



Candwr Solar Farm

Pre Application Consultation

Environmental Statement

Appendix 6.8 Information to Inform a Habitats
Regulations Assessment

2 July 2026



Candwr Solar Farm

Appendix 6.8

Information to Inform a Habitats Regulations Assessment



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Figure 1: Statutory Designated Sites

1 PURPOSE OF REPORT

- 1.1.1 This report has been prepared in relation to a proposed solar development (the 'Proposed Development') located on land at Court Farm, Ponthir, Monmouthshire (the 'Site'). The report has been produced to assist in the undertaking of a Habitats Regulations Assessment (HRA) for the Proposed Development by the relevant Competent Authority.
- 1.1.2 The Proposed Development includes the installation and operation of ground mounted solar photovoltaic arrays with all associated works, equipment and necessary infrastructure. The Proposed Development would enable the export of up to 46 megawatts (MW) of electricity. The Proposed Development covers an area of 131.62 hectares (ha) and is comprised of thirteen land parcels which are spread across three Local Authority boundaries: Monmouthshire Council, Torfaen County Borough Council and Newport City Council.
- 1.1.3 This report provides the Competent Authority with ecological information regarding the Proposed Development with respect to its potential, either alone or in-combination with other projects, to result in a Likely Significant Effect (LSE) upon the qualifying features of European sites in the UK (i.e. those which form part of the National Site Network); and, where a LSE cannot be ruled out, whether the Proposed Development would have an adverse impact on the integrity of the designated site.

2 LEGISLATIVE BACKGROUND

- 2.1.1 Council Directives 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (the 'Habitats Directive') and 2009/147/EC on the conservation of wild birds (the 'Birds Directive') provide for the designation of sites for the protection of certain species and habitats – Special Areas of Conservation (SACs) and Special Protection Areas (SPAs). Such sites designated under the Directives together with Ramsar sites (wetlands of international importance) are collectively termed European sites and form part of a network of protected sites across Europe, formerly known as the Natura 2000 network.
- 2.1.2 In the UK, the Conservation of Habitats and Species Regulations (2017) (the '2017 Regulations') transpose the Habitats and Birds Directives into national law. Changes were made to the 2017 Habitats Regulations by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (the '2019 Regulations'). The 2017 and 2019 Regulations are collectively referred to as the 'Habitats Regulations'.
- 2.1.3 Under the amendment made by the 2019 Regulations, SACs and SPAs in the UK no longer form part of the EU's Natura 2000 network, but form part of a National Site Network. The National Site Network includes:
- Existing SACs and SPAs; and,
 - New SACs and SPAs designated under the 2019 Regulations.
- 2.1.4 Ramsar sites do not form part of the national site network, but many overlap with SACs and SPAs, and may be designated for the same or different qualifying features. Ramsar sites are afforded the same protection as European sites.
- 2.1.5 As a Competent Authority, an assessment under the Habitats Regulations, known as a HRA, must be carried out to test if a project or plan could significantly harm the qualifying features of a European site, in order to decide whether to approve the project or plan.
- 2.1.6 The Competent Authority may only approve a project or plan, where it can be concluded that it will not adversely affect the integrity of a European site. The exception to this is where there are

Imperative Reasons of Overriding Public Interest (IROPI) and there are no other feasible alternatives, which would not affect the integrity of the European site. In this case the competent authority must assess all compensatory measures required to ensure the protection of the overall coherence of the National Site Network.

2.1.7 The HRA process can be summarised by the following four stages:

- Stage 1 – Screening: the first stage identifies the likely impacts of a project upon a protected site and its designated features and considers whether the resulting effects are likely to be significant.
- Stage 2 – Appropriate Assessment: where a LSE cannot be ruled out, this stage considers the impacts of the project on the integrity of the protected site, both alone and in combination with other projects or plans with respect to the site's structure and function and its conservation objectives. Where adverse impacts are predicted, it also includes an assessment of potential mitigation for those impacts.
- Stage 3 – Assessment of alternative solutions (if applicable): where adverse impacts on site integrity are predicted, this stage looks at whether there are alternative ways of achieving the project's objectives that would avoid these adverse impacts.
- Stage 4 – Assessment where no alternative solutions exist and adverse impacts remain (if applicable): this stage assesses compensatory measures where it has been deemed that the project should proceed under IROPI.

2.1.8 Stages 1 and 2 are covered by Regulation 63 and Stages 3 and 4 are covered by Regulation 64 and 68.

2.1.9 With respect to Stage 2, the integrity of a European site relates to the site's conservation objectives and has been defined in guidance as "*the coherent sum of the site's ecological structure, function and ecological processes, across its whole area, which enables it to sustain the habitats, complex of habitats and/or populations of species for which the site is designated*"¹. An adverse effect on integrity, therefore, is likely to be one which prevents the site from making the same contribution to favourable conservation status for the relevant feature as it did at the time of designation.

2.1.10 The HRA screening process (stage 1) uses the threshold of LSE to determine whether impacts on European sites should be the subject of further assessment. The Habitats Regulations do not define the term LSE. However, in the Waddenzee case (Case C127/02)², the European Court of Justice found that an LSE should be presumed and an Appropriate Assessment (AA) carried out if it cannot be excluded on the basis of objective information that the plan or project would not have significant effects on the conservation objectives of the site concerned, whether alone or in combination with any other project. The Advocate General's opinion of the Sweetman case (Case C-258/11)³ further clarifies the position by noting that for a conclusion of an LSE to be made "*there is no need to establish such an effect...it is merely necessary to determine that there **may** be such an effect*" (original emphasis).

¹ Managing Natura 2000 sites: The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC, at section 4.6.3 (Updated Version, November 2018)

² Judgment of the Court (Grand Chamber) of 7 September 2004. Landelijke Vereniging tot Behoud van de Waddenzee and Nederlandse Vereniging tot Bescherming van Vogels v Staatssecretaris van Landbouw, Natuurbeheer en Visserij. Reference for a preliminary ruling: Raad van State - Netherlands. Case C-127/02

³ Judgment of the Court (Third Chamber), 11 April 2013 Peter Sweetman and Others v An Bord Pleanála. Request for a preliminary ruling from the Supreme Court (Ireland) Case C-258/11

- 2.1.11 For the reasons highlighted above the assessment process follows the precautionary principle throughout and the word 'likely' is regarded as a description of a risk (or possibility) rather than in a legal sense as an expression of probability.
- 2.1.12 Screening can be used to screen-out European sites and elements of works from further assessment, if it is possible to determine that significant effects are unlikely (e.g., if sites or interest features are clearly not vulnerable (exposed and / or sensitive) to the outcomes of the proposal due to the absence of any reasonable impact pathways).
- 2.1.13 The screening process has two potential conclusions, namely that for the project or plan:
- No LSE is concluded on any of the qualifying features of the European site; or
 - A LSE is identified, or cannot be ruled out, on one or more of the qualifying features of the European site.
- 2.1.14 Only the second of these outcomes will trigger an AA. If one or more LSEs are identified, or cannot be ruled out, it is then necessary to proceed to Stage 2 and undertake the AA.
- 2.1.15 On 12 April 2018, the Court of Justice of the European Union (CJEU) issued a judgment on Case C323/17 (People over Wind, Peter Sweetman v Coillte Teoranta)⁴ which stated (at paragraph 41):
- "Article 6(3) of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora 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 [mitigation] of the plan or project on that site."*
- 2.1.16 This means that any specific mitigation concerned with reducing impacts on designated sites cannot be considered at the screening stage but is taken forward and considered at the AA stage to inform a decision on whether no adverse effects on site integrity can be demonstrated.
- 2.1.17 The assessment provided within this report takes into account the CJEU ruling on 'People over Wind' and the precautionary principle has been applied as per the Waddenzee case.
- 2.1.18 Only the Competent Authority can undertake the AA. Therefore, this report provides information to inform HRA.

3 BACKGROUND INFORMATION

3.1 Site description

- 3.1.1 The Site consists of fields bordered by hedgerow vegetation and trees. Within the surrounding landscape, habitats include further fields and pockets of woodland. The Afon Lwyd flows between the pockets of land located within the Site, before flowing into the River Usk, which itself flows into the Severn Estuary approximately 9 km to the south of the Site. Developed land is also present in the wider area, including urban areas: the Site is located c. 500 m northwest of the village of Ponthir, c. 1.5 km north of the town of Caerleon, and c. 5 km northeast of the city of Newport.

⁴ Judgment of the Court (Seventh Chamber) of 12 April 2018 People Over Wind and Peter Sweetman v Coillte Teoranta Request for a preliminary ruling from the High Court (Ireland) Case C-323/17

3.2 Project description

3.2.1 The Proposed Development comprises the installation and operation of ground mounted solar photovoltaic arrays with all associated works, equipment and necessary infrastructure together with a new 132 kV / 33 kV HV substation compound, an underground cable connection between the land parcels and to the National Grid Energy Distribution ('NGED') via the 132 kV / 33 kV HV substation, Site accesses, internal access tracks, security fencing, access gates, other ancillary infrastructure, landscaping and biodiversity enhancements. The solar farm would have an export capacity of up to 46 MW and is expected to be operational for 40 years.

3.2.2 The Proposed Development, as described in the Planning Statement, includes for the following main components:

- Photovoltaic solar panels and associated support frames;
- Up to 132 string inverters and 11 LV/MV transformers;
- A new 132 kV / 33 kV HV substation compound;
- 132 kV overhead wires from the existing electricity pylon to the 132 kV / 33 kV HV substation;
- Underground cable connection between the land parcels and the National Grid Electricity Distribution;
- Perimeter fencing (deer proof) and access gates;
- Access tracks within the Site (4.5 m width) linking access points with the inverters / transformers;
- Relevant communications and monitoring equipment;
- Temporary construction compounds;
- Proposed mitigation measures and biodiversity enhancement areas;
- Landscaping mitigation and enhancement planting; and
- Access points from the Highway will be used for construction, operation and decommissioning.

3.2.3 The construction works are expected to last approximately 12-18 months. The construction programme would allow for the following key construction-related works to be undertaken:

- Erection of tree protection fencing;
- Establishment of a site compound;
- Construction of site access tracks;
- Construction of watercourse crossings (comprising pipe and box culverts);
- Erection of deer / stock fencing and gates to site perimeter;
- Installation of solar panels and frames;
- Installation of solar farm electrical infrastructure;
- Installation of WAA substation;

- Installation of drainage infrastructure;
- Installation of cabling between array areas;
- Grid connection installation;
- Cultivation and seeding; and
- Hedgerow and tree planting.

3.2.4 The Proposed Development is not directly connected to or necessary for the management of any European site and is considered to be a 'Project' under the provisions of the Habitats Regulations.

3.3 European sites

3.3.1 Four European sites of conservation importance designated for their ecological or ornithological qualifying features have been identified for screening based on their proximity to the Site (taken as being within a search area of 10 km (extended to 20 km for ornithological features)) and/or their connectivity to it (e.g. ecological or hydrological connectivity).

3.3.2 **Table 3.1** identifies relevant European and Ramsar sites within 10 km of the Site and outlines their qualifying features, as described within the corresponding *European Site Register Entries* documents. No additional sites to those listed in the table were identified based on the search area/ connectivity criteria above, with no additional sites with ornithological features identified within 20 km.

3.3.1 The European and Ramsar sites are included on the statutory sites plan illustrated on **Figure 1: Statutory Designated Sites**.

Table 3.1: European sites qualifying features.

Designated Area	Distance and Direction from Site	Qualifying Features
River Usk / Afon Wusg (SAC) ⁵	1.4 km south	Annex I habitats present as a qualifying feature, but not a primary reason for the selection of this site: • 3260 Watercourses of plain to montane levels with the <i>Ranunculus fluitans</i> and <i>Callitriche-Batrachion</i> vegetation. Annex II species that are a primary reason for the selection of this site: • Sea lamprey; • Brook lamprey; • River lamprey; • Twite shad; • Atlantic salmon; • Bullhead; and • Otter. Annex II species present as a qualifying feature, but not a primary reason for site selection: • Allis shad.

⁵ Available at: [River Usk/ Afon Wysg - Special Areas of Conservation](#) (accessed December 2025)

Designated Area	Distance and Direction from Site	Qualifying Features
Severn Estuary / Môr Hafren (SPA) ⁶	8.4 km south	Qualifying features of the SPA (original citation, 1993)⁷: • Bewick's swan (wintering); • European white-fronted goose (wintering); • Dunlin (wintering); • Redshank (wintering); • Shelduck (wintering); and • Gadwall (wintering). Qualifying features added in SPA review (2001)⁸: • Curlew (wintering); • Pintail (wintering); and • Ringed plover (passage). Additionally, the SPA qualifies for the 'waterfowl assemblage', of which the following individual species are listed components in the original citation and/or the SPA review: • Bewick's swan (non-breeding); • European white-fronted goose (non-breeding); • Dunlin (non-breeding); • Redshank (non-breeding); • Shelduck (non-breeding); • Gadwall (non-breeding); • Wigeon (non-breeding); • Teal (non-breeding); • Pintail (non-breeding); • Pochard (non-breeding); • Tufted duck (non-breeding); • Ringed plover (non-breeding); • Grey plover (non-breeding); • Curlew (non-breeding); • Whimbrel (non-breeding); • Spotted redshank (non-breeding); • Lapwing (non-breeding); • Mallard (non-breeding); and • Shoveler (non-breeding).
Severn Estuary / Môr Hafren (Ramsar site) ⁹	8.5 km south	Ramsar criterion: <i>Criterion 1:</i> Due to immense tidal range, affecting both the physical and biological communities. Habitat Directive Annex I features (estuarine habitats) present at the Ramsar site, which is also designated as a SAC.

⁶ Available at: [River Usk/ Afon Wysg - Special Areas of Conservation](#) (accessed December 2025)

⁷ Available at: https://cdn.cyfoethnaturiol.cymru/632681/SPA_UK9015022_Register_Entry_EN001.pdf (accessed December 2025)

⁸ Stroud, D.A., Chambers, D., Cook, S., Buxton, N., Fraser, B., Clement, P., Lewis, P., McLean, I., Baker, H. & Whitehead, S. (eds). (2001) *The UK SPA network: its scope and content*. JNCC, Peterborough.

⁹ Available at: [untitled](#) (accessed December 2025)

Designated Area	Distance and Direction from Site	Qualifying Features
		<i>Criterion 3:</i> Due to unusual estuarine communities, reduced diversity and high productivity. <i>Criterion 4:</i> The site is important for the run of migratory fish between sea and river via estuary. Species include salmon, sea trout, sea lamprey, river lamprey, allis shad, twaite shad and eel. It is also of importance for migratory birds during spring and autumn. <i>Criterion 5:</i> Qualification for the internationally important 'waterfowl assemblage', of which the following individual species are listed (includes nationally and internationally important populations) (from original designation (1995)): • Bewick's swan (wintering); • European white-fronted goose (wintering); • Shelduck (wintering); • Dunlin (wintering and passage); • Redshank (wintering and passage); • Gadwall (wintering); • Ringed plover (wintering and passage); • Whimbrel (on passage); • Teal (wintering); • Pintail (wintering); • Wigeon (wintering); • Pochard (wintering); • Tufted duck (wintering); • Grey plover (wintering); • Curlew (wintering); and • Spotted redshank (wintering). <i>Criterion 6:</i> Species/populations occurring at levels of international importance (from original designation (1995)¹⁰): • Bewick's swan (wintering); • European white-fronted goose (wintering); • Dunlin (wintering); • Redshank (wintering); • Shelduck (wintering); and • Gadwall (wintering). Species/populations occurring at levels of national importance (from original designation (1995)) (these features do not qualify as being of international importance): • Ringed plover (on passage); • Whimbrel (on passage); • Dunlin (on passage); and • Redshank (on passage).

¹⁰ Available at: https://cdn.cyfoethnaturiol.cymru/626143/RAMSAR_UK11081_Citation_EN001.pdf (accessed December 2025)

Designated Area	Distance and Direction from Site	Qualifying Features
		In addition, the following nationally important population is also listed: • Lesser black-backed gull (breeding). <i>Criterion 8:</i> The fish of the whole estuarine and river system is one of the most diverse in Britain, with over 110 species recorded. The site is a key migration route to spawning grounds and an important feeding and nursery ground for many fish species.
Severn Estuary / Môr Hafren (SAC) ¹¹	8.5 km south	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. 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 sea water all the time; • 1170 Reefs.

3.4 European site conservation objectives

- 3.4.1 An HRA is required to assess if a project (or plan) is likely to have a significant adverse effect on the conservation objectives of a European site.
- 3.4.2 The conservation objectives of a European site are a statement of standards and integrity of the European Site which must be met to maintain the qualifying features of the site at (or to restore to) “favourable conservation status” (FCS).
- 3.4.3 As defined the Articles 1(e) and 1(i) of the Habitats Directive, the conservation status will be taken as “favourable” according to the following definitions.
- 3.4.4 The conservation 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;
 - 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.
- 3.4.5 The conservation status of a species will be taken as favourable when:
- Population dynamics data on the species indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats;

¹¹ Available at: [Severn Estuary/ Môr Hafren - Special Areas of Conservation](#) (accessed December 2025)

- 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.

3.4.6 The conservation objectives for each designated site are too long and detailed to be replicated in this document, however for Wales these can be found in the Core Management Plan documents for each site and for England can be found within the Supplementary Advice on Conservation Objectives, referenced as follows:

- Core Management Plan Including Conservation Objectives for Afon Wysg / River Usk SAC (v3) (Natural Resources Wales, 2022¹²);
- European Site Conservation Objectives for Severn Estuary Special Protection Area (v4) (Natural England, 2019¹³);
- The Severn Estuary / Mor Hafren European Marine Site comprising: The Severn Estuary Special Area of Conservation (SAC), The Severn Estuary Special Protection Area (SPA) and The Severn Estuary / Mor Hafren Ramsar Site (Natural England & the Countryside Council for Wales, 2009¹⁴).
- European Site Conservation Objectives for Severn Estuary / Mor Hafren Special Area of Conservation (v5) (Natural England, 2018¹⁵).

3.5 Baseline ecological surveys

3.5.1 This assessment has been informed by the following relevant studies and surveys:

- Desk study;
- Extended habitat survey;
- Breeding bird survey;
- Wintering bird survey; and
- Otter survey;

3.5.2 Survey methodologies and results, for all baseline ecological and ornithological surveys completed in relation to the Proposed Development, are presented in the relevant Technical Appendices to the Environmental Statement (**Appendix 6.1 – 6.7**). Survey methodologies and results relating to qualifying features of European Protected Sites qualifying features are summarised below.

¹² Available at: https://afonyddcymru.org/wp-content/uploads/2022/11/river_usk-sac-core-plan.pdf (accessed December 2025)

¹³ Available at: <https://publications.naturalengland.org.uk/publication/5601088380076032> (accessed December 2025)

¹⁴ Available at: <https://naturalresources.wales/media/673887/severn-estuary-sac-spa-and-ramsar-reg-33-advice-from-ne-and-ccw-june-09.pdf> (accessed December 2025)

¹⁵ Available at: <https://publications.naturalengland.org.uk/publication/6081105098702848> (accessed December 2025)

Desk Study

Methodology

- 3.5.3 A desk study was undertaken to identify existing information on records of priority habitats, and protected and notable faunal species, within 2 km of the Site.
- 3.5.4 A data request was made to South East Wales Biodiversity Records Centre (SEWBRc) for species records within the Site and a 2 km buffer. Data were obtained in June 2025.

Results

- 3.5.5 Of the qualifying ecological features listed for the River Usk SAC, Severn Estuary Ramsar site and SAC site (see **Table 3.1**) records from the last five years (2020 onwards) were returned in the SEWBRc data (Site plus 2 km) for the following species¹⁶: otter (18 records).
- 3.5.6 Of the qualifying ornithological features listed for the Severn Estuary SPA and Ramsar site (see **Table 3.1**) records from the last five years (2020 onwards)¹⁶ were returned in the SEWBRc data (Site plus 2 km) for the following species: European white-fronted goose (two records), shelduck (one record), mallard (250+ records), wigeon (12 records), teal (14 records), pochard (two records), tufted duck (60+ records), redshank (three records), lapwing (eight records), and lesser black-backed gull (70+ records).

Extended habitat survey

Methodology

- 3.5.7 An extended habitat survey was undertaken in April and May 2025. Following changes to the Site boundary extended habitat surveys of additional land were undertaken in December 2025 and April 2026. Habitats on-site were mapped in line with UK Habitat Classification guidance, with each habitat being assigned a primary code and, where applicable, secondary codes to further describe the habitat present. The habitat survey was 'extended' to record signs of any protected, uncommon or invasive species where present.

Results

- 3.5.8 The most widespread habitats recorded on Site were 'modified grassland', 'neutral grassland' and 'non-cereal crops', which is to be expected given the current land management. Occasional 'rivers and streams' and 'other standing water' were noted. Results of the extended habitat survey are presented in **ES Appendix 6.1: Habitats and Vegetation Survey Report**.

Breeding bird survey

Methodology

- 3.5.9 Breeding Bird Surveys (BBS) were undertaken in reference to the British Trust for Ornithology (BTO) Common Bird Census (CBC) technique (Gilbert *et al.*, 1998¹⁷) and guidance from the Bird Survey & Assessment Steering Group (2025)¹⁸. The BBS comprised six survey visits during the period April to July

¹⁶ The number of records is an estimated total, based on apportioning those records in the dataset that are given as a number of records within a stated time frame (year x to year y) and where this time period only partly overlaps with the last five years (2020-2025).

¹⁷ Gilbert, G., Gibbons, D.W. and Evans, J. (1998) *Bird monitoring methods. A manual of techniques for key UK species*. RSPB, Sandy, Bedfordshire.

¹⁸ Available at: <https://birdsurveyguidelines.org/methods/survey-method/> (accessed December 2025)

2025. The surveys covered the Site (current at the time of survey)¹⁹ and a 100 m survey buffer and comprised of six (five dawn and one evening) visits.

Results

- 3.5.10 The BBS recorded a total of 13 'Priority Species' (species of conservation concern, as defined in **ES Appendix 6.3: Breeding Bird Survey Report (2025)**) as breeding within the Site. These were all passerine species, and most were found in small numbers.
- 3.5.11 The only ornithological feature mentioned in the citations for breeding birds relates to the Severn Estuary Ramsar site, namely lesser black-backed gull. During the BBS this species was infrequently recorded passing over the Site in small numbers. In addition, there were three occasions when flocks of lesser black-backed gulls were recorded as feeding within the Site, with these flocks comprising three, ten and 32 birds. These three records were obtained during survey visits in June and July.
- 3.5.12 Further details of the BBS methodology and results are presented in **ES Appendix 6.3: Breeding Bird Survey Report (2025)**.

Wintering bird survey

Methodology

- 3.5.13 Wintering Bird Surveys (WBS) were undertaken in reference to guidance from the Bird Survey & Assessment Steering Group (2025)¹⁸. The WBS comprised 14 survey visits during the period January to mid-March 2025 (six survey visits) and September to December 2025 (eight survey visits). The WBS study area comprised the Site (current at the time of survey²⁰) and a surrounding 600 m buffer.

Results

- 3.5.14 The WBS recorded a total of 30 'Priority Species' (species of conservation concern, as defined in **ES Appendix 6.7: Wintering Bird Survey Report**) as being present within the study area (Site plus 600 m) during the non-breeding season. This included species recorded only flying over the Site and those recorded in trees and scrub along hedge lines and in wooded areas.
- 3.5.15 Observations recorded during the WBS comprised mostly passerine species typical of the habitats present and geographical location. Also recorded were species of gull and raptor. Most species were ephemeral in their presence on Site, with few fields on Site holding a species on more than one survey visit.
- 3.5.16 Two species of waterfowl were recorded during the WBS: Canada goose (11 records comprising 61 individuals) and mallard (nine records comprising 21 individuals). Apart from one record of mallard in a pasture field (three birds), all records were of birds in flight, with most considered to be associated with the small Ponthir Reservoir that is located adjacent to the Site.
- 3.5.17 One species of wader was recorded during the WBS. There were four records of snipe (comprising four individuals).

¹⁹ Minor alterations to the Site boundary since survey completion mean that there are small areas that did not receive coverage (mostly within the 100m buffer outside the Site). However, overall coverage was good and more than sufficient for categorising the baseline breeding bird assemblage (see **ES Appendix 6.3**).

²⁰ Alterations to the Site boundary occurred between the early year and late year surveys, and since survey completion (see **ES Appendix 6.7**). However, full coverage of the (current) Site was obtained during most survey visits, with two fields excluded during the January to March period. However, overall coverage is considered good and more than sufficient for categorising the baseline wintering bird assemblage.

- 3.5.18 Further details of the WBS methodology and results are presented in **ES Appendix 6.7: Wintering Bird Survey Report**.

Otter survey

Methodology

- 3.5.19 One survey visit was undertaken along all stretches of watercourses located within the Site, where access was available, during either June or September 2025. The survey followed industry standard guidance (Chanin, 2003)²¹.

Results

- 3.5.20 No evidence of otter was recorded during the surveys undertaken at the Site.
- 3.5.21 Detailed methodology and results of the otter surveys are presented in **ES Appendix 6.2: Protected Species Survey Report**.

4 POTENTIAL FOR LIKELY SIGNIFICANT EFFECTS (SCREENING)

4.1 Overview

- 4.1.1 The Proposed Development is not directly connected to, or necessary to the conservation management of, a European Site and is therefore a Project and requires an HRA.
- 4.1.2 A LSE is, in this context, any appreciable effect that may reasonably be predicted as a consequence of the project, that may affect the conservation objectives of the features for which the site was designated, but excluding inconsequential effects.
- 4.1.3 Where an LSE is identified, further assessment has been undertaken as set out in **Section 5: Appropriate Assessment** of this document, to consider the potential for significant adverse effects on the integrity of the European site or its qualifying interest species.
- 4.1.4 Potential impacts are considered for the construction, operation and decommissioning phases of the Proposed Development. Potential impacts are likely to be restricted to the construction and decommissioning phases. During operation of the solar farm, potential impacts are envisaged to be minimal for most ecological features although there is potential for displacement for some bird species should they avoid the immediate area around the solar arrays. Operational activities will be restricted to occasional maintenance which will not generate significant levels of noise, vibration or lighting sufficient to have the potential to cause disturbance. During the decommissioning phase, increased noise and vibration levels are likely to occur during the dismantling of the solar panels and removal of equipment from the Site but are considered to be comparable or lesser to those experienced during construction.

4.2 Embedded Measures

- 4.2.1 While the 'People over Wind' ruling requires specific mitigation measures designed to avoid or reduce impacts to European Sites to be considered only at the Appropriate Assessment stage, mitigation measures unrelated to European Sites can still be considered at the screening stage.

²¹ Chanin P (2003) Ecology of the European Otter. *Conserving Natura 2000 Rivers Ecology Series No. 10*. English Nature, Peterborough.

4.2.2 As such, the following measures are considered as embedded for the purposes of screening:

- Inherent scheme design (i.e., the physical footprint of hard and soft infrastructure, including a minimum 7 m stand-off from on-Site watercourses and ditches);
- Standard best practice pollution prevention measures; and,
- Measures to reduce harm to other receptors with or without incidental ecological benefits (e.g., measures to reduce noise experienced by residential receptors).

4.2.3 Where relevant to the screening of LSE, any embedded measures are identified.

4.3 Potential impacts upon qualifying habitat features of European sites

River Usk SAC²²

4.3.1 The River Usk SAC is designated due to the Annex I habitat present as a habitat qualifying feature of the site; '3260 Water courses of plain to montane levels with the *Ranunculus fluitantis* and *Callitriche-Batrachion* vegetation'.

4.3.2 The Site is 1.4 km from the SAC, and therefore there will be no direct impacts on any qualifying habitat features of the River Usk SAC as a result of the Proposed Development.

4.3.3 The Site is hydrologically connected to the River Usk via a series of drainage ditches and Candwr Brook, which flow into Afon Lwyd prior to entering the River Usk. Any release of contaminants has the potential to impact the habitats within the SAC. However, the separation distance between the Site and the SAC is 1.4 km. Regardless of the proximity to any European site, the Proposed Development would be required to implement standard legislative and regulatory requirements to prevent pollution including Guidelines for Pollution Prevention (GPPs)²³ as part of embedded tertiary measures. These measures would prevent the release of contaminants and there would have to be a catastrophic failure in protocol for any measurable impact to occur 1.4 km downstream of the Site. This is highly unlikely given the nature of the Proposed Development and such an event can be discounted.

4.3.4 With the inclusion of basic embedded mitigation there is no potential for LSE to habitat features potentially associated with the European site. **An AA is therefore not required.**

Severn Estuary SPA

4.3.5 Severn Estuary SPA is not designated for qualifying habitat features (except as supporting habitats for its ornithological features, which are dealt with separately below).

Severn Estuary Ramsar site

4.3.6 The Severn Estuary Ramsar site is designated for qualifying habitat features associated with its estuary, which has an immense tidal range (physical environment) and its unusual estuarine biological communities.

4.3.7 The Site is 8.5 km distant and therefore there will be no direct impacts on any qualifying habitat features of the Severn Estuary Ramsar site as a result of the Proposed Development.

²² It is noted that the Screening Direction for the Proposed Development provided by Planning & Environment Decisions Wales (PEDW) agreed that the River Usk SAC could be scoped out from assessment, but is included here for completeness to provide confidence that the process has been followed for all relevant European sites.

²³ Available at: <https://www.netregs.org.uk/environmental-topics/guidance-for-pollution-prevention-gpp-documents/> (accessed December 2025)

- 4.3.8 The Site is hydrologically connected to the Ramsar site via watercourses present on-Site which eventually flow into the Severn Estuary. Any release of contaminants has the potential to impact the biological communities of the Ramsar site. However, the separation distance between the Site and the Ramsar site is 8.5 km. Regardless of the proximity to any European Site, the Proposed Development would be required to implement standard legislative and regulatory requirements to prevent pollution, including GPPs, as part of embedded tertiary measures. These measures would prevent the release of contaminants and there would have to be a catastrophic failure in protocol for any measurable impact to occur over 8 km downstream of the Site. This is highly unlikely given the nature of the Proposed Development and such an event can be discounted.
- 4.3.9 With the inclusion of basic embedded mitigation there is no potential for LSE to habitat features potentially associated with the European site. **An AA is therefore not required.**

Severn Estuary SAC

- 4.3.10 Severn Estuary SAC is designated due to the presence of Annex I habitats; '1130 Estuaries', '1140 Mudflats and sandflats not covered by sea water at low tide' and '1330 Atlantic salt meadows'. Further Annex I habitats are present as qualifying features but not primary reasons for selection of the site, '1110 sandbanks which are slightly covered by sea water all the time', and '1170 reefs'.
- 4.3.11 The Site is 8.5 km distant and therefore there will be no direct impacts on any qualifying habitat features of the Severn Estuary SAC as a result of the Proposed Development.
- 4.3.12 The Site is hydrologically connected to the Severn Estuary via watercourses linked to those on-Site. Any release of contaminants has the potential to impact the biological communities of the designated area. However, the separation distance between the Site and the SAC is 8.5 km. Regardless of the proximity to any European Site, the Scheme would be required to implement standard legislative and regulatory requirements to prevent pollution, including GPPs, as part of embedded tertiary measures. These measures would prevent the release of contaminants and there would have to be a catastrophic failure in protocol for any measurable impact to occur over 8 km downstream of the Site. This is highly unlikely given the nature of the Proposed Development and such an event can be discounted.
- 4.3.13 With the inclusion of basic embedded mitigation there is no potential for LSE to habitat features potentially associated with the European site. **An AA is therefore not required.**

4.4 Potential effects upon qualifying species of European sites

River Usk SAC

- 4.4.1 The River Usk SAC is designated due to the presence of the following qualifying species features:
- sea lamprey;
 - brook lamprey;
 - river lamprey;
 - twaite shad;
 - Atlantic salmon;
 - bullhead; and
 - otter.

- 4.4.2 The Annex II species, Allis shad, is also present as a qualifying feature, but not as a primary reason for selection of the Site.
- 4.4.3 The Proposed Development is 1.4 km from the SAC and as such there would be no direct loss of, or change to, the supporting habitat of designated species features within the designated area. However, watercourses located on-Site are hydrologically connected to the SAC.

Fish (sea lamprey, brook lamprey, river lamprey, twaite shad, Atlantic salmon, bullhead and allis shad)

- 4.4.4 The size and depth of watercourses located within and adjacent to the Site range from dry ditches and shallow streams to larger streams and rivers with flowing water. The larger watercourses with flowing water, i.e. Candwr Brook and its tributaries, have the potential to support fish species that are qualifying features of the SAC.
- 4.4.5 The Proposed Development will involve watercourse crossings. In the absence of specific mitigation there is potential for a LSE to fish species, which may include those that are qualifying features of the SAC (and which may include individuals that spend some of their life cycle in the European site, form part of an important meta-population or otherwise have connectivity with it); through restriction of movement and/or the harm of individuals during the construction of watercourse crossings. **An AA is therefore required.**

Otter

- 4.4.6 The size and depth of watercourses located within and adjacent to the Site range from dry ditches and shallow streams to larger streams and rivers with flowing water. Watercourses and ditches with water present, have the potential to support otter.
- 4.4.7 Otters are known to utilise large home ranges, with male ranges sometimes exceeding 30 km and incorporating several typically smaller female territories. As such, otters using the River Usk SAC may also utilise watercourses connected to the SAC including Afon Lwyd, Canwdr Brook and their tributaries. Furthermore, through the desk study, otters are known to use the Afon Lwyd and have been recorded approximately 500 m from the central point of the Site.
- 4.4.8 While principally associated with watercourses, otter also utilise other habitats including woodland for natal holts, and ponds as a supplementary foraging resource, particularly during spring when amphibians are abundant.
- 4.4.9 Surveys undertaken at the Site did not record any evidence of otter, however some watercourses were considered suitable for the species, and they may use the watercourses and adjacent habitats periodically.
- 4.4.10 Given the presence of watercourses including Afon Lwyd and Candwr Brook located within and adjacent to the Site, it is considered that there is the potential for disturbance to the species potentially utilising these watercourses and adjacent habitats.
- 4.4.11 In the absence of specific mitigation measures there is potential for a LSE to otter through disturbance to the species utilising watercourses present on-site and adjacent to the Site. **An AA is therefore required.**

Severn Estuary SPA

- 4.4.12 The Severn Estuary SPA is designated due to the presence of the following qualifying individual species, all of which are listed for their non-breeding (wintering or passage) populations:
- Bewick's swan
 - European white-fronted goose
 - Dunlin

- Redshank
- Shelduck
- Gadwall
- Curlew
- Pintail
- Ringed plover

4.4.13 The following additional species are named components of the waterbird assemblage:

- Wigeon
- Teal
- Pochard
- Tufted duck
- Grey plover
- Whimbrel
- Spotted redshank
- Lapwing
- Mallard
- Shoveler

4.4.14 The majority of listed features of the Severn Estuary SPA were not recorded during the baseline surveys for the Proposed Development, whilst few records were returned by the desk study for most of the listed species (see below).

4.4.15 The separation distance between the SPA and the Site is over 8 km. The supporting habitats of the Severn Estuary SPA would not be impacted by the Proposed Development, nor would there be impacts on the protected populations whilst they are present within the SPA boundary. Impacts would only occur to these species' populations where individuals regularly transit from within the SPA boundary to the vicinity of the Site, where they could then be subject to disturbance or displacement impacts.

4.4.16 The Site does not lie within known functionally linked land associated with the Severn Estuary SPA according to available data²⁴. The data gathered for the Proposed Development are summarised below and this confirms that the vicinity of the Site should not be considered as functionally linked land.

Wader species (dunlin, redshank, spotted redshank, ringed plover, lapwing, grey plover, curlew and whimbrel)

4.4.17 In the non-breeding season, dunlin, redshank, spotted redshank, ringed plover and grey plover are associated with estuarine and intertidal habitats and the habitats present on Site and distance from the estuary would preclude these species from using the Site. Of these species, redshank was the only one to have occasional records within the last five years returned by the desk study (from the River Usk, within the 2 km buffer of the Site); and none of the wader species were recorded during the WBS for the Proposed Development. No LSE can safely be concluded as a result of the Proposed Development for dunlin, redshank, spotted redshank, ringed plover and grey plover associated with the Severn Estuary SPA.

4.4.18 Species such as curlew and whimbrel may forage in farmland habitats in the non-breeding season but individuals of these species, if recorded on Site, are unlikely to have connectivity to the SPA. A curlew GPS-tagging study (Mander *et al.*, 2022)²⁵ showed that the maximum distance travelled to suitable inland foraging habitats from coastal roosting sites was 3.5 km and this was only the case occasionally and for a small number of individuals, with most birds having much smaller winter home ranges. Similar behaviour has been shown by whimbrels on passage, with 75% of GPS-tagged birds foraging

²⁴ Available at: <https://environment.data.gov.uk/dataset/254211f9-1f98-45c3-9f57-0c3ebfb46709> (accessed December 2025)

²⁵ Mander, L., Nicolson, I., Green, R.M.W., Dodd, S.G., Forster, R.M. and Burton, N.H.K. (2022) Individual, sexual and temporal variation in the winter home range sizes of GPS-tagged Eurasian curlews *Numenius arquata*. *Bird Study* 69(1-2), p39-52.

within 3 km of (coastal) roost sites (Handmaker *et al.*, 2024)²⁶. No LSE can safely be concluded as a result of the Proposed Development for curlew and whimbrel associated with the Severn Estuary SPA.

- 4.4.19 Lapwing is the wader species listed as a qualifying feature of the Severn Estuary SPA that is most likely to use inland agricultural areas in winter. Lapwing flocks that utilise such areas can be very mobile, both within a single winter and between years. Within the Severn Estuary SPA, the most important areas for lapwing are the upper-most part of the estuary in Gloucestershire and around Bridgwater Bay in Somerset (Burton *et al.*, 2003)²⁷, with these areas distant from the Site (over 30 km). Lapwing was not recorded during the WBS for the Proposed Development. Within the desk study data, there were an estimated eight records in the last five years, of which most were of ones or twos, with one flock of 18 birds recorded within the 2 km buffer of the Site. The vicinity of the Site cannot be considered an important area for lapwing, either for birds associated with the SPA nor for the 'wider countryside' population, and indiscernible impacts would be expected on such a mobile species. No LSE can safely be concluded as a result of the Proposed Development for lapwing associated with the Severn Estuary SPA.

Waterfowl species (Bewick's swan, European white-fronted goose, shelduck, gadwall, pintail, wigeon, teal, pochard, tufted duck, mallard and shoveler)

- 4.4.20 The listed waterfowl species are typically associated with waterbodies (e.g. ponds, marshes, lagoons or estuaries) which are used for foraging, loafing and roosting. Such habitats are mostly absent from the vicinity of the Site, with the narrow tree-lined watercourses adjoining the Site providing little favourable habitat. The exception is the small Ponthir Reservoir that is located adjacent to the Site (within 50 m of tracks) which provides limited foraging habitat (due to the reservoir's artificial nature and unvegetated banks) but which could be used by loafing and roosting birds. However, based on species ecology, it is considered unlikely that birds from within the favourable habitats of the SPA would transit over 8 km to use this reservoir. It is possible that waterfowl using the more favourable habitat of Llandegfedd Reservoir (located over 4 km to the north of the Site) may occasionally move between that reservoir and the SPA, but the Proposed Development would not impede such movements and any birds that do so would be expected to continue to overfly the Site with or without the presence of the Proposed Development.
- 4.4.21 Bewick's swan and European white-fronted goose more typically forage in farmland habitats away from roost sites. Based on the proxy species/sub-species of whooper swan (which has a core foraging range of less than 5 km) and Greenland white-fronted goose (which has a core foraging range of 5-8 km (SNH, 2016)²⁸), the Site is located beyond expected foraging range from the Severn Estuary SPA boundary. Furthermore, both these species have limited distribution within the SPA and are found only in the upper reaches of the estuary, over 30 km from the Site.
- 4.4.22 Of the listed waterfowl species that are a qualifying feature of the Severn Estuary SPA, only one was recorded during the baseline WBS, namely mallard. The surveys obtained infrequent records of small numbers overflying the Site (nine records, totalling 21 individuals), with most birds suspected of flying to/from Ponthir Reservoir. Mallard flights would be expected to continue irrespective of the Proposed Development, given this species is often associated with man-made habitats and has a high tolerance to disturbance. Should any temporary avoidance of the reservoir occur as a result of construction/

²⁶ Handmaker, M.C., Sanders, F.J., Smith, A.D., Shealy, E.P., Fontaine, N., Kaplin, M.B., Thibault, J.M., Martin, M.C., Duquet, C., Sterling, A.V. and Senner, N.R. (2024) Individual foraging site fidelity persists within and across stopover seasons in a migratory shorebird, *Numenius phaeopus* (whimbrel). *Ornithology* 141(4).

²⁷ Burton, N.H.K., Marchant, J.H., Musgrove, A.J., Armitage, M.J.S., Holloway, S.J. and Philips, J. (2003) *Low-tide distribution of waterbirds on the Severn Estuary SPA: results of the 2002/03 WeBS low tide counts and a historical analysis*. BTO Research Report No. 335. The British Trust for Ornithology, Thetford.

²⁸ SNH (2016) *Assessing connectivity with Special Protection Areas (SPAs)*. Guidance – Version 3. Scottish Natural Heritage (now NatureScot), Inverness.

decommissioning works associated with the Proposed Development, this would have an indiscernible impact on mallard, which has rather indiscriminate habitat requirements.

- 4.4.23 Although not recorded during the WBS, the desk study returned records from the last five years for some of the waterfowl qualifying species within the Site and a 2 km buffer. There were one to two records (of one to four individuals) for European white-fronted goose, shelduck and pochard, although no records come from within the Site. The data therefore confirms that the vicinity of the Site is very rarely used by these three species and the records likely refer to wandering birds within the wider countryside, as opposed to regular movements associated with the SPA.
- 4.4.24 Wigeon, teal and, more especially, tufted duck and mallard, had numerous records in the desk study dataset but, apart from those recorded at Ponthir Reservoir (teal, tufted duck and mallard only), most records came from rivers and boating lakes within the 2 km buffer and outside the Site. Only ducks found on waterbodies lying within maximum disturbance distance of the Site boundary (which range between a maximum of 100 m for mallard and a maximum of 500 m for wigeon) (Goodship and Furness, 2022²⁹) would be impacted by works associated with the Proposed Development.
- 4.4.25 Wigeon, teal, tufted duck and mallard are abundant and widespread species and the records returned by the desk study are considered to be typical for a study area containing these habitats within the wider countryside, irrespective of the presence of the Severn Estuary 8.4 km distant. A research review undertaken by Johnson *et al.* (2014)³⁰ found that wintering foraging flight distance for waterfowl in Europe (covering geese and dabbling ducks) averaged 4.2 ± 3.2 km. This research provides further evidence that the Site is located beyond foraging distance of the Severn Estuary SPA and that the ducks recorded in the vicinity of the Site do not have connectivity to the designated area.
- 4.4.26 For all waterfowl species that are qualifying features of the Severn Estuary SPA (Bewick's swan, European white-fronted goose, shelduck, gadwall, pintail, wigeon, teal, pochard, tufted duck, mallard and shoveler) no LSE can be concluded as a result of the Proposed Development.

Severn Estuary Ramsar Site

- 4.4.27 The Severn Estuary Ramsar site is designated due to the presence of the following qualifying species features:
- *Criterion 4:* The site is important for the run of migratory fish between sea and river via estuary. Species comprises salmon, sea trout, sea lamprey, river lamprey, allis shad, twaite shad and eel. It is also of importance for migratory birds during spring and autumn.
 - *Criterion 5:* species contributing to the internationally important 'waterfowl assemblage' (wintering and on passage populations): Bewick's swan; European white-fronted goose, dunlin, redshank, shelduck, gadwall, ringed plover, whimbrel, teal, pintail, wigeon, pochard, tufted duck, grey plover, curlew and spotted redshank.
 - *Criterion 6:* ornithological species occurring at levels of international importance (wintering populations): Bewick's swan; European white-fronted goose, dunlin, redshank, shelduck and gadwall); and national importance: ringed plover, whimbrel, dunlin and redshank (populations on passage); and lesser black-backed gull (breeding).

²⁹ Goodship, N.M. and Furness, R.W. (MacArthur Green) (2022) *Disturbance Distances Review: An updated literature review of disturbance distances of selected bird species*. NatureScot Research Report 1283.

³⁰ Johnson, W.P., Schmidt, P.M. and Taylor, D.P. (2014) Foraging flight distances of wintering ducks and geese: a review. *Avian Conservation & Ecology* 9(2).

- *Criterion 8:* The fish of the whole estuarine and river system is one of the most diverse in Britain, with over 110 species recorded. The site is a key migration route to spawning grounds and an important feeding and nursery ground for many fish species.

Fish (sea lamprey, brook lamprey, river lamprey, twaite shad, Atlantic salmon, bullhead and allis shad)

- 4.4.28 The Proposed Development will involve watercourse crossings. In the absence of specific mitigation there is potential for a LSE to fish species, which may include those that are qualifying features of the SAC (and which may include individuals that spend some of their life cycle in the European site, form part of an important meta-population or otherwise have connectivity with it); through restriction of movement and/or the harm of individuals during the construction of watercourse crossings. **An AA is therefore required.**

Ornithological Features

- 4.4.29 The Severn Estuary Ramsar site is coincident in area with the Severn Estuary SPA and the overall list of qualifying ornithological features is mostly duplicated between the two designations. The following ornithological features have been assessed above under the SPA designation and no LSE concluded for the Proposed Development. The screening assessment for these qualifying features is not separately repeated for the Severn Estuary Ramsar site designation, as the conclusions remain the same as for the Severn Estuary SPA.
- 4.4.30 Ornithological features for which no LSE is concluded: Bewick's swan; European white-fronted goose, dunlin, redshank, shelduck, gadwall, ringed plover, whimbrel, teal, pintail, wigeon, pochard, tufted duck, grey plover, curlew and spotted redshank.
- 4.4.31 One qualifying feature remains, that is not assessed under the SPA designation: lesser black-backed gull (breeding). Lesser black-backed gull is listed as one of the "other notable features" in the original Ramsar site citation (1995) and as a species with a population "identified subsequent to designation" under the 2005 revised criteria. For completeness, lesser black-back gull is assessed here as a full qualifying feature of the Ramsar site.
- 4.4.32 The breeding population of lesser black-backed gulls within the Severn Estuary Ramsar site is found on Flat Holm island, which is located approximately 29.5 km from the Site. Considerable research has been carried out to determine the foraging distances of breeding lesser black-backed gulls and this has shown that flights inland to utilise terrestrial environments have a mean distance of 14.9 ± 15.9 km (Thaxter *et al.*, 2025³¹). This would put the Site at the very edge of the foraging range for lesser black-backed gulls nesting on Flat Holm. This suggests that the lesser black-backed gulls recorded during the BBS and reported in the desk study data for the Proposed Development are much more likely to be from the large, and growing, urban breeding population rather than representing birds originating from the Ramsar site. Approximately a third of the Welsh breeding population of lesser black-backed gulls are considered to be roof-nesting birds (Pritchard *et al.*, 2021)³². Even if occasional birds from Flat Holm were to use the Site, the footprint of the Proposed Development and any associated displacement as a result of disturbance would be tiny for a bird with a foraging range of c. 30 km. Impacts on lesser black-backed gull are considered to be indiscernible and no LSE is concluded for this feature of the Severn Estuary Ramsar site.

³¹ Thaxter, C.B., Quinn, L., Atkinson, P., Booth Jones, K.A., Clark, N.A., Clewley, G.D., Green, R.M.W., O'Hanlon, N.J., Johnston, D.T., Masden, E.A., Ross-Smith, V.H., Sage, E., Scragg, E., Taylor, R., Burton, N.K.H. & Humphreys, E.H. (2025) Breeding and foraging habitat are important in determining foraging ranges of sympatric generalist species. *Ibis* 168(1), p259-292.

³² Pritchard, R., Hughes, J., Spence, I.M., Haycock, B. and Brechley, A. (eds) (2021) *The Birds of Wales*. Liverpool University Press.

Severn Estuary SAC

- 4.4.33 Severn Estuary SAC is not designated for qualifying species features. The potential for impacts to supporting habitats of qualifying habitats have been assessed separately above.

4.5 Screening conclusion

- 4.5.1 The European sites identified, comprising River Usk SAC, Severn Estuary SPA, Severn Estuary Ramsar site and Severn Estuary SAC, have been assessed as part of this Information to Inform a HRA report.
- 4.5.2 No LSE has been concluded for Severn Estuary SPA and Severn Estuary SAC and, as such, these European sites do not progress to stage two (AA).
- 4.5.3 No LSE has been concluded for habitat or ornithological features present within the Severn Estuary Ramsar site and, as such, these features do not progress to stage two (AA) for this designated area.
- 4.5.4 In the absence of additional mitigation, an AA is required to be made under the Habitats Regulations in relation to the River Usk SAC (fish species and otter (not habitats)) and Severn Estuary Ramsar site (fish only) before the Competent Authority can give any consent, permission or other authorisation for the Proposed Development.
- 4.5.5 The Proposed Development is considered, alone, to have potential for LSE upon the aforementioned designated sites in relation to its potential to cause indirect adverse impacts upon qualifying species. Qualifying species for River Usk SAC comprise: sea lamprey, brook lamprey, river lamprey, twaite shad, Atlantic salmon, bullhead, allis shad and otter. Qualifying species for Severn Estuary Ramsar site comprise: sea lamprey, brook lamprey, river lamprey, twaite shad, Atlantic salmon, bullhead and allis shad.
- 4.5.6 LSEs are considered in relation to the construction, operation and decommissioning phases of the Proposed Development.

5 APPROPRIATE ASSESSMENT

5.1 Overview

- 5.1.1 In the absence of additional mitigation, the potential for LSEs is identified for the following European sites and qualifying features as a result of the Proposed Development:
- River Usk SAC (fish species and otter)
 - Fish species: sea lamprey, brook lamprey, river lamprey, twaite shad, Atlantic salmon, bullhead and allis shad; and
 - Otter
 - Severn Estuary Ramsar (fish features only)
 - Fish species: sea lamprey, brook lamprey, river lamprey, twaite shad, Atlantic salmon, bullhead and allis shad.
- 5.1.2 This section of the report therefore considers the potential for adverse effects upon the integrity of the above European sites, in view of the site's conservation objectives and on the basis of mitigation measures.

- 5.1.3 Consideration of measures included within a project which have the effect of reducing or mitigating the impacts of that project on a European site have not been considered within Stage 1: Screening but must instead be assessed with respect to the integrity of the site concerned at Stage 2: AA.
- 5.1.4 The Adverse Effect on Integrity Test undertaken in the AA can take account of the protection measures forming part of the integral design or physical characteristics of the project aimed at avoiding or reducing any direct adverse effects for the site.
- 5.1.5 The following section details the mitigation measures included within the design of the Proposed Development, which will also be set out in a Construction Environmental Management Plan (CEMP), secured by planning consent and then an assessment of LSE in consideration of these measures is undertaken.

5.2 Mitigation during construction

- 5.2.1 The following measures are proposed to mitigate for LSE during construction of the Proposed Development. For completeness, some embedded measures required for legislative compliance (e.g., pollution prevention measures) are repeated here, however they should not be considered as specific measures to reduce potential adverse impacts on qualifying features of designates sites.

Construction Environmental Management Plan

Pollution Prevention Measures

- 5.2.2 The CEMP will include best practice and regulatory pollution prevention measures including adherence to GPPs.

Watercourse Crossings

- 5.2.3 Whilst the Proposed Development will utilise existing tracks wherever possible, new ditch and watercourse crossings require construction as part of the project. Most crossings will comprise culverts (pipe culverts for smaller watercourses and box culverts for larger watercourses), whilst a bridge is proposed in 1 location.
- 5.2.4 As a matter of good practice, the following measures will be included in the CEMP:
- Watercourse crossings will be designed to ensure the flow of water is not disrupted and to allow free movement of fish species up and down stream, without creating a barrier to movement; and
 - Pre-construction surveys will be completed prior to the commencement of works to check for evidence of otter at all watercourses suitable to support otter within the Site and a surrounding 250 m. If an otter holt or resting place is found to be present, further surveys will be undertaken and/or a granted Natural Resources Wales (NRW) licence will be in place (if required) prior to the commencement of works.

5.3 Mitigation during operation

- 5.3.1 Standard pollution prevention control measures will be implemented to mitigate for adverse impacts during operation of the Proposed Development. Standard pollution prevention control measures will include safe and proper storage of materials, use of plant nappies when refuelling and storage of spill kits in vehicles.

5.4 Mitigation during decommissioning

- 5.4.1 The mitigation employed during the decommissioning phase would be expected to be similar to that used during the construction phase.
- 5.4.2 At the point of full or partial decommissioning of the Proposed Development, the CEMP developed during the construction phase would provide guidance for the management of risk to the water environment. The CEMP would be reviewed and updated as appropriate to reflect future good practice guidance (along with any changes in legislation, climate, designations, habitats or water use) and would be used to plan decommissioning activity.

5.5 Appropriate Assessment

- 5.5.1 In the absence of mitigation, potential for LSE on the following European sites and designated features have been identified:
- River Usk SAC
 - Fish species: sea lamprey, brook lamprey, river lamprey, twaite shad, Atlantic salmon, bullhead and allis shad; and
 - Otter
 - Severn Estuary Ramsar site (fish features only)
 - Fish species: sea lamprey, brook lamprey, river lamprey, twaite shad, Atlantic salmon, bullhead and allis shad.
- 5.5.2 With the implementation of mitigation measures, including the CEMP and project design measures, it can be concluded that the Proposed Development will not result in adverse effects upon the integrity of any European site.
- 5.5.3 The mitigation measures proposed are well established and in line with guidance and regulation and hence can be considered achievable and effective in preventing identified potential adverse effects. The mitigation will be secured by planning condition within the planning consent as part of the final CEMP.
- 5.5.4 With the inclusion of the mitigation outlined, a measurable adverse effect on the River Usk SAC and Severn Estuary Ramsar site would be avoided and subsequently **no adverse effects on the integrity of a European site, or its qualifying habitats or species, will occur as a result of the Proposed Development alone.**

5.6 Appropriate Assessment of effects in-combination

- 5.6.1 Regulation 63 requires that the HRA process must consider the potential for LSEs of a proposed development both alone or in combination with other plans and projects. In-combination effects are subsequently considered to be restricted to potential direct impacts from habitat loss and/or change and indirect impacts of contamination/sedimentation/pollution, with all other potential in-combination impacts inconsequential on the designated sites and qualifying features identified for assessment.
- 5.6.2 Therefore, fully constructed and operational projects are not included in the in-combination assessment, as measurable in-combination operational phase impacts (see **Section 5.3**) would not be expected following the implementation of embedded mitigation measures.

- 5.6.3 Projects located within 6 km were considered within AA of effects in-combination. It is assumed that all projects located within hydrological catchment of the designated sites would be required to implement standard legislative and regulatory requirements to prevent pollution, including GPPs, as part of embedded tertiary measures, and the assessment has been carried out on that basis.
- 5.6.4 When assessing in-combination effects, the impacts considered should be practically feasible and interpreted and applied in a proportionate manner.
- 5.6.5 The following criteria were applied to select relevant schemes considered within the AA of effects in-combination.
- Committed schemes (i.e. proposals with planning permission/consented which are either under construction or yet to commence);
 - Applications pending determination (i.e. schemes with live planning applications which may or may not be within adopted allocations);
 - Other potential schemes (e.g. adopted allocation or schemes which have screening / scoping submitted and where sufficient information is available – some of these may be considered relevant to include in the in-combination assessment);
 - Schemes located within 6 km of the Site boundary; and
 - Schemes identified as major projects³³.
- 5.6.6 Using these criteria the following planning applications have been considered within the AA of effects in-combination:
- 22/P/0446/OUT – Grange University Hospital, Proposed Mental Health Specialist Inpatient Services Unit and associated highway, drainage, landscape and infrastructure. Permission Granted.
 - DNS/3239190 – DNS Application - Pentre Bach Solar Farm. Awaiting determination.
 - DNS/3276725 – DNS Application – Mynydd Maen Wind Farm. Awaiting determination.

River Usk SAC

- 5.6.7 The identified projects are distant from the River Usk SAC (3-7 km) such that there would be no direct impacts upon habitats and features within the designated area, and all have nil or negligible hydrological connectivity to the SAC.
- 5.6.8 It would be expected that all development projects would implement minimum standards of pollution prevention in line with legislative requirements.
- 5.6.9 As such, it is considered that there is no potential for adverse in-combination effects to occur with any other projects, for the River Usk SAC.

³³ Major projects were defined as developments that are one of more of the following: (a) the winning and working of minerals or the use of land for mineral-working deposits; (b) waste development; (c) the provision of dwelling houses where: (i) the number of dwelling houses is 10 or more; (ii) the development is to be carried out on a site having an area of 0.5 hectares or more and it is not known whether the development falls within sub-paragraph (c)(i); (d) the provision of building or buildings where the floor space to be created by the development is 1000 square metres or more; or (e) development carried out on a site having an area of 1 hectare or more.

Severn Estuary Ramsar Site

- 5.6.10 The identified projects are distant from the Severn Estuary Ramsar site (9-13 km) such that there would be no direct impacts upon habitats and features within the designated area, and all have nil or negligible hydrological connectivity with the Ramsar site.
- 5.6.11 It would be expected that all development projects would implement minimum standards of pollution prevention in line with legislative requirements.
- 5.6.12 As such, it is considered that there is no potential for adverse in-combination effects to occur with any other project, for the Severn Estuary Ramsar site.

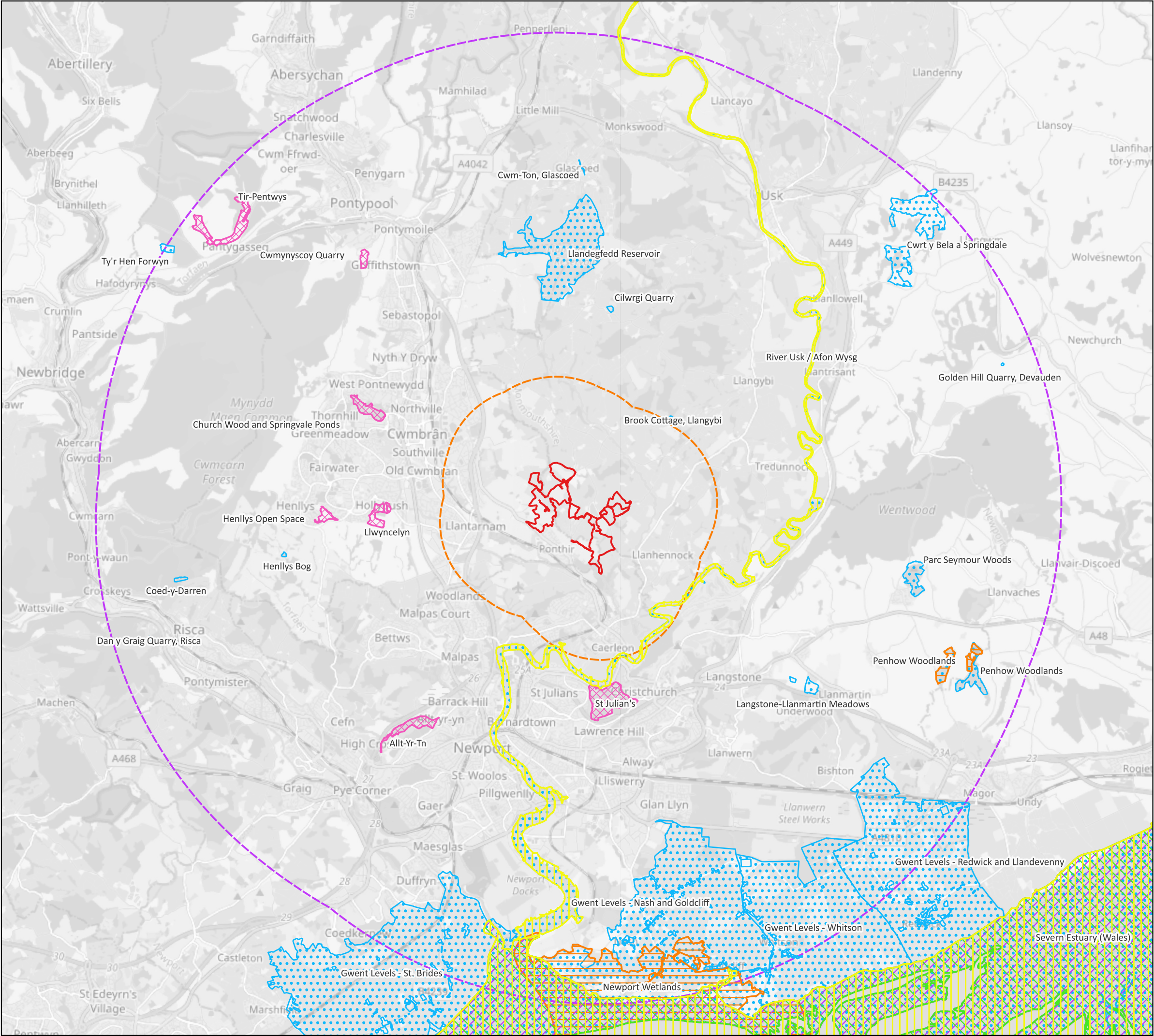
Summary

- 5.6.13 The potential for a LSE has been identified for two European sites (River Usk SAC and Severn Estuary Ramsar site) and information to inform an AA has been provided, including mitigation measures that will form a committed part of the Proposed Development.
- 5.6.14 The mitigation measures as described will ensure no direct or indirect effects on the favourable conservation status of qualifying species or habitats and hence no adverse effect on the integrity of the two European sites assessed, as a result of the Proposed Development both alone and in-combination with other projects.
- 5.6.15 The mitigation measures proposed are well established and in line with guidance and regulation and hence can be considered to be achievable and effective in preventing the identified potential adverse impacts. The mitigation will be secured by planning condition within the planning consent as part of a CEMP.

6 CONCLUSION

- 6.1.1 Four European sites were identified for screening, namely the River Usk SAC; and the Severn Estuary SPA, Ramsar site and SAC.
- 6.1.2 All four European sites were assessed at stage 1: potential for LSE. This stage determined no LSE for the following protected sites/ qualifying features: River Usk SAC (habitats), Severn Estuary SPA (all listed features), Severn Estuary Ramsar site (habitat and ornithological features) and Severn Estuary SAC (all listed features). These protected sites/ qualifying features were screened out and no AA is required.
- 6.1.3 For River Usk SAC (fish and otter) and Severn Estuary Ramsar site (fish) it was not possible to conclude no LSE and these protected areas/ qualifying features were taken forwards to stage 2: AA.
- 6.1.4 The AA found that, following the inclusion of mitigation, an adverse effect on the integrity of the River Usk SAC and Severn Estuary Ramsar site would not occur as a result of the Proposed Development.
- 6.1.5 As well as investigating potential impacts for the Proposed Development alone, in-combination impacts were also assessed. Cumulative schemes identified were considered to be sufficiently distanced from River Usk SAC and Severn Estuary Ramsar site such that there would be negligible impacts following implementation of embedded mitigation. No adverse in-combination effects on site integrity were concluded.

Figure 1: Statutory Designated Sites



- Site
- 10km Search Buffer
- 2km Search Buffer
- Statutory Designated Sites
 - RAMSAR
 - Special Area of Conservation (SAC)
 - Special Protection Area (SPA)
 - Site of Special Scientific Interest (SSSI)
 - Local Nature Reserve
 - National Nature Reserve

CANDWR SOLAR FARM

Statutory Designated Sites

Version: 01

Date: 27/05/2026

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024 km

Co-ordinate System : British National Grid
Projection: Traverse Mercator
Datum: OSGB 1936
Units: Metres

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