

Environmental Impact Assessment Report

Teindland Wind Farm

Volume 3

TA A7.4: Habitats Regulations Appraisal - Ornithology

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Teindland Wind Farm

Environmental Impact Assessment (EIA) Report

Appendix A7.4: Habitats Regulations Appraisal - Ornithology



CONTENTS

1	INTRODUCTION	1
2	IDENTIFICATION OF DESIGNATED SITES	1
2.1	Statutory Sites and Qualifying Features	1
2.2	Conservation Objectives of Relevant Designated Sites	3
3	STAGE 1: SCREENING FOR LSE	4
3.1	Screening Overview	4
3.2	Routes to Impact	4
3.3	Loch Spynie SPA and Ramsar Site.....	5
3.4	Moray & Nairn Coast SPA and Ramsar Site	6
3.5	In Combination Impacts.....	9
3.6	Summary	12
4	STAGE 2: SHADOW APPROPRIATE ASSESSMENT	12
4.1	Introduction.....	12
4.2	Assessment Against Relevant Conservation Objectives	13
4.3	In Combination Impact	16
5	CONCLUSION	17

1 INTRODUCTION

- 1.1.1 This Appendix has been prepared to accompany **Chapter 7: Ornithology** of the Teindland Wind Farm (the Development) Environmental Impact Assessment Report (EIAR). It should also be read in conjunction with **Technical Appendix A7.1: Ornithology Baseline Report** and **Technical Appendix A7.2: Collision Risk Modelling Calculations** (Volume 3).
- 1.1.2 Under the Conservation (Natural Habitats, &c.) Regulations 1994, as amended (the Habitats Regulations), any development that may have a likely significant effect (LSE) on a Special Protection Area (SPA) or Special Area of Conservation (SAC), either alone or in combination with other projects, requires an Appropriate Assessment (AA) to be carried out by the relevant competent authority, to determine whether or not the development would have an adverse effect on the integrity of the relevant designated area(s). Under Policy 4 of the National Planning Framework 4 (NPF4¹), Wetlands of International Importance designated under the Ramsar Convention (1979) (Ramsar sites) are also afforded the same level of protection in Scotland.
- 1.1.3 Before an AA is initiated, a screening process is undertaken to determine whether any of the predicted impacts of the development would result in a LSE. This Screening Assessment ('Stage 1') is presented, to provide information to the competent authority to allow them to reach a decision on whether or not the development would have a LSE on any internationally designated sites and therefore whether an AA is required. Where a LSE cannot be ruled out, information to inform the AA is provided ('Stage 2').
- 1.1.4 The two stage process is referred to as a Habitats Regulations Appraisal (HRA). Only the competent authority can undertake HRA. Thus Stage 2 is referred to in this document as a 'shadow AA'.
- 1.1.5 This Technical Appendix only covers internationally designated sites with ornithological qualifying features.
- 1.1.6 For the purposes of this appraisal, professional judgement based on best available evidence has been used to establish the likelihood of a significant effect and to determine whether a conclusion of no adverse effect on the integrity of any relevant designated sites can be reached.

2 IDENTIFICATION OF DESIGNATED SITES

2.1 Statutory Sites and Qualifying Features

- 2.1.1 Three statutory sites of international importance have been identified for initial assessment, using a search area around the Site² of 20 km; this being the maximum distance in which there is potential for qualifying features to have connectivity with the Site (in reference to NatureScot guidance (SNH, 2016)³). The designated areas identified are detailed in **Table 2.1**, along with the qualifying features for which they are designated. In the case of the Ramsar sites, only ornithological qualifying features are listed.

¹ Available from: <https://www.gov.scot/publications/national-planning-framework-4/documents/> (Accessed March 2025).

² The 'Site' refers to the red line application boundary for the Proposed Development (as shown on **Figure 4.1**).

³ SNH (2016) *Assessing connectivity with Special Protection Areas (SPAs)*. Scottish Natural Heritage Guidance: Version 3 - June 2016. Scottish Natural Heritage, now NatureScot, Inverness.

Table 2.1: Designated areas with ornithological interests within 20 km of the Site

Location	Designation	Distance/Direction from Site	Qualifying Ornithological Interests
Moray & Nairn Coast	SPA	5.0 km, northeast	<u>Breeding</u> - Osprey. <u>Non-breeding</u> - Bar-tailed godwit; - Pink-footed goose; - Greylag goose; - Redshank; and - Non-breeding bird assemblage (comprising the above species plus red-breasted merganser, dunlin, oystercatcher and wigeon).
	Ramsar Site	5.0 km, northeast	<u>Breeding</u> - Osprey. <u>Non-breeding</u> - Bar-tailed godwit; - Red-breasted merganser; - Dunlin; - Oystercatcher; - Wigeon; - Pink-footed goose; - Greylag goose; and - Redshank.
Moray Firth	SPA	8.8 km, north	<u>Breeding</u> - Shag. <u>Non-breeding</u> - Great northern diver; - Red-throated diver; - Slavonian grebe; - Scaup; - Eider; - Long-tailed duck; - Common scoter; - Velvet scoter; - Goldeneye; - Red-breasted merganser; and - Shag.
Loch Spynie	SPA	10.5 km, northwest	<u>Non-breeding</u> Greylag goose.
	Ramsar Site	10.5 km, northwest	<u>Non-breeding</u> Greylag goose.

2.1.2 For the Moray & Nairn Coast SPA and Ramsar site only three of the qualifying features require inclusion in the assessment, namely greylag goose, pink-footed goose and osprey. These species have a core foraging range of 15-20 km (both goose species) and 10 km (osprey), based on NatureScot guidance³, which suggests the potential for connectivity with the Development. Indeed, these three species were recorded during baseline surveys. The other qualifying features are species of coastal and marine habitats during the season for which they are designated. These ornithological features can be excluded based upon the distance between the Development and the designated area, the absence of suitable habitat present within the Site and the absence of these species from the Site, based on baseline data gathering. On this basis, bar-tailed godwit, redshank, red-breasted merganser, dunlin, oystercatcher and wigeon are considered to have no route to impact. Therefore, these species are not discussed further in relation to the appraisal of Moray & Nairn Coast SPA and Ramsar site.

- 2.1.3 All species listed as qualifying features of the Moray Firth SPA are estuarine and marine species during the season for which they are designated. These ornithological features can be excluded based on distance from the Development, the absence of suitable habitat present within the Site and the absence of these species from the Site, based on baseline data gathering. On this basis, shag, great northern diver, red-throated diver, Slavonian grebe, scaup, eider, long-tailed duck, common scoter, velvet scoter and red-breasted merganser are considered to have no route to impact. Therefore, for Moray Firth SPA (all features), no LSE can be concluded without a need for further assessment and this designated site is not discussed further.
- 2.1.4 Loch Spynie SPA and Ramsar site is included for assessment for its qualifying ornithological feature: greylag goose. This species has a core foraging range of 15-20 km based on NatureScot guidance³, which suggests the potential for connectivity with the Development and as noted above in relation to Moray & Nairn Coast SPA and Ramsar site, greylag goose was recorded during baseline surveys.
- 2.1.5 Based on the above, the following designated sites and qualifying ornithological interests are assessed in Stage 1: Screening for LSE:
- Moray & Nairn Coast SPA and Ramsar site:
 - Greylag goose;
 - Pink-footed goose; and
 - Osprey.
 - Loch Spynie SPA and Ramsar site:
 - Greylag goose.
- 2.1.6 Note that in the subsequent assessment, where the term SPA or designated area is used this encompasses both the SPA and Ramsar site designations. For Moray & Nairn Coast SPA and Ramsar site and Loch Spynie SPA and Ramsar site, the SPA boundaries are the same as for the Ramsar designations. Duplicate assessments are not undertaken and the conclusion given for shared listed features applies to both the SPA and the Ramsar site; unless otherwise stated.

2.2 Conservation Objectives of Relevant Designated Sites

- 2.2.1 The conservation objectives for Moray & Nairn Coast SPA⁴ and Loch Spynie SPA⁵ are the same and can be summarised as:
- Avoid deterioration to the habitats of the qualifying species, or significant disturbance to the qualifying species, thus maintaining integrity of the site; and
 - Ensure that, for the qualifying features, the following are maintained in the long-term:
 - The population of the species as a viable component of the site;
 - The distribution of the species within the site;
 - The distribution and extent of habitats supporting the species;

⁴ Available from: <https://www.nature.scot/sites/default/files/special-protection-area/8550/conservation-objectives.pdf> (Accessed March 2025).

⁵ Available from: <https://www.nature.scot/sites/default/files/special-protection-area/8540/conservation-objectives.pdf> (Accessed March 2025).

- The structure, function and supporting processes of habitats supporting the species; and
- No significant disturbance to the species.

3 STAGE 1: SCREENING FOR LSE

3.1 Screening Overview

3.1.1 Stage 1: Screening for LSE is undertaken to remove any proposals, or components of proposals, that do not require consideration under Stage 2 (Appropriate Assessment (in this case a 'shadow AA')). Screening considers three important aspects of the proposal and the qualifying features of the site:

- Connectivity between the Development and the designated site;
- Route to impact between the Development and the designated site; and
- Numbers of qualifying features exposed to impact (consequential or inconsequential).

3.1.2 If it can be clearly demonstrated that there is no connectivity, no route to impact or an inconsequential number of qualifying features would be impacted, it can be concluded that there is no LSE on the designated site. If, however, the potential for a LSE is concluded, the process moves on to Stage 2.

3.2 Routes to Impact

3.2.1 Many of the conservation objectives of the SPAs would be unaffected by the Development due to the separation distance between the Site and the designated areas; this being a minimum of 5.0 km for Moray & Nairn Coast SPA, and 10.5 km for Loch Spynie SPA.

3.2.2 Due to the distance between the Site and both SPAs, there would be no direct or indirect impacts on the habitats and processes contained within the designated areas. Although there is hydrological connectivity between the Site and the River Spey, the lower reaches of which form part of the Moray & Nairn Coast SPA, any indirect impacts on the habitats within the SPA can reasonably be excluded from assessment due to the geography and distance between the Site and the designated area (minimum of 7.5 km watercourse length between the two). For a measurable impact on the function of habitats in the SPA to occur, such that this would result in a LSE on the ornithological features they support, any pollution incident would need to be of such a large magnitude that this impact can reasonably be dismissed based on plausibility.

3.2.3 However, although habitats within the designated areas would be unaffected by the Development, there is potential for any losses of habitat as a result of the Development to impact a qualifying feature if this habitat is of importance to the species when it is outside the designated area. For example, if there is a loss of important foraging areas for geese roosting in the SPA or loss of breeding habitat for ospreys that forage within the SPA.

3.2.4 There would be no disturbance to any ornithological features as a result of the Development whilst the birds are within the boundary of the SPA, given the distance from the Site. Thus, there would be no impact on the distribution of qualifying species within the boundary of the SPAs, as set out in the conservation objectives. Disturbance to species only requires consideration if qualifying features associated with the SPA also utilise the area of the Development in such a way that disturbance impacts may occur (e.g., foraging geese or breeding osprey).

3.2.5 The long-term maintenance of 'populations of species as a viable component of the site' requires consideration if qualifying features associated with the SPA utilise the area of the Development in such a way that mortality could occur (e.g. collision impacts) to an extent that this could affect the integrity

of the designated population; or such that any displacement impact as a result of the Development causes birds to be lost from the SPA population.

3.3 Loch Spynie SPA and Ramsar Site

Greylag goose

- 3.3.1 Loch Spynie SPA and Ramsar site is designated for its non-breeding population of greylag geese from the Icelandic breeding population, and which use the loch as a night-time roost. The SPA data form for Loch Spynie⁶ gives a population of 8,830 individuals (based on five-year mean from 1985/86 to 1989/90). The information sheet for the Ramsar site⁷ provides a population estimate of 4,700 individuals, based on a later peak five-year mean (1996/97 to 2000/01).
- 3.3.2 The number of greylag geese utilising Loch Spynie has continued to decline since designation (Mitchell, 2012)⁸. This is partly a result of population decline within the Icelandic greylag goose population but is also due to a change in wintering distribution, with many birds now remaining on Orkney. The local decline is evidenced in annual census data, with 2,040 greylag geese recorded in 2020 across all Moray (Brides *et al.*, 2021)⁹ and only 650 greylag geese recorded in Moray in 2022 (across six sites (unspecified)) (Woodward *et al.*, 2024)¹⁰. Woodward *et al.* (2024) provide site counts for Loch Spynie based on Wetland Bird Survey (WeBS) census data, and this gives the most recent five-year mean (2018/19 to 2022/23) as 558 individuals. WeBS data do not typically capture numbers of roosting birds and so the actual number of greylag geese using the designated area may be greater than this, though the wider Moray census data suggest it would not be considerably greater.
- 3.3.3 Greylag geese associated with the Loch Spynie designated area were shown by Mitchell (2012)⁸ to generally feed within 6-7 km of the loch. The nearest key foraging areas to the Site are the areas of low-lying farmland east of Elgin and around Spey Bay, which are both located more than 5 km from the Site. The Site itself provides no suitable habitat for greylag geese, and forested sites are avoided by wintering geese.
- 3.3.4 The data available demonstrates that there is no route to impact in terms of disturbance or displacement as a result of the Development. The only potential for the Development to impact greylag geese from the designated area is as a result of collision.
- 3.3.5 During two years of baseline vantage point (VP) flight activity surveys for the Development only two greylag goose flights were recorded. These came from the same November date and totalled 43 individuals.
- 3.3.6 The baseline data support the findings of Mitchell (2012)⁸ that there are no important feeding areas within the species' foraging distance of the designated area and for which the Development would lie on the daily flight path. The Site is located south, and beyond, the regularly used feeding sites.
- 3.3.7 Both greylag goose flights recorded during baseline surveys passed over the southern edge of the Site, heading from the southwest in a northeasterly direction (**Figure 7.5d**). As Loch Spynie lies to the northwest of the Site, the recorded flights would appear to be of birds that had neither arrived from,

⁶ Available from: <https://jncc.gov.uk/jncc-assets/SPA-N2K/UK9002201.pdf> (Accessed March 2025).

⁷ Available from: <https://rsis.ramsar.org/RISapp/files/RISrep/GB569RIS.pdf?language=en> (Accessed March 2025).

⁸ Mitchell, C. (2012) *Mapping the distribution of feeding Pink-footed and Iceland Greylag Geese in Scotland*. Wildfowl & Wetlands Trust / Scottish Natural Heritage Report, Slimbridge.

⁹ Brides, K., Wood, K.A., Auhage, S.N.V., Sigfússon A. and Mitchell, C. (2021) *Status and distribution of Icelandic-breeding geese: results of the 2020 international census*. Wildfowl & Wetlands Trust Report, Slimbridge.

¹⁰ Woodward, I.D., Calbrade, N.A., Birtles, G.A., Feather, A., Peck, K., Wotton, S.R., Shaw, J.M., Balmer, D.E. and Frost, T.M. (2024) *Waterbirds in the UK 2022/23: The Wetland Bird Survey and Goose & Swan Monitoring Programme*. BTO/RSPB/JNCC/NatureScot. Thetford.

nor were heading towards, the designated area. The baseline data therefore suggests a lack of connectivity between the Site and the Loch Spynie designated area.

- 3.3.8 For impacts resulting from the Development (construction, operation and decommissioning phases) it can be concluded that no LSE would occur to the greylag goose population of the Loch Spynie SPA and Ramsar site. Loch Spynie SPA and Ramsar site does not progress to Stage 2: Appropriate Assessment.**

3.4 Moray & Nairn Coast SPA and Ramsar Site

- 3.4.1 The Moray & Nairn Coast SPA and Ramsar site comprises two discrete areas, the nearest to the Site covers the lower reaches of the River Spey (that part lying within approximately 5.5 km of the coast) and a larger area that encompasses Findhorn Bay and the coast between Findhorn Bay and Nairn. The part of the designated area that covers the lower River Spey is located 5 km to the northeast of the Site at its nearest point. The larger area that includes Findhorn Bay is located over 22 km to the west northwest of the Site.

Greylag goose

- 3.4.2 The data form for Moray & Nairn Coast SPA¹¹ cites a population of 3,023 individuals for greylag goose (based on five-year mean from 1988/89 to 1992/93). The same population estimate is stated in the SPA citation (2018)¹² and Ramsar citation (2022)¹³, with the greylag goose population having not been updated since designation.
- 3.4.3 However, as discussed above in relation to Loch Spynie SPA, the number of greylag geese in the Moray and Nairn area has fallen since designation (Mitchell, 2012)⁸. Woodward *et al.* (2024)¹⁰, in their summary of WeBS data, do not provide relevant data applicable to the Moray & Nairn Coast designated area. However, consulting with Moray and Nairn bird reports¹⁴ a five-year mean peak (2017 to 2021) can be calculated based on the highest counts provided from Findhorn Bay in this period (excluding post-breeding flocks) and this produces an estimate of 573 individuals. As Findhorn Bay only represents part of the designated area the actual population may be greater than this, though the wider Moray census data suggest it would not be considerably greater. This is notably less than the cited population of greylag goose, despite the citations being amended relatively recently (e.g. dated 2022 for the Ramsar site). Both population estimates are included in the assessment.
- 3.4.4 Greylag geese associated with the Moray & Nairn Coast designated area were shown by Mitchell (2012)⁸ to forage along the coastal plain between Findhorn Bay and Spey Bay. The nearest regularly used foraging areas to the Site are located more than 5 km to the northeast and northwest. The Site itself provides no suitable habitat for greylag geese, and forested sites are avoided by wintering geese.
- 3.4.5 The majority of the Moray & Nairn Coast designated area is located beyond greylag goose foraging range (15-20 km)³, which indicates no connectivity between geese roosting in Findhorn Bay and the Development. Based on known foraging areas, there is no route to impact in terms of disturbance or displacement as a result of the Development.
- 3.4.6 The only potential for the Development to impact greylag geese from the designated area is as a result of collision. During two years of baseline VP flight activity surveys for the Development only two greylag goose flights were recorded. These came from the same November date and totalled 43

¹¹ Available from: <https://jncc.gov.uk/jncc-assets/SPA-N2K/UK9001625.pdf> (Accessed March 2025).

¹² Available from: <https://www.nature.scot/sites/default/files/special-protection-area/8550/spa-citation.pdf> (Accessed March 2025).

¹³ Available from: <https://www.nature.scot/sites/default/files/ramsar-site/8447/ramsar-site-citation.pdf> (Accessed March 2025).

¹⁴ Available from: <https://birdsinmorayandnairn.org/2011-onwards/> (Accessed March 2025).

individuals. CRM analysis carried out using this flight activity data produced an estimated mortality for greylag goose of 0.077 (average) and 0.154 (maximum) bird collisions per year as a result of the Development.

- 3.4.7 The baseline data support the findings of Mitchell (2012)⁸ that there are no important feeding areas within foraging distance of the designated area and for which the Development would lie on the daily flight path. The Site is located south, and beyond, the regularly used feeding sites.
- 3.4.8 Both greylag goose flights recorded during baseline surveys passed over the southern edge of the Site, heading from the southwest in a northeasterly direction (**Figure 7.5d**). The birds may have entered the Moray & Nairn Coast SPA (River Spey area) and for the purposes of assessment are considered to be associated with this designated area; although the paucity of records, with no records at all in one baseline year, are suggestive that the greylag geese recorded passing over the Site may be more appropriately classed as 'wider countryside' birds.
- 3.4.9 Taking the maximum collision estimate (0.154 birds per year) predicted by the CRM analysis, the collision estimate is equivalent to 0.005% of the greylag goose population as stated in the SPA and Ramsar site citations. Using the precautionary recent population estimate for Findhorn Bay of 573 greylag geese, the estimated collision rate is equivalent to 0.03% of the population. The level of additional mortality would result in no discernible change to the greylag goose population of the designated area and can be regarded as an 'inconsequential' number of birds for the purposes of this assessment.
- 3.4.10 For impacts resulting from the Development on its own (construction, operation and decommissioning phases) it can be concluded that no LSE would occur to the greylag goose population of the Moray & Nairn Coast SPA and Ramsar site.**
- 3.4.11 The potential for LSE on greylag geese of the Moray & Nairn Coast SPA and Ramsar site as a result of the Development in combination with other projects is discussed in **Section 3.5**.

Pink-footed goose

- 3.4.12 The Moray & Nairn Coast SPA citation¹² and SPA Data Form¹¹ give a population of 7,538 individuals, based on a peak winter mean from the period 1988/89 to 1992/93. The same qualifying population is stated in the citation for the Ramsar site¹³.
- 3.4.13 The pink-footed goose population was increased greatly since designation, though this not reflected in the amended citations (dated 2018 and 2022 for the SPA and Ramsar site respectively). The Scottish population has increased 85% in the last 25 years (Woodward *et al.*, 2024)¹⁰. Although a recent count covering Moray & Nairn Coast SPA could not be found, recent Moray and Nairn Bird Reports¹⁴ have been consulted for counts from Findhorn Bay, which is understood to hold the large majority of birds within the designated area. The mean peak count using data from the five most recent years available of 2017 to 2021 produces an estimate of approximately 33,800 individuals.
- 3.4.14 Pink-footed geese associated with the Moray & Nairn Coast designated area were shown by Mitchell (2012)⁸ to forage along the coastal plain between Findhorn Bay and Spey Bay, and mostly to the west of Elgin. The nearest key foraging areas to the Site are located more than 6 km to the northwest, with the nearest record of foraging birds coming from approximately 2 km to the northwest of the Site. The Site itself provides no suitable habitat, and forested sites are avoided by wintering geese.
- 3.4.15 The majority of the Moray & Nairn Coast designated area (including Findhorn Bay) is located beyond pink-footed goose foraging range (15-20 km)³, which indicates the Site is beyond daily commuting distance for most birds using the SPA. Based on known foraging areas, there is no route to impact in terms of disturbance or displacement as a result of the Development.

- 3.4.16 During the baseline VP surveys for the Development, flight activity was recorded for pink-footed geese passing over the Site. Peak passage was in the autumn, particularly November, with lower numbers on spring passage and occasional records in winter. The CRM analysis undertaken produced an estimated mortality for pink-footed goose of 6.979 (average) and 7.738 (maximum) bird collisions per year as a result of the Development.
- 3.4.17 The pink-footed goose flights were generally of birds coming in from the west and passing over the Site in a southeasterly direction. There were no regular flights in the opposite direction, which further supports that these flights were not daily commutes to foraging areas but rather comprised birds on migration. The orientation of flights is suggestive that the flocks may have originated from Findhorn Bay and so the geese recorded during baseline surveys are considered as being associated with the designated area.
- 3.4.18 Taking the maximum collision estimate (7.738 birds per year) predicted by the CRM analysis, the estimated collision mortality is equivalent to 0.10% of the cited (outdated) population for Moray & Nairn Coast SPA. Using the more appropriate population estimate based on the peak mean from 2017-2021 (Findhorn Bay only) of 33,800 individuals, the collision risk is equivalent to a potential mortality rate of 0.02% of the pink-footed goose population per year. The level of additional mortality would result in no discernible change to the pink-footed goose population of the designated area and can be regarded as an 'inconsequential' number of birds for the purposes of this assessment.
- 3.4.19 For impacts resulting from the Development on its own (construction, operation and decommissioning phases) it can be concluded that no LSE would occur to the pink-footed goose population of the Moray & Nairn Coast SPA and Ramsar site.**
- 3.4.20 The potential for LSE on pink-footed geese of the Moray & Nairn Coast SPA and Ramsar site as a result of the Development in combination with other projects is discussed in **Section 3.5**.

Osprey

- 3.4.21 The SPA and Ramsar site citations^{12,13} (based on the 2008-2012 five-year mean) state that the designated area supports seven breeding pairs of ospreys within the site (7% of the GB population) and supports up to nine pairs within foraging range (4.5% of the GB population). The mismatch in percentage values is not explained, although a GB population of 200 pairs from the time of citation is considered correct (as suggested by nine pairs equalling 4.5% of the population), rather than 100 pairs (as suggested by seven pairs equalling 7% of the population). The SPA Data Form¹³ gives a population of 16 breeding pairs, with no separation of breeding and foraging birds. The 16 pairs in these citations is taken to supersede the 14 individuals (count from the early 1990s) stated in the Ramsar site Information Sheet¹⁵.
- 3.4.22 The Scottish breeding population of osprey continues to increase and so the SPA/Ramsar site population estimate based on 2008-2012 data will now be outdated. NatureScot estimate that there are currently between 250 and 300 pairs in Scotland¹⁶. The Moray & Nairn Coast designated area is located within Natural Heritage Zone (NHZ) 21: Moray Firth. The Scottish Raptor Monitoring Scheme (SRMS) has produced raptor trends for this NHZ for selected species (Wilson *et al.*, 2022)¹⁷, with this estimating a 46% population increase for osprey between 2009 and 2018. However, Wilson *et al.* (2022) also give the number of pairs as 18 in 2009 and 32 in 2018 (equal to a 78% increase), which suggests population growth may have been greater than that stated, though various caveats with the

¹⁵ Available from: <https://rsis.ramsar.org/RISapp/files/RISrep/GB890RIS.pdf?language=en> (Accessed February 2025).

¹⁶ Available from: <https://www.nature.scot/plants-animals-and-fungi/birds/freshwater-birds/osprey#:~:text=Ospreys%20have%20since%20spread%20slowly,and%20parts%20of%20the%20north> (Accessed March 2025).

¹⁷ Wilson, M., Challis, A. and Wernham, C.V. (2022) *Scottish Raptor Monitoring Scheme Trends for 2009-2018: Methods and Analysis of Gaps* (A report to the SRMG).

data extrapolation are acknowledged. Based on similar extrapolation to update the SPA population, it can reasonably be concluded that there are likely to now be an estimated 22-28 pairs of osprey with connectivity to the designated area.

- 3.4.23 NatureScot guidance³ gives ospreys' core range as 10 km, with some regular foraging up to 20 km from nest sites (maximum of 28 km). In this guidance, NatureScot state that in most cases it is core range that should be used to determine connectivity between a project and the qualifying interests of a designated area. Maximum foraging range may determine connectivity in exceptional cases, for example if there are no nearer foraging sites within core foraging range; however, this is not the case for the Development given the number of available foraging areas within 10 km of the Site, including lochs, fisheries, rivers and the coast. Therefore, there is considered to be no connectivity with the part of the Moray & Nairn Coast designated area that encompasses Findhorn Bay (22 km distant). Information could not be found as to the distribution of ospreys within the designated area, i.e. numbers associated with the part of the designated area that lies within core range of the Site (the lower River Spey) and those within the area without connectivity (Findhorn Bay and Nairn coast). Therefore, the population estimate for the full designated area is used as the basis of assessment.
- 3.4.24 Baseline surveys and data gathering for the Development showed that osprey breed within the vicinity of the Site; with three pairs identified. Proximity to the Development, including a pair within 600 m of proposed turbines, suggests a potential for disturbance or displacement impacts. The ospreys breeding in the vicinity of the Site have theoretical connectivity with Moray & Nairn Coast SPA and Ramsar site, as the three nest sites identified are within 10 km of the nearest part of the designated area (lower River Spey).
- 3.4.25 The CRM analysis undertaken using the results of the baseline flight activity surveys produced an estimated mortality for osprey of 0.731 (average) and 0.963 (maximum) bird collisions per year, as a result of the Development and prior to mitigation. Using the maximum collision estimate predicted, the estimated collision mortality is equivalent to 3.01% of the cited breeding and foraging population for the designated area (16 pairs/32 individuals). Assessing against the extrapolated, but more appropriate, population estimate of 22-28 pairs, the annual collision mortality estimate is equivalent to 1.72-2.19% of the designated area's population. This estimate is not a fraction of a percent of the relevant population, as it is for the other qualifying features assessed, and cannot be regarded as 'inconsequential'.
- 3.4.26 A potential for a LSE on the osprey population of the Moray & Nairn Coast SPA and Ramsar site has been identified for the Development.**
- 3.4.27 Moray & Nairn Coast SPA and Ramsar site progresses to Stage 2: Appropriate Assessment, in relation to osprey as a qualifying feature.**
- 3.4.28 A shadow AA is provided in **Section 4** and this includes assessment of the Development alone and in combination with other relevant projects.

3.5 In Combination Impacts

- 3.5.1 Before ruling out a LSE on greylag goose and pink-footed goose (Moray & Nairn Coast designated area only), 'in combination' impacts need to be considered for the Development alongside other relevant projects.
- 3.5.2 Note that due to a lack of connectivity being concluded for the Loch Spynie designated area, this site is not included in the in combination assessment.
- 3.5.3 Note that the in combination assessment for osprey is included within the Shadow AA (**Section 4.3**).

- 3.5.4 Based on the screening assessment for the Development, the in combination assessment in respect to greylag goose and pink-footed goose only requires consideration of potential collision impacts.
- 3.5.5 In determining projects for inclusion in the in combination assessment, potential for connectivity has been used to determine the relevant search area. A 20 km search area around the designated area has been used, based on the core foraging range of 15-20 km for both goose species, as stated in NatureScot guidance³.
- 3.5.6 Within the search area, only wind farm projects have been considered; these having a quantifiable collision risk that allows for an additive approach to be used. Other types of projects have not been requested for consideration by consultees (see **Chapter 7: Ornithology**). The wind farm projects included in the assessment are those that are operational, under construction, consented or in planning. Projects in scoping are not included as relevant data to undertake the assessment (collision mortality estimates) are not generally available at this stage. Projects with fewer than three turbines, and micro-turbine developments, are also not included as the required detail to assess collision impacts are also generally absent from these small-scale projects. Projects that have been withdrawn or were refused planning are also excluded.
- 3.5.7 Relevant projects have been identified using the interactive wind farm maps available for Moray Council¹⁸, Highland Council¹⁹ and Aberdeenshire Council²⁰. Information has then been sought in those projects' EIARs, using the search function within the planning portals of Moray Council²¹, Highland Council²² and the Scottish Government's Energy Consents Unit (ECU)²³, where available. No relevant projects were found in Aberdeenshire within 20 km of the designated areas. Additionally, no offshore projects were located within 20 km of the designated areas, in reference to information available from The Crown Estate²⁴.
- 3.5.8 The wind farm projects identified are listed in **Table 3.1**, along with relevant data regarding potential collision risk, where this has been calculated. If two collision mortality estimates have been provided for a project, the maximum is used in the table. Where it is known that CRM analysis was not undertaken due to a perceived lack of 'at-risk' flight activity records, this is shown as 'No CRM' in the table. These projects are assumed not to contribute in a measurable way to the in combination assessment. Collision estimates are used without prejudice and no attempt has been made to adjust the values; for example, if the avoidance rate used for pink-footed goose in some of the older projects was 99.0%, rather than the 99.8% that is now recommended, the presented value is used even though this would over-estimate the risk compared to an updated running of the model.

¹⁸ Available from: http://www.moray.gov.uk/moray_standard/page_119083.html (Accessed March 2025).

¹⁹ Available from: https://www.highland.gov.uk/info/198/planning_-_long_term_and_area_policies/152/renewable_energy/4 (Accessed March 2025).

²⁰ Available from: <https://www.aberdeenshire.gov.uk/planning/planning-applications/wind-turbine-applications/> (Accessed March 2025).

²¹ Available from: <https://publicaccess.moray.gov.uk/eplanning/> (Accessed March 2025).

²² Available from: <https://wam.highland.gov.uk/wam/> (Accessed March 2025).

²³ Available from: <https://www.energyconsents.scot/ApplicationSearch.aspx> (Accessed March 2025).

²⁴ Available from: <https://www.crownestatescotland.com/scotlands-property/offshore-wind/current-projects> (Accessed March 2025).

Table 3.1: In combination collision risk for greylag goose and pink-footed goose associated with Moray & Nairn Coast SPA and Ramsar site

Wind Farm	Predicted Annual Collision Mortality Estimate	
	Greylag goose	Pink-footed goose
The Development	0.15	7.74
Aultmore	0.24	1.44
Berry Burn/ Extension	0.09	0.37
Cairn Duhie	0.43	0.58
Clash Gour	0.08	0.63
Hill of Glaschyle	No CRM	No CRM
Hill of Towie	No CRM	No CRM
Hill of Towie II	No CRM	0.02
Kellas Drum	0.14	Not assessed
Lurg Hill	No CRM	Not recorded
Roths I	Not recorded	No CRM
Roths II	Not recorded	2.00*
Roths III	3.83	4.51
In Combination	4.96	17.29

Moray & Nairn Coast SPA and Ramsar Site - Greylag goose

3.5.9 The in combination collision risk of 4.96 birds per year is equivalent to 0.16% of the population as stated in the citation for the designated area. To allow an assessment of the level of impact against a more realistic contemporary population estimate, using the recent figure for Findhorn Bay of 573 individuals, the in combination collision risk is equivalent to 0.87% of this population estimate. The level of additional mortality of less than 1% would have no discernible impact on the greylag goose population of the designated area and can be regarded as an ‘inconsequential’ number of birds for the purposes of this assessment.

3.5.10 For impacts resulting from the Development in combination with other relevant projects (construction, operation and decommissioning phases) it can be concluded that no LSE would occur to the greylag goose population of the Moray & Nairn Coast SPA and Ramsar site.

Moray & Nairn Coast SPA and Ramsar Site – Pink-footed goose

3.5.11 The estimated collision mortality as a result of all relevant projects in combination (17.29 birds per year) is equivalent to 0.23% of the designated area’s population of pink-footed geese, as cited. The in combination mortality risk drops to 0.05% of the designated area’s population if the recent population estimate is used (based on Findhorn Bay counts). The level of additional mortality would result in no discernible change to the pink-footed goose population of the designated area and can be regarded as an ‘inconsequential’ number of birds for the purposes of the assessment.

3.5.12 For impacts resulting from the Development in combination with other relevant projects (construction, operation and decommissioning phases) it can be concluded that no LSE would occur to the pink-footed goose population of the Moray & Nairn Coast SPA and Ramsar site.

3.6 Summary

- 3.6.1 Stage 1: Screening has concluded that a LSE on ospreys cannot be ruled out and, for this qualifying feature only, Moray & Nairn Coast SPA and Ramsar site is progressed to Stage 2: Appropriate Assessment.
- 3.6.2 For the other designated areas and qualifying features that have been assessed, namely Loch Spynie SPA and Ramsar site (greylag goose) and Moray & Nairn Coast SPA and Ramsar site (greylag goose and pink-footed goose only) no LSE has been concluded, both for the Development on its own and in combination with other relevant projects. No AA required.
- 3.6.3 The other qualifying interests of the Moray & Nairn Coast SPA and Ramsar site (bar-tailed godwit, redshank, red-breasted merganser, dunlin, oystercatcher and wigeon) and all qualifying interests of the Moray Firth SPA (shag, great northern diver, red-throated diver, Slavonian grebe, scaup, eider, long-tailed duck, common scoter, velvet scoter, goldeneye and red-breasted merganser) are concluded as having no connectivity with the Development. No AA required.

4 STAGE 2: SHADOW APPROPRIATE ASSESSMENT

4.1 Introduction

- 4.1.1 Based on the assessment carried out at Stage 1: Screening, one designated area is identified as requiring AA: the Moray & Nairn Coast SPA and Ramsar site. Screening has further identified that for this designated area the potential for an adverse effect relates only to one qualifying feature: breeding osprey.
- 4.1.2 The shadow AA presented here provides information to the competent authority so that they can ascertain whether the Development, either alone or in combination with other projects, would have an impact on ospreys such that this would have an adverse effect on the integrity of the Moray & Nairn Coast SPA and Ramsar site.
- 4.1.3 The baseline ornithological data gathered does not provide strong evidence that the osprey breeding in the vicinity of the Development regularly utilise the Moray & Nairn Coast designated area for foraging, such that the habitats within the designated area can be considered vital to the maintenance of these pairs. The direction of flights from the surveyed nests are suggestive of a range of foraging locations being available to these pairs. However, as flight activity surveys were focussed on the proposed turbine development area, the extent to which these breeding pairs utilise the lower reaches of the River Spey (within the designated area) has not been quantified and so all three pairs identified as breeding within the vicinity of the Site are taken to be 'SPA birds' for the purposes of the assessment.
- 4.1.4 The following conservation objectives (**Section 2.2**) are assessed to determine potential adverse effects on the integrity of the osprey population associated with the designated area:
- Avoid significant disturbance to osprey;
 - Maintain the distribution and extent of habitats supporting osprey; and
 - Maintain the osprey population as a viable component of the designated site.
- 4.1.5 The other conservation objectives would not be affected by the Development. The distribution of osprey within the designated area would not be impacted given the separation distance from the Development (5 km at its nearest point). There would also be no deterioration of habitats supporting osprey as a result of the Development, within the designated area. The habitat within the designated

area that supports breeding ospreys would remain unchanged, as would the foraging habitat it supports for birds that breed outside the site boundary.

4.2 Assessment Against Relevant Conservation Objectives

Avoidance of Disturbance to Osprey

- 4.2.1 Baseline conditions are such that osprey breeding within the Site are currently subject to potential disturbance from human activity. The Site is commercial plantation with regular forestry operations. Furthermore, the network of tracks on Site have relatively high usage for recreational activity, for example by walkers and cyclists. Activity on Site also includes an annual car rally in April. It can therefore be concluded that ospreys breeding on Site must have some habituation and an existing tolerance of human activity. This is supported by the fact that two nests identified in the vicinity of the Site are located 180 m and 250 m from existing forest roads. This is below the minimum avoidance buffer of 350 m that is recommended in guidance to avoid potential disturbance (Goodship and Furness, 2022)²⁵.
- 4.2.2 Disturbance remains a potential impact during the construction (and decommissioning) phase of the Development, however, as the level of activity on Site would be considerably more in both duration and intensity (visually and audibly) during this period, than currently occurs. It is therefore possible that disturbance during the construction phase could impact osprey breeding close to construction works. However, as set out in **Chapter 7: Ornithology**, embedded mitigation measures would prevent disturbance impacts. The maximum 750 m disturbance avoidance buffer²⁵ would be applied to active nests, with no disturbing work undertaken within this buffer zone until the breeding attempt has reached its conclusion. Additionally, a 'no stopping' rule for vehicles would be enforced on roads close to active nests, with the applied buffer to be agreed with the Local Planning Authority (LPA) and NatureScot ahead of commencement and to be set out in a Breeding Bird Protection Plan (BBPP).
- 4.2.3 Following construction, the level of activity on Site would be much reduced and likely to fall back within the threshold of disturbance to which birds are already habituated. Infrastructure associated with the Development would be no nearer to the nest locations than existing forest tracks and roads. Operational disturbance would therefore not have an adverse impact on the existing nest sites, especially as ground-level human activity in the vicinity of the Development would be shielded from line of sight by trees and/ or topography.
- 4.2.4 It can be confidently concluded that the Development (construction, operation and decommissioning phases) would avoid significant disturbance to osprey following the implementation of embedded mitigation measures to protect nests and prevent disturbance. The population of breeding osprey within the vicinity of the Site and, hence, within foraging range of the designated area, would be maintained.

Maintenance of Supporting Habitat

- 4.2.5 Due to the separation distance between the Site and the designated area, potential loss of supporting habitat for osprey applies only to breeding sites, for those pairs which forage within the designated area. The habitats within the Site support nest sites only; there would be no loss to foraging areas.
- 4.2.6 Of the three nest sites identified in the vicinity of the Site, one is located within an area of forestry that would be untouched by the Development, one nest site is located in an area that is scheduled for felling based on forestry management plans unrelated to the Development (although any nest site would be protected under legal and best practice requirements) and one nest site would be removed

²⁵ Goodship, N.M. and Furness, R.W. (MacArthur Green) (2022) *Disturbance Distances Review: an updated literature review of disturbance distances of selected bird species*. NatureScot Research Report 1283.

as part of mitigation measures for the Development, to reduce flight activity in the vicinity of proposed turbines.

- 4.2.7 Displacement impacts would be mitigated for by the erection of an array of artificial nesting platforms at suitable locations within the Site. This is discussed fully below, under *Maintenance of Viable Osprey Population*.

Maintenance of Viable Osprey Population

- 4.2.8 The Development could lead to a decline of the breeding osprey population associated with the designated area if displacement of breeding birds from the vicinity of the Site leads to birds relocating beyond foraging range, therefore reducing the number of pairs with connectivity to the designated area. Or if increased mortality as a result of the Development (collision) is sufficient to cause a decline in the breeding population. These two elements are discussed in turn below.

Disturbance and Displacement

- 4.2.9 A known osprey nest will be removed as part of mitigation measures for the Development, to reduce flight activity in the vicinity of proposed turbines. However, this measure aims to relocate the breeding pair and not to lose it from the local population.
- 4.2.10 There is also the potential for the Development to cause displacement to remaining nests close to infrastructure, which could result in nest abandonment and relocation. This is an unlikely outcome given the degree of tolerance to human activity displayed by the breeding ospreys in the vicinity of the Site, and ospreys' general ecology that allows them to nest in human dominated landscapes. However, it cannot be known how the introduction of large and novel structures in the locality of a nest would be accepted.
- 4.2.11 As set out in **Chapter 7: Ornithology**, an array of five artificial nesting platforms for osprey would be erected within the Site, and away from the Development. The provision of the platforms would be assured through the inclusion of this mitigation measure within a Habitat Management Plan (HMP), to be agreed with the LPA, NatureScot and Forestry & Land Scotland, although the exact location of the platforms would be determined following a comprehensive reconnaissance survey. Platform locations would be in areas where the long-term presence of the platform would be secured.
- 4.2.12 The provision of alternative nesting locations would allow for a displaced pair to relocate within the Site. Ospreys are known to move to alternative nest sites within 2 km of an existing nest, for example following breeding failure (Hardey *et al.*, 2013)²⁶. Furthermore, the provision of artificial nests is a long recognised measure that is used for both relocating nest sites²⁷ and for aiding expansion into new areas²⁸.
- 4.2.13 Ospreys do not defend a home range and can nest close together²⁶, therefore, the relocation of a pair to one of the artificial platforms erected on Site would not prevent another pair from utilising one of the other platforms. Indeed, the number of osprey nests in the vicinity of the Site could theoretically increase as a result of provision of artificial nest platforms, especially if it is the case that a shortage of suitable nesting locations is restricting breeding numbers in the wider surrounding area. However, the aim of providing multiple platforms would be to maximise confidence that a displaced pair associated with the Site would be able to relocate.

²⁶ Hardey, J., Crick, H., Wernham, C., Riley, H., Etheridge, B. and Thompson, D. (2013) *Raptors: a field guide to survey and monitoring. Third Edition*. The Stationary Office, Edinburgh.

²⁷ Available from: <https://www.ssen-transmission.co.uk/projects/project-map/alyth-275kv-substation--reactive-compensation/> (Accessed March 2025).

²⁸ Available from: <https://www.roydennis.org/animals/raptors/osprey/nest-building/> (Accessed March 2025).

- 4.2.14 There is evidence that breeding attempts using artificial platforms can be more productive (more chicks fledged) than those in natural nest sites (e.g. Houston & Scott, 1992²⁹) which, if this came to pass, would increase recruitment into the local population and potentially benefit the osprey population associated with the designated area.
- 4.2.15 The relocation of a displaced pair to an artificial platform within the Site, or elsewhere within the Site or surrounding area, is a more likely scenario than relocation to a new, and unfamiliar, area further afield. Therefore, it can be anticipated that any new nest site would remain within foraging range (10 km core range; 20 km maximum range) of the designated area and so the population of breeding ospreys associated with the designated area would be maintained.

Collision Mortality

- 4.2.16 CRM analysis, based on flight activity data recorded during baseline surveys, produced mortality estimates for osprey of 0.498 to 0.96 birds per annum. However, the relatively high flight activity was clearly associated with active nest locations (**confidential Figures 7.6a and 7.6b**). Relatively few flights passed through the proposed turbine area, with the CRM analysis (using a 300 m buffer around the turbine envelope) producing a precautionary output.
- 4.2.17 As set out above, the northern of the two nests located close to the proposed turbine area, and responsible for the majority of flight activity, would be removed as a mitigation measure. The tree supporting the nest would be felled during the non-breeding season, following the erection of alternative artificial nesting platforms in the east of the Site, a minimum of 900 m from the nearest proposed turbine.
- 4.2.18 The removal of the nest would mean that the flight activity recorded during baseline surveys would no longer be applicable for determining potential collision impacts, with the recorded flight lines highly tied to the nest location. There can be confidence that the level of at-risk flight activity would be greatly reduced without the presence of this nest.
- 4.2.19 The CRM analysis has therefore been rerun excluding the cluster of flights surrounding the nest identified for removal. Although the occasional flight from a relocated nest may still pass within, or close to, the 'collision risk zone', the updated CRM outputs are much more representative of potential collision risk following nest relocation, than that using all flights recorded during baseline surveys. The updated CRM output following mitigation is of an estimated 0.234 to 0.271 bird collisions per year.
- 4.2.20 The maximum mortality estimate of 0.271 is equivalent to 0.85% of the osprey population, based on the population as stated in the SPA and Ramsar citations (16 pairs/32 individuals). If the population increase noted for NHZ 21: Moray Firth¹⁷ is extrapolated and an estimate of 22-28 pairs is used as the current breeding population associated with the designated area, the collision risk would be equivalent to a potential mortality rate 0.48-0.62% of the designated area's population per annum.
- 4.2.21 The osprey qualifying feature of the Moray & Nairn Coast designated area is in favourable condition³⁰, as evidenced by the strong growth in the local population shown by Wilson *et al.* (2022)¹⁷. The small increase in mortality within the population that may result from the Development would not be sufficient to change the trend from one of growth to one of decline. Therefore, the population of breeding osprey associated with the designated area would be maintained.

²⁹ Houston, C.S. and Scott, F. (1992) The effect of man-made platforms on osprey reproduction at Loon Lake, Saskatchewan. *Journal of Raptor Research* 26: 152-158.

³⁰ Available from: <https://informatics.sepa.org.uk/ProtectedNatureSites/> (Accessed March 2025).

Summary

- 4.2.22** Following assessment of potential impacts against the conservation objectives of the SPA in relation to osprey as a qualifying feature, **it can be concluded that the Development, on its own, would not have an adverse effect on the integrity of the Moray & Nairn Coast SPA and Ramsar site.**

4.3 In Combination Impact

- 4.3.1 Potential impacts as a result of the Development must also be investigated alongside the potential impacts of other relevant projects. The in combination assessment for osprey, as a qualifying feature of the Moray & Nairn Coast SPA and Ramsar site, is provided below.
- 4.3.2 Relevant projects for inclusion in the in combination assessment have been identified using the methods set out in **Section 3.5**. A precautionary approach has been taken, whereby a search area of 20 km from the Moray & Nairn Coast SPA and Ramsar site has been used to identify relevant projects. Core foraging range for osprey is 10 km, but as it is unknown whether maximum foraging range is a more appropriate metric for determining connectivity for some of the osprey pairs in the area, this larger search radius has been used.
- 4.3.3 The data identified for the relevant projects are summarised in **Table 4.1**. For the Development, the maximum CRM estimate following mitigation has been used. Where osprey was recorded for a project, but flight activity was too low to warrant CRM analysis, this is shown as 'No CRM' in the table.

Table 4.1: In combination data gathered for osprey associated with Moray & Nairn Coast SPA and Ramsar site

Wind Farm	Breeding Status	CRM Estimate
The Development	3 pairs in vicinity of Site	0.271
Aultmore	No breeding in 2 km of Site	No CRM
Berry Burn/ Extension	No breeding in 2 km of Site	0.028
Cairn Duhie	No breeding in 2 km of Site	0.001
Clash Gour	No breeding in 2 km of Site	0.029
Hill of Glaschyle	Osprey not recorded	
Hill of Towie	Osprey not recorded	
Hill of Towie II	Osprey not recorded	
Kellas Drum	Osprey not recorded	
Lurg Hill	Osprey not recorded	
Roths I	No data	
Roths II	No data	
Roths III	No breeding in 2 km of Site	No CRM
In Combination	-	0.329

Disturbance and Displacement

- 4.3.4 No other projects recorded osprey as breeding within 2 km of their development site. Therefore, no additional disturbance or displacement impacts need to be considered for the identified projects in combination, compared to the assessment for the Development on its own.

Collision Mortality

- 4.3.5 The in combination collision mortality estimate, calculated by summing the CRM outputs for the Development and the three other projects for which CRM analysis was undertaken, is of 0.329 birds per year. This is equivalent to 1.03% of the osprey population, based on the population as stated in the SPA and Ramsar citations (16 pairs/32 individuals). If using the more appropriate, but extrapolated, updated breeding population estimate of 22-28 pairs, the collision risk is of a potential mortality equivalent to 0.59-0.75% of this population per annum.
- 4.3.6 Adult ospreys, which make up the large majority of at-risk flight activity at the Development and hence of the in combination estimate, have an annual survival rate of 85%³¹; i.e. in any year 15% of the adult population would be expected not to survive (mortality is 40% in juvenile birds). At this background level of mortality, the osprey population is undergoing robust growth.
- 4.3.7 The in combination collision risk estimate that has been calculated suggests that the annual mortality rate could increase by 1%. The favourable status of osprey in the SPA and the strong population growth that has been shown locally are evidence that the small potential increase in overall mortality would not be sufficient to change the current trend from one of growth to one of decline, albeit the rate of growth may be slowed. The viable population of breeding osprey associated with the designated area can therefore be concluded as being maintained.

Summary

- 4.3.8 **It can be concluded that the Development in combination with other projects would not have an adverse effect on the integrity of the Moray & Nairn Coast SPA and Ramsar site.**

5 CONCLUSION

- 5.1.1 Three relevant statutory sites with ornithological interests have been identified for assessment, these being located within 20 km of the Site: Moray Firth SPA, Loch Spynie SPA and Ramsar site and Moray & Nairn Coast SPA and Ramsar site.
- 5.1.2 Moray Firth SPA and all qualifying interests (breeding and non-breeding shag; non-breeding great northern diver, red-throated diver, Slavonian grebe, scaup, eider, long-tailed duck, common scoter, velvet scoter, goldeneye and red-breasted merganser) were determined as having no connectivity with the Site. AA is not required for Moray Firth SPA.
- 5.1.3 Loch Spynie SPA and Ramsar site underwent Stage 1: Screening based on the potential for a LSE on its qualifying feature of non-breeding greylag goose. No connectivity was concluded and therefore no LSE. AA is not required for Loch Spynie SPA and Ramsar site.
- 5.1.4 The majority of qualifying interests of the Moray & Nairn Coast SPA and Ramsar site (non-breeding bar-tailed godwit, redshank, red-breasted merganser, dunlin, oystercatcher and wigeon) were determined as having no connectivity with the Site. However, connectivity was identified for three features, namely non-breeding greylag goose, non-breeding pink-footed goose and breeding osprey). These three qualifying interests have undergone Stage 1: Screening.
- 5.1.5 For both greylag goose and pink-footed goose associated with the Moray & Nairn Coast SPA and Ramsar site screening concluded no LSE as a result of the Development either alone or in combination with other relevant projects. AA is not required in relation to these qualifying features.

³¹ Available from: <https://www.bto.org/understanding-birds/birdfacts/osprey> (Accessed March 2025).

- 5.1.6 The potential for a LSE on osprey was concluded from screening and so there is a requirement for an AA in relation to Moray & Nairn Coast SPA and Ramsar site (osprey only).
- 5.1.7 A shadow AA has been provided and this concluded that for the Development alone, and in combination with other relevant projects, there would not be an adverse effect on the integrity of Moray & Nairn Coast SPA and Ramsar site.
- 5.1.8 The information in this document provides a basis for the competent authority to complete the formal HRA.