

Eastern Green Link 4: Scottish Onshore Scheme

*Volume 4: Appendices
Appendix 7.6: HRA*

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1. Introduction

1.1 Background

This appendix accompanies **Chapter 7: Ecology and Nature Conservation** of the Environmental Impact Assessment Report (EIAR). It describes the assessment of potential effects from the Scottish Onshore Scheme on Special Areas of Conservation (SAC) and Special Protection Areas (SPA) (collectively referred to in Scotland as ‘European sites’).

Although presented as an appendix to the EIAR, this Statement to Inform Habitats Regulations Appraisal (this ‘HRA Report’) addresses separate legislative requirements, which relate solely to European sites. Further information on the legislative context is given below.

Species scientific names for those associated with European sites are listed in **Annex A**. All distances are cited as the shortest distance ‘as the crow flies’, unless otherwise specified.

1.2 Quality Assurance

This appendix, and the desk study and field survey described within it, has been completed in accordance with the AECOM Integrated Management System (IMS). AECOM’s IMS places emphasis on professionalism, technical excellence, quality, as well as covering health, safety, environment and sustainability management. All AECOM staff members are committed to maintaining this accreditation to those parts of BS EN ISO 9001:2015 and 14001:2015, as well as BS OHSAS 18001:2007 that are relevant to a consultancy service.

1.3 Legislative Context

Under the Habitats Regulations¹, a network of sites has been designated across Scotland for the purposes of nature conservation. This network comprises sites known as SACs and SPAs. SACs are designated for the protection of habitats and non-avian animal species of conservation concern. SPAs are designated to protect rare or vulnerable species of bird, as well as certain regularly-occurring migratory bird species.

Prior to the UK’s exit from the European Union (EU), Scotland’s SACs and SPAs were part of a wider network of such sites known as the ‘Natura 2000’ network. They were consequently referred to as ‘European sites’. Now that the UK has left the EU, Scotland’s SACs and SPAs are no longer part of the Natura 2000 network but form part of a UK-wide network of designated sites referred to as the ‘UK site network’. However, it is current Scottish Government policy to retain the term ‘European sites’ to refer collectively to SACs and SPAs (including any which are designated following the UK’s exit from the EU)².

The Habitats Regulations or, for reserved matters, the Conservation of Habitats and Species Regulations 2017 (as amended) require that any plan or project, which is not directly connected with or necessary to the conservation of a European site, and which is likely to have a significant effect on such a site, either alone or in-combination with other plans or

¹ The Conservation (Natural Habitats, &c.) Regulations 1994 (as amended), more commonly referred to as the ‘Habitats Regulations’.

² Scottish Government (2020). EU Exit: The Habitats Regulations in Scotland. December 2020. Available at: <https://www.gov.scot/publications/eu-exit-habitats-regulations-scotland-2/> (Accessed June 2025).

projects, must be subject to an ‘Appropriate Assessment’ of the implications for the Conservation Objectives of that site. Generally, such proposals may only be approved if the ‘Competent Authority’ has ascertained, by means of an Appropriate Assessment, that there will be no adverse effect on the integrity of the European site(s). The procedure to be applied is known as ‘Habitats Regulations Appraisal’ (HRA)³.

In addition to fully designated European sites, the Habitats Regulations also apply to those sites in the earlier stages of the designation process, including:

- Sites of Community Interest (SCI);
- Candidate Special Areas of Conservation (cSAC);
- Possible / proposed Special Areas of Conservation (pSAC); and
- Potential / proposed Special Protection Areas (pSPA).

It is also Scottish Government policy to treat Wetlands of International Importance (more commonly known as ‘Ramsar sites’) in the same way as European sites, for the purposes of HRA⁴. In this document, the term ‘European site’ refers to fully designated SACs, SPAs, and candidate, possible, potential and proposed SACs / SPAs, SCI and Ramsar sites.

In the context of the Habitats Regulations, the Scottish Onshore Scheme constitutes a ‘project’. Therefore, unless otherwise necessary, for example when considering in-combination effects, no further reference to plans is made.

The Competent Authority responsible for carrying out a HRA is the relevant consenting body for a project – in this case Fife Council. The Competent Authority is required to apply the Precautionary Principle⁵, and can only grant consent once it has been ascertained beyond reasonable scientific doubt that there will be no adverse effect on the integrity of the European site(s) concerned. However, the Habitats Regulations provide that, even if adverse effects on European site integrity are predicted, and in the absence of a suitable alternative solution, the project can still be carried forward for imperative reasons of over-riding public interest (IROPI). In such cases, compensatory measures must be implemented, and these should be in place and effective before the negative effect(s) on a European site begin.

Although the UK is no longer part of the EU, a series of prior rulings of the Court of Justice of the European Union (CJEU) are relevant and must be considered when conducting HRA. Some of the rulings which are of relevance, and which have been considered when preparing

³ In the past, the term ‘Appropriate Assessment’ has been used to describe both the overall process and a particular stage of that process. The term ‘Habitat Regulations Appraisal’ has come into use in order to refer to the process that leads to an Appropriate Assessment, thus avoiding confusion. Throughout this document, HRA is used to refer to the overall procedure required by the Habitats Regulations.

⁴ Scottish Government (2025). Wetlands – protecting Ramsar sites: updated Scottish Government policy. Available at: <https://www.gov.scot/publications/updated-scottish-government-policy-protecting-ramsar-sites/> (Accessed August 2025).

⁵ The Precautionary Principle: the “absence of scientific evidence on the significant negative effects of an action cannot be used as justification for the approval of this action. When applied to Article 6(3) procedure, the Precautionary Principle implies that the absence of a negative effect on European sites has to be demonstrated before a plan or project can be authorised. In other words, if there is a lack of certainty as to whether there will be any negative effects, then the plan or project cannot be approved”, taken from European Commission (2021).

this Statement to Inform Habitats Regulations Appraisal, are described in NatureScot guidance^{6; 7; 8}.

As a consequence of the UK's exit from the EU, it was necessary for various amendments to be made to the Habitats Regulations. These changes were required to ensure that Scotland continues to maintain the same standard of protection afforded to European sites. The Habitats Regulations remain in force, including the general provisions for the protection of European sites and the procedural requirements to undertake HRA. The changes made were only those necessary to ensure that they remain operable following the UK's exit from the EU.

1.4 Overview of HRA Process

The Habitats Regulations set out a step-by-step sequence of statutory procedures to be followed when conducting an HRA. The steps are designed to test the potential effects of a project on a European site and must be followed in the correct and particular order.

NatureScot recommends an approach for HRA of plans or projects which is outlined as a series of thirteen steps⁷. However, with cognisance of case law clarifying when mitigation can be taken into account in the HRA process⁹, this has been revised and a flow chart with nine steps is provided on the NatureScot website, and which is reproduced as **Diagram 1: Stages of the HRA Process**. Further guidance published by NatureScot on HRA also sets out the methods for assessing whether plans or projects will affect a European site⁶.

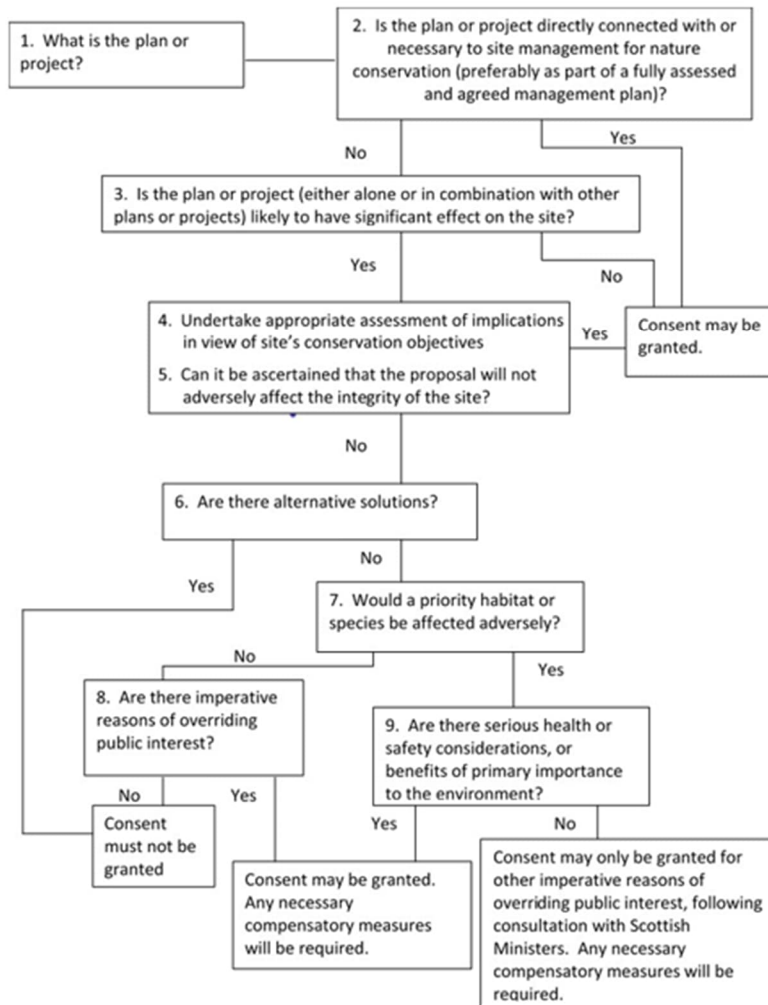
⁶ SNH (2014). Natura Casework Guidance: How to consider plans and projects affecting Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).

⁷ SNH (2015). Habitats Regulations Appraisal of Plans. Guidance for Plan-making Bodies in Scotland. Version 3 – January 2015. Available at: <https://www.nature.scot/habitats-regulations-appraisal-plans-guidance-plan-making-bodies-scotland-jan-2015> (Accessed June 2025)

⁸ SNH (2019). SNH Guidance Note: The handling of mitigation in Habitats Regulations Appraisal – the People Over Wind CJEU judgement. Available at: <https://www.nature.scot/habitats-regulations-appraisal-plans-guidance-plan-making-bodies-scotland-jan-2015> (Accessed June 2025).

⁹ People Over Wind and Sweetman v Coillte Teoranta (C-323/17).

Diagram 1: Stages of HRA Process (taken from NatureScot online guidance¹⁰)



In accordance with the process recommended by NatureScot, and relevant case law, the methodology for the HRA of a project can comprise four main activities:

- HRA Activity 1: Screening (including a ‘likely significant effect’ judgement);
- HRA Activity 2: Appropriate Assessment;
- HRA Activity 3: Assessment of alternative solutions; and
- HRA Activity 4: Assessment of IROPI, where no alternative solutions exist and where adverse effects remain.

Should the HRA Screening stage not rule out the possibility of likely significant effects on the qualifying features of any European site, then the second activity in the HRA process – Appropriate Assessment – is required.

Appropriate Assessment considers in more detail the possibility that the likely significant effects of a project identified at the HRA Screening could result in adverse effects on the

¹⁰NatureScot (2025). Habitats Regulations Appraisal. Available online: <https://www.nature.scot/professional-advice/planning-and-development/environmental-assessment/habitats-regulations-appraisal-hra> (Accessed June 2025).

integrity of the European sites, in view of the Conservation Objectives of those sites. It introduces to the assessment mitigation measures designed specifically to avoid adverse effects on European sites (the HRA Screening stage must be carried out without consideration of mitigation measures specifically designed to safeguard European sites).

1.5 Purpose of this HRA Report

This HRA Report has been written to provide Fife Council, in their role as Competent Authority, with the information needed to conduct an HRA of the Scottish Onshore Scheme. It has been prepared with regard to best scientific knowledge and an examination of all of the potential impacts of the Scottish Onshore Scheme on European sites.

2. Methodology

2.1 Sources of Guidance

This Statement to Inform Habitats Regulations Appraisal has been prepared with cognisance of the following guidance published by the European Commission (EC) and NatureScot:

- NatureScot webpage on HRA¹⁰;
- Assessment of plans and projects in relation to Natura 2000 sites – Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC¹¹;
- Managing Natura 2000 sites – The provisions of Article 6 of the ‘Habitats’ Directive 92/43/EEC¹²;
- Natura Casework Guidance: How to consider plans and projects affecting Special Areas of Conservation (SACs) and Special Protection Areas (SPAs)⁶;
- Habitats Regulations Appraisal of Plans. Guidance for Plan-making bodies in Scotland⁷; and
- SNH Guidance Note. The handling of mitigation in Habitats Regulations Appraisal – the People Over Wind CJEU judgement⁸.

Information on relevant European sites, including qualifying features, the latest assessed condition of those features, and the Conservation Objectives for each site was obtained from the NatureScot SiteLink website¹³.

¹¹ European Commission (2021). Assessment of plans and projects in relation to Natura 2000 sites – Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC. Available at: https://ec.europa.eu/environment/nature/natura2000/management/pdf/methodological-guidance_2021-10/EN.pdf (Accessed June 2025)

¹² European Commission (2019). Managing Natura 2000 sites – The provisions of Article 6 of the ‘Habitats Directive’ 92/43/EEC. Available at: https://ec.europa.eu/environment/nature/natura2000/management/docs/art6/EN_art_6_guide_jun_2019.pdf (Accessed June 2025)

¹³ NatureScot (2025). SiteLink. Available at: <https://sitelink.nature.scot/home> (Accessed June 2025).

Plans and projects (where relevant to in-combination assessment) were searched for via Fife Council planning portal¹⁴ and ECU website¹⁵.

3. The Scottish Onshore Scheme

A description of the Scottish Onshore Scheme and accompanying figures is provided in **Chapter 2 Project Description (Volume 2 Main Report)**. For the purposes of this HRA Report, land encompassing the footprint of the Scottish Onshore Scheme, including underground Horizontal Directional Drilling (HDD) construction areas, and all associated Limits of Deviation (LoD) and temporary construction areas, is referred to as the Site.

Where appropriate this HRA Report refers to the separate components of the Scottish Onshore Scheme, as detailed in Chapter 2, namely:

- The Landfall;
- Underground DC Cable Route;
- Converter Station; and
- Underground AC Cable Route

The Scottish Onshore Scheme, specifically at the Landfall HDD, extends to Mean Low Water Springs (MLWS). The outfall of the Landfall HDD is below MLWS and therefore is not considered as part of the Scottish Onshore Scheme.

4. Identification of European Sites

Potentially relevant European sites were initially identified during the routing and site selection stages of the Scottish Onshore Scheme. This early-stage screening of European sites was necessary to ensure European sites were considered at an early stage and determine the scope of supporting information required to inform this HRA Report.

European sites included in this HRA were determined by an examination of the potential impacts of the Scottish Onshore Scheme in relation to worst case scenario Zone of Influence (Zol) for each impact with cognisance of wide-ranging qualifying features that could occupy the Zol (i.e. land on or adjacent to Site). The screening used to inform this HRA Report was then updated based on the final design of the Scottish Onshore Scheme. The key potential impacts from the Scottish Onshore Scheme are detailed in Section 6.

The European sites identified for inclusion within this HRA Report are identified in Table 1 with the locations relative to the Site shown on **Figure 7.2 Statutory Sites Designated for Nature Conservation** appended to **Chapter 7 Ecology and Nature Conservation**. Full details are provided in Annex A. The EIA Scoping Opinion provided by Fife Council, with comment from

¹⁴ Fife Council (2025). Planning Applications. Available at: https://www.highland.gov.uk/info/180/planning_-_applications_warrants_and_certificates/143/planning_permission/4 (Accessed June 2025).

¹⁵ Scottish Government (2025). The Energy Consents Unit. Available at: <https://www.energyconsents.scot/ApplicationSearch.aspx> (Accessed June 2025).

NatureScot, was in agreement with the requirement for a HRA in relation to these European sites. No other European sites additional to those listed in **Table 1** are located within 10 km of the Site , or 20 km for SPAs with goose qualifying species.

Table 1: Identified European Sites

European Site	Distance from Site	Description and Summary of Qualifying Features
Firth of Forth SPA	Overlaps the SPA at the Landfall	A complex of estuarine and coastal habitats in southeast Scotland stretching from Alloa to the coasts of Fife and East Lothian. The site includes extensive invertebrate-rich intertidal flats and rocky shores, areas of saltmarsh, lagoons and sand dune. The SPA is designated for supporting a range of waders and waterfowl during the non-breeding season plus Sandwich tern during the passage period.
Firth of Forth Ramsar Site	Overlaps the Ramsar site at the Landfall	The Ramsar site is coincident with the Firth of Forth SPA and is designated for the same species.
Outer Firth of Forth St Andrews Bay Complex SPA	Directly adjacent to the SPA at the Landfall	A large estuarine / marine site on south-east coast of Scotland consisting of the two closely adjacent Firths of Forth and Tay. The SPA is designated for supporting a range of waterfowl and seabirds during the non-breeding and breeding seasons. Designated open water habitat supports birds away from breeding sites (e.g. foraging / loafing) but does not encompass breeding sites themselves (see Forth Islands SPA below)
Loch Leven SPA	2.4 km northwest Underground AC Cable Route	A large natural eutrophic lake in central Scotland. The SPA supports a range of waterfowl during the non-breeding season.
Loch Leven Ramsar site	2.4 km northwest Underground AC Cable Route	The Ramsar site is coincident with the Loch Leven SPA and is designated for the same species, as well as eutrophic loch habitat.
Forth Islands SPA	6.4 km southwest of the Landfall	A series of islands supporting the main seabird colonies in the Firth of Forth (Inchmickery, Isle of May, Fidra, The Lamb, Craigleith, Bass Rock and Long Craig). The SPA supports a range of seabirds during the breeding season.

5. Supporting Information

Supporting information to inform this HRA Report was collected in parallel with that collected to inform the EIA. A summary of studies relevant to this HRA is provided in this section with full details of methodology in **Appendix 7.4 Ornithology** and **Chapter 7 Ecology and Nature Conservation**. The results of these surveys are described, where relevant, in Section 6.

5.1 Wintering Waterbird Surveys

The aim of the surveys was primarily to record use of the Converter Station site by qualifying species of the Loch Leven SPA and the Landfall site by qualifying species of the Firth of Forth SPA and Outer Firth of Forth St Andrews Bay Complex SPA.

Surveys of wintering waterbirds¹⁶ were carried out within suitable habitat within 500 m of the Converter Station site and 1 km of the Landfall site between September 2024¹⁷ and March 2025. Surveys of the Landfall site, therefore, included coverage of both the inland habitats and intertidal/coastal habitats of the Firth of Forth. Results for the wintering waterbird surveys are presented in **Appendix 7.4 Ornithology**.

The surveys were stratified according to tide times and focussed on high and low tides, to investigate use of the area by birds under different tidal conditions. Where possible, surveys were carried out from two hours before to two hours after the focal tide condition and comprised a similar number of high and low tide surveys. The surveys generally followed the method adopted by the British Trust for Ornithology (BTO) for the national Wetland Bird Survey (WeBS) scheme¹⁸.

5.2 Habitat Surveys

A habitat survey was carried out of the Site (as it was understood at the time of survey) plus a 50 m buffer where access was possible and safe. Habitats were mapped and classified according to the UK Habitat Classification (UKHab) system¹⁹. During the survey, invasive non-native plant species (INNPS) were also recorded.

6. Screening for Likely Significant Effects

6.1 Approach To Screening and Impacts Scoped Out

It is considered unlikely that the Scottish Onshore Scheme will be decommissioned entirely, with upgrades over time more likely. However, as the possibility of decommissioning cannot be ruled out this HRA Report is required to consider this stage of the project lifecycle. Due to

¹⁶ The BTO define 'waterbirds' as wildfowl (ducks, geese and swans), waders, rails, divers, grebes, cormorants, herons, gulls and terns. This list is extended to include all seabirds as listed within the BTO Seabird Monitoring Program.

¹⁷ N.B. Surveys of the Landfall site commenced in November 2024

¹⁸ BTO (2025). Wetland Bird Survey. Available at: <https://www.bto.org/get-involved/volunteer/projects/wetland-bird-survey>

¹⁹ UKHab Ltd (2023). UK Habitat Classification Version 2.0. Available at: <https://ukhab.org/> (Accessed: June 2025).

the absence of detailed information on any potential decommissioning it is considered that the assessment detailed below for the construction phase will also broadly apply to the decommissioning phase. This approach is likely a reasonable worst-case scenario as some impacts, e.g. habitat loss, will likely be of greater magnitude during the construction phase, in comparison to any decommissioning. As such it is considered that the assessment detailed below for the construction phase is also relevant for decommissioning. Decommissioning is therefore not mentioned further in this HRA Report.

Direct mortality during construction of adult qualifying birds, given their mobility, is highly improbable at any time and is excluded from further consideration.

All potential operational impacts have been scoped out due to the nature and design of the Scottish Onshore Scheme for the following reasons:

- All impacts from habitat loss would occur during the construction phase only, and not during operation;
- The Landfall, Underground DC Cable Route and Underground AC Cable Route are entirely located underground and will thus be unobtrusive, and will result in negligible change to baseline conditions during operation;
- Potential operational impacts from the Converter Station will be negligible. A small workforce (four to six people) will be based on the Site permanently, however they will predominantly be inside site buildings and therefore not visible to any birds using adjacent habitats. Noise emissions will also be negligible with respect to potential impacts on birds.

6.2 Potential Impacts from the Scottish Onshore Scheme

The potential impacts during the construction phase are detailed in Table 2.

Table 2: Potential Impacts from the Scottish Onshore Scheme

Potential Impact	Description	Potential Zone of Influence
Loss / degradation of terrestrial habitats	<p>Direct loss of habitat under the footprint of the Scottish Onshore Scheme, including both permanent and temporary loss i.e. temporary construction areas reinstated following construction.</p> <p>Loss / degradation of habitat could also occur in areas adjacent to the Site by disruption of supporting hydrological pathways, introduction and / or spread of INNPS, and / or airborne pollution (including dust).</p>	<p>Direct loss – directly under work areas within the Site.</p> <p>Groundwater flows – SEPA guidance suggests that activities could impact Ground Water Dependant Terrestrial Ecosystems (GWTDE) up to 100 m from excavations less than 1 m in depth, extending up to 250 m for deeper excavations²⁰.</p> <p>Airborne Pollution – A maximum of 200 m for air quality (including NOx and dust) in accordance with guidance from Natural England²¹ and the Institute of Air Quality Management (IAQM)²².</p> <p>INNPS – The Site and adjacent areas. Transfer to distant areas possible when contaminated areas are hydrologically connected to the site via surface water flow.</p>
Disturbance / displacement of qualifying species	<p>Visual or acoustic disturbance from the movement and operation of plant, equipment and personnel. As a worst case, this impact could result in direct mortality of dependant young / chicks of qualifying species (e.g., breeding birds) due to abandonment of eggs / dependant young.</p>	<p>Zol is species- and source-specific. The maximum zone of influence for qualifying species considered in this HRA Report is 1 km from source, which is applicable to pink-footed goose²³.</p>
Direct mortality	<p>Direct mortality of bird eggs / chicks due to overlap with works areas.</p>	<p>Directly under work areas within the Site</p>
Changes in water quality	<p>Impacts on freshwater or the marine environment through the release of sediment or pollutants during works activities. Potential pollutants would largely be limited to the accidental release of hydrocarbons (e.g. fuel) from works sites. Bentonite used during the HDD process is non-toxic but could act to increase sedimentation.</p>	<p>Effects on water quality would be most acute close to the source of release. Impacts, however, could occur at distance to the source if pollution is released into surface water flows. The Zol could therefore extend to any watercourses / marine habitat hydrologically connected to the Site.</p>

²⁰ SEPA (2024). Guidance on Assessing the Impacts of Development on Groundwater Dependant Terrestrial Ecosystems

²¹ Natural England (2018). Natural England’s approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations. Version: June 2018

²² IAQM (2024). Guidance on the assessment of dust from demolition and construction. Version 2.2

²³ 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.

6.3 Screening Assessment

Potential impact pathways from the Scottish Onshore Scheme and their potential effects on the qualifying features of the European sites are detailed in **Table 3 to Table 6**. Due to their coincident designated areas overlapping qualifying features potential effects on the Firth of Forth SPA and Loch Leven SPA and their respective Ramsar sites are considered analogous. For conciseness the above designated sites are referred to only as ‘SPA’ in the HRA Report going forward with conclusions applying equally for the respective Ramsar sites.

The Screening Assessment considers design and mitigation measures which are considered essential or intrinsic components of the Scottish Onshore Scheme and/or are standard practice for developments of this type. This approach aligns with NatureScot guidance for the consideration of mitigation in HRA⁸. Relevant embedded mitigation is included in **Table 3 to Table 6**.

In summary, Likely Significant Effects (LSE) could not be ruled out for the Firth of Forth SPA/Ramsar site and the Outer Firth of Forth and St Andrews Bay Complex SPA based on the Scottish Onshore Scheme alone. As all impacts not considered to result in LSE would have no effects (including *de minimis* effects²⁴) there is no potential for these effects to act in-combination with effects from other plans or projects. As such there is no requirement to consider in-combination effects at screening stage.

As LSE have been identified, the HRA is required to progress to Stage 2 Appropriate Assessment. Information to inform the Appropriate Assessment is provided in Section 7.

²⁴ A *de minimis* change is one that has no appreciable effect on the protected site; in other words, so negligible, restricted or remote from the protected site that the effect would not undermine the conservation objectives for the site either alone or in combination

Table 3: Screening Assessment for the Firth of Forth SPA

Potential Impact	Screening Assessment	Screening Conclusion
<p>Loss / degradation of habitats on Site</p>	<p>There would be no direct loss of SPA habitat as the area of the Site which overlaps the SPA is the HDD cable, which would be underground. The closest point of the above ground elements of the Site to the SPA, the Landfall HDD Compound, is located c. 250 m west of the SPA. Potential indirect impacts to SPA habitat were considered as set out below:</p> <p>Dust – The SPA is beyond the Zol for this impact;</p> <p>INNPS – the ecology surveys found INNPS scattered through the survey area, mostly sparsely and locally within the Site; the more critical INNPS (including Japanese knotweed <i>Reynoutria japonica</i>, Himalayan balsam <i>Impatiens glandulifera</i> and giant hogweed <i>Heracleum mantegazzianum</i>) are very localised (see Chapter 7 Ecology and Nature Conservation for details). Industry standard measures to prevent the spread of INNPS, which is a legal requirement, will be implemented as detailed in Chapter 7 Ecology and Nature Conservation. Such measures will minimise the potential for spread, via watercourses, to habitats within and adjacent to the SPA.</p> <p>Groundwater – Intertidal habitats associated with the SPA are not supported by groundwater²⁰.</p> <p>Habitat on and adjacent to Site could potentially support qualifying species, e.g. for foraging, and such habitat could therefore have the potential to be Functionally Linked Land (FLL)²⁵. Several qualifying species could use inland habitat, with wading bird species (e.g. curlew) typically limited to areas close to the coast (within 1-2 km) and pink-footed goose ranging as wide as 20 km from roost sites within the SPA²⁶. During the wintering bird surveys the following qualifying species were recorded using inland habitats associated with Converter Station and Landfall Site:</p>	<p>No Effects</p>

²⁵ Functionally linked land can be defined as “land... ‘linked’ to a European site...because it provides an important role in maintaining or restoring the population of qualifying species at favourable conservation status” (Natural England (2016). Functional linkage: How areas that are functionally linked to European sites have been considered when they may be affected by plans and projects – a review of authoritative decisions. Natural England Commissioned Report NECR207).

²⁶ Scottish Natural Heritage (2016). Assessing connectivity with special protection areas - Guidance. Version 3.

Potential Impact	Screening Assessment	Screening Conclusion
	<ul style="list-style-type: none"> • Pink-footed goose – A flock of 500 birds foraging within a field in the Converter Station site in January 2025 and 200 birds roosting in a flooded quarry, approximately 400 m east of Site, in October 2024; • Oystercatcher – Ten birds foraging in a field within the Converter Station site in February 2025 and three birds foraging in fields within and adjacent to the Inland Landfall survey area; and • Curlew – Twenty birds foraging in fields to the north of the Landfall site. <p>It is considered unlikely that records of pink-footed goose and oystercatcher at the Converter Station site are associated with the SPA. Mitchell (2012)²⁷ indicates that the Converter Station is more than 20 km from the nearest major SPA roost site at Aberlady Bay. Additionally, oystercatcher / curlew associated with the SPA would be unlikely to travel as far as 10 km from SPA habitat at the coast and agricultural land is widespread throughout the coast area. As such, habitat lost permanently under the Converter Station is not considered to constitute FLL.</p> <p>Mitchell (2012) identified a 1 km grid square in the region of Kinghorn (adjacent to the Landfall site) as having supported a low number / frequency of foraging pink-footed goose. This is an isolated grid square with favoured foraging areas located in East Lothian. While it is considered likely that SPA-qualifying individuals, of species such as oystercatcher, curlew and pink-footed goose, do forage in agricultural land in the vicinity of the Landfall site and Underground Cable Route, it is unlikely that this habitat would be sufficiently important for any given species to constitute FLL.</p>	
Disturbance / displacement of qualifying species from the Site and adjacent areas	<p>The closest above ground element of the Site, the HDD Compound, is located approximately 250 m east of the SPA.</p> <p>The following SPA qualifying species were recorded foraging and / or resting within coastal habitat within or adjacent to the SPA:</p>	LSE identified for the following species: curlew, oystercatcher, redshank, turnstone, cormorant, and eider.

²⁷ Mitchell, C (2012). Mapping the distribution of feeding Pink-footed and Iceland Greylag Geese in Scotland. Wildfowl & Wetlands Trust / Scottish Natural Heritage Report, Slimbridge. 108pp.

Potential Impact	Screening Assessment	Screening Conclusion
	<ul style="list-style-type: none"> • Curlew – Recorded during all survey months with a peak count of six recorded in November 2024. Records comprised both foraging and resting birds; • Oystercatcher – Recorded during all survey months with a peak count of 35 birds recorded in November 2024. Records comprised both foraging and resting birds; • Redshank – Recorded during all survey months with a peak count of eleven birds recorded in February 2025. Records comprised both foraging and resting birds; • Turnstone – Recorded during all survey months except March 2025 with a peak count of 16 birds recorded in January 2025. Records comprised both foraging and resting birds; • Cormorant – Recorded during all survey months with a peak count of seven birds recorded in December 2024. Records comprised both foraging and resting birds; • Eider – Recorded during all survey months except January 2025 with a peak count of 58 birds recorded in March 2025. Records comprised both foraging and resting birds; and • Long-tailed duck – Recorded during the November 2024, December 2024 and February 2025 surveys with a peak count of ten birds recorded in December. <p>The Waterbird Disturbance Mitigation Toolkit (Cutts et al., 2013)²⁸ provides species-specific information on the sensitivity of several bird species which are qualifying features of SPA. It suggests that, in general, disturbance of non-breeding waterbirds can occur up to distances of around 300 m from construction works. As such works associated with the HDD Compound have the potential to disturb and/or displace SPA qualifying individuals from SPA habitat for the duration of the works. For the purposes of this assessment, it is assumed that the works at the Landfall HDD Compound will span an entire overwintering period (September to April inclusive).</p>	
Direct mortality	The SPA is not designated for breeding qualifying species and therefore no direct mortality of eggs/chicks would be possible.	No Effects

²⁸ Cutts, N., Hemingway, K and Spencer, J (2013). Waterbird Disturbance Mitigation Toolkit – Informing Estuarine Planning & Construction Projects.

Potential Impact	Screening Assessment	Screening Conclusion
Changes in water quality	<p>The Site crosses several watercourses that discharge into the SPA, including the Teil Burn and Tyrie burn. Pollution prevention measures will be implemented as part of the Scottish Onshore Scheme. Measures are detailed in full in Chapter 8 Water Environment and Flood Risk. Additionally, all crossing points of watercourses that discharge into the SPA are in excess of 1 km upstream (the closest being Tyrie burn, which discharges into the SPA approximately 1.4 km downstream from the crossing point) with the majority far more distant. As such, any pollutants / sediment release from Site will likely dissipate/settle, to an extent, in the intervening watercourse. The extremely large expanse of the Firth of Forth and its tidal nature will further dilute any potential pollutants to negligible levels.</p> <p>The potential for ‘frack out’ of drilling fluid from the landfall HDD works is considered negligible due to the nature of the bedrock and drilling depth (see Chapter 12 Geology and Ground Conditions for full details). Additionally, the drilling fluid is composed of Bentonite, which is non-toxic to the environment. As above, the large expanse and tidal action of the Firth of Forth would dissipate any fluid released by the works to negligible levels, in the event this occurred.</p>	No Effects

Table 4: Screening Assessment for the Outer Firth of Forth St Andrews Bay Complex SPA

Potential Impact	Screening Assessment	Screening Conclusion
Loss / degradation of habitats on Site	<p>The above-ground elements of the Site do not overlap with the SPA, as the HDD compound is located approximately 250 m to the west. The HDD outfall would be located below MLWS (within the SPA) and therefore is not considered part of the Scottish Onshore Scheme. There would therefore be no direct impacts on SPA habitat from the Scottish Onshore Scheme and in-direct impacts from Dust, INNPS and changes to groundwater are excluded as detailed for the Firth of Forth SPA. Potential impacts considered are therefore restricted to loss/degradation of inland habitats that are potentially functionally linked to the SPA.</p> <p>The following SPA qualifying species were recorded during the Converter Station and Landfall Inland surveys:</p>	No Effects

Potential Impact	Screening Assessment	Screening Conclusion
	<ul style="list-style-type: none"> Common gull – Flocks of 100 and two birds recorded foraging in fields in within the Converter Station site in February. Two flocks of 20 and 14 birds were recorded to the southwest of the Underground DC Cable Route in December and January respectively; Herring gull – A single flock of 50 birds was recorded in the Converter Station site in February and three flocks totalling 254 birds foraging in fields in the vicinity of the Underground DC Cable Route (closest record approximately 300 m north of the Site); and Black-headed gull – A flock of 20 birds foraging within the Converter Station site in February 2025 and 20 birds foraging north of the Underground Cable Route in November 2024. <p>Of the qualifying species, the above three species, plus little gull, have the potential to use inland agricultural habitats, primarily for foraging, that could potentially constitute FLL. Agricultural land, however, is widespread and ubiquitous throughout the coastal area adjacent to the Firth of Forth. Use of any given fields by the birds will likely be infrequent and influenced by agricultural activities, and they would not be dependent on particular fields. It would therefore be reasonable to assume that terrestrial habitat does not constitute FLL for these species.</p>	
<p>Disturbance / displacement of qualifying species from the Site and adjacent areas</p>	<p>As explained above for loss / degradation of habitats, it is considered unlikely that terrestrial habitat temporarily or permanently lost under the footprint of the Scottish Onshore Scheme would constitute FLL. While birds could be disturbed or displaced across a wider area than the Site during works it is considered that the same logic applies, and this habitat does not constitute FLL.</p> <p>As detailed under the Firth of Forth SPA the works associated with the HDD compound at the Landfall have the potential to disturb or displace birds from the intertidal areas and immediately adjacent open water. SPA qualifying species recorded in this general area were:</p>	<p>LSE identified for the following species: black-headed gull, herring gull, eider and long-tailed duck.</p>

Potential Impact	Screening Assessment	Screening Conclusion
	<ul style="list-style-type: none"> • Herring gull – Recorded during all survey months with a peak count of 64 birds recorded in November 2024. Records comprised both foraging and resting birds; • Black-headed gull – Recorded during all survey months except March 2025 with a peak count of four birds recorded in November 2024 and February 2025. Records comprised resting birds; • Eider – Recorded during all survey months except January 2025 with a peak count of 58 birds recorded in March 2025. Records comprised both foraging and resting birds; • Long-tailed duck – Recorded during the November 2024, December 2024 and February 2025 surveys with a peak count of ten birds recorded in December; and • Shag – Recorded in November 2024, December 2024 and March 2025 with a peak count of 25 birds recorded in December. Records comprised both foraging and resting birds <p>On a precautionary basis it is assumed that the above qualifying species could potentially be disturbed/displaced from SPA and directly adjacent habitat during the works. For the purposes of this assessment, it is assumed that the works at the Landfall HDD Compound will span an entire overwintering period (September to April inclusive).</p>	
Direct mortality	Terrestrial habitats overlapping the Site do not support breeding sites of any qualifying species. The SPA is designated for supporting foraging habitat of breeding seabirds which breed on the islands of the Firth of Forth (including within the Firth of Forth SPA).	No Effects
Changes in water quality	The screening assessment follows that of the Firth of Forth SPA, as potential impacts are analogous. Embedded pollution mitigation will be implemented, and any pollutants released would be highly dispersed and diluted.	No Effects

Table 5: Screening Assessment for Loch Leven SPA

Potential Impact	Screening Assessment	Screening Conclusion
Loss / degradation of habitats on Site	<p>The Site is located approximately 2.4 km southeast of the SPA and therefore no SPA habitat would be directly lost, temporarily or permanently, to the footprint of the Scottish Onshore Scheme, or indirectly modified.</p> <p>Of the qualifying species, pink-footed goose and whooper swan are known to range widely from roost sites to forage in surrounding agricultural and grassland habitats. NatureScot guidance²⁶ indicates that core foraging ranges for pink-footed goose and whooper swan could extend 20km and 5km from roost sites respectively. During wintering bird surveys no whooper swan were recorded. Pink-footed goose were recorded during the Converter Station surveys and comprised the following records:</p> <ul style="list-style-type: none"> • A flock of approximately 500 birds foraging and loafing within a field in the Converter Station site in January 2025; • A flock of approximately 200 birds roosting on the quarry loch approximately 400 m east of the Site; and • Six records of flocks in flight over the Converter Station site. <p>NatureScot recommends a review of distribution maps included in Mitchell (2012)²⁹ to determine the potential for functional linkage with SPAs designated for pink-footed goose. Based on review of the foraging distribution map in Mitchell (2012), Figure 57 in the report, there were no records of pink-footed goose overlapping the Site. Specifically, the 1 km grid square containing the Converter Station site is shaded grey which indicated this area was subject to standardised surveys (and not solely based on ad hoc records). Foraging records were clustered around Loch Leven, particularly to the west and north. The closest records to the Site were approximately 2 km north and northwest of the Converter Station site.</p> <p>While a relatively large flock of pink-footed goose were recorded within the Converter Station site, 400 birds (representing approximately 3.1% of the SPA population) were only</p>	No Effects

²⁹ Mitchell, C. (2012). Mapping the distribution of feeding Pink-footed and Iceland Greylag Geese in Scotland. Wildfowl & Wetlands Trust / Scottish Natural Heritage Report, Slimbridge. 108pp.

Potential Impact	Screening Assessment	Screening Conclusion
	recorded on a single survey (out of seven) within or adjacent to the Site. This, together with the distribution map in Mitchell (2012), indicates that habitats within and adjacent to the Site are not regularly used by pink-footed goose and are therefore unlikely to constitute FLL.	
Disturbance / displacement of qualifying species from the Site and adjacent areas	No disturbance of qualifying species using SPA habitat could occur as the SPA is approximately 2.4 km northwest of the Site. As explained above for loss / degradation of habitats, it is not considered that habitats on or adjacent to the Site constitute FLL for any species, including pink-footed goose. While disturbance/displacement of foraging flocks of pink-footed goose may occur the habitats with the Zol of the Site (up to a maximum of 1km from the Site ²³) are not considered important in maintaining the favourable conservation status of the species.	No Effects
Direct mortality	All qualifying species are designated during the non-breeding season and therefore no nest sites would be impacted.	No Effects
Changes in water quality	The Site is 2.4 km from the SPA and in a different water catchment, and therefore not hydrologically connected to the Site. Field drains and ditches in the vicinity of the Converter Station site drain into adjacent quarry lochs or the Lochty Burn and Kirk Burn which discharges into the River Ore to the east and south of Loch Leven respectively ³⁰ . There is therefore no potential for pollutants to reach the SPA if discharged from the Site.	No Effects

Table 6: Screening Assessment for the Forth Islands SPA

Potential Impact	Screening Assessment	Screening Conclusion
Loss / degradation of habitats on Site	The Site is approximately 6.4 km northwest of the SPA and therefore no SPA habitat will be directly lost due to the Scottish Onshore Scheme. Of the listed qualifying species. Herring	No Effects

³⁰ SEPA (2025). Water Classification Hub. Available at: <https://informatics.sepa.org.uk/WaterClassificationHub/> (Accessed June 2025).

Potential Impact	Screening Assessment	Screening Conclusion
	<p>gull and lesser-black-backed gull have the potential to use terrestrial habitat within or adjacent to the Site. Records of these species in inland habitats comprise the following:</p> <ul style="list-style-type: none"> • Herring gull – A flock of six birds foraging within the Converter Station site in February and three flocks totalling 256 birds foraging in fields in the vicinity of the Underground Cable Route (closest record approximately 300 m north of the Site); and • Lesser black-backed gull – Two flocks of twelve and five birds recorded foraging and resting within the Converter Station site in February 2025. <p>Agricultural land, however, is widespread and ubiquitous throughout the coastal area adjacent to the Firth of Forth. Use of any given fields by the birds will likely be infrequent and influenced by agricultural activities, and they would not be dependent on particular fields. It would therefore be reasonable to assume that terrestrial habitat does not constitute FLL for these species</p>	
<p>Disturbance / displacement of qualifying species from the Site and adjacent areas</p>	<p>As explained above for loss / degradation of habitats, it is considered unlikely that terrestrial habitat temporarily or permanently lost under the footprint of the Scottish Onshore Scheme, or indirectly modified, would constitute FLL. While birds could be disturbed or displaced across a wider area than the Site during works it is considered that the same logic applies, and this habitat does not constitute FLL.</p> <p>Qualifying species, including the above gull species, could potentially be disturbed or displaced from intertidal and adjacent marine habitats in vicinity of the HDD compound at the Landfall. Species recorded in this area were:</p> <ul style="list-style-type: none"> • Herring gull – Recorded during all survey months with a peak count of 64 birds recorded in November 2024. Records comprised both foraging and resting birds; • Lesser black-backed gull – Recorded during March 2025 only with a peak count of three birds. Records comprised both foraging and resting birds; • Cormorant – Recorded during all survey months with a peak count of seven birds recorded in December 2024. Records comprised both foraging and resting birds; and 	<p>No Effects</p>

Potential Impact	Screening Assessment	Screening Conclusion
	<ul style="list-style-type: none"> Shag – Recorded in November 2024, December 2024 and March 2025 with a peak count of 25 birds recorded in December. Records comprised both foraging and resting birds <p>Such habitats, however, are distant from the SPA itself and comprise a small proportion of the wider coastal habitats available to these species in the Firth of Forth. It is considered unlikely that these habitats are important for maintaining or restoring the conservation status at a favourable condition for any qualifying species.</p>	
Direct mortality	The Site does not overlap with any breeding sites of SPA qualifying species (they are all located on distant islands in the Firth of Forth). Therefore there is no pathway for impacts to breeding sites or nests.	No Effects
Changes in water quality	While the Site does cross numerous watercourses that flow into the Firth of Forth, embedded pollution prevention measures and the diluting effect of the very large Firth of Forth (as set out in more detail for the Firth of Forth SPA above), negates the potential for effects on the marine environment.	No Effects

7. Information to Inform Appropriate Assessment

7.1 Introduction

The following LSE were identified during the preceding screening assessment:

- Firth of Forth SPA – Disturbance/displacement of qualifying species (specifically curlew, oystercatcher, redshank, turnstone, cormorant and eider) from SPA and directly adjacent habitat at the Landfall site.
- Outer Firth of Forth St Andrews Bay Complex SPA – Disturbance/displacement of qualifying species (specifically black-headed gull, herring gull, eider and long-tailed duck) from SPA and directly adjacent habitat at the Landfall site.

This section provides information to inform an Appropriate Assessment, to be undertaken by the Competent Authority. The information will allow the Competent Authority to consider potential Adverse Effects on Site Integrity (AESI) for the above SPAs as a consequence of the Scottish Onshore Scheme.

Identified LSEs are further assessed in relation to details of the Scottish Onshore Scheme, European site information, ecological supporting information, and impact avoidance and mitigation measures.

7.2 Impact Avoidance and Mitigation

All impact avoidance and mitigation measures described in this section will be incorporated into a site-specific Construction Environmental Management Plan (CEMP) to be produced by the Principal Contractor. Compliance with the CEMP will be the responsibility of the Principal Contractor with supervision and advice provided by an Ecological Clerk of Works (ECoW) employed by the Principal Contractor

Noise and Visual Barriers

Mitigation is proposed in the form of a site specific noise management plan to be informed by detailed design. This plan will consider factors such as equipment selection, selecting the drilling site that maximises separation distance between the HDD and noise sensitive receptor and/or benefits from natural screening, as well as the implementation of temporary noise barriers. Specific mitigation in the form of a temporary 10-metre-high barrier has been included around the landfall construction area to provide an indication of the potential reduction provided. Mitigation is primarily for human receptors, developed by the noise specialists (**Chapter 11 Noise and Vibration, Volume 2 Main Report**) with input from ecology specialists.

7.3 Consideration of the Scottish Onshore Scheme Alone

Firth of Forth SPA

Visual Disturbance

At 250 m to the west of the SPA, the Landfall HDD Compound is towards the outer limits of the visual disturbance threshold suggested by Cutts et al. (2013)²⁸. Of the species recorded, only redshank and curlew could be expected to exhibit behavioural changes when greater than 250 m from the source of disturbance. The Waterbird Mitigation Toolkit focuses on birds which predominantly use intertidal areas and therefore cormorant, eider and long-tailed duck are not considered. Goodship and Furness (2024)²³ list a non-breeding season disturbance distance of 200 m to 600 m from source for eider (cormorant and long-tailed duck are not listed) although this primarily relates disturbance to birds on the open water by vessels. It is acknowledged that activities on shore would be unlikely to impact the birds on the open water to the same extent.

However, there is no direct line of sight from the HDD Compound to the intertidal habitat, as the terrain slopes steeply to the beach and the HDD Compound is set back from the beach on more level ground (approximately 50 m above sea level). Additionally, the Edinburgh – Aberdeen Railway line, with embankments, further provides a screen between the two, and the Fife Coastal Path runs between the railway line and the shore. Both of the above indicate that the coastal area is subject to existing background sources of disturbance. These factors, in combination with the mitigation proposed, minimise the potential for visual disturbance during works to negligible levels. The only work which could potentially be visible from the shoreline is operation of a crane, which would only be required for short durations (c. 1 week) during mobilisation and demobilisation of the site.

Additionally, while a number of SPA qualifying species were recorded in the intertidal and coastal areas of the SPA, no important / large foraging or roost sites were recorded. The largest concentration of birds comprised resting oystercatcher, curlew and turnstone in an area approximately 300 m north of the Landfall site. Numbers recorded comprised small proportions of the wider SPA population with peak counts comprising 1.9%, 0.5%, 0.2% and 0.2% of the SPA population for turnstone, oystercatcher curlew and redshank (the species group, wading birds, most susceptible to disturbance from the works) respectively. As the conservation status is listed as ‘favourable maintained’ for all the above species they are not vulnerable to such negligible or minor impacts associated with the Scottish Onshore Scheme.

Noise Disturbance

As detailed above a relatively low number of SPA qualifying species were recorded during the wintering bird surveys. Cutts et al. (2013) recommend that noise levels in excess of 55dB at source (i.e. the bird) could potentially result in a disturbance response. Noise modelling indicates that noise levels exceeding 55dB would only extend approximately 200m from the HDD Compound (with the implementation of mitigation). As such SPA qualifying species in the coastal zone are very unlikely to be affected by noise disturbance from the Scottish Onshore Scheme.

Outer Firth of Forth and St Andrews Bay Complex SPA

Visual and Noise Disturbance

The assessment for the Outer Firth of Forth and St Andrews Bay Complex SPA largely follows that described for the Firth of Forth SPA in the preceding paragraphs. Recorded SPA qualifying species comprise seabirds and sea ducks, with all except herring gull and black-headed gull predominantly recorded in open water or on offshore islands / reefs. While no estimates for disturbance distances for non-breeding gull species are available it is reasonable to assume that they are more tolerant than curlew, the wading bird species with the largest disturbance buffer.

7.4 Appropriate Assessment Conclusion for the Scottish Onshore Scheme Alone

Given the arguments above, no significant effects on any SPA qualifying species are anticipated with respect to the conservation objectives listed in Annex A. Therefore, there would be no adverse effects on the integrity of the Firth of Forth SPA or Outer Firth of Forth and St Andrews Bay Complex SPA due to the Scottish Onshore Scheme

7.5 In-combination Assessment

As no effects the Firth of Forth and Outer Firth of Forth and St Andrews Bay Complex SPA remain following mitigation there is no requirement to consider effects in-combination with other projects or plans.

8. Conclusion

This Statement to Inform Habitats Regulations Appraisal therefore concludes that the Scottish Onshore Scheme will not result in adverse effects on the integrity of any European site, either alone or in-combination with other projects or plans

Annex A European Sites Information

All information provided below is taken from NatureScot sitelink¹³ unless otherwise stated. Population estimates for the Firth of Forth SPA, Loch Leven SPA and Forth Islands SPA are taken from the Joint Nature Conservation Committee (JNCC) third SPA Review³¹. All population estimates listed are based on counts of individuals unless otherwise stated.

³¹ Stroud, D.A., Bainbridge, I.P., Maddock, A., Anthony, S., Baker, H., Buxton, N., Chambers, D., Enlander, I., Hearn, R.D., Jennings, K.R., Mavor, R., Whitehead, S. & Wilson, J.D. - on behalf of the UK SPA & Ramsar Scientific Working Group (eds.) 2016. The status of UK SPAs in the 2000s: the Third Network Review. [c.1,108] pp. JNCC, Peterborough

Firth of Forth SPA

Date of designation: 30 October 2001

Local planning authority: East Lothian (primary), City of Edinburgh, Clackmannanshire, Falkirk, Fife, Marine Scotland (inshore), Stirling, West Lothian

Total area: 6,317.93 ha

Qualifying features [SPA population and latest assessed condition]:

Non-Breeding Season

- Bar-tailed godwit *Limosa lapponica* [1,312; Favourable Maintained]
- Common scoter *Melanitta nigra* [1,393; Unfavourable Declining]
- Cormorant *Phalacrocorax carbo* [615; Favourable Maintained]
- Curlew Numenius arquata [3,740; Favourable Maintained]
- Dunlin *Calidris alpina* [5,853; Favourable Declining]
- Eider *Somateria mollissima* [5,298; Favourable Declining]
- Golden plover *Pluvialis apricaria* [2,664; Unfavourable Declining]
- Goldeneye *Bucephala clangula* [768; Unfavourable Declining]
- Great crested grebe *Podiceps cristatus* [113; Unfavourable Declining]
- Grey plover *Pluvialis squatarola* [396; Favourable Declining]
- Knot *Calidris canutus* [3,752; Unfavourable Declining]
- Lapwing *Vanellus vanellus* [4,717; Favourable Declining]
- Long-tailed duck *Clangula hyemalis* [193; Unfavourable Declining]
- Mallard *Anas platyrhynchos* [1,115; Favourable Declining]

- Oystercatcher *Haematopus ostralegus* [7,212; Favourable Maintained]
- Pink-footed goose *Anser brachyrhynchus* [15,098; Favourable Maintained]
- Red-breasted merganser *Mergus serrator* [336; Unfavourable Declining]
- Red-throated diver *Gavia stellata* [87; Favourable Maintained]
- Redshank *Tringa totanus* [4,898; Favourable Maintained]
- Ringed plover *Charadrius hiaticula* [619; Favourable Maintained]
- Scaup *Aythya marila* [40; Unfavourable Declining]
- Shelduck *Tadorna tadorna* [3,343; Favourable Maintained]
- Slavonian grebe *Podiceps auratus* [29; Unfavourable Declining]
- Turnstone *Arenaria interpres* [854; Favourable Maintained]
- Velvet scoter *Melanitta fusca* [652; Favourable Maintained]
- Wigeon *Anas penelope* [1,976; Favourable Maintained]
- Waterfowl assemblage [Favourable Maintained]

Passage

- Sandwich tern *Sterna sandvicensis* [1,243; Favourable Maintained]

Conservation objectives:

1. To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained.
2. To ensure for the qualifying species that the following are maintained in the long term:
 - Population of the species as a viable component of the site.
 - Distribution of the species within site.
 - Distribution and extent of habitats supporting the species.
 - Structure, function and supporting processes of habitats supporting the species.
 - No significant disturbance of the species.

Existing threats, pressures, and activities with impacts on the site:

The main threats to the qualifying features for Firth of Forth SPA are recreational activities and disturbance, including dog walking, and climate change. Other negative pressures include game and fisheries management (including fishing and harvesting aquatic resources), changes in biotic conditions (water quality) and other natural events.

Outer Firth of Forth and St Andrews Bay Complex SPA

Date of designation: 03 December 2020

Local planning authority: Marine Scotland (inshore)

Total area: 272068.1 ha

Qualifying features [SPA population and latest assessed condition]:

Breeding Season

- Arctic tern *Sterna paradisaea* [Favourable Maintained]*
- common tern *Sterna hirundo* [Favourable Maintained]*
- gannet *Morus bassanus* [10,945; Favourable Maintained]
- guillemot *Uria aalge* [28,123; Favourable Maintained]
- herring gull *Larus argentatus* [3,044; Favourable Maintained]
- kittiwake *Rissa tridactyla* [12,020; Favourable Maintained]
- Manx shearwater *Puffinus puffinus* [2,885; Favourable Maintained]
- puffin *Fratercula arctica* [61,086; Favourable Maintained]
- shag *Gulosus aristotelis* [Favourable Maintained]*
- Breeding season seabird assemblage [Condition not assessed]

Non-Breeding Season

- black-headed gull *Chroicocephalus ridibundus* [26,835; Favourable Maintained]
- common gull *Larus canus* [14,647; Favourable Maintained]
- common scoter [4,667; Favourable Maintained]
- eider [21,546; Favourable Maintained]
- goldeneye [589; Favourable Maintained]
- guillemot [21;968; Favourable Maintained]
- herring gull *Larus argentatus* [12,313; Favourable Maintained]
- kittiwake [3,191; Favourable Maintained]
- little gull *Hydrocoloeus minutus* [126; Favourable Maintained]
- long-tailed duck [1,948; Favourable Maintained]
- razorbill *Alca tadorna* [5,481; Favourable Maintained]
- red-breasted merganser [431; Favourable Maintained]
- red-throated diver [851; Favourable Maintained]
- shag [2,426; Favourable Maintained]
- Slavonian grebe [30; Favourable Maintained]
- velvet scoter [775; Favourable Maintained]
- Non-breeding season seabird assemblage [Favourable Maintained]
- Non-breeding season waterfowl assemblage [Favourable Maintained]

Conservation objectives:

1. To ensure that the qualifying features of the Outer Firth of Forth and St Andrews Bay Complex SPA are in favourable condition and make an appropriate contribution to achieving Favourable Conservation Status.
2. To ensure that the integrity of the Outer Firth of Forth and St Andrews Bay Complex SPA is restored in the context of environmental changes by meeting objectives 2a, 2b and 2c for each qualifying feature:
 - 2a: The populations of the qualifying features are viable components of the Outer Firth of Forth and St Andrews Bay Complex SPA.
 - 2b: The distribution of the qualifying features is maintained throughout the site by avoiding significant disturbance of the species.
 - 2c: The supporting habitats and processes relevant to qualifying features and their prey resources are maintained, or where appropriate restored, at the Outer Firth of Forth and St Andrews Bay Complex SPA.

Existing threats, pressures, and activities with impacts on the site:

Sensitivities and vulnerabilities for qualifying species include: entanglement in fishing gear, disturbance (e.g. from vessel movements), collisions with marine developments, disease (including avian flu) and pollution (including oil spills)

*No citation population listed.

Loch Leven SPA

Date of designation: 27 March 2000

Local planning authority: Perth and Kinross

Total area: 1611.29ha

Qualifying features [Population and latest assessed condition]:

Non-Breeding Season

- Cormorant [177; Favourable maintained]
- Gadwall *Anas strepera* [340; Favourable maintained]
- Goldeneye [442; Favourable maintained]
- Pink-footed goose [15,992; Favourable maintained]
- Pochard *Aythya ferina* [2,528; Favourable maintained]
- Shoveler *Anas clypeata* [192; Favourable maintained]
- Teal [4,340; Favourable maintained]
- Tufted duck *Aythya fuligula* [3,742; Favourable maintained]
- Whooper swan *Cygnus cygnus* [202; Favourable maintained]
- Waterfowl assemblage [Favourable maintained]

Conservation objectives:

1. To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained.
2. To ensure for the qualifying species that the following are maintained in the long term:
 - Population of the species as a viable component of the site.
 - Distribution of the species within site.
 - Distribution and extent of habitats supporting the species.
 - Structure, function and supporting processes of habitats supporting the species.
 - No significant disturbance of the species.

Existing threats, pressures, and activities with impacts on the site:

None listed

Forth Islands SPA

Date of designation: 25 September 2009

Local planning authority: Fife (Primary), City of Edinburgh, East Lothian, Scottish Government (Marine Directorate)

Total area: 9797.01 ha

Qualifying features [Population (listed in pairs) and latest assessed condition]:

Breeding Season

- Arctic tern [250; Favourable Maintained]
- Common tern [26; Unfavourable, No Change]
- Cormorant [148; Unfavourable, No Change]
- Gannet [48,065; Favourable Maintained]
- Guillemot [16,804; Favourable Maintained]
- Herring gull [2,827; Favourable Maintained]
- Kittiwake [4,523; Unfavourable, No Change]
- Lesser black-backed gull *Larus fuscus* [1,608; Favourable Maintained]
- Puffin [50,355; Favourable Maintained]
- Razorbill [2,402; Favourable Maintained]
- Roseate tern *Sterna dougallii* [3; Unfavourable, No Change]
- Sandwich tern [0; Unfavourable, No Change]
- Shag [876; Unfavourable, No Change]
- Breeding seabird assemblage [Favourable Declining]

Conservation objectives:

1. To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained.
2. To ensure for the qualifying species that the following are maintained in the long term:
 - Population of the species as a viable component of the site.
 - Distribution of the species within site.
 - Distribution and extent of habitats supporting the species.
 - Structure, function and supporting processes of habitats supporting the species.
 - No significant disturbance of the species.

Existing threats, pressures, and activities with impacts on the site:

Negative pressures listed for qualifying species include: Climate change, fisheries management, infrastructure, inter-specific competition, invasive species and recreation/disturbance.