

**BERWICK BANK WIND FARM**

**DEROGATION CASE**

**REPORT TO INFORM  
APPROPRIATE  
ASSESSMENT**



## Document Status

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Jon Abbatt



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Prepared by: **GoBe Consultants Ltd.**  
Prepared for: **SSE Renewables**

Checked by: **Kerrie Craig (SSER)**  
Accepted by: **David Still (SSER)**  
Approved by: **Jon Abbatt (SSER)**

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## ACRONYMS

Acronym	Definition
AA	Appropriate Assessment
AON	Apparently Occupied Nests
CCM	Colony Compensatory Measures
CES	Crown Estate Scotland
CfD	Contract for Difference
DEFRA	Department for Environment Food and Rural Affairs
DHT	Dunbar Harbour Trust
EC	European Commission
ECJ	European Court of Justice
EIA	Environmental Impact Assessment
ELC	East Lothian Council
ELCAS	East Lothian Council Archaeological Service
EMF	Electric and Magnetic Fields
EU	European Union
FCM	Fisheries Compensatory Measures
GIS	Geographic Information System
HRA	Habitats Regulations Appraisal
ICES	International Council for the Exploration of the Sea
IMP	Implementation and Monitoring Plan
INNS	Invasive Non-Native Species
IROPI	Imperative Reasons for Overriding Public Interest
JNCC	Joint Nature Conservation Committee
LSE	Likely Significant Effect

Acronym	Definition
MDS	Maximum Design Scenario
MS-LOT	Marine Scotland – Licensing Operations Team
MU	Management Unit
NE	Natural England
OWF	Offshore Wind Farm
RIAA	Report to Inform Appropriate Assessment
RSPB	Royal Society for the Protection of Birds
SAC	Special Area of Conservation
SCI	Site of Conservation Interest
SNH	Scottish Natural Heritage
SPA	Special Protection Area
SSER	SSE Renewables
SSSI	Site of Special Scientific Interest
SWT	Scottish Wildlife Trust
TAC	Total Allowable Catch
WTG	Wind Turbine Generator



# 1. INTRODUCTION

## 1.1. PROJECT BACKGROUND

1. Berwick Bank Wind Farm Limited (the Applicant) is proposing to develop the Berwick Bank Wind Farm (The Project), in the outer Firth of Forth and Firth of Tay within the former Round 3 Firth of Forth Zone.
2. The Project will include offshore and onshore infrastructure including an offshore generating station (array), offshore export cables to landfall and onshore transmission cables leading to an onshore substation with electrical balancing infrastructure, and connection to the electricity transmission network. The offshore components of the Project seaward of MHWs are referred to as the Proposed Development.
  - The array comprises 307 wind turbines, with an estimated capacity of 4.1 gigawatt (GW). The array will be approximately 47.6 km offshore of the East Lothian coastline and 37.8 km from the Scottish Borders coastline at St. Abbs. It lies to the south of the offshore wind farms (OWF) known as Seagreen and Seagreen 1A, south-east of Inch Cape offshore wind farm and east of Neart Na Goaithe offshore wind farm.
3. The most precautionary conclusions of the Report to Inform Appropriate Assessment (RIAA) of the Proposed Development has identified the potential for an adverse effect on the integrity of the following eight SPAs from the impacts of the Proposed Development (alone and/or in-combination):
  - Forth Islands SPA
  - St Abbs Head to Fast Castle SPA
  - Fowlsheugh SPA
  - Farne Islands SPA
  - East Caithness Cliffs SPA
  - Troup, Pennan & Lion's Heads SPA
  - Buchan Ness to Collieston Coast SPA
  - Flamborough and Filey Coast SPA
4. As such, the Applicant has proposed a derogation case including identifying compensatory measures which could be delivered to secure the overall coherence of the national site network, if necessary. The compensatory measures selection process, as set out within the Derogation Case, together with stakeholder consultation resulted in one fisheries management measure and two colony measures being selected from a long list. The chosen measures, as illustrated in Figure 1, comprise of the following:
  - Management of SA4 sandeel fishery (either under a "full closure of SA4" or an "ecosystem-based management" or option);
  - Rat Eradication: Handa; and
  - Dunbar Castle Wardening Role.
5. These measures are substantial, and reasons and evidence have been provided within the Derogation Case that should give Scottish Ministers confidence that they will maintain and enhance the national site network. This evidence is supported, and should be read alongside the accompanying technical appendices (the Fisheries Compensatory Measures (FCM) Evidence Report and the Colony Compensatory Measures (CCM) Evidence Report).
6. Information on how each of the measures will be implemented and monitored is provided in the Derogation Case: Implementation and Monitoring Plan (IMP). This includes a range of built-in adaptive management measures specific to each measure and a number of secondary measures, that could also be implemented as part of an adaptive management response. Rat eradication at Inchcolm Island is included as a secondary measure that may be implemented for adaptive management purposes. A complete account of this measure is included within this document however it should be noted that further stakeholder consultation would be required before this specific measure could be secured and the intention is not to take this measure forward as compensation at this stage

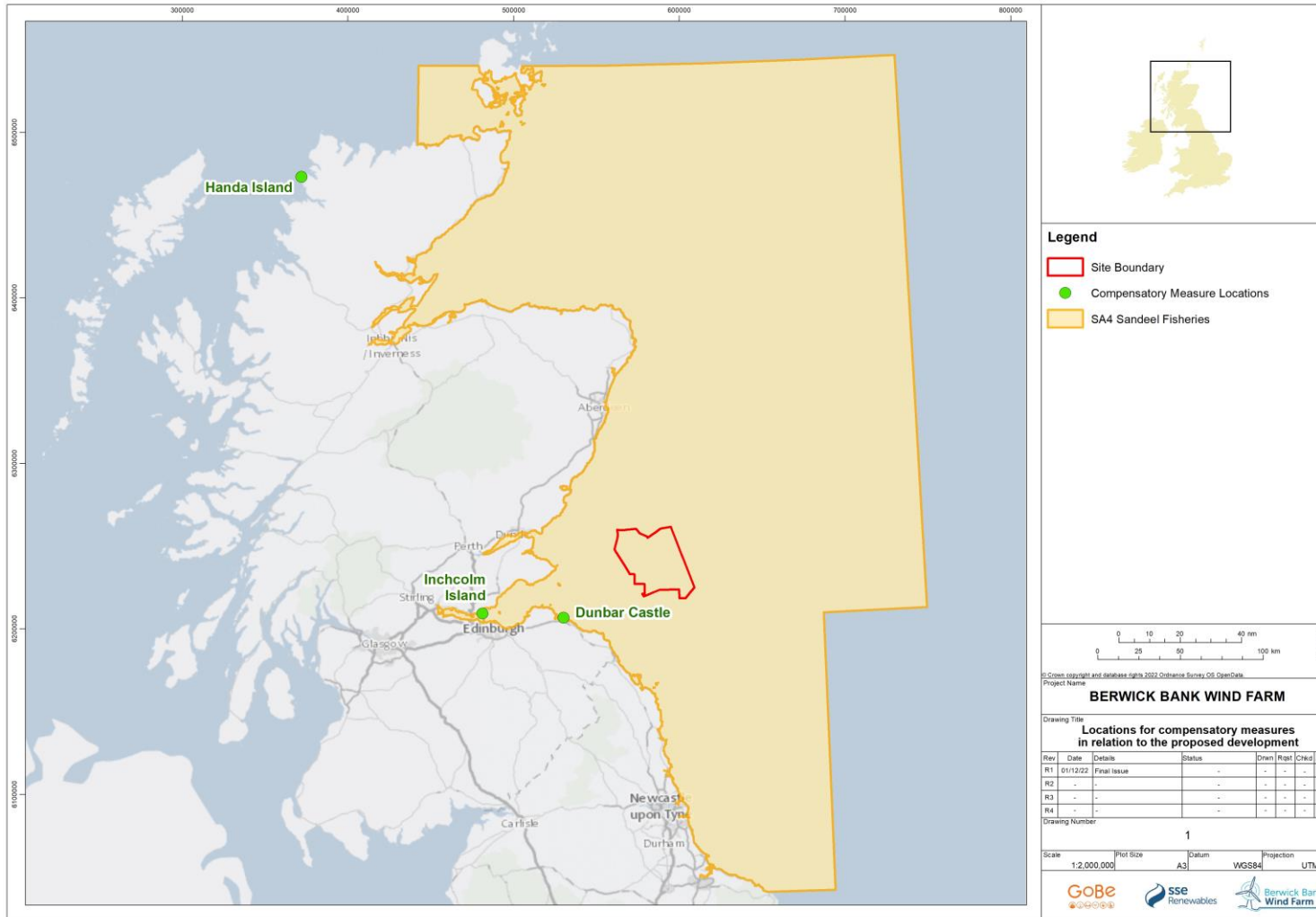


Figure 1: A map of the proposed locations for the proposed compensatory measures including the SA4 sandeel fishery, Handa island, Dunbar Castle, and Inchcolm island (included as a secondary measure for adaptive management purposes).



## 1.2. PURPOSE OF THIS DOCUMENT

7. This document presents an assessment of the likely significant environmental effects of the compensatory measures being developed as part of the derogation case for the Proposed Development. The compensatory measures are being brought forward as a consequence of the Proposed Development's potential effects on the national site network. Any effects arising from the compensatory measures are, on a precautionary basis, considered to be indirect or secondary to the effects of the Proposed Development, and for consideration under the Habitats Regulations Appraisal (HRA) regulations (see section 3.1.1). The purpose of this document is to assess the effects of the proposed compensatory measures with respect to designated sites to determine if any are likely to be significant pursuant to the requirements of the HRA regulations. For full context regarding the policy and legislative context see the RIAA for the Proposed Development

## 1.3. STRUCTURE OF THIS DOCUMENT

8. This derogation case RIAA is set out in a number of stages as follows:
  - Consultation (Section 1.4);
  - Description of the proposed compensatory measures for the Proposed Development (Section 2);
  - A brief summary of the HRA process (Section 3);
  - An HRA section for each compensatory measure (Sections 4 to 7), with each section containing the following sub-sections:
    - Screening – an assessment to determine if there is no likely significant effect (LSE) to arise for the project alone with regard to the designated features of the European sites under consideration;
    - Information to Inform Appropriate Assessment where screening has identified LSE
  - Conclusions (Section 7); and
  - References (Section 9).
9. Detail on the need for the compensatory measures and alternative compensatory measures considered to date is provided in Part D of the Derogation Case.

## 1.4. CONSULTATION

10. The Applicant has undertaken consultation with relevant stakeholders and SNCBs as part of the preparation of the Derogation Case (namely, NatureScot, Marine Scotland – Licensing Operations Team (MS-LOT), Historic Environment Scotland (HES), Department for Environment Food and Rural Affairs (Defra) the Scottish Seabird Centre, the Centre for Ecology and Hydrology, the National Trust, the National Trust for Scotland, the Scottish Wildlife Trust, Crown Estate Scotland (CES), the Royal Society for the Protection of Birds (RSPB), Dunbar Harbour Trust (DHT), East Lothian Council (ELC), East Lothian Council Ranger Service (ELCRS), Scottish Fishermen's Federation (SFF), local ornithological consultants, and local bird ringers) regarding compensation measures for the Proposed Development. Further detail on this consultation is presented in the Consultation Log (Appendix 1 of the Derogation Case). Engagement will be ongoing with various stakeholders for the proposed compensatory measures at various stages through the process, as detailed in the IMP.

## 2. PROPOSED COMPENSATORY MEASURES

### 2.1. INTRODUCTION

11. A full description of each proposed compensatory measure can be found within the IMP, CCM Evidence Report, and FCM Evidence Report.
12. In order to facilitate a HRA of the measures, a Maximum Design Scenario (MDS) has been defined for each measure, which is presented in Table 1. This essentially represents the scenario(s) that would have the greatest impact and has been defined so that “worst case” scenario can be assessed. As a result, we can be confident that any other (lesser) scenario(s) will have an impact that is no greater than that assessed.
13. The proposed compensatory measures are categorised into two groups, ‘Colony Based’ and ‘Fisheries Based’ measures as follows:
  - Fisheries Based measures:
    - Management of SA4 sandeel fishery (considering two options: closure of SA4 sandeel fishery and ecosystem-based management ).
  - Colony Based measures:
    - Rat Eradication: Handa;
    - Dunbar Castle Wardening Role;
    - Rat Eradication: Inchcolm (secondary measure).

### 2.2. MAXIMUM DESIGN SCENARIO

14. The MDS parameters for the relevant compensatory measures are the worst case for any given assessment. This approach ensures that the scenario that would have the greatest impact (e.g. longest duration or most significant level of disturbance) is assessed; and there is confidence that any other (lesser) scenarios will have an impact that is no greater than that assessed.
15. Table 1 and Table 2 present a summary of the MDS identified for the compensatory measures. Due to the nature of the compensatory measure for sandeel fishing, this measure has been presented with a different MDS per receptor (Table 2). This MDS has been identified by examination of the implementation plan combined with knowledge of similar projects, and applying expert judgement on the variables which may result in greater impacts.

**Table 1: Maximum design scenario for compensatory measures**

Measure	Management of SA4 Sandeel Fishery	Rat Eradication: Handa	Dunbar Castle Wardening Role	Rat Eradication: Inchcolm (Secondary measure)
Mechanism	<ul style="list-style-type: none"> <li>The maximum design scenario for the receptors of concern within this RIAA is based on the ecosystem-based management option for the management of SA4 sandeel fishery compensatory measure. The total allowable catch (TAC) is initially reduced to 0 and then managed based on an ecosystem-based assessment thereafter., For the purposes of defining the worst-case scenario, it is can be assumed that the TAC will always be adjusted to facilitate for a positive response from seabirds populations</li> </ul>	<ul style="list-style-type: none"> <li>Eradication phase to be undertaken in winter period and last five months (November to March inclusive)</li> <li>Eradication phase to use approximately 1300 bait stations</li> <li>Eradication phase and immediate monitoring to require visits at minimum every two days to replace poison</li> <li>Long term monitoring phase to start following eradication phase and continue for two years (monitoring at least every four weeks over the two-year period)</li> <li>Biosecurity measures will be in place for the Operational lifetime of the Proposed Development</li> </ul>	<ul style="list-style-type: none"> <li>Nesting habitat improvements to be undertaken in winter period (outside the breeding season)</li> <li>Debris removal activities to be undertaken in winter period (outside the breeding season)</li> <li>Cameras/equipment for monitoring purposes to be installed and removed in the winter period</li> </ul>	<ul style="list-style-type: none"> <li>Eradication phase to be undertaken in winter period and last five months (November to March inclusive)</li> <li>Eradication phase to use approximately 170 bait stations</li> <li>Eradication phase and immediate monitoring to require visits at minimum every two days to replace poison</li> <li>Long term monitoring phase to start following eradication phase and continue for two years (monitoring at least every 4 weeks over the two year period)</li> <li>Biosecurity measures will be in place for the Operational lifetime of the Proposed Development</li> </ul>
Timescale	<ul style="list-style-type: none"> <li>The fishery will be managed for the operational lifetime of the Proposed Development. The length of closure will depend on the ecosystem response to the closure.</li> </ul>	<ul style="list-style-type: none"> <li>Rodent removal (eradication phase) over a single winter period.</li> <li>Monitoring phase and any additional removals over a two-year period.</li> </ul>	<ul style="list-style-type: none"> <li>Initial period of wardening activities</li> </ul>	<ul style="list-style-type: none"> <li>Rodent removal (eradication phase) over a single winter period.</li> <li>Monitoring phase and any additional removals over a two-year period.</li> </ul>

Measure	Management of SA4 Sandeel Fishery	Rat Eradication: Handa	Dunbar Castle Wardening Role	Rat Eradication: Inchcolm (Secondary measure)
		<ul style="list-style-type: none"> <li>Biosecurity measures will be in place for the operational lifetime of the Proposed Development</li> <li>Rapidity of seabird response is variable so the ultimate timescale for the final results is unknown.</li> </ul>		<ul style="list-style-type: none"> <li>Biosecurity measures will be in place for the operational lifetime of the Proposed Development. Rapidity of seabird response is variable so the ultimate timescale for the final results is unknown.</li> </ul>

## 2.3. COMPENSATORY MEASURES COMMITMENTS

16. The approach taken to HRA for the compensatory measures is summarised in Figure 2. Where the screening conclusion is that there is a LSE, the primary measure applied to avoid an AEoI is mitigation. For the Proposed Development, these mitigation measures are identified below in Table 2.
17. The commitments described in Table 2 are incorporated within the IMP. As part of the process of discharging suspensive requirements of consent conditions, it is anticipated that the Applicant will produce a Colony Measures Implementation Plan and Sandeel Measures Implementation Plan for submission to Scottish Ministers. Each plan will be informed by stakeholder feedback and the commitments made in the IMP. Section 6 of the IMP details the Applicant's recommendation to Scottish Ministers on how this process should be secured within the consent.

**Table 2: Commitments relating to the proposed compensatory measures**

Commitment Reference	Commitment Details
1	Consideration of the timing and location of predator eradication programme will be made to ensure that it is undertaken at the optimal time/location and that it will avoid/reduce interaction with non-target species. Design of eradication programme and eradication methods will follow current good practise design to minimise impact on sensitive habitats, non-target species and disruption to land use.
2	Consideration of the timing and location of predator eradication long-term monitoring programme will be made to ensure that it is undertaken at the optimal time/location and that it will avoid/reduce interaction with non-target species. Design of eradication programme and eradication methods will follow current good practise design to minimise impact on sensitive habitats, non-target species and disruption to land use.
2	Consideration of the timing and location of debris removal activities will ensure that work is undertaken at the optimal time/location and that it will avoid/reduce interaction with sensitive species. Design of the programme and methodology will follow current good practise design to minimise impact on sensitive habitats, species and disruption to land use.
3	Consideration of the timing and location of kittiwake nesting habitat improvement activities will ensure that work is undertaken at the optimal time/location and that it will avoid/reduce interaction with sensitive species. Design of the programme and methodology will follow current good practise design to minimise impact on sensitive habitats, species and non-target species and disruption to land use.
4	Consideration of the timing and location of camera/monitoring equipment installation and removal activities will ensure that work is undertaken at the optimal time/location and that it will avoid/reduce interaction with sensitive species. Design of the programme and methodology will follow current good practise design to minimise impact on sensitive habitats, species and disruption to land use.

## 3. HABITATS REGULATIONS APPRAISAL PROCESS

### 3.1. LEGISLATIVE CONTEXT, GOVERNMENT POLICY AND GUIDANCE

#### 3.1.1. EU HABITATS DIRECTIVE

18. The EU Habitats Directive (Council Directive 92/43/EEC) and, by virtue of Article 7 of that Directive, also the Wild Birds Directive (Directive 2009/147/EC), termed jointly as the Nature Directives, seek to conserve particular natural habitats and wild species across the EU by, amongst other measures, establishing a network of sites (“European sites”); and a legal framework for species requiring strict protection (European protected species). The aim is to ensure the long-term survival of viable populations of Europe's most valuable and threatened species and habitats, to maintain and promote biodiversity.
19. The requirements concerning the authorisation of plans or projects which may adversely affect European sites are contained in Articles 6(3) and 6(4) of the (EU) Habitats Directive.
20. Articles 6(3) and 6(4) of the EU Habitats Directive specifically are transposed by the following regulations in the UK, collectively known as the Habitats Regulations (with the process known as a Habitats Regulations Appraisal (HRA)):
  - The Conservation (Natural Habitats, &c.) Regulations 1994;
  - The Conservation of Habitats and Species Regulations 2017 (including where applicable to specific reserved activities, including sections 36 and 37 of the Electricity Act 1989); and
  - The Conservation of Offshore Marine Habitats and Species Regulations 2017.
21. The relevant provisions for HRA in the different sets of Habitat Regulations are materially the same and there is no legal or practical need to differentiate between them in this submission. It is noted that the term HRA Regulations is used to refer to all three sets of Regulations.
22. Since the UK's withdrawal from the EU (European Union (Withdrawal) Act 2018 (as amended)), the HRA process implemented under the Habitats Regulations is subject to a few minor changes as defined by Scottish legislation (Scottish Government, 2020a) and guidance (DTA, 2021a: in draft). With designation of further ‘European sites’ in Scotland and with opinions on IROPI now carried out by the Scottish Ministers, the minor changes of relevance to the derogation case includes:
  - European sites in Scotland and the wider UK are termed “National sites” and are collectively termed the “National Site Network”, including those that formed part of the Natura 2000 network immediately before 31 December 2020 plus any subsequently designated by the Scottish Government;
  - Ramsar sites do not form part of the National Site Network in Scotland. However, protection of Ramsar features is achieved through co-designation of Ramsar sites with European sites and/or Sites of Special Scientific Interest (SSSI)
  - Whilst the Scottish Government (2020a) confirms EU guidance will be adhered to on meeting the management objectives for what is now the UK's National Site Network (the “Network Objectives”), further guidance is also available for the UK (Defra 2021a).
  - Section 6(2) of the EU (Withdrawal) Act 2018 (as amended) establishes that UK courts “may have regard to anything done by a EU entity [i.e., the EC]...so far as it is relevant”.
23. In Scotland and the UK, the Habitats Regulations define National sites as Special Areas of Conservation (SAC), Sites of Community Importance (SCI), candidate SACs and Special Protection Areas (SPAs). Potential SPAs (pSPAs) and possible SACs (pSACs) are also afforded the same protection as National sites by government policy in the National Marine Plan and Scottish Planning Policy (Scottish Government 2015; Scottish Government 2014).



24. Of additional note are recent rulings by the European Court of Justice (ECJ), referred to here as Sweetman II or ‘People over Wind’, and Holohan. The People over Wind ruling relates to how screening for potential LSE is carried out, specifically that mitigation cannot be taken into account at that stage (but remains applicable for the determination of adverse effect). The Holohan ruling relates to the importance of species and habitats which are not a reason for the designation of the site but are relevant to the conservation objectives of the site (e.g. prey items of a designated species). These recent examples of case law have helped to shape this HRA document.

### 3.2. THE HABITATS REGULATIONS ASSESSMENT PROCESS

25. The Habitats Regulations require that whenever a project that is not directly connected to, or necessary for the management of a European site, is likely to have a significant effect on the conservation objectives of the site (directly, indirectly, alone and/ or in-combination with other plans or projects), then an AA must be undertaken by the Competent Authority (e.g. Regulation 63 of the Conservation of Offshore Marine Habitats and Species Regulations 2017). The AA must be carried out before consent or authorisation can be given for the project.
26. The European Commission’s guidance on Planning for the Protection of European Sites: Appropriate Assessment (European Commission, 2001) identifies a staged process to the assessment of the effects of plans or projects on European sites. This process determines potential LSE and (where appropriate) assesses adverse impacts on the integrity of a European site, examines alternative solutions, and provides justification of IROPI (including compensatory measures). HRA includes a four-stage process, as summarised below:
- **HRA Stage 1 – Screening:** Screening for potential LSE (alone and/ or in-combination with other projects or plans);
  - **HRA Stage 2 – Appropriate Assessment:** Assessment of implications of identified potential LSEs, or if there is not enough information to rule out a risk of LSE, on the conservation objectives of a European site to ascertain if the proposal will adversely affect the integrity of a European site;
  - **HRA Stage 3 – Assessment of Alternatives:** Where it cannot be ascertained that the proposal will not adversely affect the integrity of a European site, alternative solutions must be considered; and
  - **HRA Stage 4 – Assessment of IROPI and compensatory measures:** Where it can be demonstrated that there are no alternative solutions to the project, the project may still be carried out if the competent authority is satisfied that the scheme must be carried out for IROPI.
27. All four stages of the process are referred to as the HRA to clearly distinguish the whole process from the one step within it referred to as the ‘AA’. The first stage (Screening) is intended to determine where there is a potential for a likely significant effect to occur on any designated sites and / or features. Where the Screening process concludes the potential for a LSE, then there is a requirement for an AA (Stage 2). Stage 1 Screening for the Proposed Development compensatory measures has identified the possibility of LSE for certain features and effects. The required Stage 2 AA will be conducted by the competent authority, with the information necessary to inform that assessment provided here in the RIAA.

### 3.3. APPROACH TO SCREENING (HRA STAGE 1)

#### 3.3.1. INTRODUCTION

28. The first stage to the HRA process is Screening, the process followed to identify LSE from the project, alone and or in-combination, on European sites of nature conservation importance.

29. For consideration of in-combination aspects, it is assumed for screening purposes that where LSE applies alone, that LSE applies in-combination. It is recognised that there remains the potential for an effect which does not result in potential LSE alone to contribute to a potential LSE in-combination.
30. An overview of the approach to this derogation case RIAA process is provided in Figure 2.

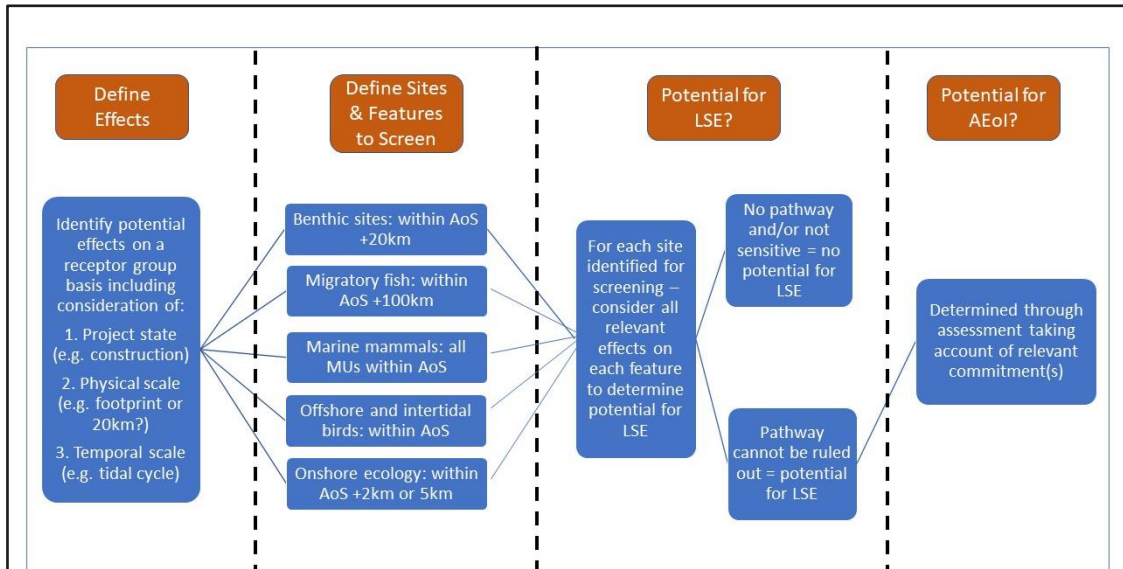


Figure 2: The derogation case RIAA Process

### 3.3.2. IDENTIFICATION OF POTENTIAL EFFECTS

31. Considerable experience and knowledge exists from practical conservation projects, with regard to the potential effects that may result from the proposed compensatory measures. This therefore provides a wealth of knowledge which can be drawn upon by the Applicant when identifying the potential effects that need to be considered through the screening process.
32. In addition, for a number of the designated sites, NatureScot has prepared site advice supporting documents, which are intended to help with site assessments and the impact of marine activity in sensitive areas. Specifically, the 'Conservation and Management Advice' documents are relevant here, as these identify the type of effect that specific features are sensitive to. All these sources of information have been drawn together to produce a list of effects that may result from each compensatory measure and that need to be taken into account when determining LSE for designated sites and features. The potential effects identified for each compensatory measure are detailed in Table 3.

**Table 3: Potential effects from the compensatory measures on relevant receptor types.**

Receptor Type	Potential Effect
Offshore and Intertidal Ornithology	Loss of prey resource provided by bycatch and discards from fishing vessels
Offshore and intertidal ornithology	Potential for disturbance from human activity due to eradication and immediate monitoring phase of the programme
	Potential for disturbance from human activity due to long-term monitoring phase of the programme
Onshore Ecology	Impacts to non-target species
	Potential for disturbance from human activity due to eradication, immediate monitoring, and long-term monitoring phase of the programme
Offshore and Intertidal Ornithology	Temporary disturbance during improvement of kittiwake nesting habitat
	Temporary disturbance through access for debris removal activities
	Temporary disturbance during camera/monitoring equipment installation and removal
Onshore Ecology	Temporary disturbance during improvement of kittiwake nesting habitat
	Temporary disturbance through access for debris removal activities
	Temporary disturbance during camera/monitoring installation and removal
Offshore and intertidal ornithology	Potential for disturbance from human activity due to eradication and immediate monitoring phase of the programme
	Potential for disturbance from human activity due to long-term monitoring phase of the programme
Onshore Ecology	Impacts to non-target species
	Potential for disturbance from human activity due to eradication, immediate monitoring, and long-term monitoring phase of the programme

### 3.3.3. IDENTIFICATION OF SITES AND FEATURES FOR SCREENING

33. In order to identify the sites to be considered for screening, the potential areas for each compensatory measure have been analysed using Geographic Information System (GIS mapping). The screening ranges applied below were selected on a highly precautionary basis based on the types of impacts identified following industry standards for large scale projects (i.e. offshore wind farms). Screening may alter for specific compensatory measures however these modifications in each case represent an appropriate highly precautionary basis and are explained within the relevant sections as appropriate. Sites have been identified by applying the following filters:

- Sites with Annex I features (designated benthic habitats) – within a 20 km buffer, as this is considered the worst-case maximum range to which proposed activities may interact with subtidal habitats;
- Sites with Annex II species (designated migratory fish feature and/or freshwater pearl mussel feature) - within 100 km buffer, as this is considered the worst-case maximum range that migratory fish species could move outside their respective SACs, to potentially interact with proposed activities;
- Sites with Annex II species (designated marine mammal feature) - where the relevant species Management Unit (MU) has physical overlap with the project area, as SAC feature marine mammals are protected beyond their respective SAC boundaries to within defined MUs;
- Sites with a designated seabird, wader or wildfowl feature (offshore and intertidal ornithology) - within an appropriate buffer dependent on the nature of the compensatory measure. For all measures aside from the management of SA4 sandeel fishery, a 5km buffer has been used, and this is considered highly precautionary based on the disturbance ranges considered within NatureScot Guidance for Scottish bird species (maximum range of 1 km for any species) (NatureScot, 2022) and these ranges are considered to incorporate supporting habitat as well. For the management of the SA4 sandeel fishery, the screening range is based on the mean-max foraging range (Woodward *et al.* 2019) so the range is species dependent; and
- Onshore – any sites with non-mobile features only within a 2 km buffer have been included as this is considered the worst-case maximum range to which proposed activities may interact with onshore habitats. An extended 5km buffer for sites with bird or bat features has been applied to account for supporting habitat for these mobile species. These buffers are considered highly precautionary considering the nature and scale of proposed land-based activities,

### 3.3.4. SCREENING FOR POTENTIAL LSE

34. The site identification process documented in Section 3.3 generated a list of designated sites and relevant features for which there is a need to consider LSE in relation to each compensatory measure. In addition, in Table 3, the likely effects that may result from all phases of each compensatory measure (and are relevant to the receptors being considered here) have been identified to enable these to be considered. The screening process combines that information for the project alone and presents the assessment of potential LSE to provide the necessary information for Stage 1 of the HRA process. Where LSE applies alone, it is assumed that LSE applies in-combination.

35. It should be noted that the effects identified above for each of the compensatory measures do not automatically correlate to a potential LSE with respect to one or more designated feature. For an effect to manifest, the receptor needs to be sensitive and there needs to be a pathway. The conclusions on Stage 1 screening, in relation to the identified sites and designated feature(s), are presented in Section 4 to Section 7 for each compensatory measure.

### 3.4. APPROACH TO APPROPRIATE ASSESSMENT (HRA STAGE 2)

36. Where the Screening process concludes the potential for a LSE, following the precautionary principle there is a requirement for an AA (Stage 2). Stage 1 Screening for the Proposed Development compensatory measures has identified the possibility of LSE for certain features and effects. Stage 2 involves the assessment of implications of identified potential LSEs on the conservation objectives of a European site to ascertain if the proposal will adversely affect the integrity of that site. The AA should also consider habitat types and species present outside the boundaries of that site and functionally linked; insofar as those implications are liable to affect the conservation objectives of the site. The required Stage 2 AA will be conducted by the competent authority, with the information necessary to inform that assessment provided within this document in Section 4 to Section 7 for each compensatory measure.
37. With respect to the assessment in-combination, it is assumed in accordance with the precautionary approach that where LSE applies alone then LSE applies in-combination (paragraph 29). Further, the potential contribution to LSE in-combination by the proposed measures could stem not only from those effects where potential LSE exists alone, but also potentially from an aspect of the proposed measure that is not significant when considered alone, but that may become potentially significant when considered in-combination. As such, where the potential exists for the proposed measure to contribute to potential LSE in-combination this has been considered.

## 4. HABITATS REGULATIONS ASSESSMENT – MANAGEMENT OF SA4 SANDEEL FISHERY

### 4.1. ASSESSMENT OF LSE

39. Screening for potential LSE considers the effects that may result from this compensatory measure, as defined in Table 3, in relation to the designated sites identified following the process described in Section 3.3. This section combines that information to determine the potential LSE for the project alone. Key to LSE is the clear presence or absence of a pathway, linking the effect to a designated site or feature, together with known sensitivity of the feature to the effect.
40. The presence or absence of a pathway is based on the scope and nature of the proposed compensatory measure activities together with the location of the designated feature, with the sensitivity of the feature(s) drawing on the relevant information available for the designated sites. Based on the nature of effects associated with this measure, screening has been undertaken based on a review of evidence to suggest which species may be significantly impacted. The species identified as being dependent on discards from fishing vessels are black-legged kittiwake, common gull, great black-backed gull, great skua, herring gull, lesser black-backed gull, Northern fulmar and Northern gannet (Camphuysen et. Al., 1995). Species-specific screening ranges based on the mean-max foraging range (Woodward et al., 2019) have been applied for this assessment to identify the potential sites that may be affected.
41. The conclusions for LSE for this compensatory measure are presented in Table 4. Where a potential LSE is identified, on a precautionary basis, it has been assumed by extension that there is the potential for LSE in-combination with other plans and projects.



**Table 4: Screening for LSE from the management of SA4 sandeel fishery compensatory measure**

Designated Site	Distance to measure (km)	Receptor Types	Features Identified for Screening	Effect to be screened for LSE	Consideration of Potential LSE	Conclusion of Potential LSE
Buchan Ness to Collieston Coast SPA	0	Offshore and intertidal ornithology	<i>Larus argentatus</i> ; <i>Rissa tridactyla</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
Copinsay SPA	0	Offshore and intertidal ornithology	<i>Larus marinus</i> ; <i>Rissa tridactyla</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
Coquet Island SPA	0	Offshore and intertidal ornithology	<i>Rissa tridactyla</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
East Caithness Cliffs SPA	0	Offshore and intertidal ornithology	<i>Larus argentatus</i> ; <i>Larus fuscus</i> ; <i>Larus marinus</i> ; <i>Rissa tridactyla</i> .	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE

Designated Site	Distance to measure (km)	Receptor Types	Features Identified for Screening	Effect to be screened for LSE	Consideration of Potential LSE	Conclusion of Potential LSE
Farne Islands SPA	0	Offshore and intertidal ornithology	<i>Rissa tridactyla</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
Firth of Forth SPA	0	Offshore and intertidal ornithology	<i>Rissa tridactyla</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
Forth Islands SPA	0	Offshore and intertidal ornithology	<i>Rissa tridactyla</i> ; <i>Larus argentatus</i> ; <i>Larus fuscus</i> ; <i>Morus bassanus</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
Forth Islands Ramsar	0	Offshore and intertidal ornithology	<i>Larus argentatus</i> ; <i>Larus fuscus</i> ; <i>Rissa tridactyla</i> .	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE

Designated Site	Distance to measure (km)	Receptor Types	Features Identified for Screening	Effect to be screened for LSE	Consideration of Potential LSE	Conclusion of Potential LSE
Fowlsheugh SPA	0	Offshore and intertidal ornithology	<i>Larus argentatus</i> ; <i>Rissa tridactyla</i> .	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
Hoy SPA	0	Offshore and intertidal ornithology	<i>Larus marinus</i> ; <i>Rissa tridactyla</i> ; <i>Stercorarius skua</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
North Caithness Cliffs SPA	0	Offshore and intertidal ornithology	<i>Rissa tridactyla</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
Northumberland Marine SPA	0	Offshore and intertidal ornithology	<i>Larus argentatus</i> ; <i>Larus marinus</i> ; <i>Rissa tridactyla</i> .	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE

Designated Site	Distance to measure (km)	Receptor Types	Features Identified for Screening	Effect to be screened for LSE	Consideration of Potential LSE	Conclusion of Potential LSE
Outer Firth of Forth and St Andrews Bay Complex SPA	0	Offshore and intertidal ornithology	<i>Larus argentatus</i> ; <i>Larus canus</i> ; <i>Rissa tridactyla</i> .	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
St Abb's Head to Fast Castle SPA	0	Offshore and intertidal ornithology	<i>Larus argentatus</i> ; <i>Rissa tridactyla</i> .	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
Teesmouth and Cleveland Coast SPA	0	Offshore and intertidal ornithology	<i>Larus argentatus</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
Teesmouth and Cleveland Coast Ramsar	0	Offshore and intertidal ornithology	<i>Larus argentatus</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
Troup, Pennan and Lion's Heads SPA	0	Offshore and intertidal ornithology	<i>Rissa tridactyla</i> ; <i>Larus argentatus</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE

Designated Site	Distance to measure (km)	Receptor Types	Features Identified for Screening	Effect to be screened for LSE	Consideration of Potential LSE	Conclusion of Potential LSE
Marwick Head SPA	10	Offshore and intertidal ornithology	<i>Rissa tridactyla</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
Rousay SPA	18	Offshore and intertidal ornithology	<i>Rissa tridactyla</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
Calf of Eday SPA	23	Offshore and intertidal ornithology	<i>Larus marinus</i> ; <i>Rissa tridactyla</i> .	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
Flamborough & Filey Coast SPA	26	Offshore and intertidal ornithology	<i>Rissa tridactyla</i> ; <i>Morus bassanus</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
West Westray SPA	29	Offshore and intertidal ornithology	<i>Rissa tridactyla</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
Cape Wrath SPA	46	Offshore and	<i>Rissa tridactyla</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and	LSE

Designated Site	Distance to measure (km)	Receptor Types	Features Identified for Screening	Effect to be screened for LSE	Consideration of Potential LSE	Conclusion of Potential LSE
		intertidal ornithology			Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	
Fair Isle SPA	54	Offshore and intertidal ornithology	<i>Rissa tridactyla</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
Handa SPA	64	Offshore and intertidal ornithology	<i>Rissa tridactyla</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
Sumburgh Head SPA	93	Offshore and intertidal ornithology	<i>Rissa tridactyla</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
North Rona and Sula Sgeir SPA	102	Offshore and intertidal ornithology	<i>Rissa tridactyla</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
Shiant Isles SPA	111	Offshore and intertidal ornithology	<i>Rissa tridactyla</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
Ailsa Craig SPA	119	Offshore and	<i>Morus bassanus</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and	LSE



Designated Site	Distance to measure (km)	Receptor Types	Features Identified for Screening	Effect to be screened for LSE	Consideration of Potential LSE	Conclusion of Potential LSE
		intertidal ornithology			Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	
Foula SPA	122	Offshore and intertidal ornithology	<i>Rissa tridactyla</i> ; <i>Stercorarius skua</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
Noss SPA	124	Offshore and intertidal ornithology	<i>Morus bassanus</i> ; <i>Rissa tridactyla</i> ; <i>Stercorarius skua</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
The Wash SPA	175	Offshore and intertidal ornithology	<i>Larus fuscus</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
Fetlar SPA	172	Offshore and intertidal ornithology	<i>Stercorarius skua</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
Flannan Isles SPA	187	Offshore and intertidal ornithology	<i>Rissa tridactyla</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and	LSE

Designated Site	Distance to measure (km)	Receptor Types	Features Identified for Screening	Effect to be screened for LSE	Consideration of Potential LSE	Conclusion of Potential LSE
					Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	
Hermaness, Saxa Vord and Valla Field SPA	191	Offshore and intertidal ornithology	<i>Rissa tridactyla</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
St Kilda SPA	238	Offshore and intertidal ornithology	<i>Morus bassanus</i> ; <i>Rissa tridactyla</i> ; <i>Stercorarius skua</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
Horn Head to Fanad Head SPA	259	Offshore and intertidal ornithology	<i>Fulmarus glacialis</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
Alde-Ore Estuary SPA	278	Offshore and intertidal ornithology	<i>Larus fuscus</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
Alde-Ore Estuary Ramsar	278	Offshore and intertidal ornithology	<i>Larus fuscus</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE

Designated Site	Distance to measure (km)	Receptor Types	Features Identified for Screening	Effect to be screened for LSE	Consideration of Potential LSE	Conclusion of Potential LSE
Tory Island SPA	293	Offshore and intertidal ornithology	<i>Fulmarus glacialis</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
West Donegal Coast SPA	306	Offshore and intertidal ornithology	<i>Fulmarus glacialis</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
Lambay Island SPA	316	Offshore and intertidal ornithology	<i>Fulmarus glacialis</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
Grassholm SPA	422	Offshore and intertidal ornithology	<i>Morus bassanus</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
Saltee Islands SPA	446	Offshore and intertidal ornithology	<i>Fulmarus glacialis</i> ; <i>Morus bassanus</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
Duvillaun Islands SPA	462	Offshore and intertidal ornithology	<i>Fulmarus glacialis</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE

Designated Site	Distance to measure (km)	Receptor Types	Features Identified for Screening	Effect to be screened for LSE	Consideration of Potential LSE	Conclusion of Potential LSE
Clare Island SPA	468	Offshore and intertidal ornithology	<i>Fulmarus glacialis</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
Cliffs of Moher SPA	498	Offshore and intertidal ornithology	<i>Fulmarus glacialis</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
Kerry Head SPA	555	Offshore and intertidal ornithology	<i>Fulmarus glacialis</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
Dingle Peninsula SPA	584	Offshore and intertidal ornithology	<i>Fulmarus glacialis</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
Iveragh Peninsula	603	Offshore and intertidal ornithology	<i>Fulmarus glacialis</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
Blasket Islands SPA	620	Offshore and intertidal ornithology	<i>Fulmarus glacialis</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE

Designated Site	Distance to measure (km)	Receptor Types	Features Identified for Screening	Effect to be screened for LSE	Consideration of Potential LSE	Conclusion of Potential LSE
Beara Peninsula SPA	630	Offshore and intertidal ornithology	<i>Fulmarus glacialis</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
Puffin Island SPA	639	Offshore and intertidal ornithology	<i>Fulmarus glacialis</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE
Skelligs SPA	648	Offshore and intertidal ornithology	<i>Fulmarus glacialis</i> ; <i>Morus bassanus</i>	Loss of prey resource provided by bycatch and discards from fishing vessels	Due to the proximity to the site and the use of sandeel discards as a food source (Oro 1999; Furness and Tasker, 2000; Voiter et al., 2004), there is a pathway for effect.	LSE

## 4.2. ASSESSMENT OF ADVERSE EFFECT ALONE – INFORMATION TO INFORM APPROPRIATE ASSESSMENT

42. Where the potential for LSE on a European site(s) has been identified (Table 4), following the precautionary principle there is a requirement to consider whether that potential effect(s) will adversely affect the integrity of the site in view of its conservation objectives. LSE applies where a feature is known to be sensitive to the effect and a potential pathway cannot be discounted.
43. The assessment of AEoI to inform the AA for the management of SA4 sandeel fishery compensatory measure is presented in Table 5; the table details all designated sites, features and effects for which LSE has been identified, proposes appropriate commitments (mitigation) that could be applied to avoid or reduce the impacts (Table 2), and provides conclusions on whether there is potential for AEoI after the application of these commitments for the project alone. This assessment has been undertaken in view of all relevant conservation objectives published by the statutory nature conservation bodies.

**Table 5: Assessment of AEoI Alone for the management of SA4 sandeel fishery compensatory measure**

Designated Site	Features	Effect	Relevant Commitment	Potential for AEoI
Buchan Ness to Collieston Coast SPA	<ul style="list-style-type: none"> <li>• <i>Larus argentatus</i>;</li> <li>• <i>Rissa tridactyla</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Copinsay SPA	<ul style="list-style-type: none"> <li>• <i>Larus marinus</i>;</li> <li>• <i>Rissa tridactyla</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Coquet Island SPA	<ul style="list-style-type: none"> <li>• <i>Rissa tridactyla</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.



Designated Site	Features	Effect	Relevant Commitment	Potential for AEoI
East Caithness Cliffs SPA	<ul style="list-style-type: none"> <li>• <i>Larus argentatus</i>;</li> <li>• <i>Larus fuscus</i>;</li> <li>• <i>Larus marinus</i>;</li> <li>• <i>Rissa tridactyla</i>.</li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Farne Islands SPA	<ul style="list-style-type: none"> <li>• <i>Rissa tridactyla</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Firth of Forth SPA	<ul style="list-style-type: none"> <li>• <i>Rissa tridactyla</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Forth Islands SPA	<ul style="list-style-type: none"> <li>• <i>Rissa tridactyla</i>;</li> <li>• <i>Larus argentatus</i>;</li> <li>• <i>Larus fuscus</i>;</li> </ul>	Loss of prey resource provided by bycatch and	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the

Designated Site	Features	Effect	Relevant Commitment	Potential for AEoI
	<ul style="list-style-type: none"> <li><i>Morus bassanus</i></li> </ul>	discards from fishing vessels		loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Forth Islands Ramsar	<ul style="list-style-type: none"> <li><i>Larus argentatus</i>;</li> <li><i>Larus fuscus</i>;</li> <li><i>Rissa tridactyla</i>.</li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Fowlsheugh SPA	<ul style="list-style-type: none"> <li><i>Larus argentatus</i>;</li> <li><i>Rissa tridactyla</i>.</li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Hoy SPA	<ul style="list-style-type: none"> <li><i>Larus marinus</i>;</li> <li><i>Rissa tridactyla</i>;</li> <li><i>Stercorarius skua</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea

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				concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
North Caithness Cliffs SPA	<ul style="list-style-type: none"> <li><i>Rissa tridactyla</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Northumberland Marine SPA	<ul style="list-style-type: none"> <li><i>Larus argentatus;</i></li> <li><i>Larus marinus;</i></li> <li><i>Rissa tridactyla.</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Outer Firth of Forth and St Andrews Bay Complex SPA	<ul style="list-style-type: none"> <li><i>Larus argentatus;</i></li> <li><i>Larus canus;</i></li> <li><i>Rissa tridactyla.</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.

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St Abb's Head to Fast Castle SPA	<ul style="list-style-type: none"> <li><i>Larus argentatus</i>;</li> <li><i>Rissa tridactyla</i>.</li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Teesmouth and Cleavland Coast SPA	<ul style="list-style-type: none"> <li><i>Larus argentatus</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Teesmouth and Cleavland Coast Ramsar	<ul style="list-style-type: none"> <li><i>Larus argentatus</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Troup, Pennan and Lion's Heads SPA	<ul style="list-style-type: none"> <li><i>Rissa tridactyla</i>;</li> <li><i>Larus argentatus</i></li> </ul>	Loss of prey resource provided by bycatch and	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the

Designated Site	Features	Effect	Relevant Commitment	Potential for AEoI
		discards from fishing vessels		loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Marwick Head SPA	<ul style="list-style-type: none"> <li><i>Rissa tridactyla</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Rousay SPA	<ul style="list-style-type: none"> <li><i>Rissa tridactyla</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Calf of Eday SPA	<ul style="list-style-type: none"> <li><i>Larus marinus</i>;</li> <li><i>Rissa tridactyla</i>.</li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea

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				concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Flamborough & Filey Coast SPA	<ul style="list-style-type: none"> <li><i>Rissa tridactyla</i>;</li> <li><i>Morus bassanus</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
West Westray SPA	<ul style="list-style-type: none"> <li><i>Rissa tridactyla</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Cape Wrath SPA	<ul style="list-style-type: none"> <li><i>Rissa tridactyla</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.



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Fair Isle SPA	<ul style="list-style-type: none"> <li><i>Rissa tridactyla</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Handa SPA	<ul style="list-style-type: none"> <li><i>Rissa tridactyla</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Sumburgh Head SPA	<ul style="list-style-type: none"> <li><i>Rissa tridactyla</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
North Rona and Sula Sgeir SPA	<ul style="list-style-type: none"> <li><i>Rissa tridactyla</i></li> </ul>	Loss of prey resource provided by bycatch and	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the



Designated Site	Features	Effect	Relevant Commitment	Potential for AEoI
		discards from fishing vessels		loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Shiant Isles SPA	<ul style="list-style-type: none"> <li><i>Rissa tridactyla</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Ailsa Craig SPA	<ul style="list-style-type: none"> <li><i>Morus bassanus</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Foula SPA	<ul style="list-style-type: none"> <li><i>Rissa tridactyla</i>;</li> <li><i>Stercorarius skua</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea

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				concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Noss SPA	<ul style="list-style-type: none"> <li>• <i>Morus bassanus</i>;</li> <li>• <i>Rissa tridactyla</i>;</li> <li>• <i>Stercorarius skua</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
The Wash SPA	<ul style="list-style-type: none"> <li>• <i>Larus fuscus</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Fetlar SPA	<ul style="list-style-type: none"> <li>• <i>Stercorarius skua</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.

Designated Site	Features	Effect	Relevant Commitment	Potential for AEoI
Flannan Isles SPA	<ul style="list-style-type: none"> <li><i>Rissa tridactyla</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Hermaness, Saxa Vord and Valla Field SPA	<ul style="list-style-type: none"> <li><i>Rissa tridactyla</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
St Kilda SPA	<ul style="list-style-type: none"> <li><i>Morus bassanus</i>;</li> <li><i>Rissa tridactyla</i>;</li> <li><i>Stercorarius skua</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Horn Head to Fanad Head SPA	<ul style="list-style-type: none"> <li><i>Fulmarus glacialis</i></li> </ul>	Loss of prey resource provided by bycatch and	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the

Designated Site	Features	Effect	Relevant Commitment	Potential for AEoI
		discards from fishing vessels		loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Alde-Ore Estuary SPA	<ul style="list-style-type: none"> <li><i>Larus fuscus</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Alde-Ore Estuary Ramsar	<ul style="list-style-type: none"> <li><i>Larus fuscus</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Tory Island SPA	<ul style="list-style-type: none"> <li><i>Fulmarus glacialis</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea

Designated Site	Features	Effect	Relevant Commitment	Potential for AEoI
				concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
West Donegal Coast SPA	<ul style="list-style-type: none"> <li><i>Fulmarus glacialis</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Lambay Island SPA	<ul style="list-style-type: none"> <li><i>Fulmarus glacialis</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Grassholm SPA	<ul style="list-style-type: none"> <li><i>Morus bassanus</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.

Designated Site	Features	Effect	Relevant Commitment	Potential for AEoI
Saltee Islands SPA	<ul style="list-style-type: none"> <li><i>Fulmarus glacialis</i>;</li> <li><i>Morus bassanus</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Duvillaun Islands SPA	<ul style="list-style-type: none"> <li><i>Fulmarus glacialis</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Clare Island SPA	<ul style="list-style-type: none"> <li><i>Fulmarus glacialis</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Cliffs of Moher SPA	<ul style="list-style-type: none"> <li><i>Fulmarus glacialis</i></li> </ul>	Loss of prey resource provided by bycatch and	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the



Designated Site	Features	Effect	Relevant Commitment	Potential for AEoI
		discards from fishing vessels		loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Kerry Head SPA	<ul style="list-style-type: none"> <li><i>Fulmarus glacialis</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Dingle Peninsula SPA	<ul style="list-style-type: none"> <li><i>Fulmarus glacialis</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Iveragh Peninsula	<ul style="list-style-type: none"> <li><i>Fulmarus glacialis</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea



Designated Site	Features	Effect	Relevant Commitment	Potential for AEoI
				concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Basket Islands SPA	<ul style="list-style-type: none"> <li><i>Fulmarus glacialis</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Beara Peninsula SPA	<ul style="list-style-type: none"> <li><i>Fulmarus glacialis</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.
Puffin Island SPA	<ul style="list-style-type: none"> <li><i>Fulmarus glacialis</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.

Designated Site	Features	Effect	Relevant Commitment	Potential for AEoI
Skelligs SPA	<ul style="list-style-type: none"> <li><i>Fulmarus glacialis</i>;</li> <li><i>Morus bassanus</i></li> </ul>	Loss of prey resource provided by bycatch and discards from fishing vessels	N/a	While discards from fisheries can be of importance to the features at this site, it is considered that improving sandeel abundance has a significant longer term influence on seabird populations and improved sandeel stock is likely therefore to be more sustainable and of greater long term significance to the seabird populations than the loss of discards within the North Sea (Votier et al., 2004). Furthermore, discards of fish species subject to quotas has been banned since 2019 (MMO, 2018) and therefore sandeel has not been discarded within the North Sea since this date. Additionally, previous endeavours to close the sandeel fishery in the North Sea concluded that closures have a beneficial impact on top predators (Daunt et al., 2007), on this basis it can be concluded that the proposed compensatory measure alone will not have an AEoI of this site.

### 4.3. ASSESSMENT OF ADVERSE EFFECT IN-COMBINATION – INFORMATION TO INFORM APPROPRIATE ASSESSMENT

44. Based on the nature and scale of effects associated with the management of SA4 sandeel fishery compensatory measure, the scope of plans and projects to consider under the in-combination assessment is those that have the potential to act in-combination with the proposed measures to result in AEOI on any European sites. The search for plans and projects spanned a significant number of plans and projects that qualify for consideration, which can be grouped as follows:
- Oil and gas ;
  - Cables and pipelines;
  - Offshore wind farms;
  - Tidal energy;
  - Wave energy projects; and
  - Seismic / geophysical surveys.
45. Following the approach to the assessment outlined above, it is not considered that any plan or project considered within these categories has the potential to contribute in a meaningful way to a reduction in discards (i.e. a prey resource for seabird features). Therefore, these projects are not considered further. On this basis it can be concluded that the proposed measure will not result in an AEOI on any European site in-combination with other plans and projects. .

## 5. HABITATS REGULATIONS ASSESSMENT - RAT ERADICATION: HANDA

### 5.1. ASSESSMENT FOR LSE

46. Screening for LSE considers the effects that may result from the rat eradication: Handa compensatory measure, as defined in Table 3, in relation to the designated sites identified following the process described in Section 3.3. This section combines that information to determine LSE for the project alone. Key to LSE is the clear presence or absence of a pathway, linking the effect to a designated site or feature, together with known sensitivity of the feature to the effect.
47. The presence or absence of a pathway is based on the scope and nature of the proposed compensatory measure activities together with the location of the designated feature, with the sensitivity of the feature(s) drawing on the relevant information available for the designated sites.
48. For ornithological receptors, for the rat eradication: Handa compensatory measure, birds nesting at other breeding colonies within foraging range of Handa island are unlikely to be impacted by disturbance as they will be spending their time rafting/ fishing at sea or at their nests at other colonies. Additionally, during the non-breeding season, seabirds are not restricted to particular sites as they are during the breeding season, therefore any disturbance caused by monitoring is unlikely to cause significant negative effects on individuals. Additionally, NatureScot Guidance for Scottish bird species considers that the maximum range of disturbance for any bird species is 1 km (NatureScot, 2022). Therefore, factoring in the above, the nature of effects associated with this measure, and the application of expert judgement, a highly precautionary screening buffer of 5 km has been applied to this assessment.
49. Additionally, there are no SACs within the screening range for Onshore Ecology receptors, and therefore there is considered to be no LSE for the Onshore Ecology receptor group and it is not considered further within this assessment for this compensatory measure.
50. The conclusions for LSE are presented in Table 6 for the rat eradication: Handa compensatory measure. Where a potential LSE is identified, on a precautionary basis, it has been assumed by extension that there is the potential for LSE in-combination with other plans and projects.

**Table 6: Screening for LSE from the rat eradication: Handa compensatory measure**

Designated Site	Distance to measure (km)	Receptor Types	Features Identified for Screening	Relevant effect(s)	Consideration of Potential LSE	Conclusion of Potential LSE
Handa SPA	0.0	Offshore and Intertidal Ornithology	<ul style="list-style-type: none"> <li>• <i>Uria aalge</i>;</li> <li>• <i>Alca torda</i>;</li> <li>• <i>Stercorarius skua</i>;</li> <li>• <i>Rissa tridactyla</i>; and</li> <li>• <i>Fulmarus glacialis</i>.</li> </ul>	<p>Potential for disturbance from human activity due to eradication and immediate monitoring phase of the programme</p> <hr/> <p>Potential for disturbance from human activity due to long-term monitoring phase of the programme</p>	Due to proximity to the site, there is a potential for connectivity.	LSE

## 5.2. ASSESSMENT OF ADVERSE EFFECT ALONE – INFORMATION TO INFORM APPROPRIATE ASSESSMENT

51. Where the potential for LSE on a European site(s) has been identified (Table 6), following the precautionary principle is a requirement to consider whether that potential effect(s) will adversely affect the integrity of the site in view of its conservation objectives. LSE applies where a feature is known to be sensitive to the effect and a potential pathway cannot be discounted.
52. The assessment of AEoI to inform the AA for the rat eradication: Handa compensatory measure is presented in Table 7; the table details all designated sites, features and effects for which LSE has been identified, proposes appropriate commitments (mitigation) that could be applied to avoid or reduce the impacts (Table 2), and conclusions on whether there is potential for AEoI after the application of these commitments for the project alone. This assessment has been undertaken in view of all relevant conservation objectives published by the statutory nature conservation bodies.

**Table 7: Assessment of AEol Alone for the rat eradication: Handa compensatory measure**

Designated Site	Features	Effect	Relevant Commitment	Potential for AEol
Handa SPA	<ul style="list-style-type: none"> <li>• <i>Uria aalge</i>;</li> <li>• <i>Alca torda</i>;</li> <li>• <i>Stercorarius skua</i>;</li> <li>• <i>Rissa tridactyla</i>; and</li> <li>• <i>Fulmarus glacialis</i>.</li> </ul>	Potential for disturbance from human activity due to eradication and immediate monitoring phase of the programme	Commitment 1	The baiting and immediate monitoring of traps will be undertaken in the winter period, therefore avoiding the breeding season and ensuring that the spatial extent of disturbance would be small, with any disturbance from human presence being temporary and short-term. The temporal extent is also anticipated to be small, with any disturbance caused being temporary (typically in terms of hours). Additionally, during the non-breeding season, seabirds are not restricted to particular sites, as they are during the breeding season. Therefore, factoring in the small spatial and temporal extent and expert guidance, it can be concluded that any disturbance caused by monitoring will not cause adverse effects on individuals. Therefore, it can be ascertained that there will be <b>no AEol alone</b> .
		Potential for disturbance from human activity due to long-term monitoring phase of the programme	Commitment 2	The long-term monitoring of traps will be undertaken every four-weeks over a two year period. The spatial extent of disturbance would be small, with any disturbance from human presence being temporary and short-term. The temporal extent is also anticipated to be small, with any disturbance caused being temporary (typically in terms of hours). Kittiwake are often found in and around human population centres, and as species and populations that are regularly around humans, it is considered that they have an increased level of resilience to human disturbance, especially on Handa island where there are approximately 9,000 visitors to the site per year. Combined with the low levels of bird populations on the island (as outlined in the Derogation Case), it can therefore be ascertained that there will be <b>no AEol alone</b> .



### **5.3. ASSESSMENT OF ADVERSE EFFECT IN-COMBINATION – INFORMATION TO INFORM APPROPRIATE ASSESSMENT**

53. As the potential effects are exceedingly small in nature, no effects are anticipated further afield than Handa Island itself, and therefore the screening undertaken for plans and projects to be considered in-combination is limited to those with direct spatial overlap with the proposed compensatory measures.
54. Following on from the above methodology, no projects have been identified for the consideration of in-combination effects. Therefore it can be concluded that this compensatory measure will not have an AEIO on any European site alone and in-combination with other plans and projects.

## 6. HABITATS REGULATIONS ASSESSMENT – DUNBAR CASTLE WARDENING ROLE

### 6.1. ASSESSMENT OF LSE

55. Screening for potential LSE considers the effects that may result from this compensatory measure, as defined in Table 3, in relation to the designated sites identified following the process described in Section 3.3. This section combines that information to determine the potential LSE for the project alone. The key to LSE is the clear presence or absence of a pathway, linking the effect to a designated site or feature, together with known sensitivity of the feature to the effect.
56. The presence or absence of a pathway is based on the scope and nature of the proposed compensatory measure activities together with the location of the designated feature, with the sensitivity of the feature(s) drawing on the relevant information available for the designated sites.
57. For ornithological receptors, birds nesting at other breeding colonies within foraging range of the compensatory measure are unlikely to be impacted by disturbance as they will be spending the majority of the time rafting/ fishing at sea or at their nests at other colonies. Additionally, during the non-breeding season, seabirds are not restricted to particular sites as they are during the breeding season, therefore any disturbance caused by monitoring is unlikely to cause adverse effects on individuals. Additionally, NatureScot Guidance for Scottish bird species considers that the maximum range of disturbance for any bird species is 1 km (NatureScot, 2022). Therefore, factoring in the above, the nature of effects associated with this measure, and the application of expert judgement, a highly precautionary screening buffer of 5 km has been applied to this assessment.
58. There are no SACs within the screening range for Onshore Ecology receptors, and therefore there is considered to be no LSE for the Onshore Ecology receptor group and it is not considered further within this assessment.
59. The conclusions for LSE are presented in Table 8. Where a potential LSE is identified, on a precautionary basis, it has been assumed by extension that there is the potential for LSE in-combination with other plans and projects.

**Table 8: Screening for LSE from the Dunbar Castle wardening role compensatory measure**

Designated Site	Distance to measure (km)	Receptor Types	Features Identified for Screening	Effect	Consideration of Potential LSE	Conclusion of Potential LSE
Firth of Forth SPA	0.0	Offshore and Intertidal Ornithology	<ul style="list-style-type: none"> <li>• <i>Anas penelope</i>;</li> <li>• <i>Anas platyrhynchos</i>;</li> <li>• <i>Answer brachyrhynchus</i>;</li> <li>• <i>Arenaria interpres</i>;</li> <li>• <i>Aythya marila</i>;</li> <li>• <i>Bucephala clangula</i>;</li> <li>• <i>Calidris alpina alpina</i>;</li> <li>• <i>Calidris canutus</i>;</li> <li>• <i>Charadrius hiaticula</i>;</li> <li>• <i>Clangula hyemalis</i>;</li> <li>• <i>Gavia stellata</i>;</li> <li>• <i>Haematopus ostralegus</i>;</li> <li>• <i>Limosa lapponica</i>;</li> <li>• <i>Melanitta fusca</i>;</li> <li>• <i>Melanitta nigra</i>;</li> <li>• <i>Mergus serrator</i>;</li> <li>• <i>Numenius arquata</i>;</li> <li>• <i>Phalacrocorax carbo</i>;</li> <li>• <i>Pluvialis apricaria</i>;</li> <li>• <i>Pluvialis squatarola</i>;</li> <li>• <i>Podiceps auratus</i>;</li> <li>• <i>Podiceps cristatus</i>;</li> <li>• <i>Somateria mollissima</i>;</li> <li>• <i>Sterna sandvicensis</i>;</li> <li>• <i>Tadorana tadorna</i>;</li> <li>• <i>Tringa totanus</i>; and</li> <li>• <i>Vanellus vanellus</i>.</li> </ul>	<p>Temporary disturbance during improvement of kittiwake nesting habitat</p> <hr/> <p>Temporary disturbance through access for debris removal activities</p> <hr/> <p>Temporary disturbance during camera/monitoring equipment installation and removal</p>	Due to proximity to the site, there is a potential for connectivity.	LSE
Firth of Forth Ramsar	0.0	Offshore and Intertidal Ornithology	<ul style="list-style-type: none"> <li>• <i>Answer brachyrhynchus</i>;</li> <li>• <i>Calidris canutus islandica</i>;</li> </ul>	Temporary disturbance during improvement of kittiwake nesting habitat	Due to proximity to the site, there is a	LSE

Designated Site	Distance to measure (km)	Receptor Types	Features Identified for Screening	Effect	Consideration of Potential LSE	Conclusion of Potential LSE
			<ul style="list-style-type: none"> <li>• <i>Limosa lapponica</i>;</li> <li>• <i>Podiceps auratus</i>; and</li> <li>• <i>Tringa totanus totanus</i>;</li> </ul>	<p>Temporary disturbance through access for debris removal activities</p> <hr/> <p>Temporary disturbance during camera/monitoring equipment installation and removal</p>	potential for connectivity.	
Outer Firth of Forth and St Andrews Bay Complex SPA	0.0	Offshore and Intertidal Ornithology	<ul style="list-style-type: none"> <li>• <i>Alca torda</i>;</li> <li>• <i>Bucephala clangula</i>;</li> <li>• <i>Clangula hyemalis</i>;</li> <li>• <i>Fratercula arctica</i>;</li> <li>• <i>Gavia stellata</i>;</li> <li>• <i>Larus argentatus</i>;</li> <li>• <i>Larus canus</i>;</li> <li>• <i>Larus minutus</i>;</li> <li>• <i>Larus ridibundus</i>;</li> <li>• <i>Melanitta fusca</i>;</li> <li>• <i>Melanitta nigra</i>;</li> <li>• <i>Mergus serrator</i>;</li> <li>• <i>Morus bassanus</i>;</li> <li>• <i>Phalacrocorax aristotelis</i>;</li> <li>• <i>Podiceps auratus</i>;</li> <li>• <i>Puffinus puffinus</i>;</li> <li>• <i>Rissa tridactyla</i>;</li> <li>• <i>Somateria mollissima</i>;</li> <li>• <i>Sterna hirundo</i>;</li> <li>• <i>Sterna paradisaea</i>;</li> <li>• <i>Uria aalge</i>; and</li> <li>• <i>Breeding Seabird Assemblage</i>.</li> </ul>	<p>Temporary disturbance during improvement of kittiwake nesting habitat</p> <hr/> <p>Temporary disturbance through access for debris removal activities</p> <hr/> <p>Temporary disturbance during camera/monitoring equipment installation and removal</p>	Due to proximity to the site, there is a potential for connectivity.	LSE

## 6.2. ASSESSMENT OF ADVERSE EFFECT ALONE – INFORMATION TO INFORM APPROPRIATE ASSESSMENT

60. Where the potential for LSE on a European site(s) has been identified (Table 8), following the precautionary principle is a requirement to consider whether that potential effect(s) will adversely affect the integrity of the site in view of its conservation objectives. LSE applies where a feature is known to be sensitive to the effect and a potential pathway cannot be discounted.
61. The assessment of AEoI to inform the AA for the Dunbar Castle wardening role compensatory measure is presented in Table 9; the table details all designated sites, features and effects for which LSE has been identified, proposes appropriate commitments (mitigation) that could be applied to avoid or reduce the impacts (Table 2), and provides conclusions on whether there is potential for AEoI after the application of these commitments for the project alone. This assessment has been undertaken in view of all relevant conservation objectives published by the statutory nature conservation bodies.

**Table 9: Assessment of AEol Alone for Dunbar Castle wardening role compensatory measure**

Designated Site	Features	Compensatory Measure Phase			Effect	Relevant Commitment	Potential for AEol	
		C	O&M	D				
Firth of Forth SPA	<ul style="list-style-type: none"> <li>• <i>Anas penelope</i>;</li> <li>• <i>Anas platyrhynchos</i>;</li> <li>• <i>Answer brachyrhynchus</i>;</li> <li>• <i>Arenaria interpres</i>;</li> <li>• <i>Aythya marila</i>;</li> <li>• <i>Bucephala clangula</i>;</li> <li>• <i>Calidris alpina alpina</i>;</li> <li>• <i>Calidris canutus</i>;</li> <li>• <i>Charadrius hiaticula</i>;</li> <li>• <i>Clangula hyemalis</i>;</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Gavia stellata</i>;</li> <li>• <i>Haematopus ostralegus</i>;</li> <li>• <i>Limosa lapponica</i>;</li> <li>• <i>Melanitta fusca</i>;</li> <li>• <i>Melanitta nigra</i>;</li> <li>• <i>Mergus serrator</i>;</li> <li>• <i>Numenius arquata</i>;</li> <li>• <i>Phalacrocorax carbo</i>;</li> <li>• <i>Pluvialis apricaria</i>;</li> <li>• <i>Pluvialis squatarola</i>;</li> <li>• <i>Podiceps auratus</i>;</li> <li>• <i>Podiceps cristatus</i>;</li> <li>• <i>Somateria mollissima</i>;</li> <li>• <i>Sterna sandvicensis</i>;</li> <li>• <i>Tadorana tadorna</i>;</li> </ul>				Temporary disturbance during improvement of kittiwake nesting habitat	Commitment 3	Following best practice guidelines (including implementation of commitments) and examples set from other projects proposing similar measures, during the breeding season, activities at Dunbar Castle will not be undertaken in a way that disturbs breeding seabirds. Therefore, birds nesting at the site will not be adversely impacted. Additionally, during the non-breeding season, seabirds are not restricted to particular sites, as they are during the breeding season. Therefore, factoring in the small spatial and temporal extent and expert guidance, it can be concluded that any disturbance caused will not cause adverse effects on individuals. Therefore, it can be ascertained that there will be <b>no AEol alone</b> .
						Temporary disturbance through access for debris removal activities	Commitment 4	
			✓	✓	✓	Temporary disturbance during camera/monitoring equipment installation and removal	Commitment 5	

Designated Site	Features	Compensatory Measure Phase			Effect	Relevant Commitment	Potential for AEol
		C	O&M	D			
							<ul style="list-style-type: none"> <li>• <i>Tringa totanus</i>; and</li> <li>• <i>Vanellus vanellus</i>.</li> </ul>
Firth of Forth Ramsar	<ul style="list-style-type: none"> <li>• <i>Answer brachyrhynchus</i>;</li> <li>• <i>Calidris canutus islandica</i>;</li> <li>• <i>Limosa lapponica lapponica</i>;</li> <li>• <i>Podiceps auratus</i>; and</li> <li>• <i>Tringa totanus totanus</i>;</li> </ul>				Temporary disturbance during improvement of kittiwake nesting habitat	Commitment 3	Following best practice guidelines (including implementation of commitments) and examples set from other projects proposing similar measures, during the breeding season, activities at Dunbar Castle will not be undertaken in a way that disturbs breeding seabirds. Therefore, birds nesting at the site will not be adversely impacted. Additionally, during the non-breeding season, seabirds are not restricted to particular sites, as they are during the breeding season therefore any disturbance caused by activities is unlikely to cause adverse effects on individuals. Therefore, it can be ascertained that there will be <b>no AEol alone</b> .
					Temporary disturbance through access for debris removal activities	Commitment 3	
		✓	✓	✓	Temporary disturbance during camera/monitoring equipment installation/removal	Commitment 4	



Designated Site	Features	Compensatory Measure Phase			Effect	Relevant Commitment	Potential for AEol	
		C	O&M	D				
Outer Firth of Forth and St Andrews Bay Complex SPA	<ul style="list-style-type: none"> <li>• <i>Alca torda</i>;</li> <li>• <i>Bucephala clangula</i>;</li> <li>• <i>Clangula hyemalis</i>;</li> <li>• <i>Fratercula arctica</i>;</li> <li>• <i>Gavia stellata</i>;</li> <li>• <i>Larus argentatus</i>;</li> <li>• <i>Larus canus</i>;</li> <li>• <i>Larus minutus</i>;</li> <li>• <i>Larus ridibundus</i>;</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Melanitta fusca</i>;</li> <li>• <i>Melanitta nigra</i>;</li> <li>• <i>Mergus serrator</i>;</li> <li>• <i>Morus bassanus</i>;</li> <li>• <i>Phalacrocorax aristotelis</i>;</li> <li>• <i>Podiceps auratus</i>;</li> <li>• <i>Puffinus puffinus</i>;</li> <li>• <i>Rissa tridactyla</i>;</li> <li>• <i>Somateria mollissima</i>;</li> <li>• <i>Sterna hirundo</i>;</li> <li>• <i>Sterna paradisaea</i>;</li> <li>• <i>Uria aalge</i>; and</li> <li>• <i>Breeding Seabird Assemblage</i>.</li> </ul>	✓	✓	✓	<p>Temporary disturbance during improvement of kittiwake nesting habitat</p> <hr/> <p>Temporary disturbance through access for debris removal activities</p> <hr/> <p>Temporary disturbance during camera/monitoring equipment installation/removal</p>	<p>Commitment 2</p> <hr/> <p>Commitment 3</p> <hr/> <p>Commitment 4</p>	<p>Following best practice guidelines (including implementation of commitments) and examples set from other projects proposing similar measures, during the breeding season, activities at Dunbar Castle will not be undertaken in a way that disturbs breeding seabirds. Therefore, birds nesting at the site will not be adversely impacted. Additionally, during the non-breeding season, seabirds are not restricted to particular sites, as they are during the breeding. Therefore, factoring in the small spatial and temporal extent and expert guidance, it can be concluded that any disturbance caused will not cause adverse effects on individuals. Therefore, it can be ascertained that there will be <b>no AEol alone</b>.</p>

### **6.3. ASSESSMENT OF ADVERSE EFFECT IN-COMBINATION – INFORMATION TO INFORM APPROPRIATE ASSESSMENT**

62. As the potential effects are exceedingly small in nature, no effects are anticipated further afield than Dunbar castle itself, and therefore the screening undertaken for plans and projects to be considered in-combination is limited to those with direct spatial overlap with the proposed compensatory measures.
63. Following on from the above methodology, no projects have been identified for the consideration of in-combination effects. Therefore it can be concluded that this compensatory measure will not have an AEOI on any European site alone and in-combination with other plans and projects.

## 7. HABITATS REGULATIONS ASSESSMENT – RAT ERADICATION: INCHCOLM

### 7.1. ASSESSMENT FOR LSE

64. This measure is included as a secondary measure that may be implemented for adaptive management purposes. A complete account of this measure is provided although it should be noted that further stakeholder consultation would be required before this specific measure could be secured and the intention is not to take this measure forward as compensation at this stage for the purposes of the Derogation Case.
65. Screening for LSE considers the effects that may result from the rat eradication: Inchcolm secondary compensatory measure, as defined in Table 3, in relation to the designated sites identified following the process described in Section 3.3. This section combines that information to determine LSE for the project alone. Key to LSE is the clear presence or absence of a pathway, linking the effect to a designated site or feature, together with known sensitivity of the feature to the effect.
66. The presence or absence of a pathway is based on the scope and nature of the proposed compensatory measure activities together with the location of the designated feature, with the sensitivity of the feature(s) drawing on the relevant information available for the designated sites.
67. For ornithological receptors, for the rat eradication: Inchcolm secondary compensatory measure, birds nesting at other breeding colonies within foraging range of Inchcolm island are unlikely to be impacted by disturbance as they will be spending their time rafting/ fishing at sea or at their nests at other colonies. Additionally, during the non-breeding season, seabirds are not restricted to particular sites as they are during the breeding season, therefore any disturbance caused by monitoring is unlikely to cause significant negative effects on individuals. Additionally, NatureScot Guidance for Scottish bird species considers that the maximum range of disturbance for any bird species is 1 km (NatureScot, 2022). Therefore, factoring in the above, the nature of effects associated with this measure, and the application of expert judgement, a highly precautionary screening buffer of 5 km has been applied to this assessment.
68. Additionally, there are no SACs within the screening range for Onshore Ecology receptors, and therefore there is considered to be no LSE for the Onshore Ecology receptor group and it is not considered further within this assessment for this compensatory measure.
69. The conclusions for LSE are presented Table 10. Where a potential LSE is identified, on a precautionary basis, it has been assumed by extension that there is the potential for LSE in-combination with other plans and projects.

**Table 10: Screening for LSE from the rat eradication: Inchcolm secondary compensatory measure**

Designated Site	Distance to measure (km)	Receptor Types	Features Identified for Screening	Relevant effect(s)	Consideration of Potential LSE	Conclusion of Potential LSE
Outer Firth of Forth and St Andrews Bay Complex SPA	0.0	Offshore and Intertidal Ornithology	<ul style="list-style-type: none"> <li>• <i>Alca torda</i>;</li> <li>• <i>Bucephala clangula</i>;</li> <li>• <i>Clangula hyemalis</i>;</li> <li>• <i>Fratercula arctica</i>;</li> <li>• <i>Gavia stellata</i>;</li> <li>• <i>Larus argentatus</i>;</li> <li>• <i>Larus canus</i>;</li> <li>• <i>Larus minutus</i>;</li> <li>• <i>Larus ridibundus</i>;</li> <li>• <i>Melanitta fusca</i>;</li> <li>• <i>Melanitta nigra</i>;</li> <li>• <i>Mergus serrator</i>;</li> <li>• <i>Morus bassanus</i>;</li> <li>• <i>Phalacrocorax aristotelis</i>;</li> <li>• <i>Podiceps auratus</i>;</li> <li>• <i>Puffinus puffinus</i>;</li> <li>• <i>Rissa tridactyla</i>;</li> <li>• <i>Somateria mollissima</i>;</li> <li>• <i>Sterna hirundo</i>;</li> <li>• <i>Sterna paradisaea</i>;</li> <li>• <i>Uria aalge</i>; and</li> <li>• Breeding Seabird Assemblage.</li> </ul>	<p>Potential for disturbance from human activity due to eradication and immediate monitoring phase of the programme</p> <p>Potential for disturbance from human activity due to long-term monitoring phase of the programme</p>	Due to proximity to the site, there is a potential for connectivity.	LSE
Forth Islands SPA	0.0	Offshore and	<ul style="list-style-type: none"> <li>• <i>Alca torda</i>;</li> <li>• <i>Fratercula arctica</i>;</li> <li>• <i>Larus argentatus</i>;</li> </ul>	Potential for disturbance from human activity due to eradication and immediate monitoring phase of the programme	Due to proximity to the site, there	LSE

Designated Site	Distance to measure (km)	Receptor Types	Features Identified for Screening	Relevant effect(s)	Consideration of Potential LSE	Conclusion of Potential LSE
		Intertidal Ornithology	<ul style="list-style-type: none"> <li>• <i>Larus fuscus</i>;</li> <li>• <i>Morus bassanus</i>;</li> <li>• <i>Phalacrocorax aristotellus</i>;</li> <li>• <i>Phalacrocorax carbo</i>;</li> <li>• <i>Rissa tridactyla</i>;</li> <li>• <i>Sterna dougallii</i>;</li> <li>• <i>Sterna hirundo</i>;</li> <li>• <i>Sterna paradisaea</i>;</li> <li>• <i>Sterna sandvicensis</i>;</li> <li>• <i>Uria aalge</i>; and</li> <li>• Breeding Seabird Assemblage.</li> </ul>	Potential for disturbance from human activity due to long-term monitoring phase of the programme	is a potential for connectivity.	

## 7.2. ASSESSMENT OF ADVERSE EFFECT ALONE – INFORMATION TO INFORM APPROPRIATE ASSESSMENT

70. Where the potential for LSE on a European site(s) has been identified (Table 3), there is a requirement to consider whether that potential effect(s) will adversely affect the integrity of the site in view of its conservation objectives. LSE applies where a feature is known to be sensitive to the effect and a potential pathway cannot be discounted.
71. The assessment of AEol to inform the AA for the rat eradication: Inchcolm compensatory measure is presented in Table 11. The table details all designated sites, features and effects for which LSE has been identified, proposes appropriate commitments (mitigation) that could be applied to avoid or reduce the impacts (Table 2), and provides conclusions on whether there is potential for AEol after the application of these commitments. This assessment has been undertaken in view of all relevant conservation objectives published by the statutory nature conservation bodies.

**Table 11: Assessment of AEol Alone for the rat eradication: Inchcolm compensatory measure**

Designated Site	Features	Effect	Relevant Commitment	Potential for AEol	
Outer Firth of Forth and St Andrews Bay Complex SPA	<ul style="list-style-type: none"> <li>• <i>Alca torda</i>;</li> <li>• <i>Bucephala clangula</i>;</li> <li>• <i>Clangula hyemalis</i>;</li> <li>• <i>Fratercula arctica</i>;</li> <li>• <i>Gavia stellata</i>;</li> <li>• <i>Larus argentatus</i>;</li> <li>• <i>Larus canus</i>;</li> <li>• <i>Larus minutus</i>;</li> <li>• <i>Larus ridibundus</i>;</li> <li>• <i>Melanitta fusca</i>;</li> <li>• <i>Melanitta nigra</i>;</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Mergus serrator</i>;</li> <li>• <i>Morus bassanus</i>;</li> <li>• <i>Phalacrocorax aristotelis</i>;</li> <li>• <i>Podiceps auratus</i>;</li> <li>• <i>Puffinus puffinus</i>;</li> <li>• <i>Rissa tridactyla</i>;</li> <li>• <i>Somateria mollissima</i>;</li> <li>• <i>Sterna hirundo</i>;</li> <li>• <i>Sterna paradisaea</i>;</li> <li>• <i>Uria aalge</i>; and</li> <li>• Breeding Seabird Assemblage.</li> </ul>	Potential for disturbance from human activity due to eradication and immediate monitoring phase of the programme	Commitment 1	<p>The baiting and immediate monitoring of traps will be undertaken in the winter period, therefore avoiding the breeding season and ensuring that the spatial extent of disturbance would be small, with any disturbance from human presence being temporary and short-term. The temporal extent is also anticipated to be small, with any disturbance caused being temporary (typically in terms of hours). Additionally, during the non-breeding season, seabirds are not restricted to particular sites, as they are during the breeding season. Therefore, factoring in the small spatial and temporal extent and expert guidance, it can be concluded that any disturbance caused by monitoring will not cause adverse effects on individuals. Therefore, it can be ascertained that there will be <b>no Aeol alone</b>.</p>



Designated Site	Features	Effect	Relevant Commitment	Potential for AEoI	
		Potential for disturbance from human activity due to long-term monitoring phase of the programme	Commitment 2	The long-term monitoring of traps will be undertaken every four -weeks over a two year period. The spatial extent of disturbance would be small, with any disturbance from human presence being temporary and short-term. The temporal extent is also anticipated to be small, with any disturbance caused being temporary (typically in terms of hours). It can therefore be ascertained that there will be <b>no AEoI alone.</b>	
Forth Islands SPA	<ul style="list-style-type: none"> <li>• <i>Alca torda</i>;</li> <li>• <i>Fratercula arctica</i>;</li> <li>• <i>Larus argentatus</i>;</li> <li>• <i>Larus fuscus</i>;</li> <li>• <i>Morus bassanus</i>;</li> <li>• <i>Phalacrocorax aristotellis</i>;</li> <li>• <i>Phalacrocorax carbo</i>;</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Rissa tridactyla</i>;</li> <li>• <i>Sterna dougallii</i>;</li> <li>• <i>Sterna hirundo</i>;</li> <li>• <i>Sterna paradisaea</i>;</li> <li>• <i>Sterna sandvicensis</i>;</li> <li>• <i>Uria aalge</i>; and</li> <li>• Breeding Seabird Assemblage</li> </ul>	Potential for disturbance from human activity due to eradication and immediate monitoring phase of the programme	Commitment 1	The baiting and immediate monitoring of traps will be undertaken in the winter period, therefore avoiding the breeding season and ensuring that the spatial extent of disturbance would be small, with any disturbance from human presence being temporary and short-term. The temporal extent is also anticipated to be small, with any disturbance caused being temporary (typically in terms of hours). Additionally, during the non-breeding season, seabirds are not restricted to particular sites, as they are

Designated Site	Features	Effect	Relevant Commitment	Potential for AEol
				<p>during the breeding season. Therefore, factoring in the small spatial and temporal extent and expert guidance, it can be concluded that any disturbance caused by monitoring will not cause adverse effects on individuals. Therefore, it can be ascertained that there will be <b>no AEol alone.</b></p>
		<p>Potential for disturbance from human activity due to long-term monitoring phase of the programme</p>	<p>Commitment 2</p>	<p>The long-term monitoring of traps will be undertaken every four-weeks over a two year period. The spatial extent of disturbance would be small, with any disturbance from human presence being temporary and short-term. The temporal extent is also anticipated to be small, with any disturbance caused being temporary (typically in terms of hours). It can therefore be ascertained that there will be <b>no AEol alone.</b></p>

### **7.3. ASSESSMENT OF ADVERSE EFFECT IN-COMBINATION – INFORMATION TO INFORM APPROPRIATE ASSESSMENT**

72. As the potential effects are exceedingly small in nature, no effects are anticipated further afield than Inchcolm Island itself, and therefore the screening undertaken for plans and projects to be considered in-combination is limited to those with direct spatial overlap with the proposed compensatory measures.
73. Following on from the above methodology, no projects have been identified for the consideration of in-combination effects. Therefore it can be concluded that this compensatory measure will not have an AEOI on any European site alone and in-combination with other plans and projects

## 8. CONCLUSIONS

74. This derogation case RIAA has considered the environmental impacts associated with the implementation of the following proposed compensatory measures:
- Management of SA4 sandeel fishery;
  - Rat Eradication: Handa;
  - Dunbar Castle wardening role; and
  - Rat Eradication: Inchcolm (as secondary compensation).
75. For each compensatory measure, GIS has been applied to identify the relevant sites and features to consider for Stage 1 Screening. LSE is then established, per compensatory measure and for each site and feature. Where no LSE is identified, then the site/feature/effect is not carried forward to Stage 2 AA. Where LSE is identified alone, it is assumed that LSE applies in-combination.
76. For all the proposed compensatory measures a range of sites were identified to have a LSE. However, when applying measure specific commitments (Table 2), a conclusion of no AEol has been drawn for all of the potential effects identified for these proposed compensatory measures. Therefore there is no requirement to progress beyond Stage 2.
77. For all the compensatory measures assessed within this document it has been concluded that there is no potential for AEol alone or in-combination.

## 9. REFERENCES

### 9.1. LITERATURE

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