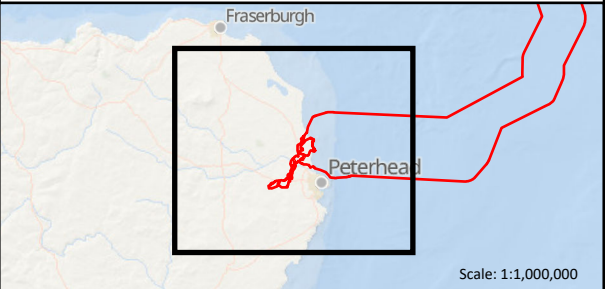
Site name	Designation	Qualifying / notable features	Distance and direction from the Onshore Red Line Boundary
Bullers of Buchan Coast	SSSI	The site is notified for its coastal geomorphology, maritime cliff habitat and birds, including its seabird colonies.	5.1km ² , south.
Rora Moss	SSSI	The site is the second largest lowland raised bog in Aberdeenshire with a significant area of uncut dome and associated cut-over areas.	4.5km, north-west.

- 3.1.1.4 No NNRs or LNRs were recorded within 5km of the Onshore Red Line Boundary, and no Royal Society for the Protection of Birds / SWT Reserves within 2km of the Onshore Red Line Boundary.

² This figure has been rounded down for inclusion in Figure 2, which illustrates statutory designated sites within 5km of the Onshore Red Line Boundary.



- Red Line Boundary
- 5km Buffer Search
- Site of Special Scientific Interest (SSSI)



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2	22/09/2025	EH	LT	AM	MW
1	06/06/2025	EH	LT	AM	MW
REV	REV DATE	GIS CREATOR	GIS REVIEWER	TECHNICAL CHECKER	TECHNICAL APPROVER

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MarramWind DRAWING NUMBER MAR-GEN-ENV-MAP-WSP-000317

DATUM	OSGB 1936	PROJECTION	British National Grid
SCALE	1:100,000	PAGE SIZE	A3

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Figure 2 Statutory designated sites within 5km of the Onshore Red Line Boundary (Special Areas of Conservation (SACs) and Sites of Special Scientific Interest (SSSIs) only)
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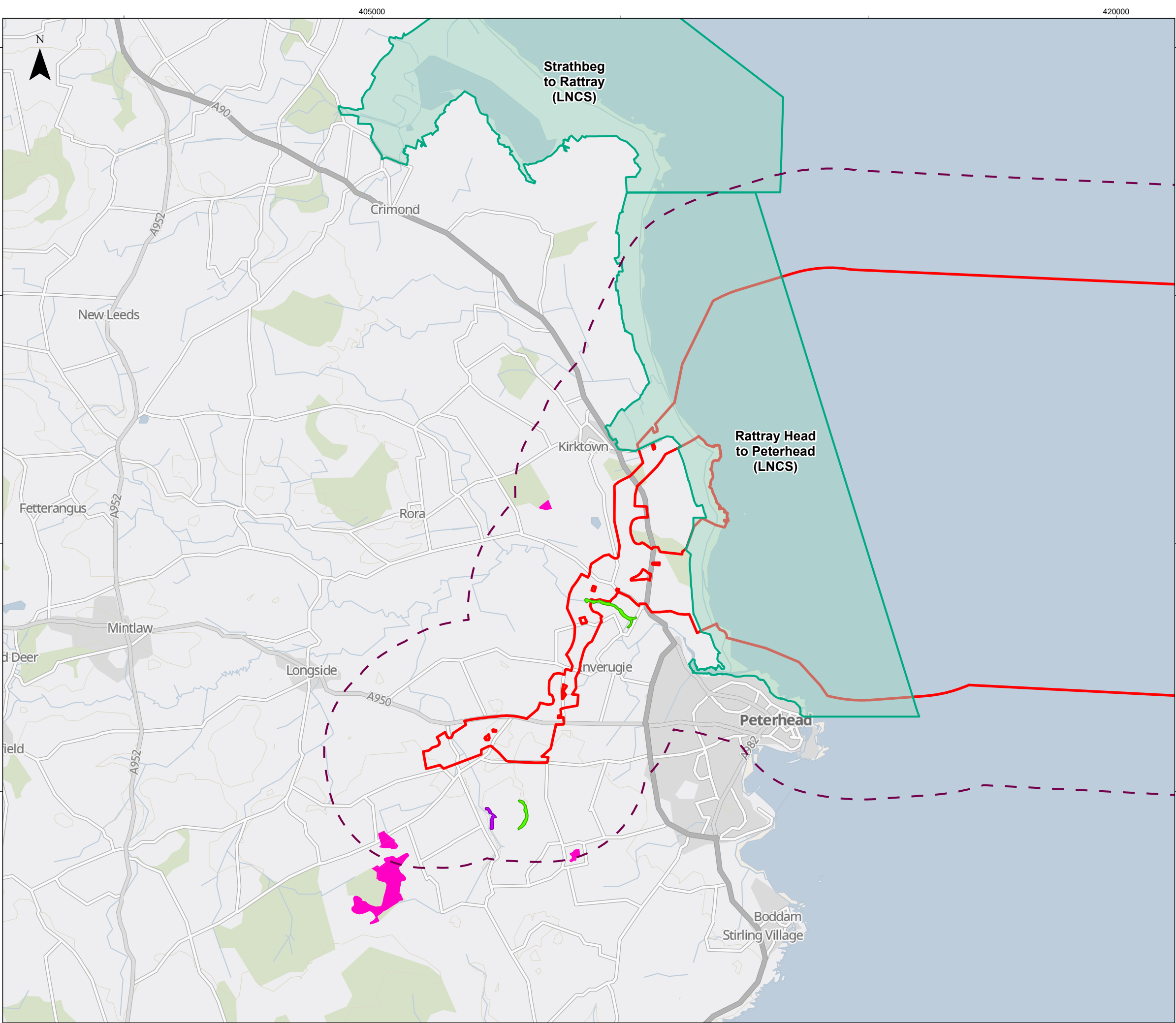


3.2 Non-Statutory designated sites

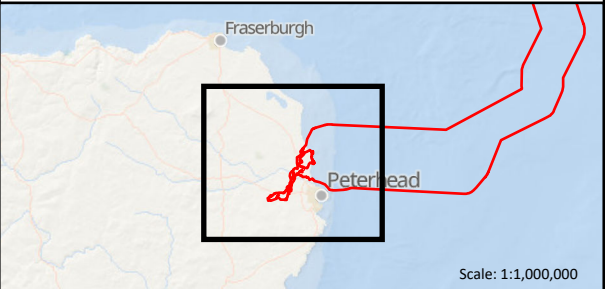
- 3.2.1.1 **Table 3.3** presents several non-statutory designated sites in the form of LNCSs and ancient woodland recorded within 2km of the Onshore Red Line Boundary. In Scotland, NatureScot defines ancient woodland as land that is currently wooded and has been continually wooded since at least 1750 (NatureScot, 2025). Its age means that it is important for biodiversity and cultural identity.
- 3.2.1.2 NatureScot's Carbon and Peatland Map (Scottish Government, 2016) was also reviewed: no Class 1, Class 2 or Class 3 peatland was recorded within the Onshore Red Line Boundary, however four locations were identified within a 2km buffer of the Onshore Red Line Boundary.
- 3.2.1.3 No Priority Peatland habitats (those listed in NatureScot, 2023) were recorded within field surveys - detailed habitat survey results are presented in **Appendix 23.2: Habitats and Vegetation Report**.
- 3.2.1.4 Non-statutory designated sites (LNCSs) and other areas of conservation importance (ancient woodland and Class 1 peatland) within 2km of the Onshore Red Line Boundary are shown in **Figure 3**.

Table 3.3 Non-statutory designated sites within 2km of the Onshore Red Line Boundary

Site name	Designation	Description	Distance and direction from the Onshore Red Line Boundary
Rattrayhead to Peterhead Coast	LNCS	Site contains a variety of coastal habitats including sand dunes with a good diversity of plant species including several species that are rare in North East Scotland. Adjacent fields important for roosting and feeding geese, waders and wildfowl.	0m
Ancient Woodland: River Ugie	AWI	Ancient woodland along banks of River Ugie.	0m
Ancient Woodland: East Dens	AWI	Ancient woodland along East Dens watercourse.	745m, south.
Ancient Woodland: West Dens	AWI	Ancient woodland along Burn of Faichfield	1km, south.



- Red Line Boundary
- 2km Buffer Search
- Local Nature Conservation Site (LNCS)
- Ancient Woodland**
 - Ancient (of semi-natural origin)
 - Long-Established (of plantation origin)
- Carbon and Peatland 2016**
 - Class 1



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2	22/09/2025	EH	LT	AM	MW
1	06/06/2025	EH	LT	AM	MW
REV	REV DATE	GIS CREATOR	GIS REVIEWER	TECHNICAL CHECKER	TECHNICAL APPROVER

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Figure 3 Non-statutory designated sites within 2km of the Onshore Red Line Boundary (Local Nature Conservation Sites, ancient woodland, Class 1 and Class 2 peatland)
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3.2.2 Legally protected and notable species

- 3.2.2.1 Records obtained from NESBReC relating to legally protected and / or notable species within 2km of the Onshore Red Line Boundary are presented in **Table 3.4**.

Table 3.4 Legally protected and notable species (NESBReC)

Species	Number of records	Year of most recent record	Conservation designation
Reptiles and Amphibians			
Common lizard	2	2006	UK Biodiversity Action Plan (UK BAP) SBL
Mammals			
Eurasian badger	68	2021	Protection of Badgers Act 1992
Brown hare	50	2021	UK BAP
Eurasian red squirrel	5	2011	UK BAP SBL
European water vole	4	2021	UK BAP SBL
Pine marten	6	2020	UK BAP SBL
West European hedgehog	21	2016	UK BAP SBL
European otter	22	2021	European Protected Species (EPS) SBL
Common pipistrelle	15	2017	EPS SBL
Daubenton's bat	4	2003	EPS SBL
Soprano pipistrelle	7	2017	EPS SBL

Animal species protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended); SBL – Scottish Biodiversity List (NatureScot, 2025); Protection of Badgers Act 1992; EPS – European Protected Species.

- 3.2.2.1 Records obtained from NBN Atlas (NBN Atlas Partnership, 2025) relating to legally protected and / or notable species within 2km of the Onshore Red Line Boundary are presented in **Table 3.5**.

Table 3.5 Legally Protected and Notable Species (NBN Atlas)

Species	Number of records	Year of most recent record	Conservation designation
Mammals			
Eurasian red squirrel	1	2020	UK BAP SBL
European otter	2	2012	EPS SBL
Common pipistrelle	1	2006	EPS SBL
Daubenton's bat	1	2003	EPS SBL

Animal species protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended); SBL – Scottish Biodiversity List (NatureScot, 2025); Protection of Badgers Act 1992; EPS – European Protected Species.

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5. Glossary of Terms and Abbreviations

5.1 Abbreviations

Acronym	Definition
AWI	Ancient Woodland Inventory
CIEEM	Chartered Institute of Ecology and Environmental Management
EclA	Ecological Impact Assessment
EPS	European Protected Species
LNR	Local Nature Reserve
NBN	National Biodiversity Atlas
NESBReC	North-East Scotland Biological Records Centre
NNR	National Nature Reserve
SAC	Special Area of Conservation
SBL	Scottish Biodiversity List
SPA	Special Conservation Area
SSSI	Site of Special Scientific Interest
SWT	Scottish Wildlife Trust
UK BAP	UK Biodiversity Action Plan

5.2 Glossary of terms

Term	Definition
Environmental Impact Assessment Report	The outcome of the Environmental Impact Assessment (EIA) process is reported within a document called an EIA Report.
Ecological Impact Assessment	The process through which the potential impacts resulting from a project are identified, quantified and assessed through appropriate ecology surveys.
United Kingdom	The United Kingdom of Great Britain and Northern Ireland, comprising England, Scotland, Wales and Northern Ireland.

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