FIVE ESTUARIES OFFSHORE WIND FARM

VOLUME 5, REPORT 5.8: GUILLEMOT & RAZORBILL IMPLEMENTATION AND MONITORING PLAN – (CLEAN)

Application Reference	EN010115
Application Document Number	5.5.8
Revision	B
Pursuant to	Deadline 2
EcoDoc Number	005105355-03
Date	October 2024

In preparation of this document Five Estuaries Wind Farm Ltd has made reasonable efforts to ensure that the content is accurate, up to date and complete for purpose.

Revision	Date	Status/Reason for Issue	Originator	Checked	Approved
A	Mar-24	DCO Application	GoBe	GoBe	VE OWFL
B	Oct-24	Deadline 2	GoBe	GoBe	VEOWFL

CONTENTS

FIGURES

DEFINITION OF ACRONYMS

Term	Definition
AEoI	Adverse Effect on Integrity
AOE	Alde-Ore Estuary
AON	Apparently Occupied Nests
DCO	Development Consent Order
ETG	Expert Topic Group
HRA	Habitats Regulations Assessment
IROPI	Imperative Reasons of Overriding Public Interest
LBBG	Lesser Black-backed Gull
LIMP	Lesser Black-backed Gull Implementation and Monitoring Plan
MMF	Mean-Max Foraging Range
NE	Natural England
OOEG	Offshore Ornithology Engagement Group
OTB	Outer Trial Bank
OWF	Offshore Wind Farm
RAG	Red, Amber, Green
RIAA	Report to Inform Appropriate Assessment
RSPB	Royal Society for the Protection of Birds
SD	Standard Deviation
SMP	Seabird Monitoring Programme
SNCB	Statutory Nature Conservation Bodies
SPA	Special Protection Area
VE	Five Estuaries Offshore Wind Farm
VE OWFL	Five Estuaries Offshore Wind Farm Limited

Term	Definition
Development Consent Order	An order made under the Planning Act 2008 granting development consent for a Nationally Significant Infrastructure Project (NSIP) from the Secretary of State (SoS) for the Department for Energy Security and Net Zero (DESNZ).
Environmental Statement	Environmental Statement (the documents that collate the processes and results of the EIA).
Export Cable Corridor (ECC)	The area(s) where the export cables will be located.
Habitats Regulation Assessment (HRA)	The assessment of the impacts of implementing a plan or policy on a European Site (as required by the Conservation of Habitats and Species Regulations 2017 (as amended) and the Conservation of Offshore Marine Habitats and Species Regulations 2017 (as amended)), the purpose being to consider the impacts of a project against conservation objectives of the site and to ascertain whether it will adversely affect the integrity of the site
Mitigation	Mitigation measures, or commitments, are commitments made by the project to reduce and/or eliminate the potential for significant effects to arise as a result of the project.
NSIP	Nationally Significant Infrastructure Projects are major infrastructure developments in England and Wales which are consented by DCO under the Planning Act 2008. These include proposals for offshore wind farms with an installed capacity over 100MW.
Order Limits	The extent of development including all works, access routes, TCCs, visibility splays and discharge points. (Not Red Line Boundary (RLB))
The Applicant	Five Estuaries Offshore Wind Farm Limited (The Applicant).
Special Area of Conservation (SAC)	A protected site under the Conservation of Habitats and Species Regulations (2017).
Special Protection Area (SPA)	Sites designated under EU Regulations (79/409/EEC) to protect habitats of migratory birds and certain threatened birds under the Birds Directive Regulations.

1 INTRODUCTION

1.1.1 This document presents the guillemot (*Uria aalge*) and razorbill (*Alca torda*) implementation and monitoring plan (GRIMP) that will guide the compensation measures for Five Estuaries Offshore Wind Farm (VE - hereafter referred to as the 'Applicant'). VE is a proposed extension to the operational Galloper Offshore Wind Farm. VE will be situated approximately 37 km off the coast of Suffolk, England (at its closest point). The GRIMP has been developed in consultation with Natural England and the RSPB through the Expert Topic Groups (ETGs) and specific meetings with both Natural England and the RSPB.

1.1.2 The Applicant is applying for a Development Consent Order (DCO) supported by a range of plans and documents, including an Environmental Statement (ES) which will set out the results of the Environmental Impact Assessment (EIA). The Applicant is also submitting a Report to Inform Appropriate Assessment (RIAA) (Volume 5, Report 4), which sets out the information necessary for the competent authority, in this case the Secretary of State (SoS), to undertake a Habitats Regulations Assessment (HRA) to determine if there is any Adverse Effect on Integrity (AEoI) on the national site network.

1.1.3 The GRIMP is part of the Habitat Regulation Assessment (HRA) Derogation Case and should be read in conjunction with the guillemot and razorbill evidence, site selection and roadmap document (Volume 5, Report 5.5) and sets out how the final compensation scheme would be developed, implemented and monitored, if required. This process is described in more detail below.

1.2 DEROGATION PROCESS

1.2.1 As part of the Development Consent Order (DCO) application, Five Estuaries Offshore Windfarm Ltd (VE OWFL) is required to produce a Report to Inform Appropriate Assessment (RIAA) to provide the information required by the Competent Authority in order to undertake its Habitats Regulation Assessment (HRA) and Appropriate Assessment. If the HRA process deems that Adverse Effects on Integrity (AEoI) cannot be excluded, a derogations process is followed. In the event that no alternative solutions can be found, and if there are imperative reasons of overriding public interest (IROPI), the final stage of the derogations process is to develop measures to compensate for adverse effects on a site.

1.2.2 Though VE is at the stage of pre-application, VE OWFL is already investigating compensation options for species deemed at risk of requiring compensation, so it can allow for sufficient time to engage with stakeholders and develop compensation plans.

1.2.3 However, it should be noted that this does not prejudice the outcome of the ongoing HRA process. The ongoing HRA process will ultimately determine the compensation requirements for VE OWFL.

1.3 PREDICTED IMPACTS

1.3.1 Two of the species of potential derogation risk for VE is guillemot and razorbill at Flamborough and Filey Coast (FFC) Special Protection Area (SPA).

1.3.2 FFC SPA is 275.5 km away from VE, out with the mean-max foraging (MMF) range) for guillemot (153.7 km; Woodward et al., 2019) and razorbill (164.6 km; Woodward et al., 2019); therefore, there is low potential for connectivity between FFC SPA and VE during the breeding season. Following a review of tracking data and agreement from Natural England (NE) it was decided that guillemot and razorbill were only considered for the non-breeding connectivity.

1.3.3 Recent decisions on other offshore wind projects (e.g. Hornsea Three, East Anglia One North, East Anglia Two, Norfolk Vanguard and Norfolk Boreas) concluded that AEoI could not be ruled out for guillemot at FFC SPA when considered in-combination with other projects. As a precedent for concern around AEoI has been established on other projects, the species is thus of in-principle derogation concern for VE.

1.4 OUTLINE

1.4.1 This document will outline the implementation and monitoring plan for the chosen guillemot and razorbill compensatory measures. Small scale compensation measures in colonies in southwest England were agreed to be an appropriate measure by Natural England at the ETG in September 2023. It was concluded and agreed with Natural England that compensation should focus on mitigating the effects of recreational disturbance and perhaps predation if it's found to be an issue at the selected site(s).

1.4.2 Feedback from Natural England and DEFRA has highlighted the desire to have a collaborative approach to these small-scale compensation measures and the Applicant has been working with other developers. Furthermore, the implementation plan will adapt where necessary when further relevant information becomes available from future OWF applications, such as Outer Dowsing and North Falls OWFs.

1.4.3 The Secretary of State recently approved measures for DEFRA strategic compensation/ Marine Recovery Fund (MRF) including predator control. The Applicant proposes either the small-scale management measures or participating in the Department for Environment, Food and Rural Affairs (DEFRA) strategic compensation via the MRF are feasible, deliverable compensation options.

2 PROPOSED COMPENSATION MEASURES

2.1.1 Following the guillemot and razorbill roadmap (Volume 5, Report 5.5: Guillemot and Razorbill Compensation – Evidence, Site Selection and Roadmap), after consultation with Natural England and the RSPB at the ETG in September 2023 and subsequent meetings the following options for measures have been selected for compensation for guillemot and razorbill:

- Small scale management measures at colonies in the southwest of England including:
  - Recreational disturbance reduction;
    - Wardening
    - Signage
    - Education
    - Visitor access statements
    - Engagement with local businesses and organisations.
- Participating in the DEFRA strategic compensation via the MRF.

3 STAKEHOLDER ENGAGEMENT

3.1.1 VE OWFL presented potential compensation measures to Natural England during the ETG in September 2023 and it was agreed that small scale management measures at colonies in southwest England would be the most suitable option given the low level of impact on guillemot and razorbill by the Project (VE OWFL, 2023).

3.1.2 Stakeholder engagement will be required throughout the development of the management measures.

3.1.3 In addition to consultation with local experts and stakeholders during the site selection process, compensation plans are being consulted upon with relevant stakeholders, such as Natural England before DCO application submission. Consultation on compensation plans to date has consisted of relevant ETG meetings with Natural England and the RSPB as well as monthly meetings with Natural England. Further consultation is planned as the development of the management measures progresses (VE OWFL, 2023).

3.1.4 Following consent of the project, a steering group named the Offshore Ornithology Engagement Group (OOEG) will be convened by VE OWFL. This group will assist in the delivery of any implementation and maintenance of the compensation measures, monitoring, reporting, and other relevant matters as determined by VE OWFL. It is envisaged that core members of the OOEG will be the relevant Statutory Nature Conservation Bodies (SNCBs) as well as the local planning authority and owners and/or managers of the sites at which the artificial nesting program is planned to be implemented. RSPB and other relevant parties will also be invited to form part of the OOEG in an advisory capacity.

4 LOCATIONS FOR IMPLEMENTATION

4.1.1 As outlined in Section 2, the delivery of small-scale management measures for guillemot and razorbill may be undertaken using the below options:

- Small scale management measures at colonies in the southwest of England including:
  - Recreational disturbance reduction;
    - Wardening
    - Signage
    - Education
    - Visitor access statements
    - Engagement with local businesses and organisations.

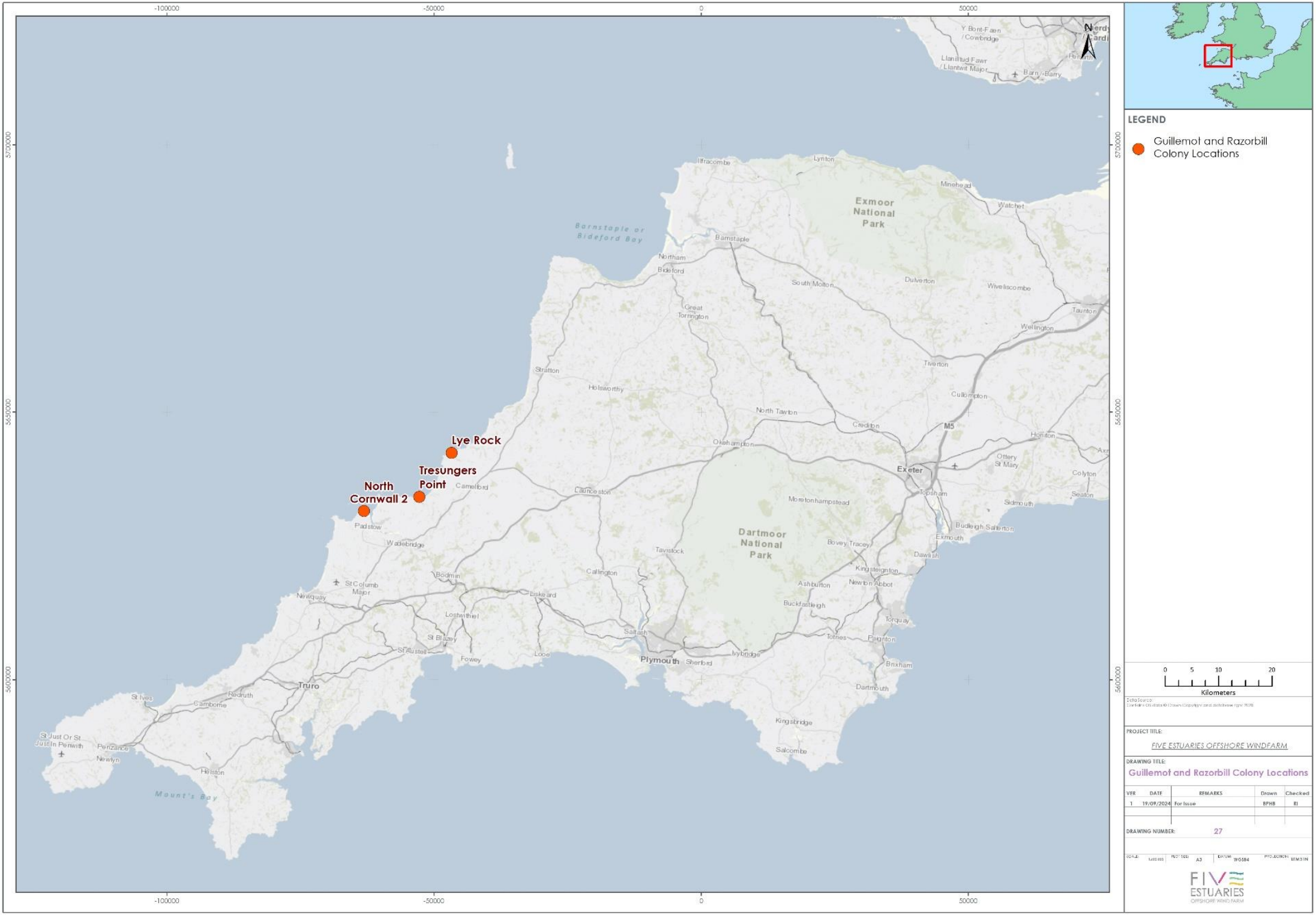
4.1.2 The Applicant is currently in discussions with landowners, managers and local stakeholders at the locations set out in Figure 4.1. Following the conclusion of these discussions the final measures will be selected based on various factors including the impacts recreational disturbance has on the productivity and success of the colony. The design of the compensation measures will be targeted at the identified pressures to maximise the efficiency of the proposed measures.

4.1.3 The location of the selected sites were agreed with Natural England during the ETG in September 2023 as a proportionate measure given the very small impacts involved. Although there is no connectivity with FFC SPA, the sites are within dispersal range of several larger colonies such as Lundy and Skomer and will help protect the national site network.

4.2 COMPENSATION REQUIREMENTS

4.2.1 The estimated compensation quantum for the predicted mortality of 0.8 birds for guillemot and 0.2 birds for razorbill was calculated in the Guillemot and Razorbill Evidence, Site Selection and Roadmap document (Volume 5, Report 5.5). The roadmap presents a range of compensation requirements, from a ratio of 1:1 up to 3:1, following both the methods used in Hornsea Four.

4.2.2 Following the methods used by Hornsea Four for guillemot and razorbill, the minimum number of guillemot breeding pairs required (1:1 ratio) is four (3.48) and the maximum number of pairs required (3:1 ratio) is 12 (10.44). The minimum number of razorbill breeding pairs required (1:1 ratio) is two (1.93) and the maximum number of pairs required (3:1 ratio) is six (5.79).



LEGEND

- Guillemot and Razorbill Colony Locations

0 5 10 20
Kilometers

Data Source:

PROJECT TITLE:
FIVE ESTUARIES OFFSHORE WINDFARM

DRAWING TITLE:
Guillemot and Razorbill Colony Locations

VER	DATE	REMARKS	Drawn	Checked
1	19/09/2024	For Issue	BPHB	RI

DRAWING NUMBER: 27

SCALE:	PLOT SIZE:	DATUM:	PROJECTION:
1:600 000	A3	WGS84	WGS84

FIVE ESTUARIES
OFFSHORE WIND FARM

4.3 LANDOWNER AGREEMENTS

4.3.1 The Applicant is currently in correspondence with local stakeholders and landowners/managers of the short-listed sites, including Cornwall Council, Cornwall Wildlife Trust, Cornwall Birds and the Seal Research Trust. The Applicant is also progressing conversations with the Cornwall Marine and Coastal Partnership. Through the discussions with the landowners/stakeholders and the site surveys undertaken in summer 2024, the final site(s) were identified based on recreational disturbance pressures in the area. As discussions progress and the measures are defined, relevant agreements will be put in place to implement the most suitable small scale management measures outlined in Section 4.1.1.

4.4 COORDINATION WITH OTHER OFFSHORE WIND FARM DEVELOPMENTS

4.4.1 Section 4.2 highlighted that the estimated compensation requirement is low, with 0.8 guillemot and 0.2 razorbill mortalities per annum. Other RWE projects have similar impacts, and the Applicant is working with other OWF developers on a strategic approach to the compensation for guillemots and razorbills. This collaboration with other OWF developers is key to the success of these compensation measures, which wouldn't be feasible for each individual project given the low levels of impact.

4.4.2 The collaborative approach described has also been supported and encouraged by Natural England and DEFRA during consultation. The full consultation table can be found in the RIAA (Volume 5, Report 4).

5 GUILLEMOT AND RAZORBILL COLONIES IN SOUTHWEST ENGLAND

5.1 AIM

5.1.1 This section will outline the implementation plan for the small-scale management options at southwest England guillemot and razorbill colonies, including the timeline and monitoring and reporting of the compensation programme.

5.2 IMPLEMENTATION TIMETABLE

5.2.1 It is planned that the compensation measures are to be in place four breeding seasons before the operational phase of VE, therefore the site(s) will potentially receive a net benefit from these compensation measures by the time VE becomes operational.

5.3 MAINTENANCE

5.3.1 The maintenance of the compensation measure will depend on which measure is carried forward. Signage will be monitored at the same time as the colony breeding season is monitored and repaired where necessary. Coordination with local businesses and organisations will continue throughout the lifetime of the project.

5.4 MONITORING AND REPORTING

MONITORING PLAN

5.4.1 Monitoring will be required for all stages of the proposed management programme. The details of monitoring proposals will be discussed with the OOEG, with key details to be agreed upon including the frequency, duration, and nature of monitoring methodology, as well as data analysis and reporting requirements. However, this document will present an initial monitoring methodology upon which the final monitoring plan can be decided.

5.4.2 When monitoring, the same environmental variables will be recorded on each visit to ensure that clear comparisons can be made to baseline conditions and between visits. Additional data, such as productivity and diet, may be collected to further the knowledge of the breeding colonies. A monitoring programme will be discussed and developed with the OOEG, but it is expected that monitoring will be undertaken throughout the operational lifetime of VE. The first two years of monitoring will help establish appropriate setback distances to maximise the benefits of disturbance measures once the reduction methods are implemented.

5.4.3 After the compensation plan has been implemented, additional monitoring will take place to determine the success of these compensatory measures. Therefore, productivity of the site will be monitored and be measured against the pre-implementation monitoring that serves as a baseline.

5.4.4 This monitoring will be carried out by trained observers, and they will undertake monitoring using the methods outlined in JNCC's Seabird Monitoring Programme (Walsh et al., 1995). The surveys at the sites will be carried out using telescopes from vantage points along the cliff tops. The final methods will be decided after discussion with various stakeholders.

5.4.5 This monitoring plan will be reviewed annually to reassess its accuracy and efficiency in light of up-to-date survey methods.

5.4.6 Methods for monitoring the benefits of the compensation measures are proposed as follows:

- To assess the benefits of measures at these colonies, the Applicant will consider both the expected increase in productivity and population size (in pairs – where individuals counted are multiplied by 0.67 to estimate the number of pairs).
- For each colony the calculation to determine the potential benefit will follow the methodology set-out below. For sites with populations below historical peaks, the Applicant will estimate benefits by considering the potential for the population to recover to historic levels due to increased productivity and the retention of adult birds.
- Two scenarios will be compared: (1) a baseline scenario assuming the national productivity rate from Horswill and Robinson (2015) and a stable population, and (2) the national productivity rate from Horswill and Robinson (2015) and a population equivalent to the historical maximum. Estimates of benefits to productivity rates have not been incorporated into calculations at this time due to lack of site-specific productivity data. The following steps were conducted:
- Calculate the number of fledglings produced per annum by multiplying the population size by productivity.
- Multiply the number of fledglings produced per annum by the survival until adulthood (0.3502 for guillemot) to calculate the number of adults that would re-enter the regional population.
- Compare the two scenarios to calculate the benefit/difference in expected offspring between the regional average and the colony-specific productivity rate.

5.4.7 Although the compensation measures will provide benefits to the colonies, given the low impacts from the project, it is unlikely that the benefits can be accurately measured due to natural fluctuations in population sizes. Whilst monitoring the colonies will be an important, the monitoring of human behavioral change is intended to be the measure by which the success of the compensation will be determined.

REPORTING PLAN

5.4.8 Following the breeding season an annual report will be produced and provided to the relevant stakeholders by the end of the year.

5.4.9 An OOEG/stakeholders meeting will be organised following each years' monitoring to present any findings and will discuss any reporting issues or any adaptive management measures that may be required.

5.4.10 The planned timelines for the annual reporting will follow the stages below:

- Monitoring data collected from the season received by the end of August;
- Findings from the data presented to the OOEG/stakeholders by end of September;
- Draft report circulated by end of October;
- Finalised report submitted to relevant stakeholders by start of December;
- Approval/final comments by January the following year;

- Adaptive management begins where required prior to the breeding season.

6 COMPENSATION PERFORMANCE MONITORING AND ADAPTIVE MANAGEMENT

6.1.1 Should post-implementation monitoring reveal that the selected site(s) is unsuccessful, or less successful than anticipated, an assessment will be undertaken to determine the reasons underlying the lack of success, and to inform the next steps.

6.1.2 Notably, the next steps will consist of identifying potential improvements (or extensions) to the implemented measure, based on potential issues discovered during the assessment. The design of the compensation measures provides several options to help deal with recreational disturbance. Should the assessment determine that the measure cannot be improved or extended sufficiently, then alternatives will be considered in consultation with the OOEG. The Project will not commit to adaptive measures if the evidence suggests that the reason for lack of success are out of the Projects control e.g. climate change, prey availability.

7 REFERENCES

Ausden, M. (2007) 'Habitat management for conservation', Oxford University Press, Great Clarendon Street, Oxford, OX2 6DP.

BirdLife International (2023), 'Species factsheet: *Uria aalge*. Available at: http://www.birdlife.org [Accessed January 2024].

Bradbury, G., Trinder, M., Furness, B., Banks, A.N., Caldow, R.W.G., Hume, D. (2014), 'Mapping Seabird Sensitivity to Offshore Wind Farms,' PLOS ONE, 9: 1-17.

Furness, R.W., MacArthur, D., Trinder, M. and MacArthur K. (2013), 'Evidence review to support the identification of potential conservation measures for selected species of seabirds. ' MacArthur Green, Glasgow.

Gilbert, G., Gibbons, D.W., Evans, J. (1998), 'Bird Monitoring Methods: a manual of techniques for key UK species,' RSPB/British Trust for Ornithology, The Wildfowl and Wetlands Trust, Joint Nature Conservation Committee, Institute of Terrestrial Ecology and The Seabird Group.

Horswill, C. & Robinson, R.A. (2015), 'Review of seabird demographic rates and density dependence', JNCC Report No. 552, Joint Nature Conservation Committee, Peterborough.

JNCC (2021), 'Seabird Population Trends and Causes of Change: 1986–2019 Report.' (https://jncc.gov.uk/our-work/smp-report-1986-2019). Joint Nature Conservation Committee, Peterborough. Updated 20 May 2021. [Accessed August 2022].

Mitchell, P.I., Newton, S.F., Ratcliffe, N., and Dunn, T.E (Eds.). (2004), 'Seabird Populations of Britain and Ireland: results of the Seabird 2000 census (1998-2002).' T. and A.D. Poyser, London.

Robinson, R.A. (2005), 'BirdFacts: profiles of birds occurring in Britain & Ireland. BTO, Thetford, https://app.bto.org/birdfacts/results/bob5910.htm [Accessed August 2022].

VE OWFL (2023). 'Guillemot and razorbill Compensation – Ecological Evidence, Preliminary Site Selection and Roadmap'.

Walsh, P.M., Halley, D.J., Harris, M.P., del Nevo, A., Sim, I.M.W., and Tasker, M.L. (1995), 'Seabird monitoring handbook for Britain and Ireland,' Peterborough: JNCC, RSPB, ITW, Seabird Group.

Woodward, I., Thaxter, C.B., Owen, E., and Cook, A.S.C.P. (2019), 'Desk-based revision of seabird foraging ranges used for HRA screening', BTO research report number 724.

FIVE ESTUARIES
OFFSHORE WIND FARM

PHONE 0333 880 5306
EMAIL fiveestuaries@rwe.com
WEBSITE www.fiveestuaries.co.uk
ADDRESS Five Estuaries Offshore Wind Farm Ltd
Windmill Hill Business Park
Whitehill Way, Swindon, SN5 6PB
COMPANY NO Registered in England and Wales
company number 12292474