Fferm Solar Larnog

Environmental Statement

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1. Executive Summary

1.1.1. This report, to inform a Habitats Regulations Assessment (HRA) – Stage 1: Screening, has been prepared by WSP on behalf of Trydan Gwyrdd Cymru. The report has been produced in compliance with the Conservation of Habitats and Species Regulations 2017 (as amended). Trydan Gwyrdd Cymru is seeking to construct a solar farm development, Fferm Larnog Solar Farm (the 'Proposed Development') to the south of Cosmeston (central National Grid Reference: ST 17739 68268); hereafter referred to as the 'Site'.

1.1.2. The key elements of the design are as follows:

- Ground mounted solar PV generating station with a gross electrical output capacity to the distribution grid network in the region of 35 MW. The generating station will include solar PV modules and mounting structures;
- Project substation compound, which will include substation, switching and control equipment, storage areas, and provisions for vehicular parking and material laydown;
- Battery Energy Storage System (BESS), also situated within the project substation compound which will include inverters, transformers, switchgear and ancillary equipment and their containers, enclosures, monitoring systems, air conditioning, electrical cables and fire safety infrastructure;
- Balance of Solar System (BoSS) which comprises, inverters, transformers, switchgear;
- Ancillary infrastructure works including underground cables, boundary treatments, security equipment, lighting, weather stations, landscaping, access tracks, earthworks, surface water management, and any other works identified as necessary to enable the development;
- Permanent diversion of Public Footpath L1/5/2; and
- Landscaping, habitat management, biodiversity enhancement and amenity improvements.

1.1.3. The Site lies within the precautionary Zone of Influence (ZoI) of the Severn Estuary SPA/Ramsar in relation to potential construction-related noise, vibration and lighting effects. However, these effects would be temporary, localised and limited to the construction phase. Furthermore, wintering bird surveys and desk study records indicate that the Site does not support qualifying species of the Severn Estuary SPA/Ramsar and is therefore not considered functionally linked land. As a result, no credible impact pathways to the qualifying features of the designated site have been identified, and Likely Significant Effects (LSE) can be screened out at Stage 1 of the HRA.

2. Introduction

2.1.1. This report to inform a Habitats Regulations Assessment (HRA) Stage 1: Screening has been prepared by WSP UK Ltd (WSP) on behalf of Trydan Gwyrdd Cymru (the 'Applicant'). This report has been produced in compliance with Regulations 27 to 30 and 32 to 37 of the Conservation Habitats and Species Regulations 2017 (as amended)[1].

2.1.2. This report sets out the information necessary for the Competent Authority (The Vale of Glamorgan Council) to undertake the Stage 1: Screening of the Proposed Development, upon the qualifying interest features of International Sites.

2.1.3. The definition of 'International Site' for the purpose of this report is set out in **Section 3**, and includes any of the following:

- Special Area of Conservation (SAC) or candidate SAC (cSAC);
- Special Protection Area (SPA) or potential SPA (pSPA); or
- Wetland of International Importance (Ramsar site) – as a matter of UK government policy;
- The methodology for HRA is set out in **Section 4**; and
- The identified International Sites are described in **Section 5** whilst consideration of potential effects of the Proposed Development upon the International Sites (including in-combination effects) and whether these are likely to be significant is provided in **Section 6**.

[1] HM Government (2017). *The Conservation of Habitats and Species Regulations 2017* (SI 2017/1012), as amended. Available at: https://www.legislation.gov.uk/uksi/2017/1012/contents (accessed October 2026).

3. The Proposed Development

3.1. Background and Context

3.1.1. The Applicant is proposing the construction of a solar farm development (referred to as the 'Proposed Development') to the south of Cosmeston (central British National Grid Reference: ST 17739 68268 (herein referred to as 'the Site'). The Site location is shown on **Figure 1 (Annex A)**.

3.1.2. The Severn Estuary SAC, SPA and a Ramsar site are located within 1 km of the Site, as shown on **Figure 2 (Annex A)**. The Proposed Development comprises several distinct elements, which together form the overall scheme (described in **Section 3.2**), and this report to inform a HRA is in support of the Proposed Development.

3.2. Proposed Development Description

3.2.1. The key elements of the Proposed Development design are as follows:

- Ground mounted solar PV generating station with a gross electrical output capacity to the distribution grid network in the region of 35 MW. The generating station will include solar PV modules and mounting structures;
- Project Substation Compound, which will include substation, switching and control equipment, storage areas, and provisions for vehicular parking and material laydown;
- Battery Energy Storage System (BESS), also situated within the project substation compound, which will include inverters, transformers, switchgear and ancillary equipment and their containers, enclosures, monitoring systems, air conditioning, electrical cables and fire safety infrastructure;
- Balance of Solar System (BoSS) which comprises inverters, transformers and switchgear;
- Ancillary infrastructure works including underground cables, boundary treatments, security equipment, lighting, weather stations, landscaping, access tracks, earthworks, surface water management, and any other works identified as necessary to enable the Proposed Development;
- Permanent diversion of Public Footpath L1/5/2; and
- Landscaping, habitat management, biodiversity enhancement and amenity improvements.

3.2.2. Temporary lighting and security measures may be required within construction compounds and active working areas during the construction period. Any temporary lighting will be of a sensitive design and managed through the Construction Environmental Management Plan (Outline CEMP provided as **Appendix 5A: Outline CEMP** of the ES) to minimise light spill beyond the Site Boundary. All temporary lighting will be removed following completion of construction unless required for operation or maintenance of the Proposed Development at the Project Substation Compound.

3.3. Ecological Context

3.3.1. A Preliminary Ecological Appraisal (PEA) of the Site including a desk study was conducted by WSP in February 2025 and subsequently updated in August 2026 (see **Appendix 7A: PEA 2026** of the ES). **Figure 2 (Annex A)** provides locations of International Sites relative to the Site.

3.3.2. The brief of the PEA was to provide sufficient information to assess the ecological baseline of the Site and to inform the considerations for biodiversity associated with the Proposed Development. The report also identified the need for avoidance, mitigation, compensation or enhancement measures and/or further ecological surveys.

3.3.3. The PEA included a Phase 1 habitat survey identifying habitats comprising arable land, dense scrub, neutral semi-improved grassland and broadleaved woodland habitats. Other habitats included standing water, species poor hedgerows, and mixed parkland/scattered trees

3.3.4. The PEA assessed the Site as containing suitable habitats for supporting bats, badger *Meles meles*, dormouse *Muscardinus avellanarius*, hedgehog *Erinaceus europaeus*, birds, amphibians, reptiles and invertebrates.

3.3.5. The Site is located west of the Severn Estuary (which is approx. 169 m east of the Site) and is bound to the north by a road (B4267). A disused railway track runs from east to west across the Site. Cosmeston Lakes, freshwater lakes which are flooded limestone quarries, are located to the north of the Site.

3.3.6. There are three International Sites identified within 2 km of the Site, including The Severn Estuary (Wales), which is designated as a SAC, SPA, and a Ramsar site.

3.3.7. There will not be any land take of these International Sites as a result of the Proposed Development. However, the Proposed Development may lead to noise and dust pollution during the construction phase, which may impact bird species for which the International Sites qualify. Further, the International Sites are designated partially for the presence of breeding, migrating and wintering birds, which may use the Site as a feeding or roosting ground. Therefore, the Proposed Development may impact on the qualifying features of these International Sites.

3.3.8. A summary of the species identified on Site which are of relevance to this HRA and the Severn Estuary SAC, SPA and Ramsar (see **Section 5** for qualifying features) is detailed in the paragraphs below.

Wintering Birds

3.3.9. To establish whether wintering birds were present or considered likely to be absent within the Site, wintering bird surveys were completed in November 2025 – March 2026, following the methodology outlined within best practice guidelines (**Appendix 7C: Wintering Bird Survey Report**).

3.3.10. The surveys and baseline assessment concluded the likely absence of the SPA qualifying species (Bewick's swan Cygnus *columbianus bewickii*, European white-fronted goose Anser *albifrons albifrons*, gadwall *Anas strepera* and shelduck *Tadorna tadorna*) from the Site. The Site was not considered to function as supporting habitat for the Severn Estuary SPA/Ramsar qualifying species. These results have been used to inform the assessment in **Section 6**.

Invasive Non-Native Species

3.3.11. No Invasive Non-Native Species (INNS) were recorded during the updated Phase 1 habitat survey undertaken in August 2026. Nevertheless, the presence of INNS within the Site cannot be completely discounted, particularly when considering the future baseline as populations may colonise the Site between the survey and construction phases. The desk study returned ten records of INNS within 2 km of the Site.

4. Habitats Regulations Assessment Approach

4.1.1. This section sets out the applicable methodologies and assumptions for the assessment of the Proposed Development with regard to the Conservation of Habitats and Species Regulations 2017 ('The Habitats Regulations') (as amended). This requires all plans or projects to be assessed by the Competent Authority to determine if there is likely to be a significant effect on International Sites before permission can be granted.

4.1.2. Should LSE be identified by the initial screening process it is necessary to further consider the effects by way of an 'Appropriate Assessment'. Overall, this process of assessment is known as HRA, and further details of the applicable legislative context are summarised within **Section 4.2** below.

4.2. Habitats Regulations Assessment Context

Legislative Context

4.2.1. The Habitats Directive is transposed into UK law through the Habitats Regulations; Regulation 63 (1) and states that:

'A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which –

(a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects), and

(b) is not directly connected with or necessary to the management of that site,

—must make an Appropriate Assessment of the implications for that site in view of that site's conservation objective'.

4.2.2. Regulation 63 (5) details in the light of the conclusions of the assessment, and subject to regulation 64 (considerations of overriding public interest), the competent authority may agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site or the European offshore marine site (as the case may be).

4.2.3. The competent authority is required to consult Natural Resources Wales (NRW) (as the statutory nature conservation body in Wales), in all cases where Appropriate Assessment is required.

4.2.4. Following the UK's departure from the European Union, the UK Government has issued guidance[2] on the implementation of these regulations, providing detailed instructions on implementing the regulations and conducting assessments, to ensure continuity in habitat protection despite the departure from the EU. This guidance clarifies that:

'SACs and Special Protection Areas (SPAs) in the UK no longer form part of the EU's Natura 2000 ecological network.'

4.2.5. The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 have created a national site network on land and at sea, including both the inshore and offshore marine areas in the UK. The national site network includes:

- Existing SACs and SPAs; and
- New SACs and SPAs designated under these Regulations.

4.2.6. Any references to Natura 2000 in the 2017 Regulations and in guidance now refers to the new National Site Network.

4.2.7. Maintaining a coherent network of protected sites with overarching conservation objectives is still required in order to:

- Fulfil the commitment made by government to maintain environmental protections; and
- Continue to meet our international legal obligations, such as the Bern Convention[3], the Oslo and Paris Conventions (OSPAR)[4], Bonn[5] and Ramsar Conventions[6]".

[2] Defra, Natural England, Natural Resources Wales & Welsh Government (2021) *Habitats regulations assessments: protecting a European site*. Available at: https://www.gov.uk/guidance/habitats-regulations-assessments-protecting-a-european-site (Accessed: October 2026)
[3] Council of Europe (1979). *Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention)*. Bern, Switzerland. Available at: https://www.coe.int/en/web/bern-convention (Accessed: 15 October 2026).
[4] OSPAR Commission (1992). *Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Convention)*. Available at: https://www.ospar.org/convention (Accessed: October 2026).
[5] Convention on the Conservation of Migratory Species of Wild Animals (1979). *Bonn Convention*. United Nations Environment Programme. Available at: https://www.cms.int/ (Accessed: October 2026)
[6] Ramsar Convention Secretariat (1971). *Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention)*. Available at: https://www.ramsar.org/ (Accessed: October 2026

Policy Context

4.2.8. It is a matter of Government policy (Planning Policy Wales (PPW) edition 12 (2024) paragraphs 6.4.29 and 6.4.30[7]) that sites designated under the 1971 Ramsar Convention for their internationally important wetlands (commonly known as Ramsar sites) and potential SPAs (pSPA) are also considered in the same way as SACs, SPAs and cSACs. As a matter of good practice, potential SACs (pSACs) should also be considered in the same way.

4.2.9. For the purpose of this report the range of sites identified above are considered under the grouped term 'International Sites'.

4.3. Stages Of Habitats Regulations Assessment

4.3.1. The HRA process includes distinct stages of assessment, including the following elements, as set out within the PPW Technical Advice Note 5: Nature Conservation and Planning (TAN 5), Annex 3:

- Determining whether the development plan, alone or in-combination with other plans or projects, is likely to have a significant effect on any International sites or International offshore marine sites and if so:
  - scoping the "appropriate assessment";
- Undertaking the "appropriate assessment" (in consultation with NRW) to identify any significant effects that the development plan may have on International sites or International offshore marine sites, either alone or in combination with other plans or projects, in view of those sites' conservation objectives;
- Where the "appropriate assessment" identifies potentially significant impacts on an International site or International offshore marine site, identifying whether there are possible alternative solutions or mitigation measures which, if adopted, will avoid, or counteract those adverse impacts;
- Determining, in the light of the "appropriate assessment", whether the development plan will or will not adversely affect the integrity of any International site or International offshore marine site, either alone or in combination with other plans or projects;
- Where there is a possibility that the plan could have such an adverse effect, determining whether there are any alternative solutions to the development plan, or to the potentially damaging elements within that plan, which would avoid or reduce such effects upon the International site(s) or International offshore marine site(s); and

[7] UK Government (2019). *The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019*. Statutory Instrument 2019 No. 579. London: The Stationery Office. Available at: https://www.legislation.gov.uk/uksi/2019/579/contents/made (Accessed: October 2026]).

- Where there are no such alternative solutions, determining whether there are imperative reasons of overriding public interest for giving effect to the development plan.

4.3.2. The integrity of an International Site is defined as the coherence of the site's ecological structure and function, across the whole of its area, which enables it to sustain the habitat, complex of habitats and/or populations of species for which the site has been designated (TAN 5 Annex 13). An adverse effect on integrity is likely to be one which prevents the site from making the same contribution to favourable conservation status as it did at the time of designation, and/or inhibits its restoration to a favourable conservation status.

4.3.3. The precautionary approach is applied at all stages of the HRA process. In relation to HRA Stage 1: Screening Assessment, projects or plans likely to have significant effects, or where there is uncertainty as to the significance of effects, must be subject to a Stage 2: Appropriate Assessment.

4.4. Stage 1: Screening Methodology

4.4.1. The screening methodology uses pathways to link development impacts and effects on International Sites that may be vulnerable to those impacts. Each development impact is considered, and its pathway assessed to understand the likelihood of an impact resulting in an LSE on an International Site.

4.4.2. When screening in/out International Sites and their features of interest, it needs to be established whether there is a pathway between the likely development impacts (causes) and the possible effect they may have on qualifying interest features of International Sites. Where there are no pathways to affect an International Site from the Proposed Development, impacts are not considered further. Where a pathway is identified, consideration is then given to whether there is a 'mechanism' for LSEs to occur. The screening methodology considers the sensitivity of the qualifying interest features in question to the identified impact pathways, as determined by the known threats and pressures on the international sites (see **Table 5.1**).

4.4.3. LSE can result from the Proposed Development itself (alone) or in combination with other plans or projects. In combination effects have been considered in this screening report where potential effects from the Proposed Development alone are identified above a de minimis (or trivial) level in accordance with the HRA Handbook[8] which states that:

[8] Tyldesley, D. and Chapman, C. (2021). *The Habitats Regulations Assessment Handbook*. UK Habitat Regulations Assessment guidance and methodology. Available at: https://www.dtapublications.co.uk/handbook/ (Accessed: October 2026).

- *"it may be apparent at an early stage that there are no other plans or projects with effects which could combine with those of the subject proposal to produce any significant adverse effect on the integrity of a site in combination. In this case cumulative effects are taken into account by their elimination; and the subject plan or project may be authorised."*

4.4.4. If the Competent Authority considers there will be no LSEs upon the qualifying interest features from the identified impact pathways alone and in combination with other plans and projects, the Proposed Development may proceed without further assessment.

4.4.5. It should be noted that this report has taken account of the 2017 European Court of Justice (CJEU) ruling (C-323/17 – People Over Wind and Peter Sweetman v Coillte[9]): "Article 6(3) of the Habitats Directive must be interpreted as meaning that, in order to determine whether it is necessary to carry out, subsequently, an Appropriate Assessment of the implications, for a site concerned, of a plan or project, it is not appropriate, at the screening stage, to take account of the measures intended to avoid or reduce the harmful effects of the plan or project on that site."

4.4.6. Embedded mitigation measures which are integral to delivery of the Project (regardless of the Site's location and relevant International Sites identified) can be considered and taken into account when identifying LSE.

4.5. Consultation

4.5.1. No formal consultation with key engagement groups (Local Planning Authority, Natural Resources Wales or Welsh Government) has been undertaken specifically in relation to the contents of this report and the Stage 1 Screening as this is not a statutory requirement.

4.5.2. This document forms part of the ES prepared for the Pre-Application Consultation and relevant consultees will be able to provide comments on this HRA.

[9] Court of Justice of the European Union (2018). Case C-323/17, *People Over Wind, Peter Sweetman v Coillte Teoranta*. Judgment of 12 April 2018. ECLI: ECLI:EU:C:2018:244. Available at: https://curia.europa.eu/juris/liste.jsf?num=C-323/17 (Accessed: October 2026)

5. Relevant Designated Sites

5.1. Identification Of International Sites

5.1.1. Three International Sites are present within 10 km of the Site:

- Severn Estuary SAC (SAC number UK0013030);
- Severn Estuary SPA (SPA number UK9015022); and
- Severn Estuary Ramsar (UK11081).

5.1.2. See **Figure 2 (Annex A)** for the locations of the international Sites relative to the Site.

5.1.3. The reasons for designation of the identified International Sites and their conservation objectives are summarised in **Table 5.1**, as are the known vulnerabilities. All information listed in are collated from the standard data forms (JNCC, 2016) and Core Management Plans (NRW (formerly Countryside Council for Wales (CCW)), 2008 and 2019)[10].

5.1.4. The overall aim of the conservation objectives is to maintain the sites in 'favourable conservation statuses'. The Habitats Regulations provides further interpretation of the meaning of 'favourable conservation status' within Article 1 parts a, e and i as below:

'(a) conservation means a series of measures required to maintain or restore the natural habitats and the populations of species of wild fauna and flora at a favourable status as defined in (e) and (i);

(e) conservation status of a natural habitat means the sum of the influences acting on a natural habitat and its typical species that may affect its long-term natural distribution, structure and functions as well as the long-term survival of its typical species within the territory referred to in Article 2. The conservative status of a natural habitat will be taken as "favourable" when:

- *Its natural range and areas it covers within that range are stable or increasing, and*
- *The specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future; and*
- *The conservation status of its typical species is favourable as defined in (i);*

(i) conservation status of a species means the sum of the influences acting on the species concerned that may affect the long-term distribution and abundance of its populations within the territory referred to in Article 2; The conservation status will be taken as "favourable" when:

[10] JNCC (2015) STANDARD DATA FORM for sites within the 'UK national site network of European sites' Accessed 15/10/2026

- *Population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and*
- *The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis'.*

5.1.5. The Proposed Development has not been conceived solely to further the conservation of the International Sites nor is it essential to the management of these sites. Therefore, further consideration of the Proposed Development within the HRA process is required as set out in the remainder of this document.

Table 5.1 - Relevant International Sites within 10 km and known threats and pressures on these sites

Site Name	Distance from the Proposed Development	Summary of reasons for designation summarised on SAC Standard Data Form (JNCC 2010)	Activities with greatest effect upon the site, as listed on SAC/SPA standard data form (JNCC)
Severn Estuary SAC UK001303026,770 ha (26,770 ha)	169 m east	• Annex I habitats that are a primary reason for selection of this site: • 1130 Estuaries • 1140 Mudflats and sandflats not covered by seawater at low tide • 1330 Atlantic salt meadows *Glauco-Puccinellietalia maritimae* • Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site: • 1110 Sandbanks which are slightly covered by seawater all the time • 1170 Reefs • Annex II species that are a primary reason for selection of this site: • 1095 Sea lamprey *Petromyzon marinus* • 1099 River lamprey *Lampetra fluviatilis* • 1103 Twaite shad *Alosa fallax*	**High Positive Impacts:** • A04 Grazing • A02 Modification of cultivation practices • D05 Improvement of habitat connectivity **Medium positive impacts:** • G03 Management of habitats (and associated recreational/open space management) **High Negative Impacts:** • E06 Other urbanisation, industrial and similar activities • M01 Changes in abiotic conditions • J02 Human-induced changes in hydraulic conditions • G01 Outdoor sports and leisure activities, recreation activities • A02 Modification of cultivation practices
Severn Estuary SPA/Ramsar UK001303026,770 ha (26,770 ha)	169 m east	• Species that are a qualifying feature of the site: • Bewick's swan • Gadwall • European white-fronted goose • Dunlin *Calidris alpina alpina*	**High negative impacts:** • J02 Human-induced changes in hydraulic conditions • M01 Changes in abiotic conditions (including climate change) • A02 Modification of cultivation practices

Site Name	Distance from the Proposed Development	Summary of reasons for designation summarised on SAC Standard Data Form (JNCC 2010)	Activities with greatest effect upon the site, as listed on SAC/SPA standard data form (JNCC)
		• Shelduck • Redshank *Tringa totanus* • Waterbird assemblage (>20,000 birds)	• E06 Urbanisation, industrial and similar activities • G01 Outdoor sports, recreation and leisure activities **Positive impacts:** • A02 Modification of cultivation practices • A03 Mowing or cutting of grasslands • A04 Grazing • D05 Improved habitat connectivity • G03 Interpretation, awareness raising and visitor management

6. Stage 1: Screening Of Potential Effects

6.1. Approach

6.1.1. The Proposed Development has been subject to Stage 1 of the HRA, or 'test of likely significance' to assess the potential for LSE of the Proposed Development on International Sites. The screening information is summarised below. This screening exercise has considered whether cause-effect pathways exist between the Proposed Development and the International Sites that have been identified within the ZoI.

6.1.2. Due to recent case law mentioned in **Section 5** of this document, the screening assessment was prepared and completed whilst omitting proposed mitigation measures for the Proposed Development specifically to reduce effects on International Sites. The following mitigation measures were not included during Stage 1:

- The implementation of construction management measures and controls through the Construction Environmental Management Plan (CEMP);
- The implementation of Ecological Management Plans (EcMPs);
- Specific/targeted mitigation measures to avoid or minimise impacts of construction and operational disturbance on designatory features; and
- Pollution prevention controls.

6.2. Zone Of Influence

6.2.1. The ZoI is defined by the potential impacts arising from the Proposed Development and the potential pathways for those impacts to reach and affect designatory features of International Sites, resulting in effects upon those designatory features. **Table 6.1** details the ZoI for potential effects (in the absence of mitigation) of the Proposed Development on International Sites.

Table 6.1 - Potential pathway between cause and effect and likely zone of influence

Effect	Cause	Likely Zone of Influence
Direct habitat loss and/or mortality	Vegetation clearance (tree felling and scrub removal) to facilitate remedial options	Within the construction footprint
Disturbance of key species	Excessive noise, vibration and light pollution (construction only) resulting from The Proposed Development	300 m of construction zone (precautionary basis)[11][12]
Loss of functionally linked habitats (waterbirds)	Habitat degradation - removal	1 km of Site Boundary

[11] Conservative distance based on information detailed in 'An overview of fish bioacoustics and the impacts of anthropogenic sounds on fishes' (Popper and Hawkins, 2019).

[12] https://cieem.net/wp-content/uploads/2019/07/natural-information-otters-and-development-2011.pdf

Effect	Cause	Likely Zone of Influence
Habitat degradation – dust deposition	Pollution and contamination incidents associated with the construction works for the remedial options, such as construction dust deposition onto habitats	50 m of construction zone[13]
Habitat degradation – hydrological pollution	Pollution (e.g. oils or silt), contamination incidents associated with run off from excavation, piling, vehicle movement, wheel wash and stockpiling	Within 10 km downstream (functionally linked habitat)[14]
Habitat degradation – INNS	Spread of INNS during vegetation clearance	Within 10 km downstream (functionally linked habitat)

6.3. Consideration of Effects in Isolation

6.3.1. The Proposed Development has been screened to identify whether potential impact pathways between the Proposed Development and the International Sites are present that are likely to result in LSE.

6.3.2. The three designated sites as identified in **Table 5.1** have been screened in relation to the ZoI and sensitivity of designated features to each potential pathway:

- Severn Estuary SAC – The designated features are not considered to be vulnerable to the ZoI of the impact pathways stated in **6-1**. This International Site will not be considered further in this assessment;
- Severn Estuary SPA/Ramsar - The designated features (waterbirds) may be considered to be vulnerable to the ZoI of the impact pathways stated in **6-1** (through loss of functionally linked habitats and disturbance of key species) and therefore are considered further in this assessment.

Likely Significant Effects

6.3.3. The Severn Estuary SPA/Ramsar site is the only International Site that was identified to have potential impact pathways, that fall within the ZoI of the Proposed Development, therefore, all sections hereafter refer to these International Sites alone.

6.3.4. There will be no loss of direct SPA/Ramsar habitat (land take) as a result of construction decommissioning and operation of the Proposed Development. Furthermore, the Proposed Development falls outside of the ZoI for the following potential impact pathways:

- Direct habitat loss and/or mortality;
- Habitat degradation – dust deposition;

[13] https://iaqm.co.uk/text/guidance/construction-dust-2014.pdf

[14] Conservative distance based on information documented in 'Sediment Transport and Deposition' (Fondriest Environmental, 2014).

- Habitat degradation – hydrological pollution; and
- Habitat degradation – INNS.

6.3.5. The following LSE have been identified at screening stage, for which the Proposed Development falls within the ZoI:

- Loss of functionally linked habitats for waterbirds; and
- Disturbance of key species.

Loss of Functionally Linked Habitats

6.3.6. Removal of farmland to facilitate the Proposed Development (installation of the solar farm and the ancillary infrastructure works) could result in the destruction or damage of functionally linked habitat such as direct habitat loss of supporting habitat used by birds listed as reason for designation for Severn Estuary for feeding, roosting, loafing or commuting and visual disturbance/displacement causing birds to avoid otherwise suitable habitat

6.3.7. The predominant habitat within the Site is arable land, which may provide suitable supporting habitat for Bewick's swan and European white-fronted goose as both of these species are known to forage on agricultural land during the winter months. Gadwall and shelduck are more closely associated with wetlands, estuaries, and other aquatic habitats, meaning arable land is generally of limited value to these species.

6.3.8. However, no evidence of the SPA qualifying species (Bewick's swan, European white-fronted goose, gadwall and shelduck) being present on Site was identified during the wintering bird survey (see **Appendix 7C: Wintering Bird Survey Report** of the ES); there are also no desk study records of these species from the South East Wales Biodiversity Records Centre (SEWBReC). In the Vale of Glamorgan, the European white-fronted goose is classed as a rare winter visitor. The East Glamorgan Bird Report 2024[15], the most up-to-date report available at the time of writing, contains no records of Bewick's swan or European white-fronted goose within the Vale of Glamorgan. As the Site falls within the Glamorgan recording area, this indicates that neither species was recorded locally during 2024.

6.3.9. Therefore, based on the findings of the wintering bird surveys, the absence of desk study records, and the lack of records of Bewick's swan and European white-fronted goose within the Vale of Glamorgan during 2024, the Site is not considered to function as supporting habitat for the Severn Estuary SPA/Ramsar qualifying species. As a result, the construction, operation and decommissioning of the Proposed Development won't lead to disturbance or displacement of these qualifying species as they are unlikely to utilise the Site or surrounding farmland.

[15] Glamorgan Bird Club (2025) East Glamorgan Bird Report 2024. Report No. 63. Glamorgan Bird Club

Disturbance of Key Species

6.3.10. Although the Site is located within the precautionary ZoI of the Severn Estuary SPA/Ramsar, construction-related noise, vibration and lighting would be temporary and localised. As the Site is not considered functionally linked land and does not support qualifying bird species, no significant disturbance effects on the qualifying features of the International Sites are anticipated. LSEs can therefore be screened out at Stage 1 of the HRA.

6.4. Consideration Of In-Combination Effects

6.4.1. Other developments can have LSE or affect the integrity of International Sites. LSE can result from the Proposed Development itself (alone) or arise in combination with other plans or projects.

6.4.2. The Vale of Glamorgan Council (VoGC) Local Development Plan[16], draft Core Strategy Habitat Regulations Assessment Report and Planning Portal[17] have been reviewed to obtain information on other projects, plans and developments from the last five years in proximity to the Site that could give rise to in-combination effects with The Proposed Development.

6.4.3. No other plans or projects in proximity to the Site have been identified that could give rise to in-combination effects with The Proposed Development.

6.5. Screening Conclusion

6.5.1. This document provides information to inform the Competent Authority's HRA screening of the Proposed Development. It provides an assessment of whether the Proposed Development would lead to LSE on features for which the site is designated for within the ZoI of the Proposed Development.

[16] Vale of Glamorgan Council. (2021). *Vale of Glamorgan Local Development Plan 2011–2026*. Barry: Vale of Glamorgan Council. Available at: https://www.valeofglamorgan.gov.uk/en/living/planning_and_building_control/Planning/Local-Development-Plan.aspx (Accessed: October 2026).
[17] Vale of Glamorgan Council (2026). *Planning Application Search*. Available at: https://vogonline.planning-register.co.uk/ (Accessed: October 2026)

6.5.2. Three International Sites within 1 km of the Site were considered, but the Severn Estuary SPA/Ramsar was the only International Site which could be subject to LSE as a result of the Proposed Development. However, no evidence of SPA/Ramsar qualifying species was recorded during wintering bird surveys of the Site, no records of qualifying species were returned by the desk study, and the East Glamorgan Bird Report 2024 contains no records of Bewick's swan or European white-fronted goose within the Vale of Glamorgan. Therefore, despite the presence of arable land that could theoretically provide suitable feeding habitat, there is no evidence that the Site supports SPA/Ramsar qualifying species. The Site is not considered functionally linked habitat and LSE can therefore be excluded at Stage 1 Screening.

6.5.3. No effects pathways were identified between the qualifying features of the Severn Estuary SPA/Ramsar (waterbirds) and the Proposed Development. As such no LSE are predicted for the Proposed Development alone. No other plans or projects in proximity to the Site have been identified that could give rise to in-combination effects with The Proposed Development.

6.5.4. It is recommended therefore that there is no requirement for the Competent Authority to take the HRA further to stage 2 Appropriate Assessment, as LSE on the Severn Estuary SPA/Ramsar as a result of the Proposed Development can be discounted.

Annex A - Figures

Figure 1 - Site Location Plan

Figure 2 - Designated Sites and Other Habitats of Conservation Importance

317000

318000

169000

168000

N

Legend

Site Boundary

0 100 200 m

Scale at A3: 1:6,000

World Imagery: Microsoft, Vantor

Client

Trydan Gwyrdd Cymru

Project Name: Larnog Solar Farm HRA

Document Name:
Figure 1 - Site Location Plan

October 2026

Larnog Solar Farm_SiteBoundary

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315000 316000 317000 318000 319000 320000 321000

171000 170000 169000 168000 167000 166000

N

Severn Estuary (Wales)

Severn Estuary (Wales)

Legend

Site Boundary

2km buffer

Special Area of Conservation (SAC)

Severn Estuary (Wales)

Special Protection Area (SPA)

Severn Estuary (Wales)

Ramsar Site

Severn Estuary (Wales)

0 2 4 Kilometers

Scale at A3: 1:22,000

World Imagery: Microsoft, Vantor

Client

Trydan Gwyrdd Cymru

Project Name: Larnog Solar Farm HRA

Document Name:
Figure 2 - Designated Sites and Other Habitats of Conservation Importance

October 2026

wsp

Larnog Solar Farm_Designatedsites

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