

Hungerford Neighbourhood Plan

Habitats Regulations Assessment

Hungerford Neighbourhood Plan Group

January 2024

Quality information

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1. Introduction

Background to the Project

- 1.1 AECOM was appointed by Hungerford Town Council to produce a Habitats Regulations Assessment (HRA) of the Hungerford Neighbourhood Plan (hereafter referred to as the Neighbourhood Plan or 'Plan'). The objectives of the assessment are to:
 - Identify any aspects of the Neighbourhood Plan that would cause any adverse effect on the integrity
 of European sites (Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and, as a
 matter of Government Policy, Ramsar Sites), either in isolation or in combination with other plans and
 projects; and,
 - To advise on appropriate policy mechanism for delivering mitigation where such effects were identified.

Legislation

- 1.2 The UK left the European Union (EU) on 31 January 2020 under the terms set out in the European Union (Withdrawal Agreement) Act 2020 ("the Withdrawal Act"). While the UK is no longer a member of the EU, a requirement for Habitats Regulations Assessment continues as set out in the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019¹.
- 1.3 The HRA process applies the 'Precautionary Principle'² to European sites. Plans and projects can only be permitted having ascertained that there will be no adverse effect on the integrity of the European site(s) in question. To ascertain whether or not site integrity will be affected, an Appropriate Assessment should be undertaken of the Plan or project in question. Figure 1 below sets out the legislative basis for Appropriate Assessment.
- 1.4 Plans and projects that are associated with potential adverse impacts on European sites may still be permitted if there are no reasonable alternatives and there are Imperative Reasons of Overriding Public Interest (IROPI) as to why they should go ahead. In such cases, compensation would be necessary to ensure the overall integrity of the site network.

Conservation of Habitats and Species Regulations 2017 (as amended)

The Regulations state that:

"A competent authority, before deciding to ... give any consent for a plan or project which is likely to have a significant effect on a European site ... shall make an appropriate assessment of the implications for the site in view of that sites conservation objectives... The authority shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the European site".

Figure 1: The legislative basis for Appropriate Assessment

- 1.5 Over time the phrase 'Habitats Regulations Assessment' (HRA) has come into wide currency to describe the overall process set out in the Regulations from screening through to IROPI. This has arisen in order to distinguish the process from the individual stage described in the law as an 'Appropriate Assessment'.
- 1.6 In spring 2018 the 'Sweetman' European Court of Justice ruling³ clarified that 'mitigation' (i.e. measures that are specifically introduced to avoid or reduce a harmful effect on a European site that would otherwise arise)

¹ These don't replace the 2017 Regulations but are just another set of amendments.

² The Precautionary Principle, which is referenced in Article 191 of the Treaty on the Functioning of the European Union, has been defined by the United Nations Educational, Scientific and Cultural Organisation (UNESCO, 2005) as: *"When human activities may lead to morally unacceptable harm* [to the environment] *that is scientifically plausible but uncertain, actions shall be taken to avoid or diminish that harm. The judgement of plausibility should be grounded in scientific analysis".* ³ People Over Wind and Sweetman v Coillte Teoranta (C-323/17)

should **not** be taken into account when forming a view on Likely Significant Effects. Mitigation should instead only be considered at the Appropriate Assessment stage. This HRA is cognisant of that ruling.

Scope of the Project

- 1.7 There is no pre-defined guidance that dictates the physical scope of an HRA of a Neighbourhood Plan document. Therefore, in considering the physical scope of the assessment, we were guided primarily by the identified impact pathways (called the source-pathway-receptor model).
- 1.8 Briefly defined, impact pathways are routes by which the implementation of a policy within a Neighbourhood Plan document can lead to an effect upon a European designated site. An example of this would be new residential development resulting in an increased population and thus increased recreational pressure, which could then affect European sites by, for example, disturbance of non-breeding or breeding birds. Guidance from the Ministry of Housing, Communities and Local Government (MHCLG) states that the HRA should be 'proportionate to the geographical scope of the [plan policy]' and that 'an AA need not be done in any more detail, or using more resources, than is useful for its purpose' (MHCLG, 2006, p.6).
- 1.9 This basic principle has also been reflected in court rulings. The Court of Appeal⁴ has ruled that providing the Council (competent authority) was duly satisfied that proposed mitigation could be 'achieved in practice' to satisfy that the proposed development would have no adverse effect, then this would suffice. This ruling has since been applied to a planning permission (rather than a Core Strategy document)⁵. In this case the High Court ruled that for 'a multistage process, so long as there is sufficient information at any particular stage to enable the authority to be satisfied that the proposed mitigation can be achieved in practice it is not necessary for all matters concerning mitigation to be fully resolved before a decision maker is able to conclude that a development will satisfy the requirements of Reg 61 of the Habitats Regulations'.

2. Methodology

Introduction

- 2.1 The HRA has been carried out with reference to the general EC guidance on HRA⁶ and general guidance on HRA published by government in July 2019 and February 2021⁷. AECOM has also been mindful of the implications of European case law in 2018, notably the Holohan ruling and the People over Wind ruling, both discussed below.
- 2.2 Figure 2 below outlines the stages of HRA according to current EC guidance. The stages are essentially iterative, being revisited as necessary in response to more detailed information, recommendations and any relevant changes to the Plan.

⁴No Adastral New Town Ltd (NANT) v Suffolk Coastal District Council Court of Appeal, 17th February 2015 ⁵High Court case of R (Devon Wildlife Trust) v Teignbridge District Council, 28 July 2015

⁶ European Commission (2001): Assessment of plans and projects significantly affecting Natura 2000 Sites: Methodological Guidance on the Provisions of Article 6(3) and 6(4) of the Habitats Directive.

⁷ <u>https://www.gov.uk/guidance/appropriate-assessment</u> and <u>https://www.gov.uk/guidance/habitats-regulations-assessments-protecting-a-european-site</u>



Figure 2: Four Stage Approach to Habitats Regulations Assessment. Source EC, 2001¹.

Description of HRA Tasks

HRA Task 1 – Screening for Likely Significant Effects (LSEs)

2.3 Following evidence gathering, the first stage of any Habitats Regulations Assessment is the screening for Likely Significant Effects (LSEs), essentially a high-level assessment to decide whether the full subsequent stage known as Appropriate Assessment is required. The essential question is:

"Is the project, either alone or in combination with other relevant projects and plans, likely to result in a significant effect upon European sites?"

2.4 The objective is to filter out those Plans and projects that can, without any detailed appraisal, be concluded to be unlikely to result in any impacts upon European sites, usually because there is no mechanism for a negative interaction. This stage is undertaken in Chapter 4 of this report and in Appendix A.

HRA Task 2 – Appropriate Assessment (AA)

- 2.5 Where it is determined that a conclusion of 'no Likely Significant Effects (LSEs)' cannot be drawn, the analysis proceeds to the next stage of HRA known as Appropriate Assessment. Case law has clarified that 'Appropriate Assessment' is not a technical term. In other words, there are no particular technical analyses, or level of technical analysis, that are classified by law as belonging to Appropriate Assessment compared to the screening stage.
- 2.6 By virtue of the fact that it follows screening for LSEs, there is a clear implication that the analysis will be more detailed than undertaken at the previous stage. One of the key considerations during Appropriate Assessment is whether there is available mitigation that would entirely address the potential effect. In practice, the Appropriate Assessment would take any policies or allocations that could not be dismissed following the high-level screening and assess the potential for an effect in more detail, with a view to concluding whether there would be a potential for an adverse effect on site integrity (in other words, disruption of the coherent structure and function of the European site(s)). A decision by the European Court of Justice⁸ concluded that measures intended to avoid or reduce the harmful effects of a proposed Plan or project on a European site may no longer be considered by competent authorities at the screening for LSEs stage of HRA. That ruling has been taken into account in producing this HRA.

⁸ People Over Wind and Sweetman v Coillte Teoranta (C-323/17)

2.7 Also. in 2018 the Holohan ruling⁹ was handed down by the European Court of Justice. Among other provisions paragraph 39 of the ruling states that 'As regards other habitat types or species, which are present on the site, but for which that site has not been listed, and with respect to habitat types and species located outside that site, ... typical habitats or species must be included in the appropriate assessment, if they are necessary to the conservation of the habitat types and species listed for the protected area' [emphasis added]. Due account of this decision has been given in this HRA in relation to the Ashdown Forest SPA, which is designated for mobile ground-nesting birds (although it is to be noted that the qualifying species are not considered to be critically dependent on functionally linked habitats).

HRA Task 3 – Avoidance and Mitigation

- 2.8 Where necessary, measures are recommended for incorporation into the Plan in order to mitigate and / or avoid adverse effects on European sites. There is considerable precedent concerning the level of detail that a Neighbourhood Plan document needs to contain regarding mitigation for impact pathways on European sites (e.g. regarding recreational pressure). The implication of this precedent is that it is not necessary for all measures to be fully developed prior to adoption of the Plan, but the Plan must provide an adequate policy framework within which these measures can be delivered.
- 2.9 When discussing mitigation for a Neighbourhood Plan, one is concerned primarily with the policy framework to enable the delivery of such mitigation rather than the details of the mitigation measures themselves since a Neighbourhood Plan document is a high-level policy document.
- 2.10 In any Neighbourhood Plan, there are numerous policies for which there is a limit to the degree of assessment that is possible at the Plan level. This is because either:
 - The policy in question does not contain any specifics as to what will be delivered or where, and so
 cannot be assessed in detail at the Plan level. In these cases, the Appropriate Assessment
 focusses on precautionary mitigation that can be included in the plan to ensure that whatever
 proposals come forward will not result in adverse effects on integrity; or
 - The nature of potential impacts (e.g. visual and noise disturbance arising from construction or loss of functionally linked habitat) are related to how the development will be designed and constructed, and therefore cannot be assessed in detail at the plan level. In these instances, the Appropriate Assessment focusses on available mitigation measures, the extent to which such measures would be achievable and effective, and whether an adequate protective framework exists to ensure that the policy would not lead to an adverse effect on the integrity of any internationally designated sites.
- 2.11 In these instances, the advice of Advocate-General Kokott¹⁰ is also worth considering. She commented that: 'It would ...hardly be proper to require a greater level of detail in preceding plans [rather than planning applications] or the abolition of multi-stage planning and approval procedures so that the assessment of implications can be concentrated on one point in the procedure. Rather, adverse effects on areas of conservation must be assessed at every relevant stage of the procedure to the extent possible on the basis of the precision of the plan. This assessment is to be updated with increasing specificity in subsequent stages of the procedure' [emphasis added].

Geographical Scope of the HRA

- 2.12 There are no standard criteria for determining the ultimate physical scope of an HRA. Rather, the sourcepathway-receptor model should be used to determine whether there is any potential pathway connecting development to any European sites. In the case of Hungerford Parish, it was determined that for the initial coarse screen the following European Sites required consideration:
 - River Lambourn SAC;
 - Kennet & Lambourn Floodplain SAC; and

⁹ Case C-461/17

¹⁰ Opinion of Advocate General Kokott, 9th June 2005, Case C-6/04. Commission of the European Communities v United Kingdom of Great Britain and Northern Ireland, paragraph

⁴⁹http://curia.europa.eu/juris/document/document.jsf?docid=58359&doclang=EN

- Kennet Valley Alderwoods SAC.
- 2.13 This was based upon a search within Hungerford Parish and up to 10km surrounding the Parish boundary. All above sites were subjected to the initial screening exercise. It should be noted that the presence of a conceivable impact pathway linking the emerging PLP to a European site does not mean that Likely Significant Effects (LSEs) will occur.

3. European Sites

- 3.1 The following European sites are situated within 10km of the Hungerford Parish boundary:
 - River Lambourn SAC;
 - Kennet & Lambourn Floodplain SAC;
 - Kennet Valley Alderwoods SAC;
- 3.2 Due to development being within the 10km screening distance, there are potential negative impacts on these sites of conservation interest. They thus need to be considered in more detail. The following section provides an introduction, the qualifying features, the conservation objectives and the threats / pressures to each of these European sites.

River Lambourn SAC

Introduction

- 3.3 The River Lambourn is a lowland chalk river, that rises in Lynch Wood and flows down to a confluence with the River Kennet east of Newbury. The catchment of the river is primarily chalk, resulting in a river bed that consists of mostly gravel.
- 3.4 The upper portion of the river is ephemeral in nature and largely flows from February to autumn. Flora or fauna occurring in these stretches must be adapted to wide variations in flow, thus winterbourne sections tend to be less species-rich than the lower reaches which hold water all year round. Species characteristic of these conditions include pond water-crowfoot *Ranunculus peltatus* which is the dominant aquatic plant, as well as fool's-water-cress *Apium nodiflorum* and the moss *Fontinalis antipyretica*.
- 3.5 Further down the river where there are perennial flows, the aquatic plants are typical of shallow, gravelbedded watercourses. Stream water-crowfoot *Ranunculus penicillatus* ssp. *pseudofluitans*, lesser waterparsnip *Berula erecta* and water-cress *Rorippa nasturtium-aquaticum* are abundant; blunt-fruited waterstarwort *Callitriche obtusangula* is also characteristic in the channel. The good water quality, coarse sediments and extensive beds of submerged plants provide excellent habitat for bullhead *Cottus gobio* and brook lamprey *Lampetra planeri*.

Qualifying Features

- 3.6 Annex I habitats present as a qualifying feature:
 - Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation. (Rivers with floating vegetation often dominated by water-crowfoot)
- 3.7 Annex II species present as a qualifying feature:
 - Bullhead Cottus gobio
 - Brook lamprey Lampetra planeri

Conservation Objectives

3.8 With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;

- 3.9 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.

Threats / Pressures to Site Integrity

- 3.10 The following threats and pressures to the integrity of the River Lambourn SAC have been identified in the Natural England Site Improvement Plan:
 - Siltation
 - Water Pollution
 - Invasive Species
 - Hydrological Changes
 - Inland flood defence works
 - Inappropriate cutting/mowing
 - Change in land management
 - Inappropriate water levels
 - Hydrological changes
 - Water pollution

Kennet & Lambourn Floodplains SAC

Introduction

3.11 The cluster of sites in the Kennet and Lambourn valleys supports an extensive population of Desmoulin's whorl snail *Vertigo moulinsiana* in association with chalk stream habitat. The habitat occupied at this site differs from the sites in East Anglia in that it is predominantly reed sweet-grass *Glyceria maxima* swamp or tall sedges at the river margins, in ditches and in depressions in wet meadows.

Qualifying Features

- 3.12 Annex II species present as a qualifying feature:
 - Desmoulin's whorl snail Vertigo moulinsiana

Conservation Objectives

- 3.13 With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;
- 3.14 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.

Threats / Pressures to Site Integrity

- 3.15 The following threats and pressures to the integrity of the Kennet & Lambourn Floodplains SAC have been identified in the Natural England Site Improvement Plan:
 - Siltation
 - Water Pollution
 - Invasive Species
 - Hydrological Changes
 - Inland flood defence works
 - Inappropriate cutting/mowing
 - Change in land management
 - Inappropriate water levels
 - Hydrological changes
 - Water pollution

Kennet Valley Alderwoods SAC

Introduction

3.16 These are the largest fragments of alder-ash (*Alnus glutinosa – Fraxinus excelsior*) woodland on the Kennet floodplain. They lie on alluvium overlain by a shallow layer of moderately calcareous peat. The wettest areas are dominated by alder *Alnus glutinosa* over tall herbs, sedges and reeds, but dryer patches include a base-rich woodland flora with much dog's mercury *Mercurialis perennis* and also herb-Paris *Paris quadrifolia*. The occurrence of the latter is unusual, as it is more typically associated with ancient woodland, whereas the evidence suggests that these stands have largely developed over the past century.

Qualifying Features¹¹

- 3.17 Annex I habitats that are a primary reason for selection of this site:
 - Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)

Conservation Objectives¹²

3.18 With regard to the SAC and the natural habitats and/or species for which the site has been designated (the 'Qualifying Features' listed below), and subject to natural change;

¹¹ Available at: <u>http://jncc.defra.gov.uk/protectedsites/sacselection/sac.asp?EUCode=UK0030059</u> [Accessed on the 03/11/2020]

¹² Available at: <u>http://publications.naturalengland.org.uk/publication/4857883850178560</u> [Accessed on the 03/11/2020]

- 3.19 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.

Threats / Pressures to Site Integrity

- 3.20 The following threats and pressures to the integrity of the Kennet Valley Alderwoods SAC have been identified in the Natural England Site Improvement Plan:
 - Inappropriate Water Levels
 - Game Management: Other

'In Combination' Assessment

- 3.21 It is a requirement of the Regulations that the impacts of any land use plan being assessed are not considered in isolation but in combination with other plans and project that may also be affecting the European site(s) in question.
- 3.22 For the purposes of this assessment we have determined that, due to the nature of the identified impacts, the other plans and project with potential for in-combination likely significant effects are those that can result in recreational pressure, loss of supporting habitats, reduced air quality, reduced water quality, or increased demand for water resources.
- 3.23 For the purpose of this assessment the following documents will be considered in-combination with the Neighbourhood Plan:
 - West Berkshire Local Plan Review, currently going through Examination
- 3.24 When undertaking this part of the assessment it is essential to bear in mind the principal intention behind the legislation i.e. to ensure that those projects or plan which in themselves have minor impacts are not simply dismissed on that basis but are evaluated for any significant cumulative contribution they may make to an overall significant effect.

4. Background to Impact Pathways

4.1 In carrying out an HRA it is important to avoid confining oneself to effectively arbitrary boundaries (such as Local Authority or parish boundaries), but to use an understanding of the various ways in which Land Use Plans can impact European sites to evaluate whether development is connected with European sites, in some cases many kilometres distant. Briefly defined, impact pathways are routes by which a change in activity associated with a development can lead to an effect upon a European site. As highlighted earlier, it is also important to bear in mind MHCLG guidance which states that the AA should be 'proportionate to the geographical scope of the [plan policy]' and that 'an AA need not be done in any more detail, or using more resources, than is useful for its purpose' (CLG, 2006, p.6¹³).

¹³ Department for Communities and Local Government. 2006. *Planning for the Protection of European Sites: Appropriate Assessment*. <u>http://www.communities.gov.uk/index.asp?id=1502244</u>

- 4.2 Based upon Natural England's Site Improvement Plans (SIPs) and professional judgement, the following impact pathways require consideration regarding development proposals within the WSGNP area and the identified European sites:
 - Water quantity, level and flow; and
 - Water quality.

Background to Water Quantity, Level and Flow

- 4.3 The water level, its flow rates and the mixing conditions are important determinants of the condition of European sites and their qualifying features. Hydrological processes are critical in influencing habitat characteristics in rivers, wetlands and for water-dependent plant species. Habitat parameters that may be impacted include water cycling, water depth, dissolved oxygen levels, salinity, current velocity and water temperature (noting that not all parameters will be relevant to all qualifying habitat / species). In turn these parameters determine the short- and long-term condition, viability and reproductive success of plant and animal species, as well as overall ecosystem composition.
- 4.4 The unique nature of wetlands combines shallow water and conditions that are ideal for the growth of organisms at the basal level of food webs, which feed many species of birds, mammals, fish and amphibians. Migrating and breeding wetland species are particularly reliant on these food sources, as they need to build up enough nutritional reserves to sustain their long migration routes or feed their hatched chicks.
- 4.5 Maintaining a steady water supply is of critical importance for many hydrologically dependent SPAs, SACs and Ramsars. For example, in many wetlands winter flooding is essential in sustaining a mosaic of foraging habitats for SPA / Ramsar wader and waterfowl species. However, species have varying requirements with regard to specific water levels. For example, some duck species (e.g. wigeon) have optimum water depth requirements of under 0.3m for successful foraging. In contrast, Bewick's swan require deeper water to enable their natural roosting and loafing behaviours.
- 4.6 A constant supply of freshwater is fundamental in maintaining the ecological integrity of water-dependent European sites. While the natural fluctuation of water levels within narrow limits is desirable (and indeed often the reason why nature conservation interests are present in a site), excess or too little water supply might cause the water level to be outside of the required range of qualifying birds, invertebrates or plant species. There are two mechanisms through which urban development can negatively impact the water level in European sites:
 - The supply of new housing with potable water may require increased abstraction of water from surface water and groundwater bodies. Depending on the level of water stress in a geographic region, this may reduce the water levels in European sites that lie in the same catchment as new abstractions.
 - The proliferation of impermeable surfaces in urban areas increases the volume and speed of surface water runoff. As traditional drainage systems often cannot cope with the volume of stormwater, Combined Sewer Overflows (CSOs) are designed to discharge excess water directly into watercourses to protect human assets. Such pluvial flooding may result in downstream inundation of watercourses and flooding in wetland habitats.
- 4.7 It is noted that Hungerford sits within an area of serious water stress (see Figure 3). This means that the water resources are being or are likely to be exploited to a degree which may result in pressure on the environment or water supplies both now and in the future. This result does not indicate how the individual water companies are preforming in the management of their water resources, or a level of risk to public water supply. This may imply that additional abstractions could have negative impacts on water-dependent European sites.



Figure 3: Areas of water stress in England and Wales¹⁴

Background to Water Quality

4.8 Increased amounts of housing or business development can lead to reduced water quality of rivers and estuarine environments. Sewage and industrial effluent discharges can contribute to increased nutrients and toxic contaminants in European sites leading to unfavourable conditions.

¹⁴ Environment Agency, 2021. Water Stressed Areas – Final Classification 2021.

Water_stressed_areas___final_classification_2021.odt (live.com) [Accessed 14/02/2023]

- 4.9 The quality of the water that feeds European sites is an important determinant of the nature of their habitats and the species they support. Poor water quality can have a range of environmental impacts:
 - At high levels, toxic chemicals and metals can result in immediate death of aquatic life, and can have detrimental effects even at lower levels, including increased vulnerability to disease and changes in wildlife behaviour. Eutrophication, the enrichment of plant nutrients in water, increases plant growth and consequently results in oxygen depletion. Algal blooms, which commonly result from eutrophication, increase turbidity and decrease light penetration. The decomposition of organic wastes that often accompanies eutrophication deoxygenates water further, augmenting the oxygen depleting effects of eutrophication. In the marine environment, nitrogen is the limiting plant nutrient and so eutrophication is associated with discharges containing available nitrogen.
 - Some pesticides, industrial chemicals, and components of sewage effluent are suspected to interfere with the functioning of the endocrine system, possibly having negative effects on the reproduction and development of aquatic life.
 - For sewage treatment works close to capacity, further development may increase the risk of
 effluent escape into aquatic environments. In many urban areas, sewage treatment and surface
 water drainage systems are combined, and therefore a predicted increase in flood and storm
 events could increase pollution risk.

Summary of Impact Pathways to be Taken Forward

4.10 Having considered the impact pathways identified in this chapter, those listed in Table 1 will be taken to the next stage in the HRA process, the LSEs screening.

Impact pathway	European site (s) potentially affected
Water quantity, level and flow	River Lambourn SAC Kennet & Lambourn Floodplains SAC Kennet Valley Alderwoods SAC
Water quality	River Lambourn SAC Kennet & Lambourn Floodplains SAC

Table 1. Impact pathways and relevant European sites.

5. Test of Likely Significant Effects

Introduction

- 5.1 When seeking to identify relevant European sites, consideration has been given primarily to identified impact pathways and the source-pathway-receptor approach, rather than adopting purely a 'zones'-based approach. The source-pathway-receptor approach is a standard tool in environmental assessment. For an effect to occur, all three elements of this mechanism must be in place, whereas the absence of one or more of the elements means there is no potential for an effect. Furthermore, even where an impact may occur, it may not result in significant effects (i.e., those which undermine the Conservation Objectives of a European site).
- 5.2 The likely zone of impact (also referred to as the likely Zone of Influence, ZoI) of a plan or project is the geographic extent over which significant ecological effects are likely to occur. The ZoI of a plan or project will vary depending on the specifics of a particular proposal and must be determined on a case-by-case basis with reference to a variety of criteria, including:
 - the nature, size / scale and location of the plan;
 - the connectivity between the plan and European sites, for example through hydrological connections or because of the natural movement of qualifying species;
 - the sensitivity of ecological features under consideration; and,
 - the potential for in-combination effects.

Approach to Hungerford Neighbourhood Plan Policy Screening

- 5.3 Policies were screened out of having LSEs on a European site where any of the following reasons applied:
 - they are environmentally positive;
 - they will not themselves lead to any development or other change;
 - they make provision for change but could have no conceivable effect on a European site. This can be because there is no pathway between the policy and the qualifying features or a European site, or because any effect would be positive;
 - they make provision for change but could have no significant effect on a European site (i.e., the effect would not undermine the conservation objectives of a European site); or,
 - the effects of a policy on any particular European site cannot be ascertained because the policy is too general. For example, a policy may be screened out if, based on absence of detail in the policy, it is not possible to identify where, when, or how the policy may be implemented, where effects may occur, or which sites, if any, may be affected.
- 5.4 Any 'criteria-based' policy (i.e., those that simply list criteria with which development needs to comply) or other general policy statements that have no spatial element were also screened out. Likewise, policies that simply 'safeguard' an existing resource (e.g., existing green infrastructure or mineral resources) by preventing other incompatible development, were also screened out.
- 5.5 The appraisal therefore focussed on those policies with a definable spatial component. Having established which policies required scrutiny by virtue of being spatially defined, consideration was given as to whether LSEs could be dismissed due to a lack of connectivity to any European site for one of the following reasons:
 - a potentially damaging activity may occur as a result of the policy but there is no pathway connecting it to a European site (due to distance, for example);
 - there are no European sites vulnerable to any of the activities that the policy will deliver; or,
 - the policy will not result in any damaging activities.

Results of Policy Screening

- 5.6 The results of the LSEs screening of policies included in the Hungerford Neighbourhood Plan are presented in Appendix A. Where a policy is shaded green, there are no linking impact pathways to European sites and LSEs can be excluded. Where the screening outcome is shaded orange, these are to be discussed further within the test of Likely Significant Effects to see if a likely significant effect can be screened out, or if the policy would need to be taken to Appropriate Assessment.
- 5.7 Two of the neighbourhood plan policies are considered to have the potential to result in LSE, in-combination with other plans and projects, as they are associated with impact pathways linking to European sites.
- 5.8 The policies that have potential likely significant effects are listed below:
 - HUNG12: Land at Smitham Bridge Road
 - HUNG13: Land North of Cottrell Close

6. Appropriate Assessment Incombination

Water Resources

- 6.1 The River Lambourn SAC is vulnerable to hydrological changes due to water abstraction. However, the quantum of development to be provided by the Hungerford Neighbourhood Plan is in conformity with the overarching Local Plan. This local plan has been subject to HRA that concluded no adverse effects on integrity, impact pathways relating to increased water demand and increased water treatment provided by the additional development that could result in an increase in water abstraction and increased effluent. This issue has therefore been addressed at a higher tier level within the West Berkshire Local Plan.
- 6.2 Thames Water (TW) are responsible for supplying water to development within Hungerford Parish from Kennet Valley Water Resource Zone. Hungerford is an area of serious water stress. Thames Water have prepared a Water Resource Management Plan (WRMP)¹⁵ in order to set out how to meet water needs of population growth across their supply area. This plan compares the supply and demand forecasts to determine surpluses and deficits. The growth plans defined in the WRMP are broadly in line with the growth in the neighbourhood plan. The WRMP does not predict a supply-demand deficit however does propose actions over to improve resilience. The WRMP was subject to a HRA to specifically consider the potential to impact European sites. This HRA confirmed that no significant effects on any European sites would arise from its implementation. Since this finds that there are no significant effects on any European site with regards to water availability within all of West Berkshire, and the Hungerford Neighbourhood plan growth falls within the anticipated growth of the West Berkshire Local Plan, it can be concluded that the Hungerford Neighbourhood Plan will not cause an adverse effect on the integrity of River Lambourn SAC, Kennet & Lambourn Floodplains SAC or Kennet Valley Alderwoods SAC either alone or in-combination.

Water Quality

- 6.3 Guidance from West Berkshire Council indicates that nutrient neutrality must be considered for all nutrientaffected catchments. Within West Berkshire, these catchments are the River Lambourn catchment and the Test Valley catchment. The allocations made within the Hungerford Neighbourhood Plan do not fall within either of these catchments and are therefore not required to deliver nutrient neutrality, however they may still pose a threat to Kennet and Lambourn Floodplains SAC via impacts on water quality.
- 6.4 Any new residential or employment development in Hungerford Parish as a result of the Neighbourhood Plan has potential to result in increased levels of nutrients entering the Kennet catchment zone. While the level of development in the NP is small (87 net new dwellings), this could operate 'in combination' with other existing and future development. The planned growth within Hungerford Parish falls within the growth outlined in the current West Bedfordshire Local Plan. A water cycle study was conducted in respects to the West Bedfordshire Local Plan. This analysis concluded that the expected growth in output of the Hungerford Waste Water Treatment Works, would not lead to a degradation of over 10% with respect to nutrients, nor would it lead to the degradation in quality of the river with respect to the Water Framework Directive.
- 6.5 The impact of surface run-off has also been considered. The allocations are located over 4km form Kennet Valley Alderwoods SAC and over 7km from River Lambourn SAC. The development allocated within policy HUNG13 is located approximately 200m north of a portion of Kennet & Lambourn Floodplain SAC. Due to the distances involved, surface run-off will not impact the integrity of River Lambourn SAC or Kennet Alderwoods SAC. The impact of surface run-off on Kennet & Lambourn floodplain is mitigated by Policy HUNG10 within the neighbourhood plan, which specifies that development must minimise surface run-off via the implementation of sustainable drainage systems.
- 6.6 It can be concluded that the Hungerford Neighbourhood Plan will not cause an adverse effect on the integrity of River Lambourn SAC, Kennet & Lambourn Floodplains SAC or Kennet Valley Alderwoods SAC either alone or in-combination.

¹⁵ Thames Water, Water Resources Management Plan 2019 <u>https://www.thameswater.co.uk/about-us/regulation/water-resources#current</u>

7. Conclusion

- 7.1 The Hungerford Neighbourhood Plan has a total of 13 policies. Of these policies 2 had the potential to cause a likely significant effect and were discussed with regards to their impacts upon European sites. These sites were;
 - HUNG12: Land at Smitham Bridge Road
 - HUNG13: Land North of Cottrell Close
- 7.2 The test of likely significant effects focused on the above policies with regards to the vulnerabilities of the European sites. The impact pathways relating to the European site's vulnerabilities are listed below:
 - Water Quantity, Level and Flow
 - Water quality
- 7.3 The policies were found to have a potential likely significant effect upon the European sites with regards to Water Quantity Level and Flow and Water Quality
- 7.4 The overarching Local Plan, West Berkshire Local Plan, was subject to an HRA which concluded that there would be No Significant Effects from the development it outlined, given the Water Resource Management Plans that have been prepared by Thames Water. The allocations within the Hungerford Neighbourhood plan are within the quanta provided for by the West Berkshire Local plan and therefore in combination impacts from this development can be excluded.
- 7.5 The possibility for these developments to impact the European sites via increased surface run-off was considered. However, given that these site allocations are located over 1km away from the SACs in question, and that Policy HUNG10 requires that development minimises surface run off utilising Sustainable drainage systems it was concluded that these developments will not have any negative impacts with regards to surface water run-off.
- 7.6 Therefore, it can be concluded that the Hungerford Neighbourhood Plan will not provide any negative impacts on European site, either alone or in combination with other plans and projects.

Appendix A Policy Screening Tables

Table 2. Policy And Allocations Screening Table for the South Kesteven Local Plan

Policy Name	Policy Description	Screening Outcome
HUNG1: Housing Mix	This policy sets a need for developments of 5 or more dwellings to provide a mix of dwelling sizes. In developments of 5 or more dwellings, 2 bedroom houses must provide a mix of dwelling types suitable for first-time buyers and older residents.	No likely significant effects. This policy is a development management policy. It sets out criteria for developments of over 5 dwellings to provide a mix of housing sizes. There are no linking impact pathways and this policy can be screened out.
HUNG2: Design and Character	 This policy requires development to have high quality design and layout, respecting the local character. The policy states that the following should be considered as part of design proposals: Integrating into the existing setting including pedestrian and cycling access; A range of density and housing types; Building heights should reflect the prevailing height, providing diverse frontage, scale and form; Suitable provision of parking. 	No likely significant effects. This policy is a development management policy. It sets out a requirement for high quality design and layout as well as factors to be considered in design. There are no linking impact pathways and this policy can be screened out.
HUNG3: Gateways into and out of Hungerford Town	Policy requires development along gateways into Hungerford town should create a transition from rural to urban. Development proposals should not feel overly dense and should provide suitable natural boundary treatments to mitigate the impact of development and retain the open feel, including lining gateway routes with trees. The gateways into Hungerford town are on the following approaches: Bath Road, Eddington Hill, Charnham Street, B4192 (towards Chilton Foliat), North Standen Road, Park Street, Salisbury Road, Priory Road, Kennet and Avon Canal	No likely significant effects. This policy is a development management policy. It seeks to ensure that development at the gateways into and out of Hungerford create a good transition. It does not set any allocations for development. There are no linking impact pathways and this policy can be screened out.
HUNG4: Retrofitting Historic Buildings for Energy Efficiency	This policy encourages the retrofitting of energy efficiency measures in historic buildings provided this is done in a manner which safeguards the historic characteristics of these heritage assets. Measures reducing heat loss can include the secondary, double or triple glazing of windows, even on listed buildings and in conservation areas. These should use timber frames with alternative materials only permitted if they do not impact the significance of the building or area. Solar panels are encouraged in the Conservation Area if they do not compromise the visual integrity and are designed and coloured to integrate with existing architecture.	No likely significant effects. This policy seeks to encourage the the retrofitting of historic buildings to increase energy efficiency. It does not set any allocations for development. There are no linking impact pathways and this policy can be screened out.
HUNG5: Retaining and enhancing the vitality and viability of Hungerford Town centre	This policy supports proposals which protect, enhance and promote diverse town centre uses. This policy states that the shopping frontages should be primarily for retail and food and drink uses. The use of premises for temporary uses will be supported provided they do not negatively impact neighbouring uses. If the use requires large amounts of vehicle parking, sufficient parking arrangements must be presented. This policy supports proposals that improve the quality and accessibility of the public realm.	No likely significant effects. This policy supports development that is beneficial to Hungerford town centre. It does not set any allocations for development. There are no linking impact pathways and this policy can be screened out.
HUNG6: Key walk/cycle routes	This policy supports proposals that would improve cycling and walking routes including, the provision of cycle and pedestrian routes. Proposals should ensure safe pedestrian routes connecting to Key Walk and Cycle Routes. Proposals should protect the safety and accessibility of Key Walk/Cycle Routes. Development proposals should mitigate the impact of additional traffic movements on pedestrian and cycle access. This policy supports	No likely significant effects. This policy supports development that helps to support Key walking and cycling routes. It does not set any allocations for development. There are no linking impact pathways and this policy can be screened out.

Policy Name	Policy Description	Screening Outcome	
	development near Hungerford Town Centre Commercial Area that reduces car dependency.		
HUNG7: Play and Youth Facilities	This policy supports the provision and maintenance of play and youth facilities.	No likely significant effects. This policy supports play and youth facilities. It does not set any allocations for development. There are no linking impact pathways and this policy can be screened out.	
HUNG8: Local Green Spaces	 This policy designates the following local green spaces: Atherton Crescent green space The canal wharf Land adjacent to Smitham Bridge play area Lancaster Park green spaces Proposals to develop these Green Spaces are not supported unless it clearly is required to support or enhance the Local Green Space. 	No likely significant effects. This policy prevents the development of Local Green Spaces where this does not support or enhance its function. There are no linking impact pathways and this policy can be screened out.	
HUNG9: Wellbeing and Safety Through Design	This policy states that development should maximise the wellbeing of its users, taking all opportunities to create high quality environments through landscaping and layout of green spaces. If Sustainable Drainage Systems (SuDS) are required, they should be multi-functional and create the opportunity to be enjoyed by users. Where possible SuDS should be designed for use as public open space. This policy encourages developments to have green spaces supporting habitats for wildlife and food growing. Development should minimise the opportunities for crime to occur.	No likely significant effects. This policy encourages developments to be designed in order to support the wellbeing of users. It does not make any allocations for development. There are no linking impact pathways and this policy can be screened out.	
HUNG10: Low energy and energy efficient design	 This policy states that new development must minimise carbon emissions by minimising the consumption of energy, water, minerals, materials, and other natural resources. All developments should incorporate measures to adapt to climate change including: Orientation to maximise natural heating and ventilation and reducing exposure; maximising resistance and resilience materials Use of trees and other planting Minimising surface water runoff through a suitable SuDS-based drainage system 	No likely significant effects. This policy encourages developments to be designed in order to support the wellbeing of users. It does not make any allocations for development. There are no linking impact pathways and this policy can be screened out.	
HUNG11: Wildlife- friendly Development	This policy states that development should protect existing habitats and species. Developments that must deliver measurable biodiversity net gain (a minimum of 10%) that propose the removal or reduction of existing habitats should deliver biodiversity net gain on site. Design features that encourage wildlife and biodiversity will be supported. Development proposals should retain trees, shrubs and hedgerows of value on-site and conserve and enhance connectivity. New planting should consist of native species of trees, shrubs and grasses and allow use as stepping stones for wildlife. This planting should have an ongoing programme of maintenance.	No likely significant effects. This policy encourages developments to protect habitats and species. It does not make any allocations for development. There are no linking impact pathways and this policy can be screened out.	
HUNG12: Land at Smitham Bridge Road	 This policy allocates approximately 2.78 hectares of land for the provision of at least 44 dwellings. This development must: provide a mix of dwelling sizes and affordable housing. Have design that reflects the local character. Upgrade the existing Public Right of Way. Provide appropriate vehicle access from North Standen Road. Provide a footway connection for existing footways 	Potential likely significant effects. This policy details an allocation of 2.78ha for the provision of housing. This allocation falls within some of the Zones of Influence of the European sites, and therefore there could be linking impact pathways and likely significant effects.	

Policy Name	Policy Description		Screening Outcome	
	 Provide a construction traffic ma provide high quality public open Be located away from high risk f Provide SuDS Contribute to the Smitham Bridg Undertake ecological surveys ar mitigation for protected species. 	nagement plan space. looding areas. le Play Park. nd provide adequate	The effects of this policy will be discussed further within the body of the report.	
HUNG13: Land North of Cottrell Close	 This policy allocates approximately 1 hectare of land for the development of 12 dwellings. This development must: provide a mix of dwelling sizes and affordable housing. Have design that reflects the local character. Provide appropriate vehicle and pedestrian access from Cottrell Close. Provide a Construction Traffic Management Plan Provide a footway to the nearby cemetery and provide appropriate contributions to a footway Provide SuDS Protect the setting of the listed building and the Hungerford conservation area. Undertake ecological surveys and provide adequate mitigation for protected species. 		Potential likely significant effects. This policy details an allocation of 1ha for the provision of housing. This allocation falls within some of the Zones of Influence of the European sites, and therefore there could be linking impact pathways and likely significant effects. The effects of this policy will be discussed further within the body of the report.	
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