codling wind park

Natura Impact Statement

Volume 1

Summary


codling
wind park

Table of contents

1 INTRODUCTION / PURPOSE OF THE DOCUMENT 6

1.1 The CWP Project 6

1.2 The Applicant 6

1.3 Purpose of this document 6

1.4 Requirement for a Natura Impact Statement 6

2 DOCUMENT STRUCTURE 8

3 APPROACH TO SCREENING AND ASSESSMENT OF ADVERSE EFFECTS ON SITE INTEGRITY 9

4 SUMMARY OF ASSESSMENTS 11

4.1 SAC assessment 11

4.2 SPA assessment 17

5 CONCLUSIONS 22

6 REFERENCES 23

Abbreviations

Abbreviation	Term in Full
AA	Appropriate Assessment
AESI	Adverse Effect on Site Integrity
CEMP	Construction Environmental Management Plan
CWP	Codling Wind Park
CWPL	Codling Wind Park Limited
EC	European Commission
EDFR	Électricité de France Renewables
EMF	Electromagnetic Fields
EU	European Union
INNS	Invasive Non-Native Species
Km	Kilometre
LSE	Likely Significant Effects
MAP	Maritime Area Planning
NIS	Natura Impact Statement
NPWS	National Parks and Wildlife Services
OECC	Offshore Export Cable Corridor
OWF	Offshore Wind Farm
PDA	Planning and Development Act
QI	Qualifying Interests
SAC	Special Area of Conservation
SCI	Special Conservation Interest
SPA	Special Protection Area
SSC	Suspended Sediment Concentration
UK	United Kingdom
VMP	Vessel Management Plan
ZoI	Zone of Influence

Definitions

Glossary	Meaning
the Applicant	The Applicant, Codling Wind Park Limited (CWPL).
Codling Wind Park (CWP) Project	The proposed development as a whole is referred to as the Codling Wind Park (CWP) Project, comprising of the offshore infrastructure, the onshore infrastructure and any associated temporary works.
Codling Wind Park Limited (CWPL)	A joint venture between Fred. Olsen Seawind (FOS) and Électricité de France (EDF) Renewables, established to develop the CWP Project.
Maritime Area Planning (MAP) Act 2021	An Act to regulate the maritime area, to achieve such regulation by means of a National Marine Planning Framework, maritime area consents for the occupation of the maritime area for the purposes of maritime usages that will be undertaken for undefined or relatively long periods of time (including any such usages which also require development permission under the Planning and Development Act 2000) and licences for the occupation of the maritime area for maritime usages that are minor or that will be undertaken for relatively short periods of time.
Special Area of Conservation (SAC)	A Special Area of Conservation (SAC) protects one or more special habitats and / or species – terrestrial or marine – listed in the Habitats Directive.
zone of influence (ZoI)	Spatial extent of potential impacts resulting from the project.

1 INTRODUCTION / PURPOSE OF THE DOCUMENT

1.1 The CWP Project

1. Codling Wind Park (CWP) Project is a proposed offshore wind farm (OWF) in the Irish Sea, set in an area called Codling Bank, between approximately 13–22 kilometres (km) off the County Wicklow coast, between Greystones and Wicklow Town.

2. Codling Wind Park Limited (CWPL) (hereafter 'the Applicant'), are applying for permission for the CWP Project under Section 291 of the Planning and Development Act (PDA) (as amended by the Maritime Area Planning (MAP) Act 2021).

1.2 The Applicant

3. The Applicant is a joint venture between Fred. Olsen Seawind and Électricité de France Renewables (EDFR) and was established to develop the CWP Project. Both companies are leading developers, owners and operators of renewable energy assets, with many years of global experience in the renewable energy and offshore wind sector.

1.3 Purpose of this document

4. This document is Volume 1 out of 6 of the CWP Project Natura Impact Statement (NIS). It provides a summary of the findings of the NIS, which is presented in full in subsequent volumes (see Section 2 below).

1.4 Requirement for a Natura Impact Statement

5. With the introduction of the Habitats Directive (Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora) came the obligation to establish the Natura 2000 network, comprising a coherent European ecological network of sites hosting particular natural habitat types and habitats of identified species. The objective of the Natura 2000 network is to enable the relevant habitat types and species' habitats to be maintained or, where appropriate, restored at a favourable conservation status in their natural range.

6. The Natura 2000 network comprises Special Areas of Conservation (SACs, including candidate SACs), designated under the Habitats Directive, and Special Protection Areas (SPAs, including proposed SPAs) designated under the Birds Directive (Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds). These sites are referred to collectively as 'European sites'.

7. More specifically, SACs are designated for the conservation of Annex I habitats (including priority types which are in danger of disappearance) and Annex II species (other than birds) identified in the Habitats Directive. SPAs are designated for the conservation of Annex I birds identified in the Birds Directive and other regularly occurring migratory birds and their habitats. The habitats and species for which SACs are designated are referred to as the 'Qualifying Interests' (QI) of the sites. The species for which SPAs are designated are referred to as 'Special Conservation Interests' (SCIs). Member states are required to identify conservation objectives in respect of each QI and SCI species.

8. Article 6(3) of the Habitats Directive provides that any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to Appropriate Assessment (AA) of its implications for the site in view of the site's conservation objectives. In particular, Article 6(3) provides that the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public. Article 6(4) of the Habitats Directive provides that if, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted. AA was originally transposed into Irish law by the European Communities (Natural Habitats) Regulations, 1997. This has now been replaced by the European Communities (Birds and Natural Habitats) Regulations 2011 as amended (hereafter 'the Habitats Regulations') and Part XAB of the PDA 2000.

9. It is recognised that following the United Kingdom's departure from the European Union, SACs and SPAs in the United Kingdom (UK) are no longer considered 'Natura 2000 sites' for the purpose of an assessment pursuant to Article 6(3) of the Habitats Directive and are instead part of the UK national site network. However, pursuant to the UK's Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, those sites still retain the same protection under UK law as they did prior to the UK's exit from the EU.

10. In these circumstances, the assessment of the UK sites formerly forming part of the Natura 2000 network protected under those Directives have been assessed.

11. This report (the NIS for the CWP Project, including all volumes) has been prepared in accordance with current guidance (National Parks and Wildlife Service (NPWS) 2009, revised February 2010, Office of Planning Regulator 2021), and in accordance with the feedback provided by NPWS to Phase One projects in October 2023. With regards ornithological assessment, the NIS has been completed in accordance with the written feedback provided by NPWS in their document '*Review of Method Statement – Offshore Wind Ornithology Assessment for East Coast Phase 1 Projects'*. Assessments have been undertaken using objective information where possible, with the aim of providing conclusions which are beyond reasonable scientific doubt.

12. This report (all volumes) will accompany the application for development of the CWP Project, to support the Competent Authority in its AA in respect of the CWP Project and associated determination on AA.

2 DOCUMENT STRUCTURE

13. The NIS is contained within multiple volumes as detailed below:

- This document, **Volume 1**, contains the introduction to the CWP Project, document structure and a summary of the conclusions of the other volumes.
- **Volume 2** contains the introductory sections of the document, detailing the relevant legislation, assessment methodology and the project description.
- **Volume 3** provides the report to inform AA Screening.
- **Volume 4** considers the implications for SACs where Likely Significant Effects (LSE) could not be ruled out in the report to inform AA Screening.
- **Volume 5** considers the implications for SPAs where LSE could not be ruled out in the report to inform AA Screening.
- **Volume 6** provides the assessment of the CWP project in combination with other relevant plans and projects.

14. Relevant outline plans or other supporting information as referred to within the NIS are included in **Volume 7** as appendices.

3 APPROACH TO SCREENING AND ASSESSMENT OF ADVERSE EFFECTS ON SITE INTEGRITY

15. Section 177U of the Planning and Development Act (PDA) 2000 (as amended) requires a screening for AA of an application for consent for proposed development to be carried out by the Competent Authority to assess, in view of best scientific knowledge, if the proposed development, individually or in combination, is likely to have a significant effect on any European site. Section 177U(4) provides that the Competent Authority shall determine that an AA of the proposed development is required if it cannot be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will have a significant effect on a European site. Conversely, section 177U(5) provides that the Competent Authority shall determine that an AA of the proposed development is not required if it can be excluded, on the basis of objective information, that the proposed development, individually or in combination with other plans or projects, will not have a significant effect on a European site.

16. European Union and domestic case law also confirms that measures intended to avoid or reduce the harmful effects of a project on a European site must not be considered as part of the AA Screening process. However, the AA screening process can include consideration of measures incorporated into the design of a project not with the aim of reducing negative effects on a European site, but as standard features required for all projects of the same type.

17. Accordingly, the purpose of the Screening stage is to determine which European Sites or features of sites (i.e., SCIs or QIs) may be subject to an impact at a level where LSE from the proposed development, alone or in combination with other plans or projects, cannot be excluded based on objective information and in the absence of measures intended to avoid or reduce negative effects of the project on European sites. For example, it is considered that LSE cannot be ruled out where connectivity and route to impact cannot be discounted without measures intended to avoid or reduce negative effects on a European site.

18. The Screening Volume of the NIS (**Volume 3**) provides the information required to inform the determination of LSE on the European sites considered in the CWP Project's zone of influence (ZoI).

19. The ZoI of a proposed development is the geographical area over which it could affect the receiving environment in a way that could have significant effects on a European site. This area should be established on a case-by-case basis using the Source-Pathway-Receptor framework and not by arbitrary distances (such as 15 km).

20. The highly precautionary approach to Screening taken by the CWP Project means that in all cases where there is potential connectivity with CWP Project activities (or impacts arising from such) and a route to impact on a given QI or SCI of a European site exists, the QI or SCI of that European site has been screened in for inclusion in the next stage of the assessment (i.e., NIS / Stage 2 Appropriate Assessment). Where there is no connectivity with CWP Project activities to a QI or SCI of a European site, and / or no route to impact from the CWP Project on that QI or SCI has been identified, it can be concluded beyond reasonable scientific doubt that there will be no LSE and accordingly the relevant Qis / SCIs have been screened out for Stage 2 appropriate assessment.

21. Where relevant, the effects of the CWP Project in combination with other plans and projects has also been considered for the purposes of Screening. **Volume 6** and EIAR **Appendix 5.1 Cumulative Effects Assessment Methodology** describes the basis upon which relevant plans and programmes have been identified for inclusion in the in-combination assessment.

22. A total of 145 sites have been brought forward from the Screening stage for Stage 2 of the AA process (see **Section 4** below).

23. Following AA Screening, 'Stage 2' AA, including preparation of a NIS, is required where it cannot be excluded, on the basis of objective information (without the implementation of measures intended to avoid or reduce the harmful effects of the Project on European sites), that the CWP Project, individually or in combination with other plans or projects, will have an LSE on any European sites.

24. The purpose of the NIS is to characterise any possible implications of the CWP Project, either alone or in combination with other projects or plans, on the integrity of European sites where LSE could not be ruled out at Screening stage in view of the site's conservation objectives. The NIS contains the information necessary for the Competent Authority to carry out an AA and the full detail and process of which is contained within **Volume 3 – Volume 6** of the NIS.

4 SUMMARY OF ASSESSMENTS

4.1 SAC assessment

4.1.1 SACs considered for impacts to Annex I habitat Qualifying Interests

25. Fifteen SACs designated for Annex I habitat QIs were considered in Screening.

26. Connectivity with direct effects on habitats and effects from the presence of electromagnetic fields (EMF) and associated temperature changes was determined based on whether the array site, offshore export cable corridor (OECC) and / or landfall overlapped with the SAC boundary.

27. Connectivity with indirect effects on habitats, including temporary increases in suspended sediments and smothering, remobilisation of contaminated sediments and the introduction of invasive non-native species (INNS) was informed by hydrodynamic conditions assessments undertaken by the CWP Project.

28. The following impact pathways were considered:

- Direct effects on habitats;
- Temporary increases in suspended sediments / smothering;
- Remobilisation of contaminated sediments;
- INNS; and
- Presence of EMF and / or temperature changes resulting from presence of electrical infrastructure.

29. At Stage 1 (Screening), three SACs with Annex I habitat QIs were screened in where LSE could not be ruled out beyond reasonable scientific doubt. These were:

- South Dublin Bay SAC (IE000210) screened in for:
  - Mudflats and sandflats not covered by seawater at low tide [1140];
  - *Salicornia* and other annuals colonising mud and sand [1310];
  - Annual vegetation of drift lines [1210]; and
  - Embryonic shifting dunes [2110].
- Rockabill to Dalkey Island SAC [IE0003000], screened in for:
  - [1170] Reefs.
- North Dublin Bay SAC [IE000206], screened in for:
  - [1140] Mudflats and sandflats not covered by seawater at low tide;
  - [1310] *Salicornia* and other annuals colonizing mud and sand;
  - [1330] Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*); and
  - [1410] Mediterranean salt meadows (*Juncetalia maritimi*).

30. LSE, alone and in combination, was ruled out for all other habitat QIs of all other SACs.

31. At Stage 2 (AA) the NIS concluded beyond reasonable scientific doubt that, following mitigation, there would be no Adverse Effect on Site Integrity (AESI) of any SAC designated for Annex I habitat QIs, including South Dublin Bay, for the CWP Project alone.

32. Key mitigations in the determination of no AESI related to the management of invasive species and pollution events through the development and implementation of a Construction Environmental Management Plan (CEMP). A CEMP has been submitted in support of the planning application.

33. Similarly, following an assessment of relevant plans and projects in combination with the CWP Project, it was concluded beyond reasonable scientific doubt that there would be no AESI in combination with other plans and projects.

4.1.2 SACs considered for impacts to Marine Mammal Qualifying Interests

34. The potential for connectivity between the CWP Project and SACs (and French Zones Spéciale de Conservation (ZSCs)[1]), for which marine mammals are a QI, was assessed based on whether the CWP Project fell within the relevant Management Unit (MU) for cetaceans or likely foraging range of seals using these SACs. MUs are considered to represent the areas over which cetacean populations may range and thus are an objective measure of connectivity. These ranges have been defined on a species by species basis as outlined in the AA screening document.

35. The following pathways were considered:

- Increased Underwater Noise, caused by:
  - Surveys;
  - UXO clearance;
  - Pile driving;
  - Other construction and decommissioning related activities;
  - Vessels; and
  - Operation.
- Collision risk;
- Change in prey availability;
- Changes in available habitat;
- Pollution; and
- Presence of EMF.

36. At Stage 1, 53 SACs were considered and reviewed under these pathways. Of the 53 sites, 34 SACs with Marine Mammal QIs were screened in, where LSE could not be ruled out beyond reasonable scientific doubt. These were:

- Duvillaun Islands SAC (IE000495) screened in for Bottlenose dolphin.
- Lower River Shannon SAC (IE002165) screened in for Bottlenose dolphin.
- Slyne Head Islands SAC (IE000328) screened in for Bottlenose dolphin.
- Slyne Head Peninsula SAC (IE002074) screened in for Bottlenose dolphin.
- West Connacht Coast SAC (IE002998) screened in for Bottlenose dolphin.
- Cardigan Bay SAC (UK0012712) screened in for Bottlenose dolphin and Grey Seal.
- Llŷn Peninsula and the Sarnau SAC (UK0013117) screened in for Bottlenose dolphin and Grey Seal.
- Saltee Islands SAC (IE000707) screened in for Grey Seal.
- Lambay Island SAC (IE000204) screened in for Grey Seal and Harbour Seal.
- Abers – Côte des légendes ZSC (FR5300017) screened in for Harbour Porpoise.
- Anse de Vauville ZSC (FR2502019) screened in for Harbour Porpoise.
- Baie de Lancieux, Baie de l'Arguenon, Archipel de Saint Malo et Dinard ZSC (FR5300012) screened in for Harbour Porpoise.
- Baie de Morlaix ZSC (FR5300015) screened in for Harbour Porpoise.
- Baie de Saint-Brieuc – Est ZSC (FR5300066) screened in for Harbour Porpoise.
- Baie du Mont Saint-Michel ZSC (FR2500077) screened in for Harbour Porpoise.
- Banc et récifs de Surtainville ZSC (FR2502018) screened in for Harbour Porpoise.

[1] Zones Spéciale de Conservation (ZSCs) is the name for Special Areas of Conservation (SACs) in France.

- Blasket Islands SAC (IE002172) screened in for Harbour Porpoise.
- Bristol Channel Approaches SAC (UK0030396) screened in for Harbour Porpoise.
- Cap d'Erquy-Cap Fréhel ZSC (FR5300011) screened in for Harbour Porpoise.
- Chausey ZSC (FR2500079) screened in for Harbour Porpoise.
- Chaussée de Sein ZSC (FR5302007) screened in for Harbour Porpoise.
- Côte de Granit rose-Sept-Iles ZSC (FR5300009) screened in for Harbour Porpoise.
- Côtes de Crozon ZSC (FR5302006) screened in for Harbour Porpoise.
- Estuaire de la Rance ZSC (FR5300061) screened in for Harbour Porpoise.
- Mers Celtiques – Talus du golfe de Gascogne ZSC (FR5302015) screened in for Harbour Porpoise.
- Nord Bretagne DH ZSC (FR2502022) screened in for Harbour Porpoise.
- North Anglesey Marine SAC (UK0030398) screened in for Harbour Porpoise.
- North Channel SAC (UK0030399) screened in for Harbour Porpoise.
- Ouessant-Molène ZSC (FR5300018) screened in for Harbour Porpoise.
- Récifs et Landes de la Hague ZSC (FR2500084) screened in for Harbour Porpoise.
- Roaringwater Bay and Islands SAC (IE000101) screened in for Harbour Porpoise.
- Rockabill to Dalkey Island SAC (IE003000) screened in for Harbour Porpoise.
- Tregor Goëlo ZSC (FR5300010) screened in for Harbour Porpoise.
- West Wales Marine SAC (UK0030397) screened in for Harbour Porpoise.

37. At Stage 2, when all SACs were considered, it was concluded beyond reasonable scientific doubt that, following mitigation, there would be no AESI on any SAC for the CWP Project alone.

38. Key mitigations in the determination of no AESI related to the development and implementation of an Ecological Vessel Management Plan (EVMP), the development and implementation of a Marine Mammal Mitigation Protocol (MMMP), and the implementation of the CEMP. An EVMP, MMMP and CEMP have been submitted in support of the planning application.

39. Similarly, following an assessment of relevant plans and projects in combination with the CWP Project, it was concluded beyond reasonable scientific doubt that there would be no AESI in combination with other plans and projects.

4.1.3 SACs considered for impacts to Annex II migratory fish Qualifying Interests

40. At Stage 1 (Screening), 75 SACs designated for Annex II migratory fish Qis were considered.

41. The potential for connectivity between the CWP Project and SACs for which Annex II diadromous fish are a QI was assessed based on whether the array site, offshore export cable corridor and / or landfall is adjacent to or overlapping with an SAC boundary designated for Annex II migratory fish. It was also considered that there is potential for connectivity with the SAC if species designated as QIs of European sites are likely to migrate through, or in proximity to, the array site, offshore export cable corridor, landfall, and / or the onshore substation location (i.e., within the western Irish Sea). The migration range used for each species is defined below. At sea distances, rather than linear distances, have been used to account for migration pathways, as summarised below.

- Twaite and allis shad: a recent acoustic tagging study of 73 twaite shad from the River Severn (within the Severn estuary SAC) recorded a movement distance of up to 950 km, with one individual detected in Blackwater estuary (Davies et al., 2020). SACs with allis or twaite shad as QIs within 950 km have therefore been considered to have potential connectivity with the CWP Project.
- Atlantic salmon: Atlantic salmon are known to undertake long distance migrations. Recent studies found populations migrate towards oceanographic fronts for feeding (Rikardsen et al., 2021). As such, rivers in Ireland, Northern Ireland and the west coast of the UK with Atlantic salmon QIs have been considered to have potential connectivity with the CWP Project.

- Sea lamprey: It is considered that the abundance of sea lamprey is linked to the abundance of suitable prey, in particular shad and salmon (Mota et al., 2016). Accordingly, it is considered that connectivity exists to those SACs with sea lamprey QIs over the same extent as those key prey species, i.e., 950 km.
- River lamprey: river lamprey are known to mainly inhabit estuarine and riverine environments, with some near coastal habitat also utilised. As such, rivers in Ireland, Northern Ireland and the west coast of the UK with river lamprey QIs have been considered to have connectivity with the CWP Project.

42. The above specified ranges over which SACs may be considered, and the area over which interaction may be present with CWP Project activities (i.e., the western Irish Sea) are considered to encompass both direct and indirect impacts (i.e., increases in suspended sediment, presence of contaminated sediments and increased underwater noise).

43. The following impact pathways were considered:

- Direct effects on habitats;
- Temporary increase in Suspended Sediment Concentration (SSC) and contaminated sediments;
- Increase in underwater noise and vibration;
- Presence of EMF and heat; and
- Accidental pollution events.

44. Of the 75 sites considered at Stage 1, 59 SACs with Annex II migratory fish QIs were screened in where LSE could not be ruled out beyond reasonable scientific doubt. These were:

- Slaney River Valley SAC (IE0000781), screened in for Sea lamprey, River lamprey, Twaite shad and Atlantic salmon.
- River Barrow and River Nore SAC (IE0002162), screened in for Sea lamprey, River lamprey, Twaite shad and Atlantic salmon.
- Lower River Suir SAC (IE0002137), screened in for Sea lamprey, River lamprey, Twaite shad and Atlantic salmon.
- Blackwater River (Cork / Waterford) SAC (IE0002170), screened in for Sea lamprey, River lamprey, Twaite shad and Atlantic salmon.
- River Boyne and River Blackwater SAC (IE0002299), screened in for River lamprey and Atlantic salmon.
- Cummeen Strand / Drumcliff Bay (Sligo Bay) SAC (IE0000627), screened in for Sea lamprey and River lamprey.
- Killarney National Park, Macgillycuddy's Reeks and Caragh River Catchment SAC (IE0000365), screened in for Sea lamprey, River lamprey and Atlantic salmon.
- Killala Bay / Moy Estuary SAC (IE0000458), screened in for Sea lamprey.
- Lough Gill SAC (IE0001976), screened in for Sea lamprey, River lamprey and Atlantic Salmon.
- River Moy SAC (IE0002298), screened in for Sea lamprey and Atlantic salmon.
- Castlemaine Harbour SAC (IE0000343), screened in for Sea lamprey, River lamprey and Atlantic salmon.
- Lower River Shannon SAC (IE0002165), screened in for Sea lamprey, River lamprey and Atlantic salmon.
- Lough Corrib SAC (IE0000297), screened in for Sea lamprey and Atlantic salmon.
- Pembrokeshire Marine / Sir Benfro Forol (UK0013116), screened in for Twaite shad, Allis shad and Sea lamprey.
- Carmarthen Bay and Estuaries / Bae Caerfyrddin ac Aberoedd (UK0020020), screened in for Twaite shad, Allis shad and Sea lamprey.
- Afon Tywi / River Tywi (UK0013010), screened in for Twaite shad, Allis shad and Sea lamprey.
- Severn Estuary / Môr Hafren (UK0013030), screened in for Twaite shad and Sea lamprey.
- River Usk / Afon Wysg (UK0013007), screened in for Twaite shad, Allis shad and Sea lamprey.
- River Wye / Afon Gwy (UK0012642), screened in for Twaite shad, Allis shad and Sea lamprey.

- Cardigan Bay / Bae Ceredigion (UK0012712), screened in for Sea lamprey.
- Afon Teifi / River Teifi (UK0012670), screened in for Sea lamprey.
- Dee Estuary / Aber Dyfrdwy (UK0030131), screened in for Sea lamprey.
- Afonydd Cleddau / Cleddau Rivers (UK0030074), screened in for Sea lamprey.
- River Dee and Bala Lake / Afon Dyfrdwy a Llyn Tegid (UK0030252), screened in for Sea lamprey.
- River Derwent and Bassenthwaite Lake (UK0030032), screened in for Sea lamprey.
- Solway Firth (UK0013025), screened in for Sea lamprey.
- River Eden (UK0012643), screened in for Sea lamprey.
- River Axe (UK0030248), screened in for Sea lamprey.
- River Avon (UK0013016), screened in for Sea lamprey.
- Rade de Brest, Estuaire de l'Aulne (FR5300046) screened in for Twaite shad, Allis shad and Sea lamprey.
- Côte de Granit Ros Sept-Îles (FR5300009) screened in for Twaite shad, Allis shad and Sea lamprey.
- Rivière Léguer, forts de Beffou, Coat an Noz et Coat an Hay (FR5300008) screened in for Twaite shad, Allis shad and Sea lamprey.
- Tregor Golo (FR5300010) screened in for Twaite shad, Allis shad and Sea lamprey.
- Valle de l'Aulne (FR5300041) screened in for Twaite shad, Allis shad and Sea lamprey.
- Rivière Scorff, Fort de Pont Calleck, Rivière Sarre (FR5300026) screened in for Twaite shad, Allis shad and Sea lamprey.
- Baie de Saint-Brieuc – Est (FR5300066) screened in for Twaite shad and Allis shad.
- Estuaire de la Rance (FR5300061) screened in for Twaite shad, Allis shad and Sea lamprey.
- Golfe du Morbihan, côte ouest de Rhuys (FR5300029) screened in for Twaite shad and Allis shad.
- Estuaire de la Vilaine (FR5300034) screened in for Twaite shad, Allis shad and Sea lamprey.
- Baie de Seine occidentale (FR2502020) screened in for Twaite shad, Allis shad and Sea lamprey.
- Estuaire de la Loire Nord (FR5202011) screened in for Twaite shad, Allis shad and Sea lamprey.
- Baie du Mont Saint-Michel (FR2500077) screened in for Twaite shad, Allis shad and Sea lamprey.
- Estuaire de la Loire Sud – Baie de Bourgneuf (FR5202012) screened in for Twaite shad, Allis shad and Sea lamprey.
- Pertuis Charentais (FR5400469) screened in for Twaite shad, Allis shad and Sea lamprey.
- Marais de Vilaine (FR5300002) screened in for Twaite shad, Allis shad and Sea lamprey.
- Estuaires de la Loire (FR5200621) screened in for Twaite shad, Allis shad and Sea lamprey.
- Baie de Seine orientale (FR2502021) screened in for Twaite shad, Allis shad and Sea lamprey.
- Rivière Elorn (FR5300024) screened in for Allis shad and Sea lamprey.
- Rivière Lata, Pointe du Talud, tangs du Loc'h et de Lannenec (FR5300059) screened in for Allis shad and Sea lamprey.
- Rivière Elle (FR5300006) screened in for Allis shad and Sea lamprey.
- Littoral Ouest du Cotentin de Brhal Pirou (FR2500080) screened in for Allis shad and Sea lamprey.
- Marais du Cotentin et du Bessin – Baie des Veys (FR2500088) screened in for Allis shad and Sea lamprey.
- Rivière le Douron (FR5300004) screened in for Sea lamprey.
- Ria d'Etel (FR5300028) screened in for Sea lamprey.
- Havre de Saint-Germain-sur-Ay et Landes de Lessay (FR2500081) screened in for Sea lamprey.
- Bassin de l'Airou (FR2500113) screened in for Sea lamprey.
- Vallée de la Sée (FR2500110) screened in for Sea lamprey.
- Valle de l'Arz (FR5300058) screened in for Sea lamprey.
- Lac de Grand-Lieu (FR5200625) screened in for Sea lamprey.

45. LSE, alone and in combination, was ruled out for all other Annex II fish QIs of all other SACs.

46. At Stage 2, the NIS concluded beyond reasonable scientific doubt that, following mitigation, there would be no AESI on any SAC designated for Annex II migratory fish QIs, for the CWP Project alone.

47. Key mitigations in the determination of no AESI related to the management of invasive species and pollution events through the development and implementation of a Construction Environmental Management Plan (CEMP).

48. Similarly, following an assessment of relevant plans and projects in combination with the CWP Project, it was concluded beyond reasonable scientific doubt that there would be no AESI in combination with other plans and projects.

4.1.4 SACs considered for onshore Terrestrial Habitat Qualifying Interests

49. The potential for connectivity between SACs designated for terrestrial habitat qualifying interests and the CWP project were assessed and the following impact pathways were considered:

- Direct impacts on habitats – this impact relates to effects to habitats located within the onshore development area, above the high water mark.
- Spread / introduction of terrestrial INNS – the spread / introduction of INNS during the construction phase will be associated with the areas of machinery / vehicle movement, the ZoI for this impact is therefore considered to be the onshore development area plus the immediate surrounding terrestrial habitat.
- Air quality impacts (dust) – dust impacts are likely to occur during excavating activities, occurring within the immediate vicinity of the onshore development area.

50. One SAC, South Dublin Bay SAC (IE000210), was considered to be within the ZoI of construction works associated with the onshore development area and was screened in based on impacts associated with the spread / introduction of terrestrial INNS on the Annex I habitats, where LSE could not be ruled out beyond reasonable scientific doubt. The habitats' qualifying interests identified were Annual vegetation of drift lines [1210] and Embryonic shifting dunes [2110].

51. The NIS concluded beyond reasonable scientific doubt that, following mitigation, there would be no AESI on any SAC designated for terrestrial habitats, for the CWP Project alone.

52. Key mitigations in the determination of no AESI related to the management of terrestrial INNS through the development and implementation of an Invasive Species Management Plan (ISMP). An ISMP has been submitted in support of the planning application.

53. Similarly, following an assessment of relevant plans and projects in combination with the CWP Project, it was concluded beyond reasonable scientific doubt that there would be no AESI in combination with other plans and projects.

4.1.5 SACs considered for Terrestrial Mammal Qualifying Interests

54. The potential for connectivity between SACs designated for terrestrial mammals qualifying interests and the CWP project were assessed and the following impact pathways were considered:

- Direct impacts on habitats – this impact relates to the effects to habitats located within the onshore development area, above the high water mark.
- Noise / disturbance – the construction phase works are likely to result in an increase in noise levels within the vicinity of the onshore development area.

55. No SACs designated for terrestrial mammal species were identified within the ZoI of the construction works associated with the onshore development area. The closest SAC designated for any Annex II terrestrial mammal is the Wicklow Mountains SAC (IE002122), which is protected for otter. The Wicklow Mountains SAC is located approximately 25 km upstream of the onshore development area. Otter territory ranges in Ireland have been recorded to range between 6–15 km along rivers (Reid et al., 2013; Bailey and Rochford, 2006). Given the significant upstream distance (*c*. 25 km), the onshore

development area or the surrounding intertidal area is not considered to be an *ex-situ* site for the population of otter designated within the Wicklow Mountains SAC.

56. All SACs designated for terrestrial mammals were screened out within the screening assessment and were not assessed further. It was concluded beyond reasonable scientific doubt that the CWP Project both alone, and in combination with other plans and projects, will not result in LSE on terrestrial mammal QIs.

4.2 SPA assessment

57. The potential for connectivity between the CWP Project and SPAs for which ornithological features are an SCI are assessed based on four broad species groupings. SPAs designated in relation to:

- Breeding seabird SCIs;
- Non-breeding seabird SCIs;
- Migratory wildfowl and wader SCIs; and
- Other migratory SCIs.

58. Connectivity ranges for each of the species groupings (and marine area SPAs) detailed above, with justification of the rationale used to define those ranges, are defined as follows:

- **SPAs designated in relation to breeding seabird SCIs:** SPAs were selected on the basis of the array site, OECC, landfall location or the onshore substation falling within foraging range of designated seabird SCIs of those SPAs, subject to the below exceptions. Foraging range was defined from the species specific mean-maximum foraging range plus one standard deviation, as stated in Woodward et al., 2019. As foraging ranges differ between seabird species, the ZoI is treated as differing between species.
    - Exceptions to this rule are outlined below:
        - For Manx shearwater and fulmar, species known to have extremely large foraging ranges. For these species, very distant SPAs, classed as sites for which the by sea distance between the SPA and CWP Project areas is greater than the foraging range of gannet (509.4 km), there was not considered to be any meaningful pathway to impact with CWP Project activities or infrastructure, on account that numbers of individuals potentially using CWP Project areas would be negligible, the potential impact therefore *de minimis*.
        - For little tern, although not within foraging range of the array site, works and infrastructure within this area of the CWP Project were considered in relation to The Murrough SPA on account of observations of this species in the array site during breeding season (ObSERVE surveys in 2016, Jessopp et al., 2018). As no other little tern colonies occur locally and information relating to little tern foraging range is minimal, assessment was undertaken on the conservative assumption that little tern recorded within the array site and surrounding areas during ObSERVE surveys may have originated from the breeding colony within The Murrough SPA.
- **SPAs designated in relation to non-breeding seabird SCIs:** SPAs within the Irish Sea Region were selected. The Irish Sea Region is here defined as the sea area in a direct line between Fair Head (Northern Ireland) and the Mull of Kintyre (Scotland) in the north, and a direct line between Carnsore Point (Ireland) and St David's Head (Wales) in the South. This zone of impact allows for the potential that wintering seabirds may move between sites around the Irish Sea.
- **SPAs designated in relation to migratory wildfowl and wader SCIs:** Coastal, estuarine and lowland SPAs from the eastern coast of Northern Ireland and along the Irish eastern and southern coasts were selected on the basis that SCIs of these SPAs may pass through the CWP array site or through South Dublin Bay and River Tolka Estuary in the vicinity of the export cable landfall during migration.

- **SPAs designated in relation to other migratory non-seabird SCIs:** All Irish SPAs designated in relation to wintering or breeding populations of the following terrestrial (i.e., non-seabird and non-wader or wildfowl species) migratory SCIs were selected on the basis that these SCIs may pass through the CWP array site during migration:
    - Hen harrier;
    - Merlin; and
    - Corncrake.
- **SPAs designated in relation to important marine areas:** SPAs within the Irish Sea Region were selected as those with potential connectivity to the project. The Irish Sea Region is here defined as the sea area in a direct line between Fair Head (Northern Ireland) and the Mull of Kintyre (Scotland) in the north, and a direct line between Carnsore Point (Ireland) and St David's Head (Wales) in the South.

59. Six potential impacts to SPAs for which ornithological features are a SCI were identified:

- Direct effects on habitat impacts are considered effects which directly remove or alter habitats and that prevent or reduce the use of those habitats by ornithological receptors;
- Disturbance and displacement impacts are considered behavioural responses to wind farm infrastructure or associated activity leading to effective indirect habitat loss through the avoidance of particular areas, or barrier effects from the avoidance of particular areas;
- Changes in prey availability impacts are considered effects which result in changes to the distribution, abundance or behaviour of prey species in such a way as to alter their availability for ornithological receptors. These changes may result in energetic consequences to, and redistribution of, ornithological receptors;
- Pollution impacts are considered effects which result from the accidental release of materials during proposed works which may impact ornithological receptors by causing mortality, reductions in fitness or reduce the quality of the habitats which they use;
- Introduction or spread of invasive species impacts are considered effects which result from the accidental release or redistribution of invasive species during proposed works, which may impact ornithological receptors by reducing the quality of the habitats which they use; and
- Collision impacts are considered as the death (or injury) of ornithological receptors where individuals collide with OWF infrastructure, specifically rotating WTG blades during the operational phase.

60. The AA Screening Report (NIS **Volume 3**) concluded that LSE could not be ruled out for 96 SPAs as a result of the CWP Project alone, these were:

- South Dublin Bay and River Tolka Estuary SPA (IE004024), screened in for Common tern, Arctic tern, Roseate tern, Black-headed gull, Light-bellied brent goose, Oystercatcher, Ringed plover, Grey plover, Knot, Sanderling, Dunlin, Bar-tailed godwit, Redshank, and Wetland and Waterbirds.
- North Bull Island SPA (IE004006), screened in for Black-headed gull, Light-bellied brent goose, Shelduck, Teal, Pintail, Shoveler, Oystercatcher, Golden plover, Grey plover, Knot, Sanderling, Dunlin, Black-tailed godwit, Bar-tailed godwit, Curlew, Redshank and Turnstone.
- Dalkey Islands SPA (IE004172), screened in for Common tern, Arctic tern and Roseate tern.
- The Murrough SPA (IE004186), screened in for Herring Gull, Black-headed gull, Red-throated diver, Little tern, Whooper swan, Light-bellied brent goose, Greenland white-fronted goose, Greylag goose, Teal and Wigeon.
- Wicklow Head SPA (IE004127), screened in for Kittiwake.
- Howth Head Coast SPA (IE004113), screened in for Kittiwake.
- Ireland's Eye SPA (IE 004117), screened in for Kittiwake, Herring gull, Guillemot, Razorbill and Cormorant.
- Lambay Islands SPA (IE004069), screened in for Kittiwake, Fulmar, Herring gull, Lesser black-backed gull, Guillemot, Razorbill, Puffin, Cormorant and Greylag goose.
- Rockabill SPA (IE004014), screened in for Common tern, Arctic tern, Roseate tern and Purple sandpiper.

- Skerries Islands SPA (IE004122), screened in for Herring gull, Light-bellied brent goose, Purple sandpiper and Turnstone.
- Aberdaron Coast and Bardsey Island SPA (Wales – UK9013121), screened in for Manx shearwater.
- Saltee Islands SPA (IE004002), screened in for Kittiwake, Fulmar, Lesser black-backed gull, Guillemot, Razorbill, Puffin and Gannet.
- Skomer, Skokholm and the Seas off Pembrokeshire SPA (Wales – UK9015051), screened in for Lesser black-backed gull, Puffin, Manx shearwater and European storm petrel.
- Grassholm SPA (Wales – UK9014041), screened in for Gannet.
- Copeland Islands SPA (Northern Ireland – UK902091), screened in for Manx shearwater.
- Ribble and Alt Estuaries SPA (England – UK9005103), screened in for Lesser black-backed gull.
- Helvick Head to Ballyquin SPA (IE004192), screened in for Kittiwake.
- Morecambe Bay and Duddon Estuary SPA (England – UK9005103), screened in for Lesser black-backed gull and Mediterranean gull.
- Ailsa Craig SPA (Scotland – UK9003091), screened in for Kittiwake, Lesser black-backed gull and Gannet.
- Rathlin Island SPA (Northern Ireland – UK9020011), screened in for Kittiwake.
- Old Head of Kinsale SPA (IE004021), screened in for Kittiwake.
- Isles of Scilly SPA (England – UK9020288), screened in for European storm petrel.
- Horn Head to Fanad Head SPA (IE004194), screened in for Fulmar.
- Beara Peninsula SPA (IE004155), screened in for Fulmar.
- Tory Island SPA (IE004073), screened in for Fulmar and Corncrake.
- The Bull and the Cow Rocks SPA (IE004066), screened in for Gannet.
- West Donegal Coast SPA (IE004150), screened in for Fulmar.
- Deenish Islands and Scariff Island SPA (IE004175), screened in for Fulmar and Manx shearwater.
- Iveragh Peninsula SPA (IE004154), screened in for Fulmar.
- Puffin Island SPA (IE004003), screened in for Fulmar and Manx shearwater.
- Skelligs SPA (IE004007), screened in for Fulmar, Gannet and Manx shearwater.
- Rum SPA (Scotland – UK9001341), screened in for Manx shearwater.
- Mingulay and Berneray SPA (Scotland – UK9001121), screened in for Fulmar.
- Blasket Islands SPA (IE004008), screened in for Fulmar and Manx shearwater.
- Dingle Peninsula SPA (IE004153), screened in for Fulmar.
- Kerry Head SPA (IE002263), screened in for Fulmar.
- North-west Irish Sea SPA (IE004236), screened in for Red-throated diver, Great northern diver, Fulmar, Manx shearwater, Cormorant, Shag, Common scoter, Little gull, Black-headed gull, Common gull, Lesser black-backed gull, Herring gull, Great black-backed gull, Kittiwake, Roseate tern, Common tern, Arctic tern, Little tern, Guillemot, Razorbill and Puffin.
- Seas off Wexford SPA (IE004237), screened in for Kittiwake, Fulmar, Cormorant, Herring gull, Lesser black-backed gull, Guillemot, Razorbill, Puffin, Manx shearwater, Red-throated diver, Common scoter and Gannet.
- Irish Sea Front SPA (England – UK9020328), screened in for Manx shearwater.
- Dundalk Bay SPA (IE004026), screened in for Bar-tailed godwit, Black-tailed godwit, Curlew, Dunlin, Golden plover, Greenland white-fronted goose, Grey plover, Greylag Goose, Knot, Lapwing, Light-bellied brent goose, Mallard, Oystercatcher, Pintail, Redshank, Ringed plover, Shelduck, Teal, Common scoter, Black-headed gull, Red-breasted merganser, Herring gull, Common gull and Great crested grebe.
- Boyne Estuary SPA (IE004080), screened in for Black-tailed godwit, Golden plover, Grey heron, Knot, Lapwing, Light-bellied brent goose, Oystercatcher, Redshank, Sanderling, Shelduck and Turnstone.
- River Nanny Estuary and Shore SPA (IE004158), screened in for Golden plover, Knot, Light-bellied brent goose, Oystercatcher, Ringed plover, Sanderling and Herring gull.

- Rogerstown Estuary SPA (IE004015), screened in for Black-tailed godwit, Dunlin, Grey plover, Greylag goose, Knot, Light-bellied brent goose, Oystercatcher, Redshank, Ringed plover, Shelduck and Shoveler.
- Baldoyle Bay SPA (IE004016), screened in for Bar-tailed godwit, Golden plover, Grey plover, Light-bellied brent goose, Ringed plover and Shelduck.
- Malahide Estuary SPA (IE004025), screened in for Bar-tailed godwit, Black-tailed godwit, Golden plover, Grey plover, Knot, Oystercatcher, Pintail, Redshank, Shelduck, Red-breasted merganser, Great crested grebe and Goldeneye.
- Cahore Marshes SPA (IE004143), screened in for Bewick's swan, Golden plover, Greenland white-fronted goose, Lapwing, Whooper swan and Wigeon.
- The Raven SPA (IE004019), screened in for Greenland white-fronted goose, Grey plover, Sanderling, Common scoter, Red-throated diver and Cormorant.
- Wexford Harbour and Slobs SPA (IE004076), screened in for Bar-tailed godwit, Bewick's swan, Black-tailed godwit, Coot, Curlew, Dunlin, Golden plover, Greenland white-fronted goose, Grey heron, Grey plover, Knot, Lapwing, Light-bellied brent goose, Little grebe, Mallard, Oystercatcher, Pintail, Redshank, Sanderling, Shelduck, Teal, Whooper swan, Wigeon, Lesser black-backed gull, Black-headed gull, Red-breasted merganser, Great crested grebe, Cormorant, Scaup and Hen harrier.
- Lady's Island Lake SPA (IE004009), screened in for Gadwall and Common scoter.
- Tacumshin Lake SPA (IE004092), screened in for Bewick's swan, Black-tailed godwit, Coot, Gadwall, Golden plover, Greenland white-fronted goose, Grey plover, Lapwing, Light-bellied brent goose, Little grebe, Pintail, Teal, Tufted duck, Whooper swan and Wigeon.
- Ballyteige Burrow SPA (IE004020), screened in for Bar-tailed godwit, Black-tailed godwit, Golden plover, Grey plover, Lapwing, Light-bellied brent goose and Shelduck.
- Bannow Bay SPA (IE004033), screened in for Bar-tailed godwit, Black-tailed godwit, Curlew, Dunlin, Golden plover, Grey plover, Knot, Lapwing, Light-bellied brent goose, Oystercatcher, Pintail, Redshank and Shelduck.
- Tramore Back Strand SPA (IE004027), screened in for Bar-tailed godwit, Black-tailed godwit, Curlew, Golden plover, Grey plover, Lapwing and Light-bellied brent goose.
- Dungarvan Harbour SPA (IE004032), screened in for Bar-tailed godwit, Black-tailed godwit, Curlew, Dunlin, Golden plover, Grey plover, Knot, Lapwing, Light-bellied brent goose, Oystercatcher, Redshank, Shelduck and Turnstone.
- Blackwater Estuary SPA (IE004028), screened in for Bar-tailed godwit, Black-tailed godwit, Curlew, Dunlin, Golden plover, Lapwing, Light-bellied brent goose, Redshank and Wigeon.
- Ballymacoda Bay SPA (IE004023), screened in for Bar-tailed godwit, Black-tailed godwit, Curlew, Dunlin, Golden plover, Greylag goose, Lapwing, Light-bellied brent goose, Redshank, Ringed plover, Sanderling, Teal, Turnstone and Wigeon.
- Ballycotton Bay SPA (IE004022), screened in for Bar-tailed godwit, Black-tailed godwit, Curlew, Golden plover, Grey plover, Lapwing, Ringed plover, Teal and Turnstone.
- Cork Harbor SPA (IE004030), screened in for Bar-tailed godwit, Black-tailed godwit, Curlew, Dunlin, Golden plover, Grey heron, Grey plover, Lapwing, Little grebe, Oystercatcher, Pintail, Redshank, Shelduck, Shoveler, Teal, Whooper swan and Wigeon.
- Courtmacsherry Bay SPA (IE004219), screened in for Bar-tailed godwit, Black-tailed godwit, Curlew, Dunlin, Golden plover, Lapwing, Shelduck and Wigeon.
- Clonakilty Bay SPA (IE004081), screened in for Black-tailed godwit, Curlew, Dunlin and Shelduck.
- Poulaphouca Reservoir SPA (IE004063), screened in for Greylag goose.
- Strangford Lough SPA (Northern Ireland – UK9020111), screened in for Bar-tailed godwit, Golden plover, Knot, Light-bellied brent goose, Redshank and Shelduck.
- Outer Ards SPA (Northern Ireland – UK9020271), screened in for Golden plover, Light-bellied brent goose, Ringed plover and Turnstone.
- Carlingford Lough SPA (IE004078), screened in for Light-bellied brent goose.
- Killough Bay SPA (Northern Ireland – UK9020221), screened in for Light-bellied brent goose.
- Larne Lough SPA (Northern Ireland – UK9020042), screened in for Light-bellied brent goose.

- Lough Neagh and Lough Beg SPA (Northern Ireland – UK9020091), screened in for Bewick's swan and Whooper swan.
- Upper Lough Erne SPA (Northern Ireland – UK0016614), screened in for Whooper swan.
- Lough Foyle SPA (IE004087), screened in for Bewick's swan, Whooper swan and Assemblage.
- Liverpool Bay SPA / Bae Lerpwl SPA (England / Wales – UK9020294), screened in for Common scoter, Red-throated diver and Little gull.
- Traeth Lafan / Lavan Sands, Conway Bay SPA (Wales – UK9013031), screened n for Red-breasted merganser and Great crested grebe.
- Mersey Narrows & North Wirral Foreshore SPA (England – UK9020287), screened in for Little gull.
- Belfast Lough Open Water SPA (Northern Ireland – UK9020290), screened in for Great crested grebe.
- Belfast Lough SPA (Northern Ireland – UK9020101), screened in for Great crested grebe.
- Solway Firth SPA (Scotland / England – UK9005012), screened in for Common scoter, Black-headed gull, Herring gull, Common gull, Goldeneye, Red-throated diver and Cormorant.
- Connemara Bog Complex SPA (IE004181), screened in for Merlin.
- Derryveagh and Glendowan Mountains SPA (IE004039), screened in for Merlin.
- Falcarragh to Meenlaragh SPA (IE004149), screened in for Corncrake.
- Fanad Head SPA (IE004148), screened in for Corncrake.
- Inishbofin, Inishdooey and Inishbeg SPA (IE004083), screened in for Corncrake.
- Inishbofin, Omey Island and Turbot Island SPA (IE004231), screened in for Corncrake.
- Killarney National Park SPA (IE004038), screened in for Merlin.
- Lough Corrib SPA (IE004042), screened in for Hen harrier.
- Lough Nillan Bog SPA (IE004110), screened in for Merlin.
- Malin Head SPA (IE004146), screened in for Corncrake.
- Middle Shannon Callows SPA (IE004096), screened in for Corncrake.
- Mullaghanish to Musheramore Mountains SPA (IE004162), screened in for Hen harrier.
- Mullet Peninsula SPA (IE004227), screened in for Corncrake.
- Owenduff / Nephin Complex SPA (IE004098), screened in for Merlin.
- Slieve Aughty Mountains SPA (IE004168), screened in for Hen harrier and Merlin.
- Slieve Beagh SPA (IE004167), screened in for Hen harrier.
- Slieve Bloom Mountains SPA (IE004160), screened in for Hen harrier.
- Slievefelim to Silvermines Mountains SPA (IE004165), screened in for Hen harrier.
- Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA (IE004161), screened in for Hen harrier.
- West Donegal Islands SPA (IE004230), screened in for Corncrake.
- Wicklow Mountains SPA (IE004040), screened in for Merlin.

61. LSE, alone and in combination, was ruled out for all other SCIs of all other SPAs.

62. At Stage 2, the NIS concluded beyond reasonable scientific doubt that following application of suitable mitigation where required, there would be no AESI on any SPA for the CWP Project alone.

63. Key mitigations in the determination of no AESI related to the management of invasive species and pollution events through the development and implementation of a CEMP; the management of disturbance and displacement impacts through seasonal and temporal restrictions to construction activities around export cable landfall and onshore areas including the onshore substation; and through the development and management of an EVMP.

64. Similarly, following an assessment of relevant plans and projects in combination with the CWP Project, it was concluded beyond reasonable scientific doubt that there would be no AESI on any of the SPAs in combination with other plans and projects.

5 CONCLUSIONS

65. The CWP Project can conclude beyond reasonable scientific doubt that, following mitigation where required, there will be no adverse effect on the site integrity of any European designated site, either from the CWP Project alone or from the CWP Project in combination with other plans and projects.

6 REFERENCES

66. Bailey, M. and Rochford, J. (2006) Otter Survey of Ireland 2004/2005. Irish Wildlife Manuals, No. 23. National Parks and Wildlife Service, Department of Environment, Heritage and Local Government, Dublin, Ireland.

67. Reid, N., Hayden, B., Lundy, M.G., Pietravalle, S., McDonald, R.A. and Montgomery, W.I. (2013) National Otter Survey of Ireland 2010/12. Irish Wildlife Manuals No. 76. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht, Dublin, Ireland.