

F I V E 
ESTUARIES
OFFSHORE WIND FARM

FIVE ESTUARIES
OFFSHORE WIND FARM
LESSER BLACK-BACKED GULL
COMPENSATION – SITE SELECTION
NOTE

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CONTENTS

1	Introduction	5
1.1	Background	5
1.2	Aims and objectives.....	8
2	Site suitability note	10
2.1	Lesser black-backed gull compensation sites	10

TABLES

Table 1.1: Coastal, natural lesser black-backed gull colonies in England with a count of 50 or more Apparently Occupied Nests or Apparently Occupied Territories (data source: Seabird Monitoring Programme). AON: Apparently Occupied Nests; AOT: Apparently Occupied Territories; IND: Individuals. * indicates SPAs for which lesser black-backed gulls are a qualifying feature.	7
Table 2.1 Site selection notes and potential for compensation work at each site. * indicates SPAs for which lesser black-backed gulls are a qualifying feature.	10



DEFINITION OF ACRONYMS

Term	Definition
AON	Apparently Occupied Nests
AOT	Apparently Occupied Territories
IND	Individuals
SMP	Seabird Monitoring Programme
SPA	Special Protection Area



1 INTRODUCTION

1.1 BACKGROUND

- 1.1.1 Five Estuaries Offshore Wind Farm (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).
- 1.1.2 In order to allow for sufficient time to engage with stakeholders and develop compensation plans, VE Offshore Wind Farm Ltd (VE OWFL) is investigating compensation options for species deemed likely to require compensation at this early stage in the pre-application period, however it should be noted that this does not prejudice the outcome of the ongoing HRA process.
- 1.1.3 AOE SPA is 15 km away from the VE array, which is within the mean-max foraging range (MMF) of breeding lesser black-backed gull, a protected feature of AOE SPA. Given the proximity of VE to the AOE SPA and results of preliminary assessment, it is deemed likely that there will be an AEol in relation to the LBBG feature of the AOE SPA from VE, and that compensation for this effect will thus be required.
- 1.1.4 VE OWFL has identified potential compensation measures for lesser black-backed gull, and following shortlisting of compensation options and subsequent stakeholder feedback, it was considered that the compensation options of predator exclusion fencing and habitat creation are deemed most feasible for lesser black-backed gull. Subsequently, preliminary site selection to identify potential locations for compensation delivery was commenced. For further detail on the ecological evidence for these compensation measures and the preliminary site selection process, please refer to the document titled “Lesser black-backed gull compensation - ecological evidence, preliminary site selection and roadmap” (VE OWFL, 2023¹).
- 1.1.5 In short, as part of preliminary site selection, lesser black-backed gull colonies, both within and outside SPAs, which could provide potential locations for compensation delivery were identified using the Seabird Monitoring Programme (SMP) survey data.² All lesser black-backed gull colony count data were downloaded and filtered according to the following criteria:
- > Country = England
 - > Year = 1998-2022. The most recent complete colony census was Seabird 2020, which was surveyed from 1998-2002. Therefore, including data from 1998 onwards ensures comprehensive coverage of all colonies.
 - > Site type = “coastal” or blank (to remove colonies labelled “inland”)
 - > Site habitat = “natural” or blank (to remove colonies on “man-made structures”)
 - > Count ≥ 50 (to only extract larger colonies, as colonies with few breeding pairs are unlikely to be large enough to provide sufficient compensation)
- 1.1.6 For the remaining list of sites, only the most recent entry for each site was retained.

¹ VE OWFL (2023), ‘Lesser black-backed gull compensation - ecological evidence, preliminary site selection and roadmap

² Seabird Monitoring Programme, <https://app.bto.org/seabirds/public/data.jsp> [Accessed August 2022]



- 1.1.7 For sites at which “site type” and “site habitat” were left blank, the site coordinates were plotted on a map, using the grid reference provided in the SMP data, to find out whether the colony was coastal or inland, and located on natural or man-made structures. All remaining inland and/or man-made colonies were removed.
- 1.1.8 The resulting list of potential sites is shown in Table 1.1 below.



Table 1.1: Coastal, natural lesser black-backed gull colonies in England with a count of 50 or more Apparently Occupied Nests or Apparently Occupied Territories (data source: Seabird Monitoring Programme³). AON: Apparently Occupied Nests; AOT: Apparently Occupied Territories; IND: Individuals. * indicates SPAs for which lesser black-backed gulls are a qualifying feature.

Master site	Site	County	Count Year	Count type	Count
Alde Ore Estuary SPA*	Havergate Island	Suffolk	2019	AON	1670
	Orfordness Beach	Suffolk	2018	AON	97
Blackwater Estuary SPA	Pewet Island	Essex	2009	IND	171
Bowland Fells SPA*	Langden Head	Lancashire	2018	AON	5573
Coquet Island SPA	Coquet Island RSPB	Northumberland	2005	AON	50
Farne Islands SPA	Farne Islands	Northumberland	2019	AON	681
Hamford Water SPA	Hamford Water	Essex	2009	AON	600
Highbridge and Isleport	Highbridge	Somerset	2016	AON	131
Isles of Scilly SPA*	Annet	Isles of Scilly	2006	AOT	281
	Great Arthur	Isles of Scilly	2015	AON	76
	Great Ganilly	Isles of Scilly	2015	AON	70
	Gugh	Isles of Scilly	2019	AON	422
	Norwethal	Isles of Scilly	2015	AON	102
	Puffin Island	Isles of Scilly	2015	AON	97
	Samson	Isles of Scilly	2015	AON	978
	Shipman Head	Isles of Scilly	1999	AON	50
	St Helen's	Isles of Scilly	2015	AON	448
	Tean	Isles of Scilly	2015	AON	136
	White Island (St Martin's)	Isles of Scilly	2015	AON	106
Lundy	Lundy	Devon	2021	AON	91
Maryport	Maryport	Cumbria	2013	AON	95
Medway Estuary and Marshes SPA	Greenborough	Kent	2018	IND	56

³ Seabird Monitoring Programme database: <https://app.bto.org/seabirds/public/index.jsp>



Master site	Site	County	Count Year	Count type	Count
Morcambe Bay and Duddon Estuary SPA*	Hodbarrow RSPB	Cumbria	2009	AON	250
	South Walney	Cumbria	2020	AON	381
North Norfolk Coast SPA	Blakeney Point	Norfolk	2001	AON	171
	Holkham NNR	Norfolk	2014	AON	85
Ribble and Alt Estuaries SPA*	Ribble Estuary	Lancashire	2021	AON	4489
South Solway	RAF Carlisle	Cumbria	2009	AON	520
	Rockcliffe Marsh	Cumbria	2019	AON	260
St Martin's Island	St Martin's	Isles of Scilly	1999	AON	52
Steep Holm	Steep Holm	Avon	2018	AON	596
The Wash SPA	Outer Trial Bank	Norfolk	2018	AON	1294

1.2 AIMS AND OBJECTIVES

- 1.2.1 In this site selection note, the potential for compensation delivery at each of the sites identified in Table 1.1 is considered in more detail. The information collated in this note is based on a review of publicly available information (e.g. site descriptions and management plans), expert ornithological opinion, and investigation of the habitat characteristics at and near the potential site, using publicly available habitat maps and satellite imagery (Google Maps).
- 1.2.2 Connectivity between the proposed sites and Alde Ore Estuary SPA was also considered. Connectivity for each site was based on the LBBG tracking study from Orfordness (Thaxter *et al.*, 2012)⁴, taking into account both foraging ranges during the breeding season and migration routes during the pre- and post-breeding periods.
- 1.2.3 Note that whilst connectivity to Alde Ore Estuary SPA is described here to establish optimal connectivity between the potential compensation delivery site and the impacted site, connectivity with Alde Ore Estuary SPA is not a prerequisite for feasible compensation. As discussed in “Lesser black-backed gull compensation - ecological evidence, preliminary site selection and roadmap” (VE OWFL, 2023⁵), compensation measures should meet the requirement of maintaining the national site network coherence.

⁴ Thaxter *et al.* (2012). Measuring the interaction between marine features of Special Protection Areas with offshore wind farm development zones through telemetry: second year report. BTO Research Report No. 610.

⁵ VE OWFL (2023), ‘Lesser black-backed gull compensation - ecological evidence, preliminary site selection and roadmap’



- 1.2.4 Thus, whilst prioritising sites close to, and with connectivity to, Alde Ore Estuary SPA is desired, alternative sites for compensation delivery, such as sites near other SPAs, can also be considered should compensation delivery at sites with connectivity to Alde Ore Estuary SPA be deemed infeasible (e.g., following further stakeholder engagement or land owner discussions). The document “Lesser black-backed gull compensation - ecological evidence, preliminary site selection and roadmap” (VE OWFL, 2023) outlines the prioritisation of potential sites, based on connectivity with SPAs, in further detail.



2 SITE SUITABILITY NOTE

2.1 LESSER BLACK-BACKED GULL COMPENSATION SITES

2.1.1 All SPA sites listed in Table 1.1 were considered and assessed for suitability for any habitat management/creation for LBBG breeding sites. The potential for compensation work for each site is highlighted, prioritising sites close to the Alde Ore Estuary SPA.

Table 2.1 Site selection notes and potential for compensation work at each site. * indicates SPAs for which lesser black-backed gulls are a qualifying feature.

Master Site	Site selection notes	Potential
Alde Ore Estuary SPA*	> Potential to work with landowners to create LBBG nesting habitat nearby to the Alde Ore Estuary SPA.	> High potential
	> Expansion/work with nearby nature reserves to create nesting habitat.	> Moderate potential
	> Potential to work with other local major onshore infrastructure developments could be considered where suitable land for habitat restoration is available.	> High potential
	> Farmland north of Alde Ore SPA. The coast is eroding quickly here so farmland may be abandoned or available to purchase, which may provide good opportunity to secure areas for habitat creation.	> Moderate potential (long-term viability unknown)
	> Rafts and/or habitat creation/restoration could be considered in nearby suitable broads/lakes. Further research would be needed to find out the rate at which the area is eroding into the sea.	> High potential



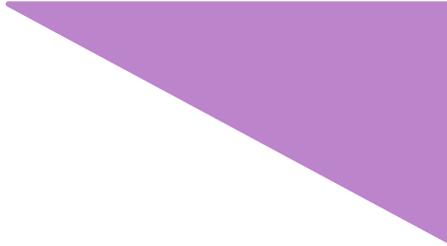
Master Site	Site selection notes	Potential
Blackwater Estuary SPA	<ul style="list-style-type: none"> > Potential to work with landowners to create LBBG nesting habitat. 	<ul style="list-style-type: none"> > Moderate potential
Bowland Fells SPA*	<ul style="list-style-type: none"> > Large managed moorland, no connectivity and already managed for wildlife. Might be hard to expand/restore any habitat here. 	<ul style="list-style-type: none"> > Low potential
Coquet Island SPA	<ul style="list-style-type: none"> > Already managed for terns, gulls and auks, thus likely limited opportunity here. 	<ul style="list-style-type: none"> > Low potential
	<ul style="list-style-type: none"> > Local Nature Reserves on mainland near to Coquet. Habitat creation, e.g. more pools with islands for nesting sites could be explored here. 	<ul style="list-style-type: none"> > Low potential
	<ul style="list-style-type: none"> > No connectivity. 	<ul style="list-style-type: none"> > Low potential
Farne Islands SPA	<ul style="list-style-type: none"> > Already managed for terns, gulls and auks, thus likely limited opportunity here. 	<ul style="list-style-type: none"> > Low potential
	<ul style="list-style-type: none"> > No connectivity. 	<ul style="list-style-type: none"> > Low potential
Hamford Water SPA	<ul style="list-style-type: none"> > Nesting habitat creation on the SPA or on the rough grassland near the north end of the SPA could be a feasible option. 	<ul style="list-style-type: none"> > High potential
	<ul style="list-style-type: none"> > Proposed Realignment site – Shingle bank construction for compensation for Bathside Bay Container Terminal (BBCT) - potential to work with developer. 	<ul style="list-style-type: none"> > High potential



Master Site	Site selection notes	Potential
Highbridge and Isleport	> No connectivity.	> Low potential
Isles of Scilly SPA*	> Already a lot of work being undertaken on the islands for seabirds, probably little scope for more.	> Low potential
	> No connectivity.	> Low potential
Lundy	> As above with Isles of Scilly.	> Low potential
Maryport	> No connectivity, and small lesser black-backed gull population only.	> Low potential
Medway Estuary & Marshes SPA	> Scrubland near to the SPA could be suitable for habitat restoration.	> Moderate potential
	> Farmland adjacent to the SPA could be suitable for habitat creation.	> Moderate potential
Morcambe Bay and Duddon Estuary SPA*	> No connectivity.	> Low potential
North Norfolk Coast SPA	> Difficult to create/restore near here as the coastline around both sites are reserves/managed for wildlife already.	> Low/moderate potential
	> Consider work with local nature conservation groups to create breeding habitat.	> Low/moderate potential



Master Site	Site selection notes	Potential
Ribble and Alt Estuaries SPA*	<ul style="list-style-type: none"> > No connectivity. 	<ul style="list-style-type: none"> > Low potential
South Solway	<ul style="list-style-type: none"> > No connectivity. 	<ul style="list-style-type: none"> > Low potential
Steep Holm	<ul style="list-style-type: none"> > No connectivity 	<ul style="list-style-type: none"> > Low potential
	<ul style="list-style-type: none"> > Potential to work with private landowners to manage land for LBBG. 	<ul style="list-style-type: none"> > Low potential
	<ul style="list-style-type: none"> > Flat Holm is nearby, which is already partway through a funding project to manage habitats and wildlife. 	<ul style="list-style-type: none"> > Low potential
The Wash SPA	<ul style="list-style-type: none"> > Could conduct work to maintain the habitat on the bank, and/or consider rafts nearby to expand breeding potential. 	<ul style="list-style-type: none"> > Low/moderate potential



F I V E 
ESTUARIES
OFFSHORE WIND FARM

PHONE
EMAIL
WEBSITE
ADDRESS

0333 880 5306
fiveestuaries@rwe.com
www.fiveestuaries.co.uk

COMPANY NO

Five Estuaries Offshore Wind Farm Ltd
Windmill Hill Business Park
Whitehill Way, Swindon, SN5 6PB
Registered in England and Wales
company number 12292474

