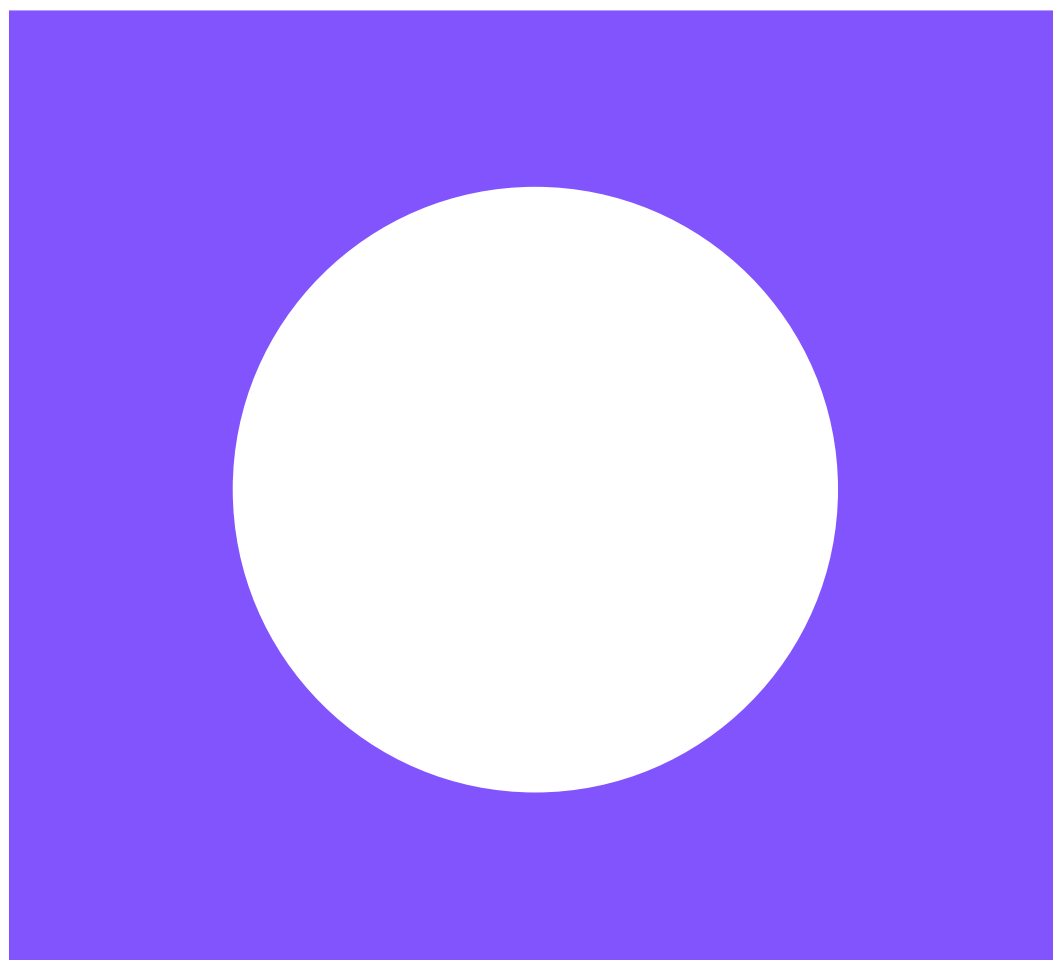




Bassaleg Bridge

Habitats Regulations Assessment

April 2025

This page left intentionally blank for pagination.

Mott MacDonald
10 Temple Back
Bristol BS1 6FL
United Kingdom

T +44 (0)117 906 9500
mottmac.com

Bassaleg Bridge

Habitats Regulations Assessment

April 2025

Issue and Revision Record

Revision	Date	Originator	Checker	Approver	Description
A	March 2025	KT	JW	AW	For planning submission

Document reference: 100119581-MMD-XX-XX-RP-EC-0002

This document is issued for the party which commissioned it and for specific purposes connected with the above-captioned project only. It should not be relied upon by any other party or used for any other purpose.

We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

This document contains confidential information and proprietary intellectual property. It should not be shown to other parties without consent from us and from the party which commissioned it.

Contents

Executive Summary	1
1 Introduction	2
1.1 Background and Site Location	2
1.2 Structure and Purpose of this Report	4
1.3 Project Description	4
1.4 Objectives	4
1.5 Scope of Works	4
2 Habitats Regulations Assessment Framework	5
2.1 Habitat Regulations Assessment Process	5
2.2 Screening Assessment Methodology	7
2.3 Appropriate Assessment Methodology	8
3 HRA Stage 1: Screening	10
3.1 Identification of Designated Sites	10
3.2 Assessment of Likely Significant Effects	11
3.2.1 River Usk SAC Screening Assessment	11
3.2.2 Severn Estuary Ramsar Screening Assessment	12
3.2.3 Severn Estuary SPA Screening Assessment	13
3.2.4 Severn Estuary SAC Screening Assessment	13
4 HRA Stage 2: Appropriate Assessment	15
4.1 River Usk SAC	15
4.2 Severn Estuary Ramsar and Severn Estuary SAC	15
A. Designated Site Locations	17
B. Legislation	18
B.1 The Directives	18
B.2 The 2017 Regulations	18
B.3 Guidance and other relevant documents	19
C. Relevant Case Law	25
C.1 Waddenzee Judgement	25
C.2 Dilly Lane Decision	26
C.3 Sweetman Case	27
C.4 The A5 Judgment	27

C.5	Wealden v SSCLG [2017] ('the Wealden Judgment 2017')	28
C.6	People over Wind (Sweetman II) [C323/17]	29
C.7	ESB Wind Developments (Sweetman III) [Case C164/17]	29
C.8	Holohan Judgment	30
C.9	The Dutch Nitrogen Cases	30
D.	Designated Sites	32
D.1	River Usk SAC	32
D.2	Severn Estuary SPA	34
D.3	Severn Estuary SAC	35
D.4	Severn Estuary Ramsar	36

Tables

Table 2.1: HRA Stages	6
Table 3.1: Identified Designated Sites relevant to the Assessment	10
Table 3.2: River Usk SAC	11
Table 3.3: Severn Estuary Ramsar	12
Table 3.4: Severn Estuary SPA	13
Table 3.5: Severn Estuary SAC	13

Figures

Figure 1.1: Site Location of the existing Bassaleg Bridge	3
Figure 1.2: Site Location of new Bassaleg Bridge	3

Executive Summary

This report presents the results of the Habitats Regulations Assessment (HRA) Stage 1 Screening and Stage 2 Appropriate Assessment undertaken in relation to the construction of a new single span bridge over the River Ebbw, at Bassaleg, Newport. This report assesses the potential effects of the project on Special Protection Areas (SPAs), Special Areas of Conservation (SACs) and Ramsar Sites.

Four Designated Sites have been identified as requiring an assessment to determine whether the project could give rise to likely significant effects (LSE) upon their designated features:

- River Usk / Afon Wysg SAC, henceforth referred to River Usk SAC,
- Severn Estuary / Môr Hafren Ramsar, henceforth referred to as Severn Estuary Ramsar,
- Severn Estuary / Môr Hafren SPA, henceforth referred to as Severn Estuary SPA,
- Severn Estuary / Môr Hafren SAC, henceforth referred to as Severn Estuary SAC.

The HRA Stage 1 Screening in this report has identified direct and indirect impacts of the project and pathways linking the impacts to qualifying features of the Designated Sites. LSE cannot be excluded on the River Usk SAC as a result of:

- Construction-related pollution incidents affecting foraging and commuting habitat for otter associated with the River Usk SAC (within functionally linked habitat only); and
- Noise and light pollution affecting foraging and commuting otter associated with the River Usk SAC (within functionally linked habitat only).

LSE cannot be excluded on the Severn Estuary Ramsar and Severn Estuary SAC as a result of:

- Direct loss of spawning habitats around new bridge piers;
- A pollution incident and noise and light pollution affecting migratory fish species associated with the Ramsar Site and SAC; and
- A pollution incident affecting the Ramsar and SAC directly by pollutants travelling downstream and into the Ramsar Site and SAC.

No LSE are expected on the qualifying features of the Severn Estuary SPA.

With consideration of mitigation measures (standard pollution control measures, sensitive timing of works to avoid disturbing otter, and spawning and migratory fish, and ensuring continued free flowing water to facilitate fish movement in the River Ebbw)

It is concluded that on the basis of this assessment, and the implementation of the mitigation above, the Proposed Development would have no appreciable effect on the integrity of the River Usk SAC, Severn Estuary SAC or Severn Estuary Ramsar, or their designated interest features. Therefore, the Proposed Development would not contribute to any in-combination effects with other plans or projects.

1 Introduction

1.1 Background and Site Location

Mott MacDonald Limited (MML) has been commissioned by Newport City Council (NCC) to undertake a Habitats Regulations Assessment – Stage 1 Screening and Stage 2 Appropriate Assessment to inform the construction of a new single-span bridge across the River Ebbw in Bassaleg, Newport.

The old Bassaleg Bridge is owned by NCC and carries a single carriageway over the River Ebbw. The existing bridge is located at National Grid Reference (NGR) ST 27846 87042 and was constructed in 1943. It is a three-span continuous reinforced concrete structure with a total bridge deck width of 13.25 metres (m).

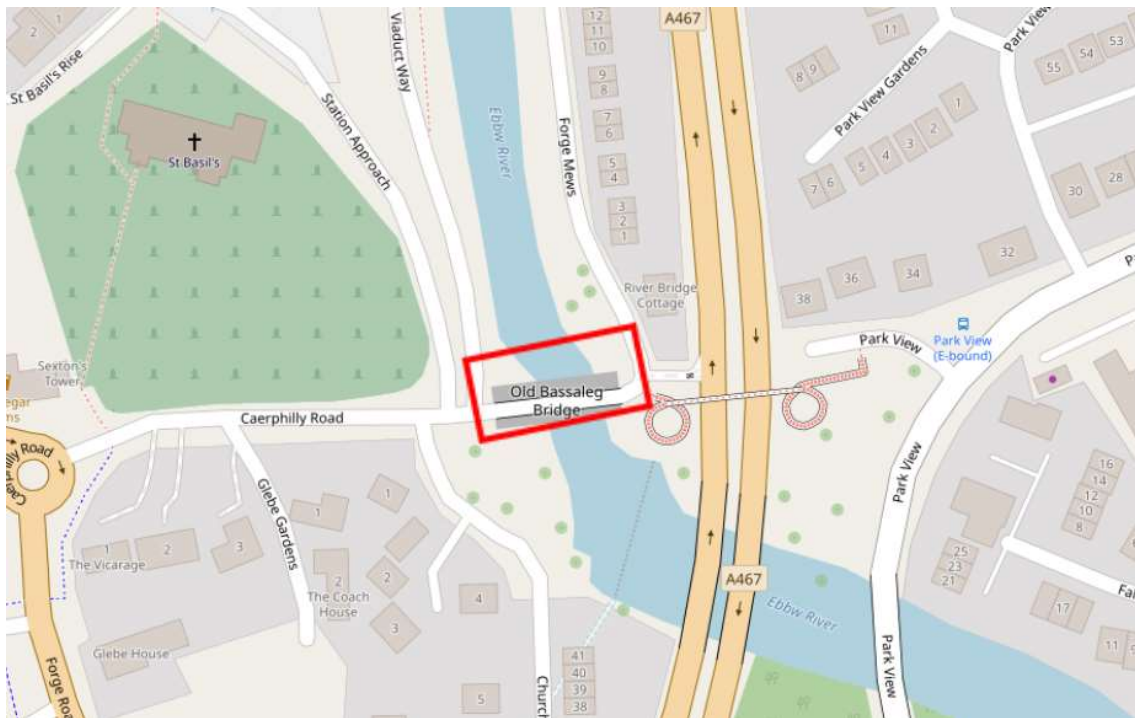
Following investigations into severe cracking in the structure in June and August 2021, emergency repairs were carried out to the bridge pier foundation in September 2021. However, the existing bridge was closed for vehicular use as it could not be confirmed as safe for bearing a live load. Further deterioration of the structure was identified in Spring 2022, and a structural assessment carried out by Mott MacDonald in January 2023 rated the structure as 'Dead Load Only' with the governing structural element being the main longitudinal beams due to the identified deficiencies. Emergency interim measures that were put in place include:

- Closure of the bridge to vehicular traffic;
- Closure of the upstream footway (above the beams with the most severe cracking); and
- Implementation of a structural monitoring system that records crack and tilt movements against temperature, for which an alert is triggered if expected crack and tilt movements are exceeded.

The existing bridge remains closed for vehicular use, and only the downstream footway remains open for pedestrian use. The existing bridge had previously provided the only vehicular access to the properties on Forge Mews, on the east side of the river; alternative access for emergency vehicles only was provided from the A467 in 2021.

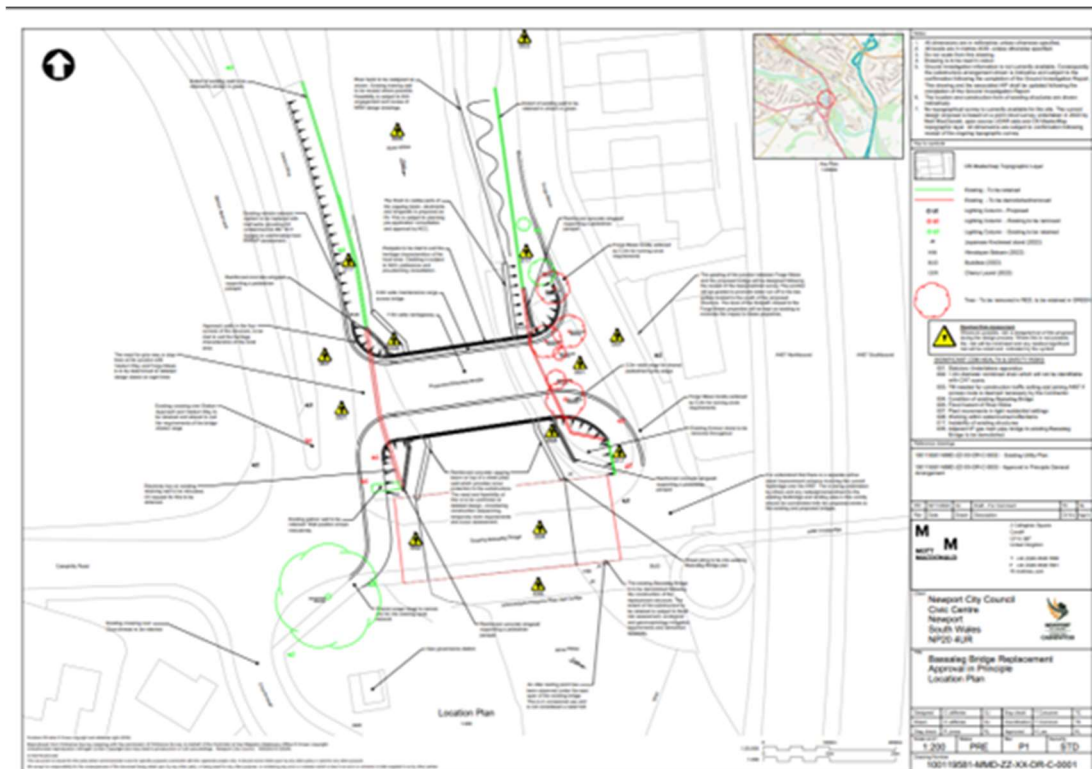
The location of the existing bridge is shown in Figure 1.1 below, with the proposed structure located as shown in Figure 1.2.

Figure 1.1: Site Location of the existing Bassaleg Bridge



Source: Map data © OpenStreetMap.org contributors

Figure 1.2: Site Location of new Bassaleg Bridge



Source: Mott MacDonald, 2024

1.2 Structure and Purpose of this Report

This report has been prepared with the aim of providing the competent authority (Newport City Council) with sufficient information to inform their decision with regard to an HRA. It has been provided in the form of an Appropriate Assessment document following the relevant process required by the competent authority.

This report documents the assessment of the potential for effects of the Proposed Development on National Sites Network (NSN) Sites (formerly Natura 2000 sites, collectively these sites are referred to hereafter as 'Designated Sites'), as required by Regulation 63(1) of the Conservation of Habitats and Species Regulations 2017 (as amended) (the Habitats Regulations). The HRA process is described Section 3.

Designated Sites relevant to this HRA Screening have been identified in accordance with the Study Area criteria noted in Section 3.2. These will be considered systematically through the stages of HRA. The HRA process is described in further detail in Section 3.

1.3 Project Description

This Habitats Regulations Assessment covers the red line boundary within Figure 1.2, above. The Proposed Development includes the construction of the new Bassaleg Bridge, predominantly over neutral and modified grassland and scrub with the removal of six scattered trees required. It also involves the demolition of the existing Bassaleg Bridge.

1.4 Objectives

The objectives of the Proposed Development are to:

- Construct a new bridge over the River Ebbw to allow residents access; and
- Demolish the existing, irreparable bridge.

1.5 Scope of Works

Upon implementation of the structural monitoring system, the downstream footway was reopened to pedestrians (subject to the progression of the ratcheting effect thereon). Following the structural assessment, MML was then commissioned by NCC to prepare an option selection report for the replacement of Old Bassaleg Bridge. The options explored in the report were:

- Demolition of the existing bridge only (no replacement).
- Online bridge replacement.
- Offline bridge replacement.
- Offline road bridge and online footbridge replacements.
- Acquisition of Forge Mews properties with an online footbridge replacement; and
- Provision of a highway junction to the A467 with an online footbridge replacement.

A workshop was held with Newport City Council on 15th March 2023 to discuss the options and obtain initial feedback. It was later determined that an offline structure was to be progressed, and MML supported the NCC in completing a WeITAG Lite to aid in the application for funding for the new structure.

2 Habitats Regulations Assessment Framework

2.1 Habitat Regulations Assessment Process

There is a requirement under the Conservation of Habitats and Species Regulations 2017 (as amended) (“the 2017 Regulations”) to determine if a plan or project (either alone or in combination) may affect the interest features and objectives of protected nature conservation sites at a European and International level (referred to in this report as Designated Sites). The process of undertaking this assessment is known as a Habitats Regulations Assessment (HRA).

The 2017 Regulations include measures to establish and maintain a network of sites to protect habitats which in themselves are valuable, and the species they support. These sites form a network that across Europe is known as Natura 2000, and domestically also known collectively as the National Site Network. Within the UK, this network consists of Special Protection Areas (SPAs) and Special Areas of Conservation (SACs), together with proposed and candidate SPAs and SACs (pSPAs and cSACs). This network also extends to marine environments, with wetland sites of international importance (Ramsar sites¹) also treated equally within this assessment framework, in accordance with Planning Policy Wales² (PPW). These sites are collectively referred to in this document as ‘Designated Sites’.

The 2017 regulations are set out in Parts, with Part 2 including provisions for the selection and designation of sites and Part 6 providing provisions to ensure that assessment of plans and projects are fully considered before being granted consent or permission. They also define the nature of and roles of statutory bodies, competent authorities and the appropriate nature conservation body, and the requirements for information to be submitted to these bodies to enable them to undertake the required assessments.

Although the 2017 Regulations have been amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 due to the UK’s exit from the EU, the effect of these amendments is largely related to terminology/wording. Requirements and processes remain the same, as protection levels remain unchanged. As such existing EU guidance³ and preceding case law from the European Court of Justice (ECJ)^{4,5,6} remain valid as a source of direction and interpretation of the requirements of the legislation, although it should be noted that much case law has now been incorporated into guidance and/or best practice.

The HRA process consists of four stages, each stage being informed by the one preceding to ensure an iterative and objective assessment. If the conclusion of Stage 1 is that there will be no likely significant effects on any features of a Designated Site, there is no requirement to

¹ Designated via The Convention on Wetlands of International Importance especially as Waterfowl Habitat, as amended in 1982 and 1987 (the ‘Ramsar Convention’).

² Welsh Government, 2024. Paragraph 6.4.31 [online] Available at: <<https://www.gov.wales/planning-policy-wales>> [Accessed March 2025].

³ Managing Natura 2000 Sites - The provisions of Article 6 of the ‘Habitats’ Directive 92/43/CEE (European Communities 2020)

⁴ Landelijke Vereniging tot Behoud van de Waddenzee/ Nederlandse Vereniging tot Bescherming van Vogels, European Court of Justice, Case C-127/02 ‘Waddenzee 2002’

⁵ Sweetman *et al* v An Bord Pleanala, European Court of Justice, Case C-258/11 ‘Sweetman 2011’

⁶ People over Wind/Sweetman v Coillte Teorante, European Court of Justice Case C-323/17 ‘People over Wind 2017’

undertake further stages. Similarly, if the Stage 2 Appropriate Assessment (AA) concludes there will be no adverse effect on integrity of the Designated Site, then the assessment is concluded. The HRA stages are summarised within Table 2.1.

Table 2.1: HRA Stages

Stage	Description
Screening (Stage 1)	Screening for Likely Significant Effects (LSEs) of the plan or project (either alone or in-combination) on a Designated Site prior to consideration of avoidance or reduction ('mitigation') measures. Screening is an iterative process and before moving to Stage 2 it can be repeated if required. The Designated Sites identified at the screening stage as potentially experiencing LSE(s) will be taken forward to Stage 2 (Appropriate Assessment). Where mitigation is required to reduce or remove the risk of LSE(s), Stage 2 Appropriate Assessment will be required.
Appropriate Assessment (Stage 2)	This stage involves the consideration of the predicted adverse effects of the project or plan either alone, or in-combination with other projects or plans, on the integrity of the Designated Site with respect to the site's structure, function, and conservation objectives. Additionally, where mitigation has been proposed to avoid or minimise LSEs, this stage includes assessment of the likely effectiveness of any mitigation applied. A key outcome of the Appropriate Assessment is to identify whether the integrity of the Designated Site(s) is likely to be adversely affected by the plan/project.
Assessment of Alternative Solutions (Stage 3)	If the mitigation measures prescribed at Stage 2 Appropriate Assessment cannot avoid adverse effects on the integrity of a Designated Site, this stage examines alternative ways of achieving the objectives of the plan or project that avoid adverse impacts on the integrity of any Designated Site. Stage 3 (and 4) of the assessment should not be seen as an automatic progression from a negative outcome at Stage 2, i.e. adverse effects on site integrity cannot be ruled out.
Assessment where no alternative solutions exist and where adverse effects remain (Stage 4)	If no suitable alternative solutions are available, Stage 4 requires an assessment of compensatory measures where, in the light of an assessment of Imperative Reasons of Overriding Public Interest ("IROPI"), it is deemed that the plan or project should proceed. In making this assessment, it is important to recognise that it will be appropriate to the likely scale, importance and impact of the proposed project. This is a last resort and should be avoided if possible.

Source: Mott MacDonald Limited, 2025

This assessment has been undertaken in an iterative and objective manner following the above stages, with reference to best practice guidance and relevant case law, notably that provided by the Waddenzee case (ECJ 2002) and Sweetman (ECJ 2011) to inform the interpretation and therefore correct application of the terms 'likelihood', 'significance' and 'in combination'.

MML undertook this HRA in March 2025 in accordance with the following guidance:

- Habitats Regulations Assessments: Protecting a European Site⁷;

⁷ DEFRA, WG, NE, NRW (2021) Habitats Regulations Assessment: Protecting a European Site. [online] Available at: < <https://www.gov.wales/habitats-regulations-assessments-protecting-european-site.html> > [Accessed March 2025].

- Design Manual for Roads and Bridges (DMRB) LA 115 'Habitats Regulations Assessment (formerly HD44/09)⁸;
- Highways England (2020) Design Manual for Roads and Bridges (DMRB) LA 113 'Road drainage and the water environment'⁹;
- *Assessment of plans and projects significantly affecting Natura 2000 sites – Methodological guidance on the provision of Article 6(3) and (4) of the Habitats Directive 92/43/EEC* (European Commission, 2021);
- *The Habitats Regulations Assessment Handbook* (Tyldesley and Chapman, 2013);
- *Managing Natura 2000 sites – The provisions of Article 6 of the Habitats Directive 92/43/EEC* (European Commission, 2019); and
- Case law from the European Court of Justice (ECJ), notably the Waddenzee, Sweetman and People Over Wind cases (relevant case law is summarised within Appendix B.3).

2.2 Screening Assessment Methodology

The identification of Designated Sites of relevance to the HRA screening has been undertaken based on professional judgement and consideration of potential impact pathways which varies according to the designation interests present.

The following screening criteria has been used to identify Designated Sites which may be affected by the proposed works:

- Designated Sites which are within 2km of the development site or connected via functionally linked land.
- All Sites within 10km of the development site, where bats are noted as one of the qualifying interests. The DMRB guidance suggests a 30km radius for SACs where bats are noted as one of the qualifying interests, however due to the small scale of the work and as no fragmentation of habitat will occur, a 10km radius was used for this assessment.
- Designated Sites which cross or lie adjacent to, upstream of, or downstream of the proposed works.
- Has an affected road network (ARN) which triggers the criteria for assessment of Designated Sites LA 105 [Ref 1.N].

The Designated Sites that met the above criteria and which were taken forward into the screening assessment are summarised in Table 4.1 and assessed in Section 4.2.

To inform the HRA screening assessment, the relevant potential impact pathways have been defined based on the proposed scope of works and site characteristics.

Potential impact pathways considered are:

⁸ Highways England (2020) Design Manual for Roads and Bridges (DMRB) LA 115 'Habitats Regulations assessment (formerly HD44/09)'. Revision 1. [online] Available at: <<https://www.standardsforhighways.co.uk/dmrb/search/e2fdab58-d293-4af7-b737-b55e08e045ae>> [Accessed March 2025].

⁹ Highways England (2020) Design Manual for Roads and Bridges (DMRB) LA 113 'Road drainage and the water environment'. [online] Available at: <<https://www.standardsforhighways.co.uk/tses/attachments/d6388f5f-2694-4986-ac46-b17b62c21727?inline=true>> [Accessed March 2025].

- Areas where there will be land take from the Designated Sites and/or direct loss of qualifying features or a reduction in species density;
- Areas where there is physical damage to the Designated Sites and/or their qualifying features;
- Areas where there is a risk of altering the hydrodynamic regime or a reduction in water quality;
- Areas where there is a risk of an increase in air, noise, vibration and/or light pollution; and
- Areas whereby fragmentation may occur because of any of the above identified impact pathways.

The above information was reviewed in respect of each feature of interest and potential impact pathway to inform an assessment of any LSE or adverse effects on integrity. Key aspects and terms used in this assessment are defined below:

- **Likelihood:** Where an effect is considered to be potentially significant, then the assessment of its occurrence is based on the likelihood of it occurring and not certainty that it would occur. Potential effects are scoped in unless there is evidence to the contrary demonstrating that they will not occur – e.g. there being no valid pathway, or the absence of the species in that area, at that time.
- **Significance:** The significance of any effect is considered objectively, against the scale and nature of the impact in relation to those of that particular feature or condition and in relation to the extent of that feature or condition over the entire Habitats Site. A significant effect within this assessment is one which, if it occurred, would lead to a decline in the quality or status of the habitats or distribution, abundance, etc of feature(s) of interest.
- **In-combination:** The assessment of in-combination effects considers those projects or plans which:
 - Are currently in operation
 - Are actually proposed – defined by being a valid live planning application, or any referenced within a local plan where there is a strong likelihood of them being undertaken within a reasonable time period, specified within that plan.

In line with relevant case law (Appendix B), this assessment is undertaken in the absence of mitigation (including 'best practice' measures embedded into the Proposed Development where these are intended for the avoidance of effects).

Where likely significant effects (LSEs) are identified, the assessment would then be taken through to Stage 2 Appropriate Assessment.

2.3 Appropriate Assessment Methodology

Where a plan or project is likely to, or has the potential to, give rise to LSE upon a Designated Site, an assessment must be made of the implications on the integrity of that site in view of that site's structure, function and conservation objectives and taking into account any site-specific supplementary advice or site improvement plan.

Where mitigation measures are to be applied to eliminate or reduce any effects identified in screening, these may be considered within the AA. Potential effects on site integrity may be direct or indirect and are dependent on the relationship between the source (proposed options'

Potential effects on the integrity of the Designated Site(s) are evaluated with respect to the scale, extent and nature of the impact, for example the area of habitat affected, changes in hydrodynamics, potential changes in species distribution, and the duration of the impact.

- Review the sites identified at Stage 1 and confirm any additions or exclusions;
- Assessment of the decommissioning effects of the option;
- Assessment of the Designated Sites' characteristics and identification of their conservation objectives; and
- Identification of the aspects of the proposed options that may significantly impact the conservation objectives of the Designated Site(s).

- GOV.UK (2019) *Appropriate Assessment - Guidance on the use of Habitats Regulations Assessment*. Published 22 July 2019¹⁰; and
- European Commission (EU, 2018) *Managing Natura 2000 sites - The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC*¹¹.

¹¹ European Commission (2018). Managing Natura 2000 Sites - The provisions of Article 6 of the 'Habitats' Directive 92/43/CEE [online] available at: [EN_art_6_guide_jun_2019.pdf \(europa.eu\)](#) (last accessed March 2025).

3 HRA Stage 1: Screening

3.1 Identification of Designated Sites

The Designated Sites identified as having potential impact pathways from the Proposed Development, based on the designation type or which intersects the site, are summarised in Table 3.1 below. This includes those which meet the criteria based on distance or are considered functionally linked to the scheme. The location of the Designated Sites identified can be seen in Appendix A. Full conservation information for the Designated Sites including conservation objectives can be found within Appendix D.

Table 3.1: Identified Designated Sites relevant to the Assessment

Name	Details	Distance and Direction
River Usk / Afon Wysg SAC	Annex I Habitats – - Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation Annex II Species – - Sea lamprey (<i>Petromyzon marinus</i>) - Brook lamprey (<i>Lampetra planeri</i>) - River lamprey (<i>Lampetra fluviatilis</i>) - Twaite shad (<i>Alosa fallax</i>) - Atlantic salmon (<i>Salmo salar</i>) - Bullhead (<i>Cottus gobio</i>) - Otter (<i>Lutra lutra</i>) - Allis shad (<i>Alosa alosa</i>)	3.55km E, hydrologically connected (~6.5km SE downstream)
Severn Estuary / Môr Hafren Ramsar	Ramsar criterion 1: Due to immense tidal range (second largest in world), this affects both the physical environment and biological communities. Ramsar criterion 3: Due to unusual estuarine communities, reduced diversity and high productivity. Ramsar criterion 4: This site is important for the run of migratory fish between sea and river via estuary. Species include salmon (<i>Salmo salar</i>), sea trout (<i>Salmo trutta</i>), sea lamprey (<i>Petromyzon marinus</i>), river lamprey (<i>Lampetra fluviatilis</i>), allis shad (<i>Alosa alosa</i>), twaite shad (<i>Alosa fallax</i>), and eel (<i>Anguilla anguilla</i>). It is also of particular importance for migratory birds during spring and autumn. Ramsar criterion 8: The fish of the whole estuarine and river system is one of the most diverse in Britain, with over 110 species recorded. Species as detailed in criterion 4 use the Severn Estuary as a key migration route to their spawning grounds in the many tributaries that flow into the estuary. The site is important as a feeding and nursery ground for many fish species particularly allis shad and twaite shad which feed on mysid shrimps (<i>Mysida</i> sp.) in the salt wedge.	4.35km SE, hydrologically connected (~5.8km downstream)
Severn Estuary / Môr Hafren SPA	ARTICLE 4.1 QUALIFICATION (79/409/EEC) Over winter the area regularly supports:	4.35km SE, hydrologically

• Bewick's swan (<i>Cygnus columbianus bewickii</i>)	connected (~5.8km downstream)
ARTICLE 4.2 QUALIFICATION (79/409/EEC)	
Over winter the area regularly supports:	
• Gadwall (<i>Anas strepera</i>) • Greater white fronted goose (<i>Anser albifrons albifrons</i>) • Dunlin (<i>Calidris alpina alpina</i>) • Common shelduck (<i>Tadorna tadorna</i>) • Common redshank (<i>Tringa tetanus</i>)	
ARTICLE 4.2 QUALIFICATION (79/409/EEC): AN INTERNATIONALLY IMPORTANT ASSEMBLAGE OF BIRDS	
Over winter the area regularly supports:	
• 84317 waterfowl (five-year peak mean 1991/92-1995/96) Including: - Bewick's swan - Common shelduck - Gadwall - Dunlin - Common redshank	
Severn Estuary / Annex I habitats: Môr Hafren SAC	4.35km SE, hydrologically connected (~5.8km downstream)
• Estuaries • Subtidal sandbanks • Atlantic salt meadows • Reefs	
Annex II species:	
• River lamprey • Sea lamprey • Twaite shad	

Source: Mott MacDonald Limited, 2025

3.2 Assessment of Likely Significant Effects

The below tables document the screening exercise to assess if the Proposed Development alone will result in a LSE on any Designated Sites. This assessment takes into consideration the identification of key features and conservation information for each Designated Site as listed in Table 4.1 and Appendix D.

3.2.1 River Usk SAC Screening Assessment

Table 3.2: River Usk SAC

Qualifying feature	Assessment of Impact Pathways	Likely significant effects
Annex I habitats: Water courses of plain to montane levels with the <i>Ranunculus fluitantis</i> and <i>Callitriche</i> -	Due to the distance between the Proposed Development and the SAC (3.55km east and 6.5km downstream), no direct or indirect damage to qualifying habitats is considered likely to occur within the SAC boundary. There is no land-take, habitat removal or physical disturbance proposed to any areas within the SAC boundary. As such, effects from construction-related noise, vibration and/or artificial lighting are not anticipated within the SAC boundary.	Potential during construction

Batrachion vegetation	Although there is hydrological connectivity between the River Ebbw and the River Usk, the boundary of the SAC is upstream of the confluence between these watercourses and therefore any pollution events which may occur during construction are not anticipated to enter the SAC boundary.
Annex II species:	Furthermore, the strong tidal regime of the Severn Estuary which adjoins this confluence is likely to result in considerable dilution of any pollutions at this location to a point where they no longer have a significant effect of the watercourses.
Sea lamprey	The River Ebbw is not considered to be functionally linked habitat for any of the qualifying fish species associated with the SAC, including those which are migratory. As the confluence of the River Ebbw and the SAC lies downstream of the SAC boundary, the River Ebbw is not considered to be a route that fish species which spawn within the SAC will use; any of these species which are found within the River Ebbw are considered to be separate populations which spawn elsewhere, and therefore any effects on these populations are not considered relevant to this SAC. However, the River Ebbw could be considered functionally linked for the SAC's otter population, considering the mobile nature of this species and the large territory sizes they hold. The River Ebbw could constitute an important foraging and commuting corridor for the SAC's otter population, and therefore any pollution events during construction could have a significant effect on overall food resource, thus displacing otters from their preferred feeding grounds and affecting their overall distribution and the total extent of supporting habitat outside the SAC boundary. Equally, construction-related noise, vibration and/or artificial light could cause disturbance to foraging or resting otters, and therefore resulting in the same displacement effects. Due to the scale of the Proposed Development and its location approximately 6.5km upstream of the SAC, any effects on individual otters and their resting sites are not anticipated to be significant at the SAC's population level and therefore are not considered further. Where works may damage or disturb otter resting sites, and thus constitute an offence, this is dealt with through the European Protected Species (EPS) licensing route, and not included within this document. On this basis, it would be considered that a LIKELY SIGNIFICANT EFFECT cannot be ruled out during the construction stage of the Proposed Development in relation to pollution events, visual disturbance, noise, vibration and artificial lighting. No LSEs are anticipated on any of the qualifying features during the operational stage.
Brook lamprey	
River lamprey	
Twaite shad	
Atlantic salmon	
Bullhead	
Otter	
Allis shad.	

Source: Mott MacDonald Limited, 2025

3.2.2 Severn Estuary Ramsar Screening Assessment

Table 3.3: Severn Estuary Ramsar

Qualifying feature	Assessment of Impact Pathways	Likely significant effects
Ramsar criteria 1, 3, 4, and 8 as detailed in Table 4.1	The habitats site is located 4.35km southeast (5.8km downstream) of the Proposed Development, the River Ebbw terminates within the Severn Estuary. No habitat loss from the Ramsar will occur and effects within the site's boundary are not anticipated due to the distance from the Proposed Development. Functionally linked habitat provided by the River Ebbw may be impacted during construction if unmitigated. There is potential (if unmitigated) for pollution to enter the Ramsar and impact the qualifying features by contaminating the habitat. Due to the distance of the Ramsar site from the Proposed development, lighting and noise pollution are unlikely to impact the Ramsar Site directly, however, qualifying features associated with the Ramsar Site, such as migratory fish, may be present within the Proposed	Potential during construction

Development Site and impacted by pollution events and noise and light pollution.

On this basis, it would be considered that a LIKELY SIGNIFICANT EFFECT cannot be ruled out during the construction stage of the Proposed Development in relation to pollution events.

No LSEs are anticipated on any of the qualifying features during the operational stage.

Source: Mott MacDonald Limited, 2025

3.2.3 Severn Estuary SPA Screening Assessment

Table 3.4: Severn Estuary SPA

Qualifying feature	Assessment of Impact Pathways	Likely significant effects
--------------------	-------------------------------	----------------------------

Wintering Birds, as detailed in Table 4.1	The designated site is located 4.35km southeast (5.8km downstream) of the Proposed Development, the River Ebbw terminates within the Severn Estuary. No habitat loss from the SPA will occur and effects within the site's boundary are not anticipated due to the distance from the Proposed Development. Although there is hydrological connectivity between the River Ebbw and the Severn Estuary SPA, any pollution events which may occur during construction are not anticipated to enter the SPA boundary due to the distance between the Proposed Development and the SPA. Furthermore, the strong tidal regime of the Severn Estuary is likely to result in considerable dilution of any pollutions at this location to a point where they no longer have a significant effect of the watercourses. Qualifying species of the SPA will forage within the marginal habitats and exposed mudflats which are not likely to be susceptible to any pollution events from the Proposed Development. No saltmarsh habitat is present between the Proposed Development and the SPA which may be used by qualifying species. Due to the distance of the SPA from the proposed development, light and noise pollution will not impact the SPA. On this basis no LSEs are anticipated on any of the qualifying features during the construction or operational stage.	No
---	---	----

Source: Mott MacDonald Limited, 2025

3.2.4 Severn Estuary SAC Screening Assessment

Table 3.5: Severn Estuary SAC

Qualifying feature	Assessment of Impact Pathways	Likely significant effects
--------------------	-------------------------------	----------------------------

Annex I habitats: Estuaries Subtidal sandbanks Atlantic salt meadows Reefs Annex II species: River lamprey Sea lamprey Twaite shad.	The designated site is located 4.35km southeast (5.8km downstream) of the Proposed Development, the River Ebbw terminates within the Severn Estuary. No habitat loss from the SAC will occur and effects within the site's boundary are not anticipated due to the distance from the Proposed Development. Although there is hydrological connectivity between the River Ebbw and the Seven Estuary SAC, any pollution events which may occur during construction are not anticipated to enter the SAC boundary due to the distance between the Proposed Development and the SAC. Furthermore, the strong tidal regime of the Severn Estuary is likely to result in considerable dilution of any pollutions at this location to a point where they no longer have a significant effect of the watercourses. There is potential (if unmitigated) for pollution to enter the River Ebbw and impact migratory fish species associated with the SAC by contaminating the habitat. Light and noise pollution from the Proposed Development will not impact this SAC due to the	Potential during construction
--	--	-------------------------------

distance, however it may impact migratory fish species that migrate up the River Ebbw from the Severn Estuary SAC.

On this basis, it would be considered that a LIKELY SIGNIFICANT EFFECT cannot be ruled out during the construction stage of the Proposed Development in relation to pollution events.

No LSEs are anticipated on any of the qualifying features during the operational stage.

Source: Mott MacDonald Limited, 2025

4 HRA Stage 2: Appropriate Assessment

The Stage 1 Screening identified a risk of adverse effects on Designated Sites such that the identified impact pathways are required to be appropriately assessed to establish if there will be an adverse effect on the integrity of the Designated Sites. The following assessment has considered the Designated Sites conservation objectives as detailed in Appendix D. The Stage 1 Screening is undertaken in the absence of mitigation measures, but these can be considered at Stage 2 in order to alleviate potential adverse effects.

4.1 River Usk SAC

Impact pathways have been identified which may result in a significant effect on a qualifying species as follows:

- Construction-related pollution incidents affecting foraging and commuting habitat for otter associated with the River Usk SAC (within functionally linked habitat only); and
- Noise and light pollution affecting foraging and commuting otter associated with the River Usk SAC (within functionally linked habitat only).

Measures are proposed to mitigate the identified potential impact pathways as follows:

- Standard pollution prevention measures^{12,13,14} to be implemented to prevent pollutants from entering the River Ebbw; and
- Sensitive timing of construction activities to avoid the optimal otter activity period. No works to be undertaken at night, to ensure that disturbance to commuting/foraging otter is avoided.

4.2 Severn Estuary Ramsar and Severn Estuary SAC

Impact pathways have been identified which may result in a significant effect on qualifying species as follows:

- Direct loss of spawning habitats around new bridge piers;
- A pollution incident and noise and light pollution affecting migratory fish species associated with the Ramsar Site and SAC; and
- A pollution incident affecting the Ramsar and SAC directly by pollutants travelling downstream and into the Ramsar Site and SAC.

Measures are proposed to mitigate the identified potential impact pathways as follows:

¹² Charles P. and Edwards P (2015) Environmental good practice on site guide. CIRIA C741, 260p.

¹³ Masters-Williams H., Heap A., Kitts H. *et al.* (2001) *Control of water pollution from construction sites*. CIRIA C532, 27p.

¹⁴ Note, the Environment Agency Pollution Prevention Guidance Notes have been withdrawn by the Government, although the principles within them are robust and still form a reasonable basis for pollution prevention measures. Documents are still available online at: [\[ARCHIVED CONTENT\] Environment Agency - Pollution prevention advice and guidance \(PPG\) \(nationalarchives.gov.uk\)](#).

- Standard pollution prevention measures^{15,16,17} to be implemented to prevent pollutants from entering the River Ebbw;
- No works to be undertaken at night, to ensure migratory fish are not impacted by light pollution;
- The River Ebbw to remain free flowing during works to ensure fish can travel up/downstream; and
- Works to avoid key fish migration and spawning periods where possible (for salmonids this is November to March inclusive, for eels this is autumn for downstream migrating adults and spring for upstream migrating glass eels/elvers).

After considering the sites conservation objectives and the relevant mitigation measures in the context of the Proposed Development area there are no residual effects on the qualifying features of the River Severn Ramsar and no appreciable adverse effect on integrity of the Designated Site as a result of the Proposed Development.

It is concluded that on the basis of this assessment, and the implementation of the mitigation above, the Proposed Development would have no appreciable effect on the integrity of the River Usk SAC, Severn Estuary SAC or Severn Estuary Ramsar, or their designated interest features. Therefore, the Proposed Development would not contribute to any in-combination effects with other plans or projects.

In line with case law¹⁸, where the Proposed Development is found to have either a neutral effect (where no impact pathways exist) or no appreciable effect (in that it is indistinguishable from background variations), on Designated Sites then it is reasonable to conclude this would not contribute to an in-combination effect with other projects.

An in-combination assessment is only required where an Appropriate Assessment has identified some *de-minimis* or negligible level of adverse impact from the Proposed Development that is not significant alone but when combined with effects from another development would result in a likely significant effect. After considering the sites conservation objectives and the relevant mitigation measures in the context of the Proposed Development area there are no residual effects on the qualifying features of the River Usk SAC and no appreciable adverse effect on integrity of the Designated Site as a result of the Proposed Development.

¹⁵ Charles P. and Edwards P (2015) Environmental good practice on site guide. CIRIA C741, 260p.

¹⁶ Masters-Williams H., Heap A., Kitts H. *et al.* (2001) *Control of water pollution from construction sites*. CIRIA C532, 27p.

¹⁷ Note, the Environment Agency Pollution Prevention Guidance Notes have been withdrawn by the Government, although the principles within them are robust and still form a reasonable basis for pollution prevention measures. Documents are still available online at: [\[ARCHIVED CONTENT\] Environment Agency - Pollution prevention advice and guidance \(PPG\) \(nationalarchives.gov.uk\)](#).

¹⁸ In the case of Sweetman C-258/11, Advocate-General Eleanor Sharpston, Paragraph 48.

A. Designated Site Locations



- Special Areas of Conservation (SAC)
- Severn Estuary Ramsar site
- Special Protection Areas (SPA)

Coordinate system: British National Grid; Datum: OSGB 1936
Data sources: Natural England, Maxar, Microsoft, Esri UK, Esri, TomTom, Garmin, FAO, NOAA, USGS



Mott MacDonald House
8-10 Sydenham Road
Croydon, CR0 2EE
United Kingdom
T +44 (0)20 8774 2000
W mottmac.com



NEWPORT
CITY COUNCIL
CYNGOR DINAS
CASNEWYDD

**Bassaleg Bridge
Designated Sites Plan**

Drawn J Faber	GIS Checked S Li	Checked K Thorne	Approved A Wilson
Scale at A3 1:30,000	Status INF	Revision 01	Security STD



B. Legislation

B.1 The Directives

Under the EC Directive on the Conservation of Natural Habitats and of Wild Flora and Fauna, commonly referred to as “the Habitats Directive” (Council Directive 92/43/EEC), Member States are required to take special measures to maintain the distribution and abundance of certain priority habitats and species (listed in Annexes I and II of the Directive). Each Member State is required to designate the most suitable sites as SACs. All such SACs will form part of the Natura 2000 network under article 3(1) of the Habitats Directive.

Article 2(3) sets out that Member States have a duty, in exercising their obligations under the Habitats Directive, to:

“.. take account of economic, social and cultural requirements and local characteristics.”

There is an obligation under the Habitats Directive for Member States to designate sites before turning to measures for their protection.

Article 6(2) requires Member States to take appropriate steps to avoid the deterioration of natural habitats and disturbance of species for which the sites have been designated, in so far as the disturbance could be significant in relation to the objectives of the Directive. Article 6(3) and Article 6(4) require that a plan or project not directly connected with the management of the site, but likely to have a significant effect upon it, either individually or in combination with other plans or projects, must be subject to an appropriate assessment of its implications on the site, in view of the sites conservation objectives.

Having undertaken an appropriate assessment, the competent authority may agree to a plan or project where it can be concluded that it will not adversely affect the integrity of the designated site. In light of a negative assessment on the implications for the integrity of the site, Article 6(4) provides that the plan or project may still proceed where it can be demonstrated that there are no alternatives and there are imperative reasons of over-riding public interest as to why it must proceed. In the event that a plan or project is to proceed on the basis of imperative reasons of over-riding public interest, by direction of Article 6(4), compensatory measures must be put in place to ensure that the overall coherence of the Natura 2000 network is protected.

B.2 The 2017 Regulations

The 2017 Regulations transpose the requirements of the Habitats Directive into UK legislation. The Habitats Regulations aim to protect a network of sites that have rare or important habitats and species in order to safeguard biodiversity.

Under the Habitats Regulations, Competent Authorities have a duty to ensure that all the activities they regulate have no adverse effect on the integrity of any of the Natura 2000 sites. Regulation 63 of the Habitats Regulations 2017 requires that:

“63(1) 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 in Great Britain (either alone or in combination with other plans or projects) and

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

shall make an appropriate assessment of the implications for the site in view of that site's conservation objectives.

...

63(5) In light of the conclusions of the assessment, and subject to regulation 64, the authority shall agree to a plan or project only after having ascertained that it will not adversely affect the integrity of the European site.

...

63(6) In considering whether a plan or project will adversely affect the integrity of the site, the authority shall have regard to the manner in which it is proposed to be carried out or to any conditions or restrictions subject to which they propose that the consent, permission or other authorisation should be given.

..."

Regulation 63 of the 2017 Regulations therefore sets out a two-stage process. The first test is to determine whether the plan / project is likely to have a significant effect on the European site, the second test (if applicable) is to determine whether the plan / project will affect the integrity of the European site.

B.3 Guidance and other relevant documents

B.3.1 Natura Standard Data Forms

A standard reporting format has been developed for Natura 2000 sites (SACs and Special Protection Areas – SPAs) to ensure that the relevant site selection information is reported and stored in a consistent manner that can be easily made available.

A standard reporting form for SPAs and SACs was developed by the European Commission and published in 1996. The form is used for all sites designated or proposed to be designated as SPAs and SACs under the relevant Directives, with the information to be stored on a central database.

Article 4 of the Habitats Directive provides the legal basis for providing the data. Article 4 states that information shall include a map of the site, its name, location, extent and the data resulting from application of the criteria specified in Annex III and that this shall be provided in a format established by the Commission.

Whilst it is the relevant country agency (*Natural England) that is responsible for designating a site, it is the JNCC who are responsible for collating the lists of European and international designated sites, together with relevant supporting information. The Natura 2000 Data Forms for SPAs and SACs are therefore made available by the JNCC.

Within the explanatory notes for Natura Standard Data Forms (European Commission 1996) the following "main objectives" of the Natura data form / database are given:

1. *"to provide the necessary information to enable the Commission, in partnership with the Member States, to co-ordinate measures to create a coherent NATURA 2000 network and to evaluate its effectiveness for the conservation of Annex I habitats and for the habitats of species listed in Annex II of Council Directive 92/43/EEC as well as the habitats of Annex I bird species and other migratory bird species covered by Council Directive 79/409/EEC."*

2. *“to provide information which will assist the Commission in other decision making capacities to ensure that the NATURA 2000 network is fully considered in other policy areas and sectors of the Commission's activities in particular regional, agricultural, energy, transport and tourism policies.”*
3. *“to assist the Commission and the relevant committees in choosing actions for funding under LIFE and other financial instruments where data relevant to the conservation of sites, such as ownership and management practice, are likely to facilitate the decision making process.”*
4. *“to provide a useful forum for the exchange and sharing of information on habitats and species of Community interest to the benefit of all Member States.”*

B.3.2 Communication from the Commission on the Precautionary Principle (2000)

Enshrined within the Habitats Directive and Regulations (though not explicitly set out in either), based upon article 191 of the Treaty on the Functioning of the European Union, is the need to have due regard to the Precautionary Principle when assessing the risks posed to the integrity of the site(s). If a risk of significant effect to the integrity of a site cannot be excluded on the basis of objective information, then the application of the precautionary principle requires no consent to be given for such a project.

The document titled “Communication from the Commission on the Precautionary Principle” (2000) provides useful guidance in relation to the application of the Precautionary Principle in relation to European sites issues. Paragraph 6, sets out the six key matters for consideration when applying the Precautionary Principle. Paragraph 6 states:

- *“Where action is deemed necessary, measures based on the precautionary principle should be, inter alia:*
- *proportional to the chosen level of protection,*
- *non-discriminatory in their application,*
- *consistent with similar measures already taken,*
- *based on an examination of the potential benefits and costs of action or lack of action (including, where appropriate and feasible, an economic cost/benefit analysis),*
- *subject to review, in the light of new scientific data, and*
- *-capable of assigning responsibility for producing the scientific evidence necessary for a more comprehensive risk assessment.”*

Under these bulleted points, the guidance gives specific definitions in relation to each of the above.

B.3.3 Managing Natura 2000 Sites (European Communities 2000)

The document entitled “Managing Natura 2000 Sites the provisions of article 6 of the Habitats Directive 92/43/CEE”, published by the European Commission in 2000, provides guidelines to the Member States on the interpretation of certain key concepts used in Article 6 of the Habitats Directive. It should be noted that the Section relating to Article 6(4) has subsequently been replaced through the publication of a further guidance document by the European Commission in 2007 entitled “Guidance document on Article 6(4) of the ‘Habitats Directive’, which is considered below under the relevant heading.

This document states that conservation measures must correspond to the ecological requirements of the habitats and species present for which the site is designated and that these requirements *“involve all the ecological needs necessary to ensure their favourable conservation status”*.

The guidance states, in relation to deterioration and disturbance of habitats or species:

“Deterioration or disturbance is assessed against the conservation status of species and habitats concerned. At a site level, the maintenance of the favourable conservation status has to be evaluated against the initial conditions provided in the Natura 2000 standard data forms when the site was proposed for selection or designation, according to the contribution of the site to the ecological coherence of the network. This notion should be interpreted in a dynamic way according to the evolution of the conservation status of the habitat or the species.”

Section 4.4.1 of the document sets out that in determining what may constitute a likely ‘significant’ effect one should take into account the conservation objectives for the site and other relevant baseline information. In the second paragraph of this section of the document it is stated:

“In this regard, the conservation objectives of a site as well as prior or baseline information about it can be very important in more precisely identifying conservation sensitivities.”

Section 4.5.3 of the document sets out the duty of Member States to provide certain specific information in support of the inclusion of a site within the Natura 2000 network. This information is to be provided in a format specified by the European Commission (the Natura 2000 Standard Data Form).

A link is drawn between the Standard Data Form and the formation of the sites conservation objectives within the text box at the end of Section 4.5.3 of the guidance where it is stated:

“The information provided according to the standard data form established by the Commission forms the basis for a Member State’s establishment of the site’s conservation objectives.”

With regard to an assessment of the effects of a plan / project on the integrity of a site, the ‘integrity of the site’ is defined in Section 4.6.3 of the document as:

“... the coherence of the site’s ecological structure and function, across the whole area, or the habitats, complex of habitats and / or populations of species for which the site is or will be classified.”

The guidance is clear, within the text box at the foot of page 39, that an assessment as to the implications of the plan / project on the integrity of the site should be limited to an assessment against the sites’ conservation objectives:

“The integrity of the site involves its ecological functions. The decision as to whether it is adversely affected should focus on and be limited to the site’s conservation objectives.”

Section 5 of the document deals with Article 6(4) of the Habitats Directive. Note that this section has been expanded upon and replaced by further guidance issued by the European Commission entitled “Guidance document on Article 6(4) of the Habitats Directive 92/43/EEC” (2007).

B.3.4 Assessment of Plans and Projects Significantly Affecting Natura 2000 sites Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC (European Commission 2001)

This document, published by the European Commission in 2001, gives guidance on carrying out and reviewing those assessments required under Article 6(3) and (4) of the Habitats Directive. It is provided as supplementary guidance and does not over-ride or replace any of that set out within Managing Natura 2000 (European Commission 2000) which as stated at page 6 of the document, *“is the starting point for the interpretation of the key terms and phrases contained in the Habitats Directive”*. The guidance provided is not mandatory and it is clearly set out that its

use is “optional and flexible” and that it is for “*Member States to determine the procedural requirements deriving from the directive*”.

The guidance sets out the key stages in following the tests contained within the Habitats Directive. Pertinent to this assessment of the Best Value Plan, alternative plans and adaptive pathways, stages one and two are relevant. Stage one is the screening stage assessing the likelihood of a plan / project resulting in a significant effect upon the European site. The second comprises the appropriate assessment.

Section 3.2.4 of the document is concerned with Appropriate Assessment and specifically, the assessment against the conservation objectives of the European Site. Box 9 provides a list of five example conservation objectives for differing broad habitat types. One such example, that for a coastal site, taken from Box 9 is provided below:

“to maintain the status of the European features of this coastal site in favourable condition, allowing for natural change. Features include coastal shingle vegetation and lagoons (within a candidate special area of conservation (SAC), which is also an SPA). “

B.3.5 Common Standards Monitoring (JNCC February 2004)

Common Standards Monitoring is a means by which condition objectives for habitats, species, or other features of designated sites (e.g. SSSIs and SPAs) are set based on key attributes of the features.

The JNCC and the country Conservation Agencies (e.g. NE) developed guidance on the setting and assessment of condition objectives, as required under the Birds and Habitats Directives and set out a framework for this in 1999. This framework is provided in the form of Common Standards Monitoring (“CSM”) guidance which comprises a suite of documents including an “Introduction to the Guidance Manual on Common Standards Monitoring” and several species/habitat specific documents. The Introduction to the Guidance Manual covers various relevant concepts and terms. It also provides a background to the setting of conservation objectives and sets out the desired approach to setting targets, monitoring, management and reporting on conservation measures in designated sites.

The Introduction to the CSM Guidance and CSM guidance for individual site attributes, sets out specific criteria regarding the identification of interest features, targets and methods of assessment. There is in-built flexibility and allowances for ‘judgements to be made’ when assessing, for example, favourable condition.

It is understood that NIEA applies the Common Standards Monitoring approach to European designated sites through an assessment of the SSSI condition. This is undertaken on a cycle of approximately 6 years. The assessment does not relate to the Conservation Objectives of the European site but provides a tool for tailoring future management of the SSSI such that favourable condition of the interest features can be maintained or restored as appropriate.

B.3.6 Guidance document on Article 6(4) of the ‘Habitats Directive’ (European Commission 2007)

This document, published by the European Commission in 2007, is intended to provide clarification on key terms / concepts as referred to within “Managing Natura 2000 Sites” and replaces the section on Article 6(4) within that earlier document.

The Guidance document covers, in particular, the concepts of Alternative Solutions, Imperative Reasons of Overriding Public Interest, Compensation Measures, Overall coherence and the Opinion of the Commission. With regard to ensuring the quality of an appropriate assessment, and to define exactly what needs to be compensated, it is stated in Section 1.3 that:

“Assessment procedures of plans or projects likely to affect Natura 2000 sites should guarantee full consideration of all elements contributing to the site integrity and to the overall coherence of the network, both in the definition of the baseline conditions and in the stages leading to identification of potential impacts, mitigation measures and residual impacts. These determine what has to be compensated, both in quality and quantity.”

The need to use information contained within the Natura Standard Data Form, in tandem with the sites conservation objectives, when undertaking an appropriate assessment is specifically referred to (under the second hyphenated point in Section 1.3 on page 5 of the guidance).

Section 1.3.2 gives guidance on the application of Article 6(4) in respect of reasons of overriding public importance and Section 1.4.1 gives guidance on the application of Article 6(4) in respect of compensatory measures.

B.3.7 Managing Natura 2000 Sites – The provisions of Article 6 of the habitats Directive 92/43/EEC

In January 2019 the European Commission published updated guidance in relation to managing Natura 2000 sites, following initial guidance published in 2000 (see above).

The primary purpose of the revision was to incorporate relevant rulings of the Court of Justice of the European Union (EU) which have been issued since the initial guidance was published in 2000. It also integrates, into a single document, other relevant European Commission notes / guidance documents. Those key rulings (of the Court of Justice of the EU) and other relevant European Commission notes / guidance are discussed above in this report. The revised guidance provides clarifications of key concepts to Member State, authorities and stakeholders involved in the management of Natura 2000 sites (e.g. SPAs and SACs).

B.3.8 Conservation Objectives

Whilst Regulation 63 of the Habitats Regulations is explicit in setting out that any assessment of the implications of the plan/project on a European designated site should be undertaken in view of the site's "conservation objectives", the term 'conservation objective' is not explicitly defined within the Regulations. The term "conservation objectives" appears at Article 6(3) of the Habitats Directive which sets out the process of assessment for a plan or project which may be likely to have an effect on a designated site, however the term itself is not defined.

To understand what is meant by the term "conservation objective" it is necessary to look at the Habitats Directive in light of relevant European and other guidance. That guidance is not always consistent or clear about the use of the term "conservation objectives". For the purposes of this assessment, reference is made to the formal "conservation objectives" mentioned in Article 6(3) and Regulation 63 as "Conservation Objectives".

The term "conservation" is defined within the Habitats Directive at Article 1(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)".

The term "conservation status of a natural habitat" is defined within the Habitats Directive at Article 1(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 term "conservation status of a species" is defined within the Habitats Directive at Article 1(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:

- *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 it 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."*

Article 3 of the Habitats Directive sets out that Member States have a duty to designate (in accordance with Article 4 of the Directive) special areas of conservation and that where necessary Member States shall endeavour to improve the ecological coherence of Natura 2000.

Article 4(1) of the Habitats Directive states that Member States must provide a list of sites, indicating which Annex I habitats and species occurring on Annex II are present. This Article also clarifies the type of information that must be submitted for each listed site (map, name, location, extent and the results of the application of qualification criteria listed at Annex III of the Directive). This information provides the basis of the Natura 2000 Data Form discussed elsewhere within this document. Article 4(4) states:

"Once a site of Community importance has been adopted in accordance with the procedure laid down in paragraph 2, the Member State concerned shall designate that site as a special area of conservation as soon as possible within six years at most, establishing priorities in the light of the importance of the sites for the maintenance or restoration, at a favourable conservation status, of a natural habitat type in Annex 1 or a species in Annex 2 and for the coherence of Natura 2000, and in the light of the threats of degradation or destruction to which those sites are exposed."

Full regard has been had to the significant weight to be applied to the formal Conservation Objectives when considering a plan or project and applying the tests of the Habitats Regulations. Regard has also been had to other relevant information including that available from the JNCC.

B.3.9 Summary

The above legal framework and guidance documents have been used by the Authors of this HRA in determining the effects of both the individual elements of the Plan and the Plan as a whole. In doing so the judgements made rely on the baseline information currently available and the information regarding the nature of the proposals at this the Plan making stage.

C. Relevant Case Law

C.1 Waddenzee Judgement

In the 'Waddenzee' case the European Court of Justice considered the trigger for 'Appropriate Assessment'. It decided that an appropriate assessment is required for a plan or project where there is a probability or a risk that it will have a significant effect on the SPA. The Judgement states [at paragraph 3(a)] that:

"...any plan or project not directly connected with or necessary to the management of the site is to be subject to an appropriate assessment of its implications for the site in view of the site's conservation objectives if it cannot be excluded, on the basis of objective information, that it will have a significant effect on that site, either individually or in combination with other plans or projects."

Hence the need for an appropriate assessment should be determined on a precautionary basis.

The Judgement gives clarity that the test of 'likely significant effect' should also be undertaken in view of the European site's conservation objectives. It is stated at paragraph 3(b)] that:

"where a plan or project not directly connected with or necessary to the management of a site is likely to undermine the site's conservation objectives, it must be considered likely to have a significant effect on that site."

Paragraph 4 of the Judgement emphasises the requirement for the appropriate assessment to rely on objective scientific information:

"...an appropriate assessment...implies that, prior to its approval, all the aspects of the plan or project which can, by themselves or in combination with other plans or projects, affect the site's conservation objectives must be identified in the light of the best scientific knowledge in the field. The competent national authorities, taking account of the appropriate assessment of the implications...for the site concerned in the light of the site's conservation objectives, are to authorise such an activity only if they have made certain that it will not adversely affect the integrity of that site. That is the case where no reasonable scientific doubt remains as to the absence of such effects."

In terms of Objective evidence, the decision in *Smyth v Secretary of State for Communities & Local Government 2* (the Exminster Marshes decision) the English Court of Appeal clarified at Paragraph 46 to 48 of the Judgement that objective evidence includes that knowledge, experience and expertise of an expert. The contention brought before the Court of Appeal was that an expert witness's evidence amounted "merely to assertion, unsupported by any objective evidence".

However, the Court of Appeal rejected this assertion, finding that:

Para 46. "Three points should be made. First, I consider that on a fair reading of Mr Goodwin's proof of evidence it can be seen that he has drawn on specific information relevant to the SPA and the SAC, as well as the development site and proposed mitigation measures, in a manner which supports in an entirely conventional and acceptable way his expressions of opinion as an ecological expert. By way of example, at paras. 10.4 and 10.5 of his proof, he pointed out that, contrary to the suggestion made by GIE's representative at the inquiry, it was not appropriate to use the analogy of mitigation measures developed for heathland sites (a 400m exclusion zone), where ground nesting birds might be subject to predation by cats, since for the SPA "the designating bird features are wintering or passage species and access to large parts of the site

is not possible in any event” (because it is marshland or cut off by water). He referred to the Interim Report and the Disturbance Study, as appropriate. Mr Goodwin demonstrated a good understanding of the particular ecological and mitigation features relevant to the SPA and the SAC. Contrary to Mr Jones’s contention, Mr Goodwin’s evidence was very far from being unsupported, free-standing assertion.”

Para 47. “Secondly, in my view it is acceptable and to be expected that an expert will draw on his own background knowledge, experience and expertise in the field to inform the opinions which constitute his evidence to a relevant decision-maker (here, the Inspector). That is, indeed, in large part the point of looking to expert witnesses to provide assistance on technical matters. In this case, Mr Goodwin’s own practical experience, the practical experience of ecologists generally and the knowledge shared between them all informed the expertise which he was able to bring to bear in giving his views regarding the effects of the development and the practical impact and viability of the mitigation options which he reviewed in his proof of evidence.”

Para 48. “Thirdly, expert evidence of the kind given by Mr Goodwin was objective evidence on which the competent authority, the Inspector, was entitled to rely in making his assessment for the purposes of Article 6(3) of the Directive. Where, as in this case, an assessment is called for of impacts on bird species and of how large numbers of people might be expected to react to incentives to direct their recreational habits away from a protected site or of how on-site control measures could be expected to limit their impact, the views of an expert ecologist drawing on his practical experience and knowledge of the effectiveness of ecological initiatives elsewhere may constitute highly material and relevant objective evidence. The Inspector clearly thought he would be assisted by such evidence, which is why he adjourned the inquiry to provide an opportunity for Bellway to provide it. It cannot be said that this indicates any error of approach on the part of the Inspector. On the contrary, in my view it indicates the care with which the Inspector approached the question of application of the Habitats Directive in this case.”

C.2 Dilly Lane Decision

In applying the tests of the Habitats Regulations it is important to refer to the Judgment of Justice Sullivan (as he was then) in relation to the decision handed down in the English High Court regarding the case of Hart District Council v The Secretary of State for Communities and Local Government, Luckmore Ltd and Barratt Homes Ltd (commonly known as “the Dilly Lane Judgment”).

The Secretary of State’s decision to allow an appeal in relation to applications for a total of 170 new homes on a greenfield site off Dilly Lane, Hartley Witney, was challenged in the English High Court by Hart District Council. The legal challenge was made on the grounds that the Secretary of State had erred in departing from her Inspector’s conclusions as to the effects on the Thames Basin Heaths SPA. A key issue for the case was whether mitigation measures should be disregarded when assessing whether the project would have a significant effect on the SPA. Mr Justice Sullivan ruled in favour of the Secretary of State after concluding that there was no absolute legal rule [see below] that mitigation measures should be disregarded in assessing whether the new homes would have significant effect on the SPA. Importantly Mr Justice Sullivan states at paragraph 55 of his judgement:

“The competent authority is not considering the likely effect of some hypothetical project in the abstract. The exercise is a practical one which requires the competent authority to consider the likely effect of the particular project for which permission is being sought. If certain features (to use a neutral term) have been incorporated into that project, there is no sensible reason why

those features should be ignored at the initial, screening, stage merely because they have been incorporated into the project in order to avoid, or mitigate, any likely effect on the SPA.”

As such, it was judged right and proper that mitigation or avoidance measures, which form a feature of a plan / project should be viewed as integral to the plan / project and not excluded when considering the likely significance test, in this instance at Regulation 63(1).

It should however be noted that more recent case law now supersedes that approach but what remains useful from the Sullivan Judgment is the overall consideration of the approach ie HRA is essentially a practical exercise of assessing the plan or project which is being considered.

C.3 Sweetman Case

Further guidance in relation to the consideration of impacts in the light of the Habitats Regulations is provided in the Sweetman case. The case as set out by the Advocate General considered in detail the test for likely significant effect in paragraphs 50 and 51:

“50. The test which that expert assessment must determine is whether the plan or project in question has ‘an adverse effect on the integrity of the site’, since that is the basis on which the competent national authorities must reach their decision. The threshold at this (the second) stage is noticeably higher than that laid down at the first stage. That is because the question (to use more simple terminology) is not ‘should we bother to check’ (the question at the first stage) but rather ‘what will happen to the site if this plan or project goes ahead; and is that consistent with “maintaining or restoring the favourable conservation status” of the habitat or species concerned’...

51. It is plain, however, that the threshold laid down at this stage of Article 6(3) may not be set too high, since the assessment must be undertaken having rigorous regard to the precautionary principle. That principle applies where there is uncertainty as to the existence or extent of risks. The competent national authorities may grant authorisation to a plan or project only if they are convinced that it will not adversely affect the integrity of the site concerned. If doubt remains as to the absence of adverse effects, they must refuse authorisation.”

The Court of Justice of the European Union (CJEU) agreed with the Advocate General’s conclusions, and held:

“40. Authorisation for a plan or project, as referred to in Article 6(3) of the Habitats Directive, may therefore be given only on condition that the competent authorities – once all aspects of the plan or project have been identified which can, by themselves or in combination with other plans or projects, affect the conservation objectives of the site concerned, and in the light of the best scientific knowledge in the field – are certain that the plan or project will not have lasting adverse effects on the integrity of that site. That is so where no reasonable scientific doubt remains as to the absence of such effects.”

Hence a plan or project may be authorised only if no reasonable scientific doubt remains as to the absence of effects. Reasonable scientific doubt will exist if the evidence is not sufficiently conclusive, or if there are gaps in the information.

C.4 The A5 Judgment

The A5 judgement handed down by Mr Justice Stephens provides guidance in relation to the application of the Habitats Regulations/Directive on two main counts. The first being the requirement to demonstrate the efficacy of mitigation. The second being the fact that a clear

difference exists between what is required of a screening assessment and what is required of an Appropriate Assessment.

At paragraph 89 Mr Justice Stephens considers the Judgment of Mr Justice Sullivan in relation to the Dilly Lane case (as referred to above). He states:

“[89] In R (on the application of Hart District Council) v Secretary of State for the Communities and Local Government the competent authority was not the developer. In that case Sullivan J stated:

‘If the competent authority does not agree with the proponents’ view as to the likely efficacy of the proposed mitigation measures, or is left in some doubt as to the efficacy, then it will require an appropriate assessment because it will not have been able to exclude the risk of a significant effect on the basis of objective information (see Waddenzee above).’

He goes on:

‘I consider that is the test to be applied by the competent authority, namely if it is left in some doubt as to the efficacy of the mitigation measures. In this case the Department is both the competent authority and the developer but that does not relieve the Department of its obligation to have an appropriate assessment if it is left in some doubt as to the efficacy of the mitigation
Thus the Judgment is clear that the efficacy of the mitigation must be demonstrable if the Competent Authority are to hold at the first stage of the legal tests being applied (namely at Regulation 63(1), and not move to undertake an Appropriate Assessment.

Paragraph 91 gives direction as to what is required of a screening assessment and what is required of an Appropriate Assessment. It is stated:

“[91] A screening opinion is different from an appropriate assessment which involves detailed consideration. The screening opinion does not require all considerations to be mentioned.”

C.5 Wealden v SSCLG [2017] (‘the Wealden Judgment 2017’)

Specifically, in relation to air quality impacts on designated sites (most notably in relation to Nitrogen deposition), until relatively recently, Natural England’s advice regarding the screening threshold for a likely significant effect was as follows. Where either, the resulting deposition / concentration equates to ‘less than 1% of the relevant benchmark’, or the predicted AADT value is less than 1000, a likely significant effect can be screened out for the project when it is considered both alone and in combination with other plans or projects.

However, relevant guidance has changed in the light of the High Court judgment in Wealden v SSCLG [2017] (‘the Wealden Judgment 2017’).

The Wealden Judgment confirms that the use of the project / plan level 1000 AADT threshold (equivalent to 1% of the critical level/load for receiving habitat) as the only means of addressing in combination effects was not appropriate, particularly where other AADT values are known and importantly which, when added together, breach the threshold. The 1000 AADT (and 1%) thresholds themselves were not questioned in terms of their use for assessment purposes.

The Judgment clarified that whilst the 1000 AADT (and 1% of the critical load / level) threshold is appropriate for use in screening assessments when applying the tests of the Habitats Regulations, a true in combination assessment must be undertaken, in view of all relevant AADT data.

C.6 People over Wind (Sweetman II) [C323/17]

This CJEU judgment concerned a Preliminary Ruling in Case C-323/17. A request for a preliminary ruling was made to the CJEU concerning the interpretation of Article 6(3) of Council Directive 92/43/EEC (the Habitats Directive). The request was made in relation to proceedings brought by 'People Over Wind', and Mr Peter Sweetman against Coillte Teoranta. The ruling is as follows:

“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 of the plan or project on that site.”

The ruling from the CJEU, departs from previous domestic jurisprudence (in particular the Dilly Lane Decision, discussed above), where it was deemed acceptable to include consideration of any mitigation / avoidance measures, which formed an integral part of the plan or project, in considering the first stage of assessment and screening for LSE on a European site (or Ramsar site). In that case, where it could be concluded that no likely significant effect arises there was no recourse to move to Appropriate Assessment and address the Integrity test.

In view of this ruling from the CJEU, in addressing the test at Regulation 63(1) of the Habitats Regulations, it is necessary to undertake the screening assessment in the absence of any consideration of avoidance or mitigation measures.

C.7 ESB Wind Developments (Sweetman III) [Case C164/17]

In this case a request for a preliminary ruling was made to the CJEU concerning the interpretation of Articles 6(3) and 6(4) of Council Directive 92/43/EEC (the Habitats Directive). The request was made in relation to proceedings brought by Mr Peter Sweetman and Edel Grace against the decision of An Bord Pleanála (National Planning Appeals Board, Ireland) concerning the latter's decision to grant ESB Wind Developments Ltd and Coillte permission for a wind farm project within an SPA. The ruling was handed down on 25th July 2018.

For the purpose of the application of Articles 6(3) and 6(4) of the Directive, this ruling distinguishes between 'mitigation' that consists of measures intended to avoid or reduce harm to the protected site, and measures intended to compensate for any harm (Compensatory measures). It is stated:

“Article 6 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, where it is intended to carry out a project on a site designated for the protection and conservation of certain species, of which the area suitable for providing for the needs of a protected species fluctuates over time, and the temporary or permanent effect of that project will be that some parts of the site will no longer be able to provide a suitable habitat for the species in question, the fact that the project includes measures to ensure that, after an appropriate assessment of the implications of the project has been carried out and throughout the lifetime of the project, the part of the site that is in fact likely to provide a suitable habitat will not be reduced and indeed may be enhanced may not be taken into account for the purpose of the assessment that must be carried out in accordance with Article 6(3) of the directive to ensure that the project in question will not adversely affect the integrity of the site concerned; that fact falls to be considered, if need be, under Article 6(4) of the directive.”

The ruling clarifies (in the context of the specifics of that project) what constitutes mitigation and what should correctly be termed compensation. It confirms that mitigation should be subject to Appropriate Assessment under article 6(3) but that measures designed to compensate for any harm rather than prevent it, cannot be considered under article 6(3) (Appropriate Assessment). In such instances, the proposal must be considered under article 6(4) and thus it cannot be permitted unless there are, "Imperative Reasons of Overriding Public Interest".

C.8 Holohan Judgment

In the case of *Holohan v. An Bord Pleanála* the CJEU considered the appropriate assessment procedure to be adopted when considering potential impacts on a European Site. In considering this case, the CJEU ruled, amongst other matters:

- a) An appropriate assessment (AA) must catalogue the entirety of the habitat types and species for which a site is protected.
- b) It must also identify and examine the implications of the proposed project for the species present on that site and for which that site has not been listed. Additionally, it must examine the implications for habitat types and species outside the boundaries of the protected site, as far as those implications are liable to affect the site's Conservation Objectives.
- c) Where the competent authority rejects findings of an expert that additional information must be obtained, the Appropriate Assessment must include a detailed statement dispelling all reasonable scientific doubt concerning effects on the protected site.

C.9 The Dutch Nitrogen Cases

On 7th November 2018 the Judgment of the CJEU was handed down pursuant to a reference for a Preliminary Ruling relating to the application of Article 6 of Directive 92/43/EEC (the Habitats Directive) in joined cases C-293/17 and C294/17.

The cases concerned authorisation schemes for agricultural activities which cause nitrogen deposition on Natura 2000 (European) sites in the Netherlands.

Key parts of the ruling (as far as they are relevant to this assessment) are discussed below.

In line with preceding case law (*Waddenzee* and *Sweetman*, discussed above) the need for scientific rigour and firm conclusions as to the absence of effects are a pre-requisite for authorisation of a plan / project. Ruling 3 in the case states:

"Article 6(3) of Directive 92/43 must be interpreted as not precluding national programmatic legislation which allows the competent authorities to authorise projects on the basis of an 'appropriate assessment' within the meaning of that provision, carried out in advance and in which a specific overall amount of nitrogen deposition has been deemed compatible with that legislation's objectives of protection. That is so, however, only in so far as a thorough and in-depth examination of the scientific soundness of that assessment makes it possible to ensure that there is no reasonable scientific doubt as to the absence of adverse effects of each plan or project on the integrity of the site concerned, which it is for the national court to ascertain."

Ruling 4 in the case states:

"Article 6(3) of Directive 92/43 must be interpreted as not precluding national programmatic legislation, such as that at issue in the main proceedings, exempting certain projects which do

not exceed a certain threshold value or a certain limit value in terms of nitrogen deposition from the requirement for individual approval, if the national court is satisfied that the 'appropriate assessment' within the meaning of that provision, carried out in advance, meets the criterion that there is no reasonable scientific doubt as to the lack of adverse effects of those plans or projects on the integrity of the sites concerned."

Ruling 5 in the case states:

"Article 6(3) of Directive 92/43 must be interpreted as precluding national programmatic legislation, such as that at issue in the main proceedings, which allows a certain category of projects, in the present case the application of fertilisers on the surface of land or below its surface and the grazing of cattle, to be implemented without being subject to a permit requirement and, accordingly, to an individualised appropriate assessment of its implications for the sites concerned, unless the objective circumstances make it possible to rule out with certainty any possibility that those projects, individually or in combination with other projects, may significantly affect those sites, which it is for the referring court to ascertain."

Ruling 6 in the case confirms that any measures which are relied upon to mitigate or avoid adverse effects on the integrity of the European site in question, must be certain at the time of assessment. It is stated:

"Article 6(3) of Directive 92/43 must be interpreted as meaning that an 'appropriate assessment' within the meaning of that provision may not take into account the existence of 'conservation measures' within the meaning of paragraph 1 of that article, 'preventive measures' within the meaning of paragraph 2 of that article, measures specifically adopted for a programme such as that at issue in the main proceedings or 'autonomous' measures, in so far as those measures are not part of that programme, if the expected benefits of those measures are not certain at the time of that assessment."

D. Designated Sites

D.1 River Usk SAC

D.1.1 Conservation Objectives

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of qualifying natural habitats and habitats of qualifying species;
- The structure and function (including typical species) of qualifying natural habitats;
- The structure and function of the habitats of qualifying species;
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely;
- The populations of qualifying species; and
- The distribution of qualifying species within the site.

D.1.2 Qualifying Features

Annex I habitats present as a qualifying feature, but not a primary reason for selection of this site

- 3260 Water courses of plain to montane levels with the *Ranunculus fluitantis* and *Callitriche-Batrachion* vegetation

Annex II species that are a primary reason for selection of this site

- 1095 Sea lamprey *Petromyzon marinus*;
- 1096 Brook lamprey *Lampetra planeri*
- 1099 River lamprey *Lampetra fluviatilis*;
- 1103 Twaite shad *Alosa fallax*;
- 1106 Atlantic salmon *Salmo salar*;
- 1163 Bullhead *Cottus gobio*; and
- 1355 Otter *Lutra lutra*.

Annex II species present as a qualifying feature, but not a primary reason for site selection

1102 Allis shad *Alosa alosa*.

D.1.3 Threats, pressures and activities with impacts on the site

The following are the prioritised issues for the site and its qualifying features:

- Invasive non-native species;
- Grazing;
- Forestry activities;
- Pollution to surface waters (limnic & terrestrial, marine & brackish);
- Soil pollution and solid waste (excluding discharges);
- Human induced changes in hydraulic conditions;
- Forest and Plantation management & use; and

- Other ecosystem modifications.

D.1.4 Site Improvement Plan and Management

The below are the Conservation Objectives for the watercourse listed within the 'Core Management Plan Including Conservation Objectives for Afon Wysg / River Usk SAC¹⁹', further information for the individual qualifying species can be found within this document.

- The capacity for the habitats in the SAC to support each feature at near natural population levels, as determined by predominantly unmodified ecological and hydromorphological processes and characteristics, should be maintained as far as possible, or restored where necessary.
- The ecological status of the water environment should be sufficient to maintain a stable or increasing population of each feature. This will include elements of water quantity and quality, physical habitat and community composition and structure.
- Flow regime, water quality and physical habitat should be maintained in, or restored as far as possible to, a near-natural state, in order to support the coherence of ecosystem structure and function across the whole area of the SAC.
- All known breeding, spawning and nursery sites of species features should be maintained as suitable habitat as far as possible, except where natural processes cause them to change.
- Flows, water quality, substrate quality and quantity at fish spawning sites and nursery areas will not be depleted by abstraction, discharges, engineering or gravel extraction activities or other impacts to the extent that these sites are damaged or destroyed.
- The river planform and profile should be predominantly unmodified. Physical modifications having an adverse effect on the integrity of the SAC, including, but not limited to, revetments on active alluvial riverbanks using stone, concrete or waste materials, unsustainable extraction of gravel, addition or release of excessive quantities of fine sediment, will be avoided.
- River SSSI features should be in favourable condition. In the case of the Usk Tributaries SSSI, the SAC habitat is not underpinned by a river habitat SSSI feature. In this case, the target is to maintain the characteristic physical features of the river channel, banks and riparian zone.
- Artificial factors impacting on the capability of each species feature to occupy the full extent of its natural range should be modified where necessary to allow passage, e.g., weirs, bridge sills, acoustic barriers.
- Natural factors such as waterfalls, which may limit the natural range of a species feature or dispersal between naturally isolated populations, should not be modified.
- Flows during the normal migration periods of sea and river lamprey will not be depleted by abstraction to the extent that passage upstream to spawning sites is hindered.
- Flow objectives for assessment points in the Usk Catchment Abstraction Management Strategy will be agreed by NRW as necessary. It is anticipated that these limits will concur with the standards used by the Review of Consents process
- Water Quality targets follow those in the revised Common Standards Monitoring Guidance for Rivers (JNCC 2016).
- Potential sources of pollution not addressed in the review of consents, such as contaminated land, will be considered in assessing plans and projects.

¹⁹NRW (2022). Core Management Plan Including Conservation Objectives for Afon Wysg / River Usk SAC [online] available at https://afonyddcymru.org/wp-content/uploads/2022/11/river_usk-sac-core-plan.pdf (last accessed March 2025).

D.2 Severn Estuary SPA

D.2.1 Conservation Objectives

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

- The extent and distribution of the habitats of the qualifying features;
- The structure and function of the habitats of the qualifying features;
- The supporting processes on which the habitats of the qualifying features rely;
- The population of each of the qualifying features; and
- The distribution of the qualifying features within the site.

D.2.2 Qualifying Features

Article 4.1 Qualification (79/409/EEC):

Over winter the area regularly supports:

- Bewick's swan (*Cygnus columbianus bewickii*) – 3.9% of the GB population (5-year peak mean 1991/92 – 1995-96).

Article 4.2 Qualification (79/409/EEC):

Over winter the area regularly supports:

- Gadwall (*Mareca strepera*) – 0.9% of the biogeographic population (NW Europe) (5-year peak mean 1991/92 – 1995-96);
- Greater white-fronted goose (*Anser albifrons albifrons*) – 0.4% of the biogeographic population (NE and NW Europe) (5-year peak mean 1991/92 – 1995-96);
- Dunlin (*Calidris alpina alpina*) – 3.3% of the biogeographic population (N Europe/W Africa) (5-year peak mean 1991/92 – 1995-96);
- Common shelduck (*Tadorna tadorna*) – 1.1% of the biogeographic population (NW Europe) (5-year peak mean 1991/92 – 1995-96); and
- Common redshank (*Tringa tetanus*) – 1.3% of the biogeographic population (E Atlantic) (5-year peak mean 1991/92 – 1995-96).

An internationally important assemblage of birds: Over winter the area regularly supports 84,317 waterfowl (5-year peak mean 1991/92 – 1995-96).

D.2.3 Threats, pressures and activities with impacts on the site

The following are the prioritised issues for the site and its qualifying features:

- Public access/disturbance;
- Impacts of development;
- Coastal squeeze;
- Change in land management;
- Changes in species distributions;
- Water pollution;
- Air pollution;
- Fisheries: recreational marine and estuarine;
- Fisheries: commercial marine and estuarine;
- Marine litter; and

- Marine pollution incidents.

D.2.4 Site Improvement Plan and Management

The following measures are detailed within the Site Improvement Plan for the Severn Estuary (SAC and SPA), to alleviate the effects of the threats and pressures listed above:

- Reduce impacts of disturbance to birds, and damage to habitats as a result of public access;
- Reduce and remove (where possible) barriers to migratory fish species;
- Inform strategic planning decisions to minimise impact of development;
- Limit coastal squeeze, provide sustainable coastal defences, improve existing structures and deliver compensatory habitat for all qualifying features;
- Maintain appropriate levels and timing of grazing, and management of intertidal saltmarsh habitat;
- Understand and prepare for changes in species distribution (caused by climate change);
- Identify any existing issues and prevent/reduce the decline in water and sediment quality;
- Develop a site nitrogen action plan;
- Ensure in combination/cumulative impacts from aggregate extraction, maintenance dredging and disposal are fully considered;
- Establish levels and location of recreational fishing activities, and the potential for impact;
- Identify any threats to site features and habitats from commercial fisheries activities, and establish and ensure compliance with any necessary management measures; and
- Assess the risks from the spread of invasive species, and control where possible.

D.3 Severn Estuary SAC

D.3.1 Conservation Objectives

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of qualifying natural habitats and habitats of qualifying species;
- The structure and function (including typical species) of qualifying natural habitats;
- The structure and function of the habitats of qualifying species;
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely;
- The populations of qualifying species; and
- The distribution of qualifying species within the site.

D.3.2 Qualifying Features

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; and
- 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 sea water all the time; and

- 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*; and
- 1103 Twaite shad *Alosa fallax*.

D.3.3 Threats, pressures and activities with impacts on the site

The following are the prioritised issues for the site and its qualifying features:

- Public access/disturbance – 1130 Estuaries, 1170 Reefs and 1330 Atlantic salt meadows only;
- Physical modification – 1095 Sea lamprey, 1099 River lamprey and 1103 Twaite shad only;
- Impacts of development;
- Coastal squeeze - 1130 Estuaries, 1170 Reefs, 1140 Intertidal mudflats and sandflats and 1330 Atlantic salt meadows only;
- Change in land management - 1130 Estuaries and 1330 Atlantic salt meadows only;
- Changes in species distributions – 1170 Reefs, 1095 Sea lamprey, 1099 River lamprey and 1103 Twaite shad only;
- Water pollution;
- Air pollution - 1130 Estuaries, 1330 Atlantic salt meadows, 1095 Sea lamprey, 1099 River lamprey and 1103 Twaite shad only;
- Marine consents and permits: minerals and waste;
- Fisheries: recreational marine and estuarine;
- Fisheries: commercial marine and estuarine;
- Invasive species - 1130 Estuaries, 1170 Reefs, 1140 Intertidal mudflats and sandflats and 1330 Atlantic salt meadows only;
- Marine litter; and
- Marine pollution incidents.

D.3.4 Site Improvement Plan and Management

Please refer to D.2.4 for measures applicable to the SAC.

D.4 Severn Estuary Ramsar

D.4.1 Conservation Objectives

No information is available for specific conservation objectives

D.4.2 Qualifying features

Ramsar criterion 1

Due to immense tidal range (second-largest in world), this affects both the physical environment and biological communities. Habitats Directive Annex I features present on the SAC include:

- H1110 Sandbanks which are slightly covered by sea water all the time;
- H1130 Estuaries;
- H1140 Mudflats and sandflats not covered by seawater at low tide; and
- H1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*).

Ramsar criterion 3

Due to unusual estuarine communities, reduced diversity and high productivity.

Ramsar criterion 4

This site is important for the run of migratory fish between sea and river via estuary. Species include Salmon (*Salmo salar*), sea trout (*S. trutta*), sea lamprey (*Petromyzon marinus*), river lamprey (*Lampetra fluviatilis*), allis shad (*Alosa alosa*), twaite shad (*A. fallax*), and eel (*Anguilla anguilla*). It is also of particular importance for migratory birds during spring and autumn.

Ramsar criterion 5

Assemblages of international importance: 70,919 waterfowl (5 year peak mean 1998/99 – 2002/2003) over winter

Ramsar criterion 6

Species/populations occurring at levels of international importance

Species with peak counts in winter:

- Bewick's swan (*Cygnus columbianus bewickii*) – 229 individuals representing 2.8% of the GB population (5-year peak mean 1998/99 – 2002/2003);
- Greater white-fronted goose (*Anser albifrons albifrons*) – 2,076 individuals representing 35.8% of the GB population (5-year peak mean 1996/97 – 2000/2001);
- Common shelduck (*Tadorna tadorna*) – 3,223 individuals representing 1% of the population (5-year peak mean 1998/99 – 2002/2003);
- Gadwall (*Anas strepera*) – 241 individuals representing 1.4% of the GB population (5-year peak mean 1998/99 – 2002/2003);
- Dunlin (*Calidris alpina alpina*) – 25,082 individuals representing 1.8% of the population (5-year peak mean 1998/99 – 2002/2003); and
- Common redshank (*Tringa tetanus*) – 2,616 individuals representing 1% of the population (5-year peak mean 1998/99 – 2002/2003).

Species/populations identified subsequent to designation for possible future consideration under criterion 6.

Species regularly supported during the breeding season:

- Lesser black-backed gull (*Larus fuscus graellsii*) – 4,167 occupied nests, representing 2.8% of the breeding population (Seabird 2000 census).

Species with peak counts in spring/autumn:

- Ringed plover (*Charadrius hiaticula*) – 740 individuals representing 1% of the population (5-year peak mean 1998/99 – 2002/2003).

Species with peak counts in winter:

- Eurasian teal (*Anas crecca*) – 4,456 individuals representing 1.1% of the population (5-year peak mean 1998/99 – 2002/2003); and
- Northern pintail (*Anas acuta*) – 756 individuals representing 1.2% of the population (5-year peak mean 1998/99 – 2002/2003).

Ramsar criterion 8

The fish of the whole estuarine and river system is one of the most diverse in Britain, with over 110 species recorded. Salmon, sea trout, sea lamprey, river lamprey, allis shad, twaite shad and eel use the Severn Estuary as a key migration route to their spawning grounds in the many

tributaries that flow into the estuary. The site is important as a feeding and nursery ground for many fish species particularly allis shad and twaite shad which feed on mysid shrimps in the salt wedge.

D.4.3 Threats, pressures and activities with impacts on the site

Factors adversely affecting the site's ecological character:

- Dredging;
- Erosion; and
- Recreational/tourism disturbance.

It is assumed that the same pressures and threats which are detailed for the Severn Estuary SAC and SPA above apply to the Ramsar, considering the identical site extent and significant overlap of qualifying features.

D.4.4 Site Improvement Plan and Management

Please refer to D.2.4 for measures applicable to the Severn Estuary SPA and SAC. It is assumed that the same measures will be applied to the management of the Ramsar, given the identical site extent and significant overlap of qualifying features. Therefore, threat and pressures are considered to be the same.

