

Lambourn Neighbourhood Plan

HRA Appropriate Assessment

March 2025

Quality information

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1. Introduction

Background to the Project

- 1.1 AECOM was appointed by Locality to undertake the appropriate assessment component of a Habitats Regulations Assessment (HRA) for the Lambourn Neighbourhood Plan (NP). This is to inform the planning group and West Berkshire District Council of the potential effects of the NP development on European sites and how they are being or should be addressed in the draft NP. West Berkshire District Council will then be able to utilise this report to inform their formal Habitats Regulations Assessment decision making regarding the Neighbourhood Plan.

Legislative Framework

- 1.2 The UK left the EU on 31 January 2020 under the terms set out in the European Union (Withdrawal Agreement) Act 2020 (“the Withdrawal Act”). This established a transition period, which ended on 31 December 2020. The Withdrawal Act retains the body of existing EU-derived law within our domestic law. The most recent amendments to the Habitats Regulations – the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 – make it clear that the need for HRA has continued after the end of the Transition Period.
- 1.3 Under the Conservation of Habitats and Species Regulations 2017 (as amended) (the “Habitats Regulations”), an appropriate assessment is required, where a plan or project is likely to have a significant effect upon an international site, either individually or in combination with other projects.

The legislative basis for Appropriate Assessment

Conservation of Habitats and Species Regulations 2017 (as amended)

With specific reference to Neighbourhood Plans, Regulation 106(1) states that:

‘A qualifying body which submits a proposal for a neighbourhood development plan must provide such information as the competent authority [the Local Planning Authority] may reasonably require for the purposes of the assessment under regulation 105 [which sets out the formal process for determination of ‘likely significant effects’ and the ‘appropriate assessment’]...’.

- 1.4 It is therefore important to note that this report has two purposes:
 - a. To assist the Qualifying Body (Lambourn Parish Council) in preparing their plan by recommending (where necessary) any adjustments required to protect international sites, thus making it more likely their plan will be deemed compliant with the Conservation of Habitats and Species Regulations 2017 (as amended); and
 - b. On behalf of the Qualifying Body, to assist the Local Planning Authority (West Berkshire District Council) to discharge their duty under Regulation 105 (in their role as ‘plan-making authority’ within the meaning of that regulation) and Regulation 106 (in their role as ‘competent authority’).
- 1.5 As ‘competent authority’, the legal responsibility for ensuring that a decision of ‘likely significant effects’ is made, for ensuring an ‘appropriate assessment’ (where required) is undertaken, and for ensuring Natural England are consulted, falls on the local planning authority and the Neighbourhood Plan examiner. However, they are entitled to request from the Qualifying Body the necessary information on which to base their judgment and that is a key purpose of this report.
- 1.6 Over the years the phrase ‘Habitats Regulations Assessment’ has come into wide currency to describe the overall process set out in the Conservation of Habitats and Species Regulations from screening through to Imperative Reasons of Overriding Public Interest (IROPI). This has arisen in order to distinguish the process from the individual stage described in the law as an ‘Appropriate Assessment’. Throughout this report we use the term Habitats Regulations Assessment for the overall process.

- 1.7 Note that at the request of the group this assessment (specifically Appendix C) not only considers allocated sites but also some sites that were ultimately not allocated. These have been assessed in the event that allocations in the final plan change between the date of this analysis and the submission of the plan.

2. Methodology

Introduction

- 2.1 The HRA has been carried out with reference to the general EC guidance on HRA (European Commission, 2001), general guidance on HRA published by the UK government in 2021 (Department for Environment, Food & Rural Affairs, 2021)



Plate 1. Four Stage Approach to Habitats Regulations Assessment (Department for Environment, Food & Rural Affairs, 2021)

- 2.2 Plate 1 above outlines the stages of HRA according to current Department for Levelling Up, Housing & Communities guidance. The stages are essentially iterative, being revisited as necessary in response to more detailed information, recommendations, and any relevant changes to the Plan until no significant adverse effects remain.

HRA Task 1 – Likely Significant Effects (LSE)

- 2.3 Following evidence gathering, the first stage of any Habitats Regulations Assessment is a Likely Significant Effect (LSE) test - essentially a risk 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 ‘screen out’ those plans and projects that can, without any detailed appraisal, be said to be unlikely to result in significant adverse effects upon European sites, usually because there is no mechanism for an adverse interaction with European sites. This stage is undertaken in Chapter 4 of this report.

HRA Task 2 - Appropriate Assessment (AA)

- 2.5 Where it is determined that a conclusion of ‘no likely significant effect’ cannot be drawn, the analysis has proceeded 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 rather than determination of likely significant effects. It literally means *‘whatever level of further assessment is appropriate to form a conclusion regarding effects on the integrity of relevant European sites’*.
- 2.6 During July 2019 the Department for Levelling Up, Housing and Communities (DLHC) published guidance for Appropriate Assessment (Department for Levelling Up, Housing and Communities, 2019). Paragraph: 001 Reference ID: 65-001-20190722 explains: *‘Where the potential for likely significant effects cannot be excluded, a competent authority must make an appropriate assessment of the implications of the plan or project for that site, in view of the site’s conservation objectives. The competent authority may agree to the plan or project only after having ruled out adverse effects on the integrity of the habitats site. Where an adverse effect on the site’s integrity cannot be ruled out, and where there are no alternative solutions, the plan or project can only proceed if there are imperative reasons of over-riding public interest and if the necessary compensatory measures can be secured’*.
- 2.7 One of the key considerations during Appropriate Assessment is whether there is available mitigation that would address the potential effect.

HRA Task 3 – Avoidance and Mitigation

- 2.8 Where necessary, measures are recommended for incorporation into the Plan in order to avoid or mitigate 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 recreational impacts on European sites. The implication of this precedent is that it is not necessary for all measures that will be deployed 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 In evaluating significance, AECOM has relied on professional judgement and the LP HRA regarding development impacts on the European sites considered within this assessment.
- 2.10 When discussing ‘mitigation’ for a Neighbourhood Plan document, 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 the Local Development Plan document is a high-level policy document. A Neighbourhood Plan is a lower-level constituent of a Local Development Plan.

3. Summary of Scoping Report

Introduction

- 3.1 There is no guidance that dictates the general physical scope of an HRA of a 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).
- 3.2 Briefly defined, impact pathways are routes by which the implementation of a project can lead to an effect upon a European designated site. An example of this would be visual and noise disturbance arising from the construction/decommissioning work or operational phase associated with a project. If there are sensitive

ecological receptors within a nearby European site (e.g. non-breeding overwintering birds), this could alter their foraging and roosting behaviour and potentially affect the site's integrity. For some impact pathways (notably air pollution) there is guidance that sets out distance-based zones required for assessment. For others, a professional judgment must be made based on the best available evidence.

European Sites Relevant to the Neighbourhood Plan

3.3 In the case of the Lambourn NP, the scoping report determined that the only European site requiring consideration is the River Lambourn Special Area of Conservation (SAC), described in Table 1. The background of this European site is discussed in **Appendix A**. This site lies partially within the neighbourhood plan area.

Table 1: European site description and distance from Lambourn NP area

Site Name/Designation	Site Description	Distance from Lambourn NP area
River Lambourn SAC / Site of Special Scientific Interest (SSSI)	The River Lambourn is a classic lowland chalk river, designated for Annex I habitats of water courses with the Ranunculion fluitantis vegetation and species including bullhead (<i>Cottus gobio</i>) and brook lamprey (<i>Lampetra planeri</i>).	Flows directly through the Lambourn NP area

Relevant Impact Pathways

3.4 The scoping report considered the impact of several different impact pathways. These include:

- Physical damage, fragmentation or loss of habitat
- Hydrological impacts
- Water quantity
- Water quality
- Non-physical disturbance: noise, vibration and light pollution
- Air pollution
- Recreation / Urban edge

3.5 It was concluded that the following impact pathways could not be screened out:

- Hydrological Impacts
- Water Quality

'In Combination' Scope

3.6 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 projects that may also be affecting the European site(s) in question.

3.7 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 plans (which in themselves may have minor impacts) are not simply dismissed on that basis but are evaluated for any cumulative contribution they may make to an overall significant effect. In practice, in-combination assessment is therefore of greatest relevance when the plan or policy would otherwise be screened out because its individual contribution is inconsequential.

3.8 It is a requirement of the Regulations that the impacts and effects of any land use plan being assessed are not considered in isolation but in combination with other plans and projects that may also be affecting the internationally designated site(s) in question.

- 3.9 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 plans which in themselves have minor impacts are not simply dismissed on that basis but are evaluated for any cumulative contribution they may make to an overall significant effect. In practice, in combination assessment is therefore of greatest relevance when the plan would otherwise be screened out because its individual contribution is inconsequential. The overall approach is to exclude the risk of there being unassessed likely significant effects in accordance with the precautionary principle. This was first established in the seminal Waddenzee (CJEU, 2004) case.
- 3.10 The local authority areas of Wiltshire and the Vale of White Horse are adjacent to the plan area, with Swindon also in close proximity. The HRAs for these local authorities' plans found no adverse effects on the integrity of Habitats Sites, either alone or in combination with other adopted plans or projects. Wiltshire and Swindon are reviewing their Local Plans and are in the process of re-assessing their HRAs.
- 3.11 In respect of NPs being prepared in areas adjacent to Lambourn, a Neighbourhood Plan is being prepared for Hungerford Parish. Within Wiltshire there are no NPs being prepared in Parishes that adjoin Lambourn. In the Vale of White Horse, the Asbury NP and the Uffington and Baulking NP have been made. These plans were not found to have significant effects, either alone or in combination with other adopted plans or projects.
- 3.12 The following adopted plans found no significant effects on the integrity of Habitats Sites, either alone or in combination with other adopted plans or projects:
- Draft Local Transport Plan for West Berkshire 2011-2026 (West Berkshire District Council, 2010);
 - West Berkshire Minerals and Waste Plan (adopted December 2022) (West Berkshire District Council, 2022);
 - Stratfield Mortimer NP (adopted June 2017) (Stratfield Mortimer Parish Council, 2017); and
 - Compton NP (adopted February 2022) (Compton Parish Council, 2022).

Summary of Policy Screening

- 3.13 The screening report found that the majority of policies had no likely significant effect on the European sites. The only policy that was found to have likely significant effects was Policy L16: Housing Need and Housing Allocations. This policy will be assessed in the Appropriate Assessment.

4. Appropriate Assessment In-combination

Water Resources and Water Quality

- 4.1 The River Lambourn SAC is vulnerable to hydrological changes due to water abstraction. However, the quantum of development to be provided by the LNP is in conformity with the overarching Local Plan (West Berkshire District Council, 2012), which has already undergone a Habitats Regulations Assessment (HRA) and concluded that there would be no adverse effects on the integrity of European sites. Impact pathways related to increased water demand and additional water treatment that could lead to increases in water abstraction and effluent have been assessed at the higher-tier Local Plan level. Therefore, these issues have already been addressed within the West Berkshire Local Plan.
- 4.2 Thames Water (Thames Water, 2024) is actively improving the sewer network in the Lambourn Valley area, which includes the villages of Lambourn, East Garston, Eastbury, and Great Shefford. Due to the area's vulnerability to flooding, particularly during periods of high groundwater levels, Thames Water has implemented several measures to manage excess flows and minimise the impact on the River Lambourn SAC. These efforts include continuous monitoring of the river, regular water quality testing, and using tankers at the Upper Lambourn sewage pumping station to manage the flows.
- 4.3 Although flooding has resulted in diluted discharges into the river, Thames Water's tests have shown minimal environmental impact due to the high level of dilution from groundwater and surface water runoff.

Thames Water remains in communication with the Environment Agency regarding the water quality and is investing in sealing and relining sewers, with 8.5 km of sewer lining and 83 manholes sealed to date. Additional funding has been secured for further improvements across the Lambourn Valley. This ongoing work will help to reduce floodwater infiltration into the sewer system, ensuring that water quality objectives are maintained in the Lambourn Valley, in line with HRA requirements.

- 4.4 In addition to improving the sewer infrastructure, Thames Water continues to collaborate with local authorities and the Environment Agency to manage the challenges posed by groundwater, surface water, and floodwater infiltration into the sewer network. The groundwater often rises long after rainfall has stopped, which can overwhelm the sewer system and lead to diluted untreated sewage being discharged into properties and streets. Thames Water's measures include filtering excess flows before discharge to the River Lambourn using ATAC units, which helps reduce the impact on the river's health. This approach, coupled with continuous investments in infrastructure improvements, ensures that any new developments proposed within the LNP will be accommodated without causing adverse effects on the integrity of the River Lambourn SAC. Thames Water's long-term plan to reduce storm overflow usage will further support river health and contribute to the overarching objectives of the West Berkshire Local Plan,.
- 4.5 However, since the West Berkshire Local Plan HRA was produced Natural England have identified (in March 2022) that the River Lambourn SAC is suffering from excessive levels of phosphorus from agriculture and (particularly) treated wastewater from residential development. As such, before any net new residential development in the catchment of the River Lambourn SAC can be permitted it must be nutrient neutral.

Nutrient Neutrality

- 4.6 The elevated levels of phosphorus input to the water environment in the River Lambourn catchment are generally caused by agricultural runoff and wastewater discharges from existing housing. Various mechanisms are already in place to reduce nutrient inputs into the river system. The River Lambourn, designated as a SSSI and SAC, has been the focus of significant restoration efforts.
- 4.7 Any new residential or employment development in Lambourn as a result of the Neighbourhood Plan has the potential to result in increased levels of nutrients entering the River Lambourn catchment. Although the scale of development in the Neighbourhood Plan is relatively small (approximately 45 net new dwellings), this could operate 'in combination' with other existing and future developments connected to the East Shefford wastewater treatment works (WwTW) and other surrounding infrastructure.
- 4.8 Natural England advises that a nutrient budget (TN) can be calculated for new developments and has provided a guidance document to enable this to be calculated (Natural England, 2022). Such a calculation has been undertaken for this NP and is included in Appendix C. This can be used to show that development either avoids harm to protected sites from water quality issues or will need to provide mitigation required to ensure that there is no adverse effect with respect to nutrients. It will then be for the applicant to ensure that such mitigation is identified before their planning application is submitted.
- 4.9 Currently, East Shefford WwTW operates under a phosphorus Environmental Permit of 1 mg TP/litre. Using this information, nutrient calculations for the allocation of 45 net new residential dwellings within the three proposed development sites indicate that the Total Phosphorus Budget for the proposed developments amounts to 5.47 kg TP/year when compared to the 'no change' in existing land use scenario and assuming the developments are delivered after 2030. Therefore, the three allocated sites will generate additional phosphorus, and appropriate mitigation will be required.

Table 2. Proposed Development Sites Nutrient Calculation Further Information

Proposed Development Reference and Name	Number of New Dwellings	Further Information
Land on the Wantage Road	25	Calculations indicate that the development of the site will, without mitigation, lead to a Total Phosphorus Budget for the proposed development of 5.47 kg/yr when compared to the 'no change' in existing land use scenario and assuming the developments are delivered after 2030. Therefore, the development will generate additional nitrogen and mitigation is required.
Former Royal British Legion	10	
Land at Collingridge Farm	10	

- 4.10 The results of the above site nutrient calculations show that the allocated sites at Wantage Road, Former Royal British Legion and Collingridge Farm will result in an increase in phosphorus levels with the current development plans. This suggests that the development will require appropriate mitigation to achieve nutrient neutrality.
- 4.11 Note that the calculations make a series of broad assumptions about a) the existing habitats on site (and thus the amount of phosphorus they currently release into the catchment) and b) how each site is to be developed (the areas to be altered) and thus the future balance between areas of housing and areas of retained greenspace. Therefore, the calculations undertaken for this report would need to be re-run by the applicants for each housing scheme and planning application as each scheme is developed and a detailed masterplan becomes available.

5. Conclusion

5.1 The Lambourn Neighbourhood Development Plan (LNP) includes a total of 19 policies. Of these policies, 3 under L14 (A, B, and C) had the potential to cause a likely significant effect and were discussed in relation to their impacts on European sites, specifically the River Lambourn SAC. These policies are:

- Policy L14 A - Land on Wantage Road: This policy allocates approximately 25 dwellings, and the potential impact is linked to increased treated wastewater discharge, which could affect nutrient levels in the River Lambourn and subsequently its designated conservation status.
- Policy L14 B - Former Royal British Legion Site: Allocates approximately 10 dwellings. This site may impact the nutrient levels in the River Lambourn through treated wastewater discharge or surface runoff.
- Policy L14 C - Land at Collingridge Farm: This policy allocates approximately 10 dwellings, and similarly, it could affect the River Lambourn SAC through nutrient loading from wastewater discharge and agricultural runoff.

5.2 The test of likely significant effects focused on the above policies with regards to the vulnerabilities of the European sites within Table 1. The impact pathways relating to the European site's vulnerabilities are listed below:

- Public access and recreational pressure
- Water quality and hydrological changes (including nutrient neutrality)
- Air quality impacts of atmospheric nitrogen deposition
- Loss of functionally linked habitats

5.3 The policies were found to have a potential likely significant effect upon the European sites within Table 1 with regards to the following impact pathways, air quality impacts of atmospheric nitrogen deposition and water quality and hydrological changes (including nutrient neutrality) in-combination with other plans and project. These pathways and the policies were discussed within the Appropriate Assessment.

5.4 The overarching Local Plan – West Berkshire Local Plan (2006-2026) (West Berkshire District Council, 2012), adopted by West Berkshire Council in 2017, provides protective policies for European sites within Policy CS17: Biodiversity and Geodiversity and Policy CS16: Flooding and Water Management. The HRA of this Plan concluded that it would not cause likely significant effects on any European site, either alone or in combination with other plans and projects. As the Lambourn Neighbourhood Plan (LNP) is not allocating net new dwellings above the level of the Adopted Local Plan and is required to comply with policies within the Local Plan, it can be concluded that the LNP would not adversely impact European sites, either alone or in combination with other plans and projects.

5.5 Policy L6 (River Lambourn) already includes nutrient neutrality as a development requirement:

5.6 Development proposals will only be supported if they can achieve nutrient neutrality regarding the River Lambourn.

Applications for development that will result in a net increase in nitrogen reaching the River Lambourn will be required to confirm the nitrogen budget and set out specific and appropriately located mitigation measures that will be implemented to ensure development is nutrient neutral from the start of its operational phase.

5.7 Therefore it is not considered necessary to make further amendments to the Neighbourhood Plan, **other than to recommend that the references to nitrogen above are amended to phosphorus.**

5.8 With these changes made it is considered that the Neighbourhood Plan will contain a sufficient policy framework to ensure no adverse effect on integrity of European sites arises from the allocations in the plan. Note that this suggested wording change would be subject to Examination and amendment along with all other elements of the plan.

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Appendix A European Sites Background

River Lambourn

Conservation Objectives

With regard to the SAC and the individual species and/or assemblage of species for which the site has been classified (the 'Qualifying Features' listed below), and subject to natural change.

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.

Qualifying Features

The following features are reasons for designation as an SAC:

- Annex I habitat: Water courses of plain to montane levels with *Ranunculus fluitantis* vegetation.
- Annex II species: Bullhead (*Cottus gobio*) and Brook lamprey (*Lampetra planeri*).

Environmental Vulnerabilities

The threats and pressures likely to affect the SAC are listed below:

- Nutrient enrichment, particularly from phosphorus (leading to eutrophication)
- Water pollution
- Physical modification of the river and hydrological changes
- Siltation
- Water abstraction and inappropriate water levels
- Invasive species
- Land management changes, including overgrazing or undergrazing
- Inappropriate weed control or cutting/mowing practices
- Forestry and woodland management
- Inappropriate ditch or scrub control management

Appendix B Policy Screening

Table 3: Lambourn Neighbourhood Plan Policy Screening

Policy Name	Brief Policy Description	Potential Likely Significant Effect?
L1 - Landscape Character	Protects and enhances the landscape character within the parish, especially in the North Wessex Downs AONB.	No likely significant effects. Focused on landscape protection, without direct impact pathways to European sites.
L2 - Development within the North Wessex Downs	Ensures development in the AONB is sensitive to its special qualities.	No likely significant effects. Conservation-focused policy with no adverse impacts on European sites.
L3 - Green and Blue Infrastructure, Landscaping and Planting	Promotes green infrastructure and landscaping to enhance ecological networks.	No likely significant effects. Encourages environmental improvements, without direct harmful impacts.
L4 - Local Green Spaces	Designates Local Green Spaces to protect them from development.	No likely significant effects. Policy aims to protect green spaces, with no adverse effects on European sites.
L5 - Important Views	Protects key views and vistas within the parish.	No likely significant effects. This policy relates to visual amenities and has no direct environmental impacts.
L6 - River Lambourn	Protects and enhances the River Lambourn, a SAC and SSSI.	No likely significant effects. Focused on conservation of the River Lambourn, without causing adverse environmental impacts.
L7 - Biodiversity	Promotes biodiversity conservation and encourages habitat creation in developments.	No likely significant effects. This policy supports biodiversity, with no negative impact pathways.
L8 - Dark Night Skies	Protects dark skies in the parish by reducing light pollution from developments.	No likely significant effects. No significant pathways to impact European sites.
L9 - Flooding and Drainage	Ensures developments address flood risks and maintain sustainable drainage.	No likely significant effects. The policy is a development management policy and does not have any linking impact pathways.
L10 - Non-Designated Heritage Assets	Seeks to protect non-designated heritage assets from inappropriate development.	No likely significant effects. Heritage-focused policy, with no direct environmental impact pathways.
L11 - Character and Design	Promotes high-quality design that reflects the character of the parish.	No likely significant effects. Design-based policy with no direct impacts on European sites.
L12 - Sustainable Construction, Resources and Climate Change	Encourages sustainable building practices and the use of renewable energy.	No likely significant effects. Supports sustainability, with no adverse impact pathways.
L13 - Housing Development	General policy managing new housing development, focusing on sustainability and local needs.	No likely significant effects.

Policy Name	Brief Policy Description	Potential Likely Significant Effect?
		The policy is a development management policy and does not have any linking impact pathways.
L14 A - Land on Wantage Road	Allocates approximately 25 dwellings for development.	Potential likely significant effects. Increased wastewater discharge could affect the River Lambourn SAC.
L14 B - Former Royal British Legion Site	Allocates approximately 10 dwellings, focused on affordable housing or housing for the racehorse industry.	Potential likely significant effects. Increased nutrient runoff and wastewater discharge could impact the River Lambourn SAC.
L14 C - Land at Collingridge Farm	Allocates approximately 10 dwellings, with a potential for building conversions.	Potential likely significant effects. Nutrient runoff and wastewater discharge may affect the River Lambourn SAC.
L15 - Community Facilities	Protects and encourages improvements to community facilities in the parish.	No likely significant effects. Focuses on community infrastructure, without significant environmental impacts.
L16 - Economy	Supports the local economy, with a focus on racehorse training and small businesses.	No likely significant effects. This policy supports economic development without pathways to affect European sites.
L17 - Racehorse Training Industry	Encourages the protection and development of the racehorse training industry in Lambourn.	No likely significant effects. Focused on economic support for the racehorse industry, without direct impacts on European sites.
L18 - Accessibility, Road Safety, and Sustainable Transport	Promotes sustainable transport options and improved road safety in the parish.	No likely significant effects. Supports sustainable transport initiatives, without significant environmental impacts.
L19 - Community Infrastructure	Seeks improvements to community infrastructure to support development.	No likely significant effects. Focuses on infrastructure development with no direct adverse impacts on European sites.

Appendix C Neutrality Calculations

Approved Sites

Policy L14

Stage 1 – Water Infrastructure Information

Water infrastructure information	
Description of required information	Data entry column - user inputs required
Date of first occupancy (dd/mm/yyyy):	
Average occupancy rate (people/dwelling or people/unit):	2.40
Water usage (litres/person/day):	120
Development proposal (dwellings/units):	45
Wastewater treatment works:	East Shefford WwTW
Current wastewater treatment works P permit (mg TP/litre):	1.00
Not applicable	Not applicable
Post 2030 WwTW P permit (mg TP/litre):	0.25
Final calculation of nutrient load from wastewater	
Description of values generated	Values generated
Post-2030 wastewater nutrient loading	
Additional population (people):	108.00
Wastewater by development (litres/day):	12960.00
Annual wastewater TP load (kg TP/yr):	1.07
Pre-2030 wastewater nutrient loading	
Annual wastewater TP load (kg TP/yr)	4.26
Not applicable	
Not applicable	Not applicable

Stage 2 – Current Land-use

Current land use information		
Description of required information	Data entry column - user inputs required	
Operational catchment:	Kennet	
Soil drainage type:	Freely draining	
Annual average rainfall (mm):	700.1 - 750	
Within nitrate vulnerable zone (NVZ):	Yes	
Current land uses		
Existing land use type(s) - user inputs required	Area (ha) - user inputs required	Annual phosphorus export (kg TP/yr)
Mixed	3.83	0.42

Stage 3 – Future Land-use

Future land uses		
New land use type(s) - user inputs required	Area (ha) - user inputs required	Annual phosphorus export (kg TP/yr)
Residential urban land	2.68	3.89
Greenspace	1.15	0.02
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
Totals:	3.83	3.91

Stage 4 – Final Nutrient Budgets

Total nutrient budget calculations	
Description of values generated	Values generated
Wastewater TP load (kg TP/year):	1.07
Net land use TP change (kg TP/year):	3.49
TP budget:	4.56
TP budget + 20% buffer:	5.47
Post-2030 annual nutrient budget	
The total annual phosphorus load to mitigate is (kg TP/yr):	5.47
Pre-2030 nutrient budget	
The total annual phosphorus load to mitigate is (kg TP/yr):	9.30
Not applicable	
Not applicable	Not applicable

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