Swindon Borough Council Swindon Borough Local Plan 2023-43

Regulation 18
Habitats Regulations Assessment

June 2025







Swindon Borough Council Swindon Borough Local Plan 2023-43 (Regulation 18)

Habitats Regulations Assessment

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Acronyms & Abbreviations

AA Appropriate Assessment

AADT Annual Average Daily Traffic
ALS Abstraction License Strategy

APIS Air Pollution Information System

CJEU Court of Justice of the European Union

Department for Transport

DMRB Design Manual for Roads and Bridges

DTA David Tyldesley and Associates

FLL Functionally Linked Land

HDV Heavy Duty Vehicle

HRA Habitats Regulations Assessment

IRZ Impact Risk Zone

IUCN International Union for the Conservation of Nature

JNCC Joint Nature Conservation Committee

LPA Local Planning Authority

LSE Likely Significant Effect

NPPF National Planning Policy Framework

NOx Nitrogen Oxides

NNR National Nature Reserve

PRoW Public Right of Way

RBMP River Basin Management Plan
SAC Special Area of Conservation
STW Sewage Treatment Works

SIP Site Improvement Plan
SPA Special Protection Area

SSSI Site of Special Scientific Interest

WCS Water Cycle Study

WFD Water Framework Directive

WRMP Water Resource Management Plan

WRZ Water Resource Zone

Executive Summary

- E1. Lepus Consulting has been appointed, on behalf Swindon Borough Council to undertake a Habitats Regulations Assessment (HRA) in compliance with the Habitats Regulations 2017 (as amended)¹ of the Swindon Borough Local Plan 2023-43 at Regulation 18.
- E2. HRA is undertaken in a number of stages. The first stage of the process is the screening stage (Stage 1) which aims to identify whether there are any aspects of a plan which may lead to a Likely Significant Effect (LSE) at a European site, either alone or in-combination with other plans or projects. Stage 2 of the process, known as the Appropriate Assessment, is undertaken where screening concludes LSEs. Where an Appropriate Assessment concludes adverse impacts on site integrity cannot be mitigated, the next stage in the process is the consideration of alternative solutions (Stage 3). Where no alternative solutions are available it is next necessary to proceed to Stage 4 of the process where consideration is given to imperative reasons of overriding public interest and securing compensatory measures. This report provides the outputs of the HRA screening process (Stage 1) which has been undertaken alongside preparation of the Local Plan at Regulation 18.
- E3. The Local Plan is not directly connected with or necessary to the management of any European site. Consideration was therefore given to potential links or causal connections between the effects of the Local Plan and European sites to identify LSEs. This exercise was undertaken through the collation of information for each European site and application of a 'source-pathway-receptor' model.
- E4. Each component of the Local Plan, including policies and site allocations, was screened for LSEs. Taking no account of mitigation measures, the screening stage concluded that the Local Plan has the potential to generate LSEs at the following European sites:
 - Air quality: in-combination at North Meadow and Clattinger Farm SAC;
 - Water quality and quantity: in-combination at Cothill Fen SAC, Kennet and Lambourn Floodplain SAC, North Meadow and Clattinger Farm SAC, Oxford Meadows SAC and the River Lambourn SAC; and
 - Recreation: alone and in-combination at North Meadow and Clattinger Farm SAC.
- E5. It is therefore concluded that the Local Plan will be screened into the HRA process. The next stage of the HRA process will be Stage 2, Appropriate Assessment.
- E6. It is too early at this stage of the plan making process to undertake a full Appropriate Assessment as key pieces of evidence are in preparation, and these will inform the details within the Local Plan.
- E7. The following information will be collated as the Local Plan progresses, to inform an Appropriate Assessment at Regulation 19:

¹ The Conservation of Habitats and Species Regulations 2017 SI No. 2017/1012, TSO (The Stationery Office), London. Available at: https://www.legislation.gov.uk/uksi/2017/1012/contents [Accessed: 14/12/22] as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. Available at: https://www.legislation.gov.uk/ukdsi/2019/9780111176573 [Date Accessed: 05/06/25].

- Air quality: The Regulation 19 version of the Local Plan will include an assessment
 of traffic modelling which is being undertaken to support the plan making process.
 This will allow a screening of likely significant air quality effects against Natural
 England's screening thresholds for North Meadow and Clattinger Farm SAC and
 inform any further work required to allow an Appropriate Assessment of this impact
 pathway.
- Water quality: The Regulation 19 HRA will be informed by ongoing dialogue with Thames Water in terms of sewerage treatment works capacity and water resources.
 The Regulation 19 HRA will also draw on outputs from the updated Water Cycle Study and take into consideration the high-level protective water framework and Local Plan policy wording.
- Recreation: The Regulation 19 HRA will take into consideration the interim
 recreational mitigation strategy for North Meadow and Clattinger Farm SAC and set
 out details regarding recreational mitigation where required. It will also take into
 consideration policies which aim to provide sufficient levels of recreational space to
 accommodate new growth in the Plan area.
- E8. The Regulation 19 Appropriate Assessment will support the Publication version of the Local Plan and will allow the Council, as the competent authority, to make the Integrity Test. The Council will take into consideration representations from Natural England under the provisions of the Habitats Regulations.

1 Introduction

1.1 Purpose of this report

- 1.1.1 Lepus Consulting has prepared this report to inform the Habitats Regulations Assessment (HRA) of the Draft Local Plan at Regulation 18 on behalf of Swindon Borough Council.
- 1.1.2 This HRA report has been prepared in accordance with the Conservation of Habitats and Species Regulations 2017 (as amended)² and has been informed by the following guidance:
 - Planning Practice Guidance: Appropriate Assessment³; and
 - The Habitat Regulations Assessment Handbook David Tyldesley and Associates (referred to hereafter as the DTA Handbook), 2013 (in particular Part F: 'Practical Guidance for the Assessment of Plans under the Regulations').

1.2 The Swindon Borough Local Plan

- 1.2.1 Swindon Borough Council (hereafter referred to as the Council) is preparing the Swindon Borough Local Plan 2023-43. The Local Plan will ensure strategic sustainability issues are effectively addressed, and a sufficient range of allocation sites are identified to meet growth needs with supporting evidence in place. Once adopted, the new Local Plan will replace the adopted Swindon Borough Local Plan 2026⁴.
- 1.2.2 The Council has been in the process of producing a Local Plan Review since 2015 and has undertaken multiple rounds of consultation⁵. The programme for the new Local Plan has since been amended in consideration of a move to a 'new plan' from the previous 'plan review' context. The new Local Plan will draw upon relevant feedback from the Local Plan Review and include an update to plan evidence, site information and other supporting documents. The new Local Plan (referred to hereafter as the 'Local Plan') is at Regulation 18 and comprises the spatial strategy and draft policies covering the period from 2023 to 2043. The area covered by the new Local Plan is illustrated in **Figure 1.1**.

² The Conservation of Habitats and Species Regulations 2017 SI No. 2017/1012, TSO (The Stationery Office), London. Available at: https://www.legislation.gov.uk/uksi/2017/1012/contents [Date Accessed: 23/05/25] as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. Available at: https://www.legislation.gov.uk/ukdsi/2019/9780111176573 [Date Accessed: 23/05/25].

³ Ministry of Housing, Communities and Local Government (July 2019) Planning Practice Guidance Note, Appropriate Assessment, Guidance on the use of Habitats Regulations Assessment.

⁴Swindon Borough Council (2023) Swindon Local Plan 2026 and New Local Plan. Adopted March 2015. Available at; https://www.swindon.gov.uk/info/20113/local plan and planning policy/635/swindon local plan [Date Accessed: 23/05/25].

⁵ For an overview of previous phases of consultation on the Local Plan Review please refer to Swindon Borough Council's website. Available at:

https://www.swindon.gov.uk/info/20113/local_plan_and_planning_policy/635/swindon_local_plan_2026_and_new_local_plan/2 #:~:text=Once%20adopted%2C%20the%20New%20Local,guide%20decisions%20on%20planning%20applications [Date Accessed: 23/05/25].

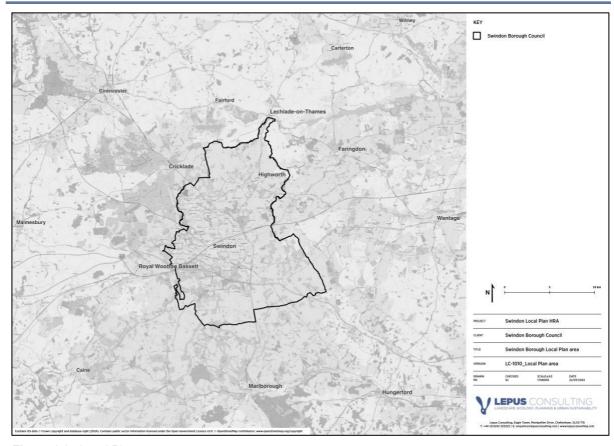


Figure 1.1: Local Plan area

1.3 Habitats Regulations Assessment

- 1.3.1 The application of HRA to land-use plans is a requirement of the Conservation of Habitats and Species Regulations 2017 (as amended)⁶. HRA applies to plans and projects, including all Local Development Documents in England and Wales.
- 1.3.2 Where a plan is likely to have a significant effect on a European site (either alone or incombination) and is not directly connected with or necessary to the management of the European site, Regulation 105 of the Habitats Regulations notes that the plan making authority for that plan must, before the plan is given effect, make an Appropriate Assessment (AA) of the implications for the site in view of that site's conservation objectives. These tests are referred to collectively as an HRA.
- 1.3.3 The most effective way to deliver the outputs of HRA is to ensure that it is incorporated into the plan-making process as early as possible. This allows for adverse impacts to be avoided in the first instance through the strategic planning of options or, where this is not possible, the effective mitigation. Mitigation measures can then be designed to avoid, cancel, or reduce significant effects following the mitigation hierarchy. Such measures may take the form of guiding principles and policy requirements, drawing on existing best practice. Should mitigation not be possible, there may be a need to consider alternatives which may require some more complex changes to a plan. The HRA process has therefore run alongside the plan making process.

⁶ The Conservation of Habitats and Species Regulations 2017 SI No. 2017/1012, TSO (The Stationery Office), London. Available at: https://www.legislation.gov.uk/uksi/2017/1012/contents [Date Accessed: 23/05/25] as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. Available at: https://www.legislation.gov.uk/ukdsi/2019/9780111176573 [Date Accessed: 23/05/25].

- 1.3.4 The Habitats Regulations provide a definition of a European site at Regulation 8. These sites include Special Areas of Conservation (SAC), Sites of Community Importance, Special Protection Areas (SPA) and sites proposed to the European Commission in accordance with Article 4(1) of the Habitats Directive. In addition, policy in England and Wales notes that the following sites should also be given the same level of protection as a European site⁷.
 - A potential SPA (pSPA);
 - A possible / proposed SAC (pSAC);
 - Listed and proposed Ramsar Sites (wetland of international importance); and
 - In England, sites identified or required as compensation measures for adverse effects on statutory European sites, pSPA, pSAC and listed or proposed Ramsar sites.

1.4 Previous HRA work

- 1.4.1 HRA work was undertaken to support the preparation of the adopted Local Plan. Likely significant effects were screened in at a number of European sites, including North Meadow and Clattinger Farm SAC, Kennet and Lambourn Floodplain SAC and the River Lambourn SAC as a result of urbanisation and recreational impacts, changes to water resources and water quality and air pollution^{8,9,10,11}. An AA was undertaken which could not rule out air quality or recreational impacts upon North Meadow and Clattinger Farm SAC due to a lack of traffic data and absence of a detailed recreational mitigation strategy. The outputs of consultation with Thames Water and a Water Cycle Study, alongside consideration of protective policy wording included in the Local Plan, allowed significant water quality and water quantity impacts to be ruled out at all European sites both alone and in-combination.
- 1.4.2 The Local Plan Review HRA Screening Assessment and Appropriate Assessment Report undertaken in 2019¹² identified three European sites within a 15km radius of the Plan area potential effects, as listed below.
 - North Meadow and Clattinger Farm SAC;
 - Kennet and Lambourn Floodplain SAC; and
 - River Lambourn SAC.

⁷ Ministry for Housing, Communities and Local Government (2025). National Planning Policy Framework. Para 187. Available at: https://www.gov.uk/government/publications/national-planning-policy-framework--2 [Date Accessed: 23/05/25].

⁸ Enfusion (2008) Habitats Regulations Assessment Screening Report - Core Strategy – Preferred Options (Incorporating Development Control Policies).

⁹ Enfusion (2009) Habitats Regulations Assessment Report - Core Strategy – Preferred Options (Incorporating Development Control Policies).

¹⁰ Swindon Borough Council (2012) Habitats Regulations Assessment Update Note Swindon Borough Local Plan 2026 Pre-Submission.

¹¹ Swindon Borough Council (2014) Swindon Borough Council Habitats Regulations Assessment Addendum Note Swindon Borough Local Plan 2026 Proposed Modifications.

¹² Land Use Consultants (2019) Swindon Borough Councils Local Plan Review 2036 Habitats Regulations Assessment – Screening Assessment and Appropriate Assessment Report.

2 Methodology

2.1 Overview

2.1.1 HRA is a rigorous precautionary process centred around the conservation objectives associated with the qualifying interests of any relevant European site. It is intended to ensure that European sites are protected from impacts that could adversely affect their integrity. A step-by-step guide to the methodology followed for the HRA, as outlined in the DTA Handbook, is illustrated in **Figure 2.1**. This HRA report provides output from Stage 1 and Stage 2 of the HRA process.

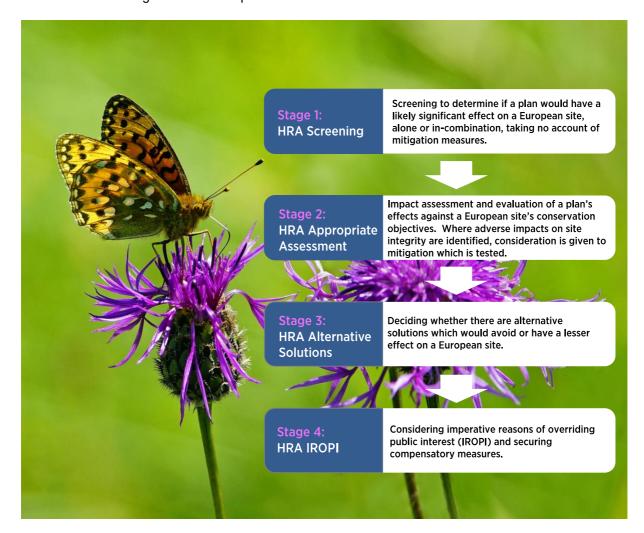


Figure 2.1: Stages in the Habitats Regulations Assessment process¹³

¹³ Tyldesley, D., and Chapman, C. (2013) The Habitats Regulations Assessment Handbook (October) (2018) edition UK: DTA Publications Limited. Available at: www.dtapublications.co.uk [Accessed: 23/05/25].

2.2 Stage 1: Screening for likely significant effects

- 2.2.1 The first stage in the HRA process comprises the screening stage. The purpose of the screening process is to firstly determine whether a plan is either (1) exempt (because it is directly connected with or necessary to the management of a European site), (2) whether it can be excluded (because it is not a plan), or (3) eliminated (because there would be no conceivable effects), from the HRA process. If none of these conditions apply, it is next necessary to identify whether there are any aspects of the plan which may lead to likely significant effects LSEs at a European site, either alone or in-combination with other plans or projects.
- 2.2.2 Where elements of the Local Plan will not result in an LSE on a European site (alone or in-combination) these are screened out and not considered in further detail in the process. Where LSEs are identified these elements of the Local Plan are screened in for further consideration in an AA. The pre-screening process uses a number of evaluation codes to summarise whether or not a plan component is likely to have LSEs alone or incombination. These codes set out in **Table 2.1** and are used to inform the formal screening decision (Column 2).
- 2.2.3 Pre-screening the components of a plan at an early stage of the plan-making process helps to minimise or avoid LSEs upon any European site and improve the plan.

Table 2.1: Screening evaluation and reasoning categories from Part F of the DTA Handbook

	ening Evaluation and Reasoning Categories From Chapter F of The Habitats ulations Assessment Handbook (DTA Publications, 2013)	Screen In / Screen Out
A.	General statements of policy / general aspirations.	Screen Out
B.	Policies listing general criteria for testing the acceptability / sustainability of proposals.	Screen Out
C.	Proposal referred to but not proposed by the Plan.	Screen Out
D.	General plan-wide environmental protection / designated site safeguarding / threshold policies.	Screen Out
E.	Policies or proposals that steer change in such a way as to protect European sites from adverse effects.	Screen Out
F.	Policies or proposals that cannot lead to development or other change.	Screen Out
G.	Policies or proposals that could not have any conceivable or adverse effect on a site.	Screen Out
H.	Policies or proposals the (actual or theoretical) effects of which cannot undermine the conservation objectives (either alone or in-combination with other aspects of this or other plans or projects).	Screen Out
I.	Policies or proposals with a Likely Significant Effect on a site alone.	Screen In
J.	Policies or proposals unlikely to have a significant effect alone.	Screen Out
K.	Policies or proposals unlikely to have a significant effect either alone or incombination.	Screen Out
L.	Policies or proposals which might be likely to have a significant effect incombination.	Screen In
M.	Bespoke area, site or case-specific policies or proposals intended to avoid or reduce harmful effects on a European site.	Screen In

- 2.2.4 The judgement by the European Court of Justice on the interpretation of the Habitats Directive in the case of People Over Wind and Sweetman vs Coillte Teoranta (Case C-323/17¹⁴) determined that mitigation measures are only permitted to be considered as part of the AA stage of the HRA process. The HRA screening process has therefore taken no account of incorporated mitigation or avoidance measures that are intended to avoid or reduce harmful effects on a European site when assessing the LSEs of the Local Plan on European sites. These are measures which, if removed (i.e. should they no longer be required for the benefit of a European site), would still allow the lawful and practical implementation of a plan.
- 2.2.5 Where screening concludes there are no LSEs from the Local Plan alone, it is next necessary to consider whether the effects of the policies in-combination with other plans and projects would combine to result in an LSE on any European site. It may be that the Local Plan alone will not have a significant effect but could have a residual effect that may contribute to in-combination effects on a European site.
- 2.2.6 Plans and projects which are considered to be of most relevance to the in-combination assessment of the Local Plan include those that have similar impact pathways (Appendix A). These include those plans and projects that have the potential to increase development in the HRA study area as listed below. In addition, other plans and projects with the potential to increase traffic across the study area which may act in-combination with the Local Plan, such as transport, waste and mineral plans and projects, will also be taken into consideration. Plans which allocate water resources or are likely to influence water quality in the study area will also be considered.
 - Cotswold District Council¹⁵
 - Vale of White Horse District Council 16
 - West Berkshire Council¹⁷
 - Wiltshire Council¹⁸
- 2.2.7 The approach taken to the consideration of in-combination effects will be compliant with the Wealden Judgement¹⁹ which requires an in-combination approach that considers the development of neighbouring and nearby authorities when assessing likely significant effects.

¹⁴ InfoCuria (2018) Case C-323/17. Available at: http://curia.europa.eu/juris/document/document.jsf?docid=200970&doclang=EN [Date Accessed: 23/05/25].

¹⁵ Cotswold District Council. Local Plan update and supporting information. Available at: https://www.cotswold.gov.uk/planning-and-building/planning-policy/local-plan-update-and-supporting-information/ [Date Accessed: 23/05/25].

¹⁶ Vale of White Horse District Council. Local Plan 2031. Available at: https://www.whitehorsedc.gov.uk/vale-of-white-horse-district-council/planning-and-development/local-plan-and-planning-policies/local-plan-2031/ [Accessed 22/07/24] and the South Oxfordshire and Vale of White Horse Joint Local Plan 2041. Available at: https://theconversation.southandvale.gov.uk/jlp/ [Date Accessed: 23/05/25].

¹⁷ West Berkshire Council. The Local Plan Review (LPR). Available at: https://www.westberks.gov.uk/article/40124/The-Local-Plan-Review-LPR [Date Accessed: 23/05/25].

¹⁸ Wiltshire Council. Local Plan. Available at: https://www.wiltshire.gov.uk/article/8029/Overview [Date Accessed: 23/05/25].

¹⁹ Wealden District Council & Lewes District Council before Mr Justice Jay. Available at: http://SLP.bailii.org/ew/cases/EWHC/Admin/2017/351.html [Date Accessed: 23/05/25].

2.3 Stage 2: Appropriate Assessment and Integrity Test

- 2.3.1 Stage 2 of the HRA process comprises the AA and Integrity Test. The purpose of the AA is to undertake an assessment of the implications of a plan for a European site in light of its conservation objectives²⁰.
- 2.3.2 As part of this process, plan makers should take account of the potential consequences of no action, the uncertainties inherent in scientific evaluation and they should consult interested parties on the possible ways of managing the risk, for instance, through the adoption of mitigation measures. Mitigation measures should aim to avoid, minimise or reduce significant effects on European sites. Mitigation measures may take the form of policies within the Local Plan, or mitigation proposed through other plans or regulatory mechanisms. All mitigation measures must be deliverable and able to mitigate adverse effects for which they are targeted.
- 2.3.3 The AA aims to present information in respect of all aspects of the Local Plan and ways in which it could, either alone or in-combination with other plans and projects, impact a European site. The Council (as the Competent Authority) must then ascertain, based on the findings of the AA, whether the Local Plan will adversely affect the integrity of a European site either alone or in-combination with other plans and projects. This is referred to as the Integrity Test.

2.4 Dealing with uncertainty

- 2.4.1 Uncertainty is an inherent characteristic of an HRA, and decisions can be made only on currently available and relevant information. This concept is reinforced in the 7th September 2004 'Waddenzee' ruling²¹:
- 2.4.2 'However, the necessary certainty cannot be construed as meaning absolute certainty since that is almost impossible to attain. Instead, it is clear from the second sentence of Article 6(3) of the Habitats Directive that the competent authorities must take a decision having assessed all the relevant information which is set out in particular in the Appropriate Assessment. The conclusion of this assessment is, of necessity, subjective in nature. Therefore, the competent authorities can, from their point of view, be certain that there will be no adverse effects even though, from an objective point of view, there is no absolute certainty.'

2.5 The Precautionary Principle

2.5.1 The HRA process is characterised by the Precautionary Principle. This is described by the European Commission: 'If a preliminary scientific evaluation shows that there are reasonable grounds for concern that a particular activity might lead to damaging effects on the environment, or on human, animal or plant health, which would be inconsistent with protection normally afforded to these within the European Community, the Precautionary Principle is triggered'. The Precautionary Principle is embedded in the Integrity Test.

²⁰ Ministry of Housing, Communities and Local Government (July 2019) Planning Practice Guidance Note, Appropriate Assessment, Guidance on the use of Habitats Regulations Assessment.

²¹EC Case C-127/02 Reference for a Preliminary Ruling 'Waddenzee' 7th September 2004 Advocate General's Opinion (para 107).

3 Scoping the HRA: understanding potential threats and pressures at European sites

3.1 Introduction

3.1.1 An important initial stage of the screening process is gathering information on European sites which may be affected by the Local Plan. This is informally known as scoping and provides an understanding of potential impact pathways from the Local Plan and connections to European sites and their vulnerabilities.

3.2 Identification of an HRA study area

- 3.2.1 Each European site has its own intrinsic qualities, besides the habitats or species for which it has been designated, that enables the site to support its particular ecosystems. An important aspect of this is that the ecological integrity of each site can be vulnerable to change from natural and human induced activities in the surrounding environment (known as pressures and threats). For example, sites can be affected by land use plans in a number of different ways, including the direct land take of new development, the type of use the land will be put to (for example, an extractive or noise-emitting use), or the pressure / threat a development generates (air pollution, water pollution or increased recreational pressure), and the resources used (for example water abstraction).
- 3.2.2 An intrinsic quality of any European site is its functionality at the landscape ecology scale. This refers to how the site interacts with its immediate surroundings as well as the wider area. This is particularly the case where there is potential for development resulting from a plan to generate water or air-borne pollutants, use water resources or otherwise affect water levels. Adverse effects may also occur via impacts to mobile species outside a designated site boundary, but which are qualifying features of the site. For example, there may be effects on protected birds, bats and fish which use habitat outside a designated site for foraging, feeding, roosting, breeding or other activities.
- 3.2.3 There is no guidance that defines the zone of influence (ZOI) or study area for inclusion in an HRA. Planning Practice Guidance for Appropriate Assessment²² indicates that: 'The scope and content of an appropriate assessment will depend on the nature, location, duration and scale of the proposed plan or project and the interest features of the relevant site. 'Appropriate' is not a technical term. It indicates that an assessment needs to be proportionate and sufficient to support the task of the competent authority in determining whether the plan or project will adversely affect the integrity of the site'.
- 3.2.4 This scoping exercise will help to determine the HRA study area and therefore which European sites will be considered in the HRA process.

²² Ministry of Housing, Communities and Local Government (July 2019) Planning Practice Guidance Note, Appropriate Assessment, Guidance on the use of Habitats Regulations Assessment.

3.3 Scoping impact pathways

- 3.3.1 Threats and pressures to which European sites are vulnerable have been identified through reference to data held by the JNCC and Natural England and through reference to Ramsar Information Sheets and Site Improvement Plans (SIPs). This information provides current and predicted issues at each European site and is summarised in **Appendix B**.
- 3.3.2 Supplementary advice notices prepared by Natural England often provide more recent information on threats and pressures upon European sites than SIPs and have therefore also been reviewed. A number of threats and pressures are unlikely to be exacerbated by the Local Plan and have therefore not been considered.
- 3.3.3 Sites of Special Scientific Interest (SSSIs) are protected areas in the United Kingdom designated for conservation. SSSIs are the building blocks of site-based nature conservation in the UK. A SSSI will be designated based on the characteristics of its fauna, flora, geology and/or geomorphology. Whilst typically analogous in ecological function, the reasons for its designation can be entirely different to those for which the same area is designated as a SAC, SPA or Ramsar.
- 3.3.4 Natural England conducts Whole Feature Assessments (WFA) which measure the condition of each notified feature across the whole of the SSSI. The conservation status of each notified feature highlights any areas which are particularly vulnerable to threats/pressures. Conservation status is defined as below:
 - Favourable:
 - Unfavourable recovering;
 - Unfavourable no change; or
 - Unfavourable declining.
- 3.3.5 Notified features classified as in an 'Unfavourable no change' or 'Unfavourable declining' condition may indicate that the SAC is in sub-optimal or poor ecological condition. It is important to remember that the SSSI may be in an unfavourable state due to the condition of features unrelated to its European designation. However, it is considered that the conservation status of SSSI features that overlap with European designated sites offer a useful indicator of habitat health at that location.
- 3.3.6 The overall objective of the Habitats Regulations is to maintain or restore, at favourable conservation status, natural habitats and species of wild fauna and flora of importance. Meeting site conservation objectives will ensure that the integrity of the National Site Network is maintained or restored as appropriate and ensures that each site contributes to achieving the 'favourable' conservation status of its qualifying features.

- 3.3.7 Natural England defines zones around each SSSI which may be at risk from specific types of development, these are known as Impact Risk Zones (IRZ). These IRZs are 'a GIS tool developed by Natural England to make a rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts. The IRZs also cover the interest features and sensitivities of European sites, which are underpinned by the SSSI designation and "Compensation Sites", which have been secured as compensation for impacts on Natura 2000/Ramsar sites'²³. The location of IRZs has been taken into consideration in this assessment as they provide a useful guide as to the location of functionally linked land (FLL; defined in **paragraph 3.3.9**) and likely vulnerabilities to development proposed within the Local Plan.
- 3.3.8 Based on a review of the adopted Local Plan HRA work and Local Plan Review HRA, neighbouring Local Plan HRAs, and local knowledge, the following potential impact pathways are considered to be within the scope of influence of the Local Plan.
 - **Air pollution:** Land use planning has the potential to increase atmospheric emissions of pollutants to the air. These can result in adverse effects at European sites such as eutrophication (nitrogen), acidification (nitrogen and Sulphur) and direct toxicity (ozone, ammonia and nitrogen oxides)²⁴.
 - Water resources and water levels: Urban development can change run off rates from urbanised areas to European sites or watercourses which run through them. An increase in housing provision can also influence supply and demand for water within the region which may impact water levels. Changes in water quantity also has the potential to affect supporting habitat (land outside a designated site boundary).
 - Water quality: Surface water run-off from urban areas has the potential to reduce
 the quality of water entering a catchment. Water quality may also be reduced
 through point source effluent discharges from new development at Wastewater
 Treatment Works (WwTWs) and other controlled discharge sources. Changes in
 water quality also has the potential to affect supporting habitat (land outside a
 designated site boundary).
 - **Recreational pressure:** Increased development has the potential to increase recreational pressure upon European sites which are accessible to the public.
 - Urbanisation effects: Urban development has the potential to result in disturbing
 activities (such as noise, lighting and visual disturbance). Disturbance effects may
 impact upon European sites themselves and also their qualifying features when
 outside a designated site boundary.

²³ Natural England (2019) Natural England's Impact Risk Zones for Sites of Special Scientific Interest User Guidance. Available at: https://magic.defra.gov.uk/Metadata_for_magic/SSSI%20IRZ%20User%20Guidance%20MAGIC.pdf [Date Accessed: 29/05/25].

²⁴ APIS (2016) Ecosystem Services and air pollution impacts. Available at: https://www.apis.ac.uk/search-ecosystem-impacts [Date Accessed: 29/05/25].

3.3.9 Land use planning also has the potential to result in impacts upon qualifying features of a European site when located outside a designation boundary, known as FLL. 'The term 'functional linkage' refers to the role or 'function' that land or sea beyond the boundary of a European site might fulfil in terms of ecologically supporting the populations for which the site was designated or classified. Such land is therefore 'linked' to the European site in question because it provides an important role in maintaining or restoring the population of qualifying species at favourable conservation status' ²⁵. This HRA therefore also considers effects upon FLL or mobile species when outside a designated site boundary within the above topic assessments.

3.4 Air quality

- 3.4.1 Natural England has developed a standard methodology for the assessment of traffic related air quality impacts under the Habitats Regulations which is relevant to the HRA of land use plans²⁶. This guidance sets a methodology and thresholds for screening of Likely Significant (air quality) Effects at the HRA screening stage (Stage 1 of the HRA process).
- 3.4.2 At this stage in the plan making process, traffic modelling data was not available to allow the application of screening thresholds. However, Natural England's guidance (in the form of a series of questions / thresholds below) has been applied to determine potential air quality impact pathways to European sites:
 - Does the Local Plan give rise to emissions which are likely to reach a European site?
 - Are the qualifying features of sites within 200m of a road sensitive to air pollution?
 - Could the sensitive qualifying features of the site be exposed to emissions?
 - Application of screening thresholds (alone and then, if necessary, in-combination).

Does the Local Plan give rise to emissions which are likely to reach a European site?

3.4.3 The Local Plan will trigger housing and employment development which in turn will increase traffic related emissions. Air quality impacts have been shown to typically affect European sites within 10km of a plan boundary²⁷. Campman and Kite (2021) note that 'this zone is based on professional judgment recognising that the effects of growth from development beyond 10km will have been accounted for in the Nitrogen Futures modelling work business as usual scenario'²⁸. This 10km distance threshold can be a useful guide to identify the broad areas that may be impacted by air quality. However, it is noted that consideration should also be given to larger residential or commercial allocations and their wider potential for air quality impacts in the context of the local and regional road network including key commuting areas set out below.

 $\underline{\text{http://publications.naturalengland.org.uk/publication/4720542048845824}} \ [\text{Date Accessed: 29/05/25}].$

²⁵ Natural England (2016) Commissioned Report. NECR207. Functional linkage: How areas that are functionally linked to European sites have been considered when they may be affected by plans and projects - a review of authoritative decisions. Available at: https://publications.naturalengland.org.uk/publication/6087702630891520 [Date Accessed: 20/06/25].

²⁶ Natural England (2018) Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations (NEA001). Available at:

²⁷ Chapman, C and Kite, B. 2021. Main Report. Guidance on Decision-making Thresholds for Air Pollution. JNCC Report No. 696. Available at: https://hub.jncc.gov.uk/assets/6cce4f2e-e481-4ec2-b369-2b4026c88447 [Date Accessed: 29/05/25].

²⁸ JNCC. Nitrogen Future. https://jncc.gov.uk/our-work/nitrogen-futures/ [Date Accessed: 29/05/25].

- Data obtained from the Office for National Statistics highlights the most common destinations for journeys to work undertaken by car or van arising from and finishing in the plan area²⁹. The key traffic destinations / origins include neighbouring authority areas such as Wiltshire, Cotswold, the Vale of White Horse and West Berkshire. A review of strategic road links connecting this wider commuting area to the Plan area has been undertaken. These are road links which provide a clear route linking residential and employment areas within the Plan area. The following European sites are located within 10km of the Local Plan boundary and / or linked to the Plan area by the strategic road network in the wider key commuting area. The HRA will draw upon traffic modelling to further define the air quality study area when available at future stages of the plan making process.
 - Hackpen Hill SAC
 - Kennet and Lambourn Floodplain SAC
 - North Meadow and Clattinger Farm SAC
 - River Lambourn SAC

Are the qualifying features of sites within 200m of a road sensitive to air pollution?

3.4.5 It is widely accepted that air quality impacts are greatest within 200m of a road source, decreasing with distance^{30,31,32}. Baseline mapping data has been used to determine the proximity of European sites listed above, and their qualifying features, to roads (within 200m) which may result in an exceedance of Natural England's screening thresholds (A and B roads)³³. The UK Air Pollution Information System (APIS) provides information on all European sites and the sensitivity of their qualifying features (habitats and / or species) to air pollution. This data has been interrogated, alongside a desk-based review of site-based data (Appendix B), to determine whether there may be impact pathways from the Local Plan to any European site through a change in atmospheric emissions (Table 3.1).

Could the sensitive qualifying features of the site be exposed to emissions?

3.4.6 As noted above, the Local Plan will allocate housing and employment development and as such has the potential to increase traffic related emissions along road links within 200m of European sites listed in **Table 3.1**.

²⁹ Office for National Statistics (2011) Location of usual residence and place of work by method of travel to work (2011 census data). Travel by car or van only. Available at: https://www.nomisweb.co.uk/census/2011/WU03UK/chart/1132462281 [Date Accessed: 29/05/25].

³⁰ The Highways Agency, Transport Scotland, Welsh Assembly Government, The Department for Regional Development Northern Ireland (2007) Design Manual for Roads and Bridges, Volume 11, Section 3, Part 1: Air Quality.

³¹ Natural England (2016) The ecological effects of air pollution from road transport: an updated review. Natural England Commissioned Report NECR 199.

³² Bignal, K., Ashmore, M. & Power, S. (2004) The ecological effects of diffuse air pollution from road transport. English Nature Research Report No. 580, Peterborough.

³³ As per Nitrogen Futures Modelling Work – see Paragraph 5.4.8.

Application of screening thresholds (alone and then, if necessary, in-combination)

- 3.4.7 Natural England's advice on the assessment of air quality impacts under the Habitats Regulations states that consideration should be given to the risk of road traffic emissions associated with a plan³⁴. This advice states that an assessment of the risks from road traffic emissions can be expressed in terms of the average annual daily traffic flow (AADT as a proxy for emissions). The use of the AADT screening threshold is advocated by Highways England in their Design Manual for Roads and Bridges (DMRB). This screening threshold is intended to be used as a guide to determine whether a more detailed assessment of the impact of emissions from road traffic is required. This non-statutory or guideline threshold is based on a predicted change of daily traffic flows of 1,000 AADT or more (or heavy-duty vehicle flows on motorways (HDV) change by 200 AADT or more).
- 3.4.8 The AADT thresholds do not themselves imply any intrinsic environmental effects and are used solely as a trigger for further investigation. Widely accepted environmental benchmarks for imperceptible impacts are set at 1% of the critical load or level, which is considered to be roughly equivalent to DMRB thresholds for changes in traffic flow of 1,000 AADT and for HDV of 200 AADT. This has been confirmed by modelling using the DMRB Screening Tool that used average traffic flow and speed figures from the Department for Transport (DfT) data to calculate whether the NO_x outputs could result in a change of >1% of critical load / level on different road types. A change of >1,000 AADT on a road was found to equate to a change in traffic flow which might increase emissions by 1% of the Critical Load or Level and might consequentially result in an environmental effect nearby (e.g. within 10 metres of roadside).
- 3.4.9 The AADT thresholds and 1% of critical load/level are considered by Natural England to be suitably precautionary as any emissions below this level are widely considered to be imperceptible and, in the case of AADT, undetectable through the DMRB model. There can, therefore, be a high degree of confidence in its application to screen for risks of an effect.
- 3.4.10 Traffic modelling data was not available at the time of writing and as such Natural England's screening thresholds have not been applied as part of this screening exercise.
- 3.4.11 To ensure a precautionary approach at this stage of the HRA process, air quality LSEs at European sites as identified in **Table 3.1** are scoped in for further consideration in the HRA process.

Table 3.1: Atmospheric pollution impact pathways to European sites within 10km of the Local Plan boundary

European sites with the influence of the Local Plan area	Is the European site sensitive to air quality impacts (as indicated in SIP / NE Supplementary Conservation Advice – Appendix B)?	Is there a strategic road link (A and B Roads and motorway) located within 200m of the European site?	Will the European site be scoped in for further assessment in the HRA process?
Hackpen Hill SAC	Yes	No	No
Kennet and Lambourn Floodplain SAC	No	No	No

³⁴ Natural England (2018) Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations (NEA001). Available at:

http://publications.naturalengland.org.uk/publication/4720542048845824 [Date Accessed: 29/05/25].

European sites with the influence of the Local Plan area	Is the European site sensitive to air quality impacts (as indicated in SIP / NE Supplementary Conservation Advice – Appendix B)?	Is there a strategic road link (A and B Roads and motorway) located within 200m of the European site?	Will the European site be scoped in for further assessment in the HRA process?
North Meadow and Clattinger Farm SAC	Yes	Yes (A419)	Yes
River Lambourn SAC	No	No	No

3.5 Water quality and water quantity

- 3.5.1 Urban development coming forward through the Local Plan has the ability to affect water dependent European sites through a number of impacts as listed below. These impacts have the potential to change the water balance (levels) and quality of water entering European sites:
 - Change in surface permeability and run off rates;
 - Increased water demand to supply new homes and businesses;
 - Reduce quality of surface water run off; and
 - Increased effluent discharge for treatment.
- 3.5.2 Features for which a European site is designated are often sensitive to changes in water balances and water quality. Therefore, urbanisation affecting drainage streams which flow through a European site has the potential to adversely affect the features for which it is designated.
- 3.5.3 The Water Framework Directive (WFD) provides an indication of the health of the water environment and whether a water body is at good status or potential. This is determined through an assessment of a range of elements relating to the biology and chemical quality of surface waters and quantitative and chemical quality of groundwater. To achieve good ecological status or potential, good chemical status or good groundwater status, every element assessed must be at good status or better. If one element is below its threshold for good status, then the status for the whole water body is classed below good. Surface water bodies can be classed as high, good, moderate, poor or bad status.
- 3.5.4 The WFD sets out areas which require special protection. These include areas designated for 'the protection of habitats or species where the maintenance or improvement of the status of water is an important factor in their protection including relevant Natura 2000 sites designated under Directive 92/43/EEC (the Habitats Directive) and Directive 79/409/EEC (the Birds Directive)³⁵.
- 3.5.5 There are no European sites located within the Plan area. European sites located outside the Plan area can also be affected by changes in water supply and quality where they are hydrologically link to development.

³⁵ Official Journal of the European Communities (2000) Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy. Available at: Accessed: 29/05/25].

- 3.5.6 The Plan area is predominantly located within the Thames River Basin District. Surface Water Management Plans (SWMPs) outline the preferred surface water management strategy alongside establishing a long-term action plan for surface water. The Plan area lies within the 'Kennet and Trib' and 'Gloucestershire and the Vale' surface water management catchment (SWMC; see **Figure 3.1**).
- 3.5.7 The River Thames flows along the Plan area's northern boundary between Cricklade and Lechlade, and a number of local tributaries, including the Share Ditch and the Bydemill Brook, flow north across the rural northern part of the Borough into the main Thames channel. A number of tributaries feed into the River Thames from the Plan area. These include the River Ray, which drains the western section of the Plan area running along the western boundary rising at Wroughton and fed by tributaries including the Lydiard Brook and the Haydon Wick Brook. The River Cole runs through the eastern section of the Plan area and along its eastern boundary and is fed by tributaries including the Lenta Brook and the South Marston Brook, The southern section of the Plan area is drained by the upper reaches of the River Kennet, this area feeds ordinary watercourses (the Og, Aldbourne and Lambourn) which drain south towards the Kennet at Marlborough, or further east.
- 3.5.8 A small proportion of the western corner of the Plan area is located within the Severn River Basin District, and within the Avon Bristol and Somerset North Streams SWMC (Figure 3.1). There are no waterbodies associated with this RBD within this small area of the Plan area.
- 3.5.9 There are seven Sewage Treatment Works (STWs) within Swindon. Currently, Swindon, Blunsdon, Wanborough and Highworth STWs do not exceed their current permitted Dry Weather Flow (DWF) capacity, however Thames Water is planning to upgrade these STWs as future capacity is likely to be exceeded.
- 3.5.10 The Thames River Basin Management Plan³⁶ (RBMP) provides a framework for protecting and enhancing the benefits provided by the water environment (**Appendix A**). To achieve this, and because water and land resources are closely linked, it also informs decisions on land-use planning. RBMPs provide strategic level policy guidance in relation to baseline classification of water bodies, statutory objectives for protected areas and water bodies, and a summary of measures to achieve statutory protection.

³⁶ Environment Agency (2022) Thames river basin district river basin management plan: updated 2022. Available at: https://www.gov.uk/guidance/thames-river-basin-district-river-basin-management-plan-updated-2022 [Date Accessed: 29/05/25].

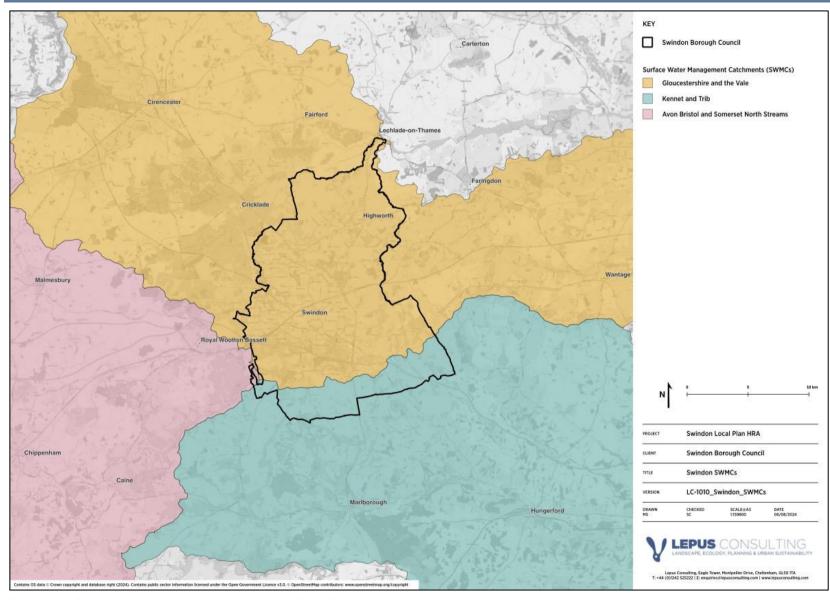


Figure 3.1: Surface Water Management Catchments (SWMCs)

- 3.5.11 For the purposes of water resource planning, the Plan area is divided into Water Resource Zones (WRZs). WRZs are defined by the EA as the 'largest possible zone in which customers share the same risk of a resource shortfall'³⁷. These WRZs have been amalgamated into larger sub-regional supply areas. The Plan area is located within the Swindon and Oxfordshire WRZ (see **Figure 3.2**). Hydrologically sensitive European sites³⁸ located within this WRZ are listed below. These European sites are dependent on hydrological regimes.
 - Cothill Fen SAC;
 - Kennet and Lambourn Floodplain SAC;
 - North Meadow and Clattinger Farm SAC; and
 - Oxford Meadows SAC.
- 3.5.12 Thames Water is the statutory water supplier and sewerage undertaker for Swindon³⁹. The role of the sewerage undertaker includes the collection and treatment of wastewater from domestic and commercial premises, and in some areas, it also includes the drainage of surface water from building curtilages to combined or surface water sewers. It is a statutory requirement that every five years water companies produce and publish a Water Resources Management Plan (WRMP). The WRMP demonstrates long term plans to accommodate the impacts of population growth, drought, environmental obligations, and climate change uncertainty in order to balance supply and demand. WRMPs are linked to Drought Plans which detail the steps that would be taken to ensure supplies can be maintained whilst minimising the impacts to rivers and the environment during drought events (see more details in **Appendix A**).
- 3.5.13 The Thames Water WRMP⁴⁰ estimates future water demands and plans how these levels will be achieved. The WRMP outline a number of demand management measures that need to be taken to ensure continued sustainable sources of water supply. The Thames WRMP identified that future water demand and supply will need to be balanced through reduced water usage (demand management), reduced leakage, and the development of new South East Strategic Reservoir Options (SESROs) and water transfers.

<u>available.pdf&ved=2ahUKEwiY8ei5gu2GAxXkZ0EAHUC5D_kQFnoECB0QAQ&usg=AOvVaw3uO8-LrFuwvJ2kHu2ixaCT_[Date Accessed: 29/05/25].</u>

³⁷ Severn Trent. A1 Water Resource Zones. Available at: https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://www.severntrent.com/content/dam/stw/ST_Corporate/About_us/Docs/Appendix-A-How-much-water-do-we-have-

³⁸ As determined through a review of Natural England Conservation Advice for each site and Site Improvement Plans.

³⁹ Stantec (2025) Water Cycle Study. Scoping Report. Swindon Borough Council.

⁴⁰ Thames Water (April 2020) Shape your future: Our Water Resources Management Plan 2020-2100. Available at: https://www.thameswater.co.uk/media-library/home/about-us/regulation/water-resources/water-resources-management-plan-overview.pdf [Date Accessed: 29/05/25].

- 3.5.14 Catchment Abstraction Management Plans (CAMS) are six-year strategies developed by the Environment Agency (EA) for managing water resources at the local level, produced for every river catchment area in England and Wales. The Plan area lies within the Wey CAMS. Through the CAMS process the EA prepares an Abstraction Licensing Strategy (ALS) to manage water resources and contribute to implementation of the WFD. ALS feed into the WRMPs in terms of determining and managing current and future pressures on water resources and how this will be managed by the relevant water companies. Swindon lies within Kennet and Vale of White Horse ALS area, and a minor part of the River Thames that flows through the Borough lies within the Thames ALS. The watercourses within these ALS areas are shown to have restricted water available for licensing during the high flow period⁴¹.
- 3.5.15 The majority of drinking water in Swindon is supplied by Thames Water from Farmoor Reservoir to the west of Oxford, which takes water from the adjacent River Thames. This source is locally supplemented by groundwater abstractions, such as those at Moulsford, South Stoke and Latton. To the south of Swindon there is also an abstraction at Axford from the chalk aquifer⁴². These abstractions are all from within the Thames Corridor ALS area and the Kennet and Vale of White Horse ALS.

⁴¹ Environment Agency. ALS CAMS Process. Available at: https://www.gov.uk/government/collections/water-abstraction-licensing-strategies-cams-process [Date Accessed: 29/05/25].

⁴² Stantec (2025) Water Cycle Study. Scoping Report. Swindon Borough Council.

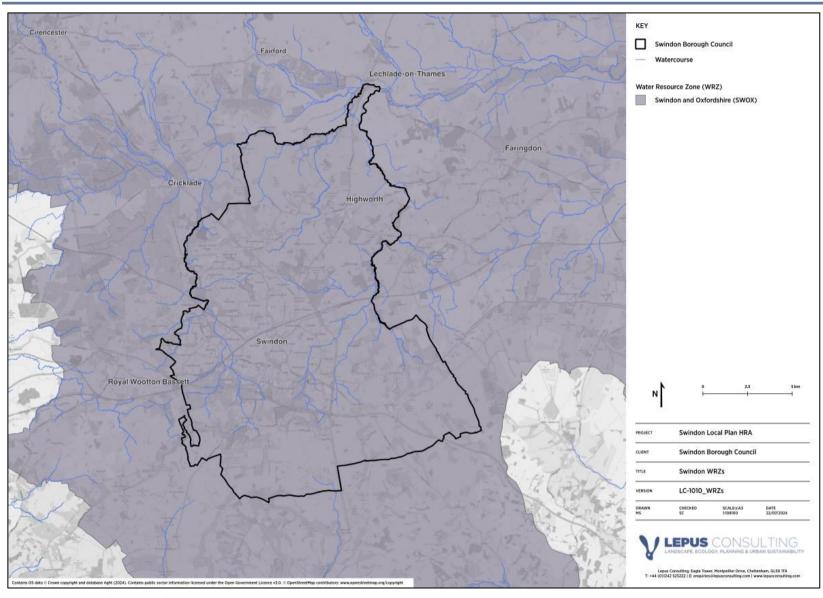


Figure 3.2: Water Resource Zone (WRZ)

- LC-1010_Swindon_Reg18_HRA_19_270625LB.docx
- 3.5.16 A Scoping Water Cycle Study (WCS) was prepared in support of the Local Plan Review in 2025⁴³. Its outputs form part of the evidence base to determine the most appropriate options for development within the Borough.
- 3.5.17 On 16th March 2022 Natural England wrote to affected LPAs regarding the sensitivity of the River Lambourn SAC to significant levels of phosphorus pollution. The south-eastern corner of the Plan area lies within the nutrient neutrality catchment of the River Lambourn SAC (see **Figure 3.3**)⁴⁴. The SAC is designated for the water course of plain to montane levels with Water-crowfoots (*R. fluitantis*), Brook Lamprey (*Lampetra planeri*) and Bullhead (*Cottus gobio*). The SAC is underpinned by the River Lambourn SSSI which comprises three units; Lynch Wood to Maidencourt Farm, Maidencourt Farm to Oxford Road and Oxford Road to River Kennet. Water quality measurements show that phosphorus concentrations are exceeding the targets for all units and the SSSI is therefore in an unfavourable condition for the river and stream features of the SSSI.
- 3.5.18 Excessive nutrient input to freshwater environments can lead to eutrophication which can cause competitive interactions between high plant species and between higher plant species and algae, which can result in a dominance in attached forms of algae and loss of characteristic plant species⁴⁵. This growth can have adverse effects on the species and plant communities through a variety of mechanisms including shading, smothering and anoxia, leading to a dominance of plant species better able to deal with these conditions, with negative competitive effects on others. This can lead to a significant negative shift in habitat quality and structure which in turn affects other species communities.
- 3.5.19 In order to address these adverse impacts, development coming forward within the River Lamborn SSSI nutrient neutrality catchment area must not add to nutrient levels at the SAC. The impacts of Local Plan growth upon nutrient levels will be considered further in the HRA process.

⁴³ Stantec (2025) Water Cycle Study. Scoping Report. Swindon Borough Council.

⁴⁴ WOOD, A., WAKE, H. and MCKENDRICK-SMITH, K. (2022) River Lambourn Special Area of Conservation – Evidence Pack. Natural England Technical Information Note. TIN199 Natural England. Available at: https://publications.naturalengland.org.uk/file/4917938338660352 [Date Accessed: 29/05/25].

⁴⁵ WOOD, A., WAKE, H. and MCKENDRICK-SMITH, K. (2022) River Lambourn Special Area of Conservation – Evidence Pack. Natural England Technical Information Note. TIN199 Natural England. Available at: https://publications.naturalengland.org.uk/file/4917938338660352 [Date Accessed: 29/05/25].

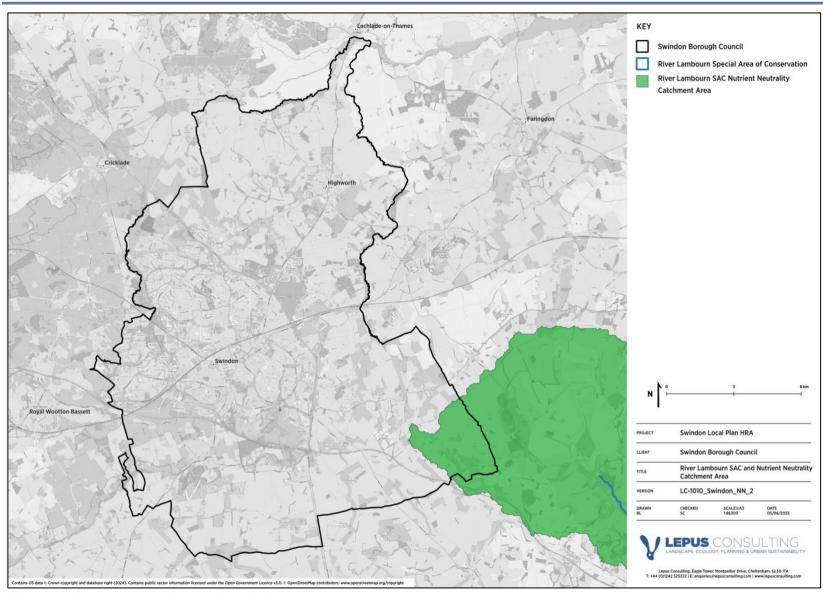


Figure 3.3: River Lambourne Nutrient Neutrality Area

- 3.5.20 As noted at **paragraph 3.2.2**, land use planning has the potential to result in impacts upon qualifying features (for instance species of fish or birds) when located outside a designation boundary, known as functionally linked habitat.
- 3.5.21 The tests set out under Article 105 of the Habitats Regulations need to be applied in respect of plans which may significantly affect functionally linked land that plays an important role in contributing to the favourable conservation status of the relevant species for which a European site is designated.
- 3.5.22 As noted in **paragraph 3.5.6** and **3.5.8**, the Plan area predominantly falls within hydrological catchments associated with the Thames Estuary and to a lesser extent the Severn Estuary. A review of mapping data indicates that there are no waterbodies associated with this Severn RBD within this small part of the Plan area and therefore direct hydrological links to the Severn Estuary SPA and Ramsar are unlikely.
- 3.5.23 Taking into consideration potential changes in water levels (through abstraction for water supply) and water quality (through surface water run-off and discharges from STWs), European sites were screened for potential hydrological impact pathways. **Table 3.2** indicates which European sites will be scoped into the screening assessment for further consideration in the HRA process in terms of hydrological impact pathways.

Table 3.2: Review of hydrological impact pathways to European sites within the influence of the Local Plan

European sites with hydrological links to the Plan area	Sensitive to hydrological impacts (water quality and water quantity)?	Potential for water quality LSEs	Potential for water quantity LSEs	Will the European site be scoped in for further assessment in the HRA process?
Cothill Fen SAC	Yes	Cothill Fen SAC is located approx. 23km to the east of the Plan area. The SAC is not linked to the Plan area by surface water features. Therefore, water quality impacts as a result of the Local Plan are unlikely.	Cothill Fen SAC is designated for its calciumrich springwater-fed fens. The SIP indicates that there is concern that fen areas of Cothill Fen SAC may be becoming drier, and that this may be affecting populations of rare fen plants and invertebrates ⁴⁶ . It is located within the Swindon and Oxfordshire (SWOX) WRZ and therefore there is potential for water quantity impacts from the Local Plan.	Yes

⁴⁶ Natural England (2014) Cothill Fens SAC SIP. Available at: https://publications.naturalengland.org.uk/publication/6482436405854208 [Date Accessed: 29/05/25].

European sites with hydrological links to the Plan area	Sensitive to hydrological impacts (water quality and water quantity)?	Potential for water quality LSEs	Potential for water quantity LSEs	Will the European site be scoped in for further assessment in the HRA process?
Kennet and Lambourn Floodplain SAC	Yes	Kennet and Lambourne Floodplain SAC is located 10km to the south west of the Plan area. The SAC is downstream of the Plan area. Therefore, water quality impacts as a result of the Local Plan are likely and will be considered further in the HRA.	The qualifying feature of the Kennet and Lambourn Floodplain SAC (Desmoulin's whorl snail (<i>Vertigo moulinsiana</i>)) is vulnerable to hydrological changes in terms of water levels and drought. The SAC is located within the SWOX WRZ and therefore there is potential for water quantity impacts from the Local Plan.	Yes
North Meadow and Clattinger Farm SAC	Yes	North Meadow and Clattinger Farm SAC is located approx. 3.1km to the west of the Plan area at its closest. The SAC is located upstream of the Plan area. Therefore, water quality impacts as a result of the Local Plan are unlikely.	North Meadow and Clattinger Farm SAC is located within the SWOX WRZ and therefore there is potential for water quantity impacts from the Local Plan.	Yes
Oxford Meadows SAC	Yes	Oxford Meadows SAC is located approx. 26km to the north east of the Plan area. The SAC is downstream of the Plan area connected via the River Thames. Therefore, water quality impacts as a result of the Local Plan are likely and will be considered further in the HRA.	Oxford Meadows SAC is located within the SWOX WRZ. Creeping marshwort (<i>Apium repens</i>) is particularly sensitive to hydrological changes. Therefore, there is potential for water quantity impacts from the Local Plan at this SAC.	Yes
River Lambourn SAC	Yes	The River Lambourn SAC is located approx. 4.5km to the south east of the Plan area. The Local Plan is located partly within the nutrient neutrality catchment of the River Lambourn SAC. Any change in nutrient levels due to new development set out in the Local Plan has the potential to have adverse effects on the qualifying features of the SAC and achievement of its conservation objectives. Therefore, water quality pathways of impact will be considered further in the HRA process.	The River Lambourn SAC is not located within the SWOX WRZ. Therefore, water quantity impacts from the Local Plan are unlikely and it will not be considered further in the HRA.	Yes

European sites with hydrological links to the Plan area	Sensitive to hydrological impacts (water quality and water quantity)?	Potential for water quality LSEs	Potential for water quantity LSEs	Will the European site be scoped in for further assessment in the HRA process?
Severn Estuary SPA and Ramsar	Yes	The Plan area predominantly falls within hydrological catchments associated with the Thames Estuary and to a lesser extent the Severn Estuary. A review of mapping data indicates that there are no waterbodies associated with this Severn RBD within this small area of the Plan area and therefore direct hydrological links to the Severn Estuary SPA and Ramsar are unlikely.	The Severn Estuary SPA and Ramsar are not located within the SWOX WRZ. Therefore, water quantity impacts from the Local Plan are unlikely and it will not be considered further in the HRA.	Yes

3.6 Recreational pressure

- 3.6.1 Increased recreational pressure at European sites can result in damage to habitats through erosion and compaction, troubling of grazing stock, causing changes in behaviour to animals such as birds at nesting and feeding sites, spreading invasive species, dog fouling, tree climbing etc.
- 3.6.2 A common approach taken across the UK to address recreational impacts at European sites is to establish a ZOI based on detailed visitor survey data. The ZOI is the area within which there are likely to be significant effects arising from recreational activities undertaken by additional residents due to growth. This is often calculated by taking the distance at which 75% of interviewees surveyed have travelled to reach a particular site (based on a review of visitor survey data).
- 3.6.3 The broad principle of buffer zones is one component of the HRA screening process for recreational pressures. This process also takes into consideration other factors such as recreational management at sites, proximity to settlements and existing recreational resources.
- 3.6.4 The recreational draw of a European site depends on a number of factors. These include the extent and range of facilities provided (in particular parking), accessibility both within the European site and links to the wider area, incorporation of a European site as part of a wider designation, such as a National Park, and the site's promotion. A review of recreational impact assessments undertaken for European sites across the UK indicates visitors typically live within 4.2 km (overall median value) of nature conservation sites and that the majority (75%) live within 12.6 km⁴⁷. However, this review recognises that some visitors are prepared to travel longer distances to visit particular sites, for instance coastal and wetland sites.

⁴⁷ Weitowitz, D, C. Panter, C. Hoskin, R. and Liley, D. (October 2019) The effect of urban development on visitor numbers to nearby protected nature conservation sites. Journal of Urban Ecology, Volume 5, Issue 1.

- 3.6.5 As such, a precautionary distance of 15km has been applied to the scoping of European sites which may be sensitive to potential recreational impact pathways (see **Table 3.3**). In addition, European site-specific buffer distances have been applied to determine potential pathways of recreational effects from the Local Plan where available.
- 3.6.6 North Meadow and Clattinger Farm SAC is designated for the presence of lowland hay meadows (National Vegetation Community MG4 *Alopecurus pratensis Sanguisorba officinalis*) which support significant populations of Snake's Head Fritillary (*Fritillaria meleagris*). Increased public access at the SAC poses a threat from soil compaction due to high levels of trampling upon Snake's Head Fritillary⁴⁸. The SAC is divided into two components: North Meadow and Clattinger Farm. North Meadow is also designated as a National Nature Reserve (NNR) and registered Common Land. North Meadow supports approximately 95% of the UK's surviving Snake's Head Fritillary population⁴⁹. This species is also present at Clattinger Farm but in lower abundance.
- 3.6.7 North Meadow is open to the public and includes approximately 4km of designated pathways around the site to facilitate access, including the Reedbed Walk, the River Walk and the Willow Walk⁵⁰ (see **Plate 1**). In addition, the Thames Path National Trail, passes along the southern boundary of the site. Parking is only possible on the road verge, although this is managed during the peak season through the use of signage and cones.

⁴⁸ Natural England (2014) North Meadows & Clattinger Farm SAC SIP. Available at: https://publications.naturalengland.org.uk/publication/4565167836758016 [Date Accessed: 05/06/25].

⁴⁹ Natural England (2014) North Meadows & Clattinger Farm SAC Conservation Objectives. Available at: https://publications.naturalengland.org.uk/publication/6299293463871488 [Date Accessed: 05/06/25].

⁵⁰ Ecological Planning & Research Ltd (2023) North Meadow, Cricklade Visitor Questionnaire Survey Prepared on behalf of Swindon Borough Council, Cotswold District Council & Wiltshire Council.

North Meadow component of the North Meadow and Clattinger Farm SAC











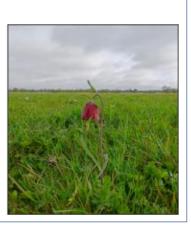


Plate 1: Photos of recreational impacts at North Meadow and Clattinger Farm SAC – North Meadow component (Lepus, April 2025)

- 3.6.8 The Clattinger Farm component of the SAC is managed by the Wildlife Trust and has not been identified as at risk of public access and disturbance effects. A site visit undertaken on 16th April 2025 indicated an abundance of Snakes Head Fritillary and minimal evidence of public disturbance
- 3.6.9 In order to safeguard the North Meadow component of the SAC from the impact of recreational pressure associated with future growth, Swindon Borough Council, Natural England and other affected LPAs commissioned a visitor survey to determine the visitor catchment of the site. Outputs from this survey identified two ZOI representing two main user groups of the site including local user groups and seasonal user groups (as illustrated on Figure 3.5):
 - Inner zone of 0 4.2km from North Meadow (local walkers and dog walkers)
 - Outer zone of 4.2 9.4km from North Meadow (visitors to see the flowering fritillaries)

- 3.6.10 Based on the outputs of the visitor surveys, an Interim Recreation Mitigation Strategy was developed (referred to hereafter as the 'Strategy')⁵¹. The Strategy sets out a strategic approach to mitigate recreational impacts, associated with new development, on the North Meadow component of the North Meadow and Clattinger Farm SAC. The Strategy is an interim approach, while further monitoring and surveys are undertaken, and will be reviewed within 5 years or earlier, if required.
- 3.6.11 As both the inner and outer ZOI coincide with the Plan area (**Figure 3.5**), any new residential development proposed through the Local Plan within these ZOI has the potential to increase regular, year-round, recreational pressures in-combination with other plans and projects at the North Meadow component of the SAC and therefore have LSEs. North Meadow and Clattinger Farm SAC will therefore be scoped into the HRA process.

⁵¹ Cotswold District Council (2023) Interim Recreational Mitigation Strategy. Available at:

https://www.swindon.gov.uk/downloads

[,]North%20Meadow%20and%20Clattinger%20Farm%20Interim%20Recreation%20Mitigation%20Strategy%202023,Farm%20Special%20Area%20of%20Conservation [Date Accessed: 23/05/25].

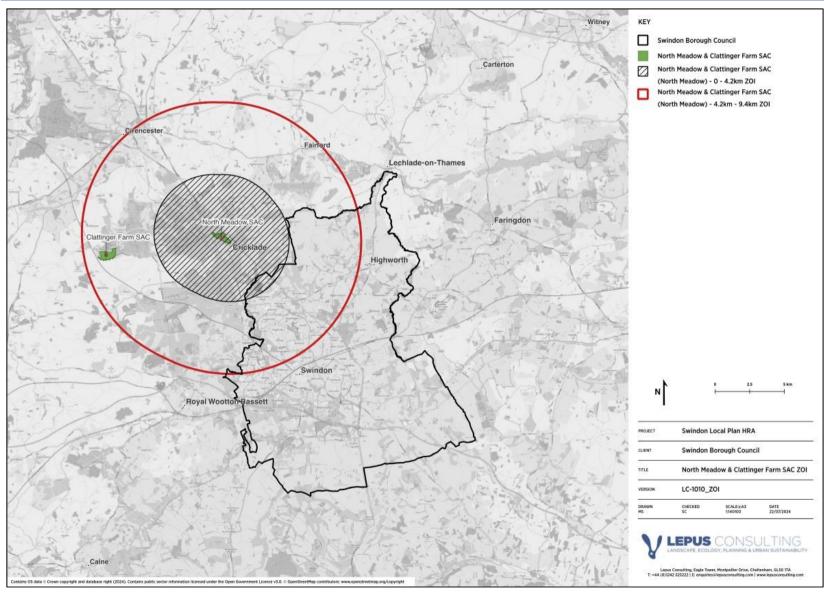


Figure 3.4: North Meadow & Clattinger Farm SAC zone of influence (relating to North Meadow component of the SAC only)

Table 3.3: Review of recreational impact pathways to European sites within the influence of the Local Plan

European site within the influence of the Plan area (15km)	Sensitive to recreational impacts?	Public access pathways	Will the European site be scoped in for further assessment in the HRA Process
Hackpen Hill SAC	No	Hackpen Hill SAC is an area of unimproved chalk grassland in the North Wessex Downs and is located approx. 8.5km from the Plan area. The topography of the site is varied and steep in nature. The site is open access. Permissive footpaths join up the areas of access land and enable a connection through to Letcombe Basset church as well as a downland link from the Ridgeway to Letcombe Basset village ⁵² . There is a small car park 200m to the west of the SAC for the Ridgeway trail which runs approx. 150m to the south of the site and uphill. The SIP ⁵³ for the SAC does not indicate that it is sensitive to recreational pressures. The SAC is not promoted locally or nationally other than for conservational purposes. Given its size, limited promotion, topography and the distance of the SAC from the Plan area, it is considered unlikely that growth in the Local Plan will have a recreational LSE on the SAC.	No
Kennet and Lambourn Floodplain SAC	No	The Kennet and Lambourn Floodplain SAC is located approx. 9.9km from the Plan area. Public access to the SAC is limited and there are no car parks within the immediate areas. At the components of the SAC which are located in Thatcham, several footpaths are present, however, these components are located approx. 26km from the Plan area. The SIP ⁵⁴ for the SAC does not indicate that it is sensitive to recreational pressures. Given the lack of facilities available and the limited public access, it is considered unlikely that growth in the Local Plan will have a recreational LSE on the SAC.	No
North Meadow and Clattinger Farm SAC	Yes	The North Meadow SAC component of North Meadow and Clattinger Farm is located approx. 3.3km from the Plan area. The Clattinger Farm SAC component is located approx. 9.8km from the Plan area. The SIP notes that public access and disturbance impacts relate predominantly to the impact of high levels of compaction caused by the public access upon Snake's Head Fritillary, for which the site is designated ⁵⁵ . An increase in recreational pressure due to development in the recreational inner and outer ZOI for the North Meadow component of the SAC (see Figure 3.4) has the potential to disturb and damage its qualifying features. Therefore, it will be considered further in this HRA in terms of recreational impacts.	Yes

 $^{^{\}rm 52}$ Oxfordshire County Council Open Access Lane Information available at:

https://www.oxfordshire.gov.uk/residents/environment-and-planning/countryside/countryside-access/open-access-land [Date Accessed: 23/05/25].

⁵³ Natural England (2014) Hackpen Hill SAC Site Improvement Plan. Available at: https://publications.naturalengland.org.uk/publication/5938642669273088 [Date Accessed: 23/05/25].

⁵⁴ Natural England (2014) Kennet and Lambourn Floodplain SAC Site Improvement Plan. Available at: https://publications.naturalengland.org.uk/publication/4738329056641024 [Date Accessed: 23/05/25].

⁵⁵ JNCC (2023) The Vascular Plan Red Data List for Great Britain. Available at: https://hub.jncc.gov.uk/assets/cc1e96f8-b105-4dd0-bd87-4a4f60449907 [Date Accessed: 23/05/25].

European site within the influence of the Plan area (15km)	Sensitive to recreational impacts?	Public access pathways	Will the European site be scoped in for further assessment in the HRA Process
Pewsey Downs SAC	No	Pewsey Downs SAC is located approx. 12.4km from the Plan area. Given the SAC is not vulnerable to recreational impacts ⁵⁶ and given its distance from the Plan area, it is considered unlikely that growth in the Local Plan will have a recreational LSE on the SAC.	No
River Avon SAC	No	The River Avon SAC is located approx. 14.8km from the Plan area at its closest point. Several footpaths and PRoWs are present throughout the SAC. The SIP indicates that the features for which the River Avon SAC is designated are not sensitive to recreational pressures ⁵⁷ . Given the distance of the SAC from the Plan area it will not be considered further in this HRA in terms of recreational impacts.	No
River Lambourn SAC	No	The River Lambourn SAC is located approx. 4.5km from the Plan area. The SIP indicates that the SAC is not sensitive to recreational pressures ⁵⁸ . It will therefore not be considered further in this HRA in terms of recreational impacts.	No

3.7 Urbanisation effects

- 3.7.1 Urbanisation effects typically occur when development is located close to a European site boundary. These may include impacts such as noise disturbance, lighting effects, cat predation, fly-tipping, wildfire, littering and vandalism. Strategic mitigation schemes elsewhere in the UK have set a presumption against development (i.e. no net increase in residential dwellings) on the basis of site-specific evidence to safeguard against these impacts of between 400m⁵⁹ and 500m⁶⁰. These distances recognise the distance cat predation is likely to take place and also the increased frequency of visits made by people living in close proximity to a designated site.
- 3.7.2 No sites are located within 500m of the Local Plan area and therefore urbanisation effects can be scoped out.

⁵⁶ Natural England (2014) Pewsey Downs SAC Site Improvement Plan. Available at: https://publications.naturalengland.org.uk/publication/5126262490136576 [Date Accessed: 23/05/25].

⁵⁷ Natural England (2015) Avon River and Valley Site Improvement Plan. Available at: https://publications.naturalengland.org.uk/publication/6133502894407680 [Date Accessed: 23/05/25].

⁵⁸ Natural England (2014) River Lambourn and Kennet Lambourn Floodplain Site Improvement Plan. Available at: https://publications.naturalengland.org.uk/publication/4738329056641024 [Date Accessed: 23/05/25].

⁵⁹ Thames Basin Heaths Strategic Joint Partnership. Thames Basin Heaths SPA Delivery Framework. Available at: https://www.guildford.gov.uk/media/21979/Thames-Basin-Heaths-SPA-delivery-framework/pdf/thames-basin-heaths-spa-delivery-framework.pdf?m=636114482807070000 [Date Accessed: 23/05/25].

⁶⁰ Panter, C., Liley, D., Lake, S., Saunders, P., and Caals, Z. 2022. Visitor survey, recreational impact assessment and mitigation requirements for the Chilterns Beechwoods SAC and the Dacorum Local Plan, Report by Footprint Ecology for Dacorum Borough Council.

3.8 European sites and threats and pressures

3.8.1 Figure 3.5 illustrates the location of European sites which will be scoped into the HRA process for further consideration in the screening assessment (**Chapter 4**). Impact pathways which have the potential to affect these European sites are summarised in **Table 3.4**. These will form the basis of the following HRA screening assessment.

Table 3.4: Potential impact pathways from the Local Plan scoped in at each European site.

Potential impact pathways?	Air quality	Water quality and quantity changes	Recreational pressure	Urbanisation effects
Cothill Fen SAC	No	Yes	No	No
Kennet and Lambourn Floodplain SAC	No	Yes	No	No
North Meadow and Clattinger Farm SAC	Yes	Yes	Yes	No
Oxford Meadows SAC	No	Yes	No	No
River Lambourn SAC	No	Yes	No	No

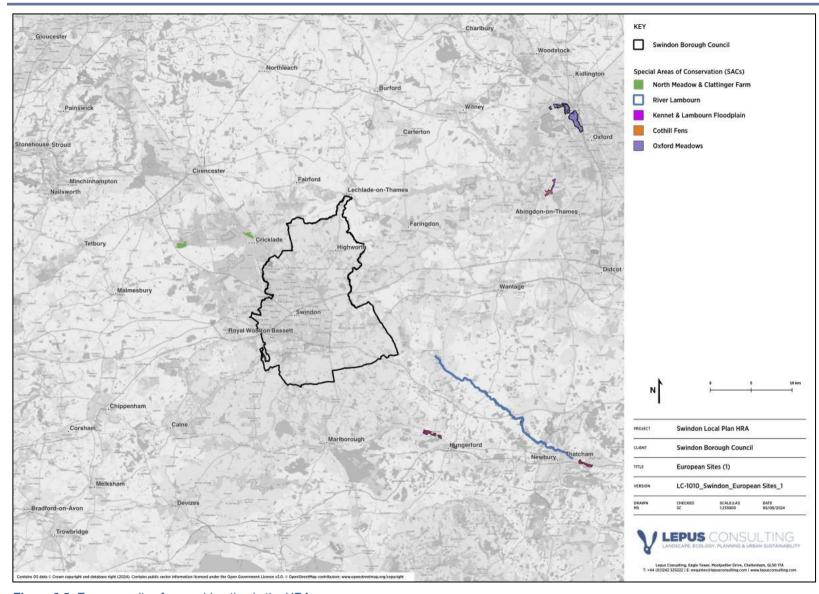


Figure 3.5: European sites for consideration in the HRA process

4 Screening of the Local Plan

4.1 Introduction

4.1.1 This section of the HRA comprises the screening stage: Stage 1 of the HRA process (see Figure 2.1). The screening exercise draws on information regarding threats and pressures at European sites scoped into the HRA process in **Chapter 3** of this report. This chapter screens each component of the Local Plan for LSEs and identifies the requirement for AA (**Chapters 5** to **7**).

4.2 Screening

- 4.2.1 The Local Plan is not directly connected with or necessary to the management of any European site and as such it is not exempted from the HRA process. In addition, it cannot be excluded or eliminated from the process on the basis of no conceivable effect. It is therefore necessary to determine whether the Local Plan will have an LSE on any European site, either alone or in-combination with other aspects of the Local Plan or other plans and projects. In order to identify LSEs upon European sites, each component of the Local Plan has been appraised against the HRA screening criteria (see **Appendix C** and **Appendix D**), taking into consideration case law and best practice. The assessment of LSEs takes no account of mitigation to ensure compliance with the People Over Wind ruling⁶¹.
- 4.2.2 The screening exercise will be revisited at Regulation 19 to capture any changes in policy wording or allocations made as the Local Plan continues to be developed.
- 4.2.3 It is concluded that LSEs, from either the Local Plan alone or in-combination with other plans or projects, could be screened out for a number of policy options. This is because they fell into the following categories (see **Table 2.1** for a description of each category):
 - Category A: General statements of policy / general aspirations;
 - Category B: Policies listing general criteria for testing the acceptability / sustainability of proposals;
 - Category D: Environmental protection / site safeguarding; and
 - Category F: Policies or proposals that cannot lead to development or other change.
- 4.2.4 The following policies in the Local Plan were however considered to have an LSE incombination with other plans and projects:
 - SS1: Swindon's Spatial Approach to Growth;
 - SGL 01: Swindon's Central Area;
 - SGL 02: New Eastern Villages (NEV);
 - SGL 03: Kingsdown;
 - SGL 04: Wichelstowe;
 - SGL 05: East Wroughton;
 - SGL 06: North Tadpole;
 - UGA 01: Marlowe Avenue;
 - UGA 02: Pipers Way;

http://curia.europa.eu/juris/document/document.jsf?docid=200970&doclang=EN [Date Accessed: 23/05/25].

⁶¹ InfoCuria (2018) Case C-323/17. Available at:

- SP2: Homes for the Community;
- HC8: Gypsy, traveller and travelling showpeople;
- SP4: Fairer, Economic Growth;
- FE1: Office (scale and location); and
- FE2: Industrial Land (scale and location).
- 4.2.5 LSEs were identified at European sites detailed in **Table 3.4** as follows:
 - Air quality LSEs in-combination at North Meadow and Clattinger Farm SAC;
 - Water quality and quantity LSEs in-combination at Cothill Fen SAC, Kennet and Lambourn Floodplain SAC, North Meadow and Clattinger Farm SAC, Oxford Meadows SAC and the River Lambourn SAC; and
 - Recreational LSEs alone and in-combination at North Meadow and Clattinger Farm SAC.
- 4.2.6 No allocations are located within 500m of any European site and therefore the urbanisation impact pathway has therefore been screened out.

4.3 Screening conclusion

- As required under Regulation 105 of the Habitats Regulations, an assessment has been undertaken of LSEs of the Local Plan upon European sites. The pre-screening checks (Appendix C and Appendix D) indicate that all proposed local plan allocations have the potential to have LSEs at the above European sites. In- combination air quality and water LSEs are possible for all allocations and in-combination recreational LSEs are possible at a number of allocations within the inner and outer ZOI for North Meadow and Clattinger Farm SAC (Appendix D). Urbanisation LSEs have been screened out. The screening assessment takes no account of mitigation measures that the policies may incorporate to mitigate adverse impacts upon European sites. It is therefore concluded that the Local Plan will be screened into the HRA process. The next stage of the HRA process will be Stage 2 AA.
- 4.3.2 It is too early at this stage of the Plan making process to undertake a full AA as key pieces of evidence are in preparation, and these will inform the details within the Local Plan. The following sections of this report however identify issues which will be considered in the AA. The AA will be completed alongside preparation of the Regulation 19 version of the Local Plan when all HRA evidence and Local Plan details are available.

5 Preliminary air quality Appropriate Assessment

5.1 Introduction

- 5.1.1 The HRA screening process in **Chapter 4** concluded that a number of Local Plan policies and all allocations have the potential to result in LSEs at North Meadow and Clattinger Farm SAC due to changes in air quality.
- 5.1.2 This section of the report provides a preliminary AA of this issue where evidence allows. It also highlights additional work that will be required to complete the AA at Regulation 19.

5.2 Air quality impacts

- 5.2.1 The main mechanisms through which air pollution can have an adverse effect are through eutrophication (nitrogen), acidification (nitrogen and sulphur) and direct toxicity (ozone, ammonia and nitrogen oxides)⁶². Deposition of air pollutants can alter the soil and plant composition and species which depend upon these.
- 5.2.2 Excess atmospheric nitrogen deposition within an ecosystem or habitat can disrupt the delicate balance of ecological processes interacting with one another. As the availability of nitrogen increases in the local environment, some plants that are characteristic of that ecosystem may become competitively excluded in favour of more nitrophilic plants. It also impacts the ammonium and nitrate balance of the ecosystem, which disrupts the growth, structure and resilience of some plant species.
- 5.2.3 Excess nitrogen deposition often leads to the acidification of soils and a reduction in the soils' buffering capacity (the ability of soil to resist pH changes). It can also render the ecosystem more susceptible to adverse effects of secondary stresses, such as frost or drought, and disturbance events, such as foraging by herbivores.
- In an attempt to manage the negative consequences of atmospheric nitrogen deposition and acidification, 'critical loads' and 'critical levels' have been established for ecosystems across Europe. Each European site is host to a variety of habitats and species, the features of which are often designated a critical load for nitrogen deposition. The critical loads of pollutants are defined as a '...quantitative estimate of exposure to one or more pollutants below which significant harmful effects on specified sensitive elements of the environment do not occur according to present knowledge'⁶³. Critical levels are defined as 'concentrations of pollutants in the atmosphere above which direct adverse effects on receptors, such as human beings, plants, ecosystems or materials, may occur according to present knowledge'⁶⁴.

⁶² APIS (2016) Ecosystem Services and air pollution impacts. Available at: https://www.apis.ac.uk/search-ecosystem-impacts [Date Accessed: 05/06/25].

⁶³ Coordination Centre for Effects (CCE). Critical load and level definitions. Available at: https://www.umweltbundesamt.de/en/Coordination Centre for Effects [Date Accessed: 05/06/25].

⁶⁴ Coordination Centre for Effects (CCE). Critical load and level definitions. Available at: https://www.umweltbundesamt.de/en/Coordination Centre for Effects [Date Accessed: 05/06/25].

5.3 North Meadow and Clattinger Farm SAC baseline information

- 5.3.1 The qualifying feature of North Meadow and Clattinger Farm SAC is lowland hay meadows (National Vegetation Classification MG4 *Alopecurus pratensis Sanguisorba officinalis*)⁶⁵. Natural England's Supplementary Advice⁶⁶ for the SAC notes that the lowland hay meadows are sensitive to air pollution. It indicates that a change in air quality may modify the chemical status of its substrate, accelerating or damaging plant growth, altering its vegetation structure and composition and causing the loss of sensitive typical species associated with it. The management target for this habitat in terms of air quality is to 'maintain concentrations and deposition of air pollutants at or below the site-relevant Critical Load or Level values given for lowland hay meadows on the Air Pollution Information System'.
- Air Pollution Information System (APIS)⁶⁷ indicates that this habitat type is sensitive to changes in air quality. A nitrogen deposition critical load range of between 10 20kgN/ha/yr is provided. Nitrogen deposition (N deposition to a short vegetation⁶⁸) is currently at an average of 15.281 N/ha/yr at the SAC and the level is relatively consistent across the site. Whilst the SAC is also sensitive to acidity, APIS data indicates that acidity levels are currently below critical loads.
- 5.3.3 North Meadow and Clattinger Farm SAC is split across two components. North Meadow is located on the outskirts of the settlement of Cricklade and within 200m of the A419 (approximately 97m to its south). Clattinger Farm is situated in a more rural location and not within 200m of a strategic road link. Natural England's Supplementary Advice⁶⁹ for the SAC notes that nutrient levels may be significantly affected by deposition of sediment following flood events from the River Thames.

5.4 Information required to progress the Appropriate Assessment

5.4.1 Natural England has developed a standard methodology for the assessment of traffic related air quality impacts under the Habitats Regulations which is relevant to the HRA of land use plans⁷⁰. In addition, the Institute of Air Quality Management (IAQM)⁷¹ and the Chartered Institute of Ecology and Environmental Management (CIEEM)⁷² have also prepared advice on the assessment of air quality impacts at designated sites. This guidance provides methodologies for Appropriate Assessment and ecological interpretation of air quality impacts at designated sites.

⁶⁵ Natural England. 2018. North Meadow and Clattinger Farm SAC Conservation Objectives. Available at: https://publications.naturalengland.org.uk/file/4953376035176448 [Date Accessed: 05/06/25].

⁶⁶ Natural England. 2018. North Meadow and Clattinger Farm SAC. Supplementary Advice. Available at: https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0016372.pdf [Date Accessed: 05/06/25].

⁶⁷ Air Pollution Information System. https://www.apis.ac.uk/ [Date Accessed: 05/06/25].

⁶⁸ Short vegetation - Representative of lowland hay meadow habitat.

⁶⁹ Natural England. 2018. North Meadow and Clattinger Farm SAC. Supplementary Advice. Available at: https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0016372.pdf [Date Accessed: 05/06/25].

⁷⁰ Natural England (2018) Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations (NEA001). Available at:

 $[\]underline{\text{http://publications.naturalengland.org.uk/publication/4720542048845824}} \ [Date \ Accessed: 23/05/25].$

⁷¹ Holman et al (2020). A guide to the assessment of air quality impacts on designated nature conservation sites – version 1.1, Institute of Air Quality Management, London.

⁷² CIEEM (2021) Advice on Ecological Assessment of Air Quality Impacts. Chartered Institute of Ecology and Environmental Management. Winchester, UK.

- In order to better define this impact, traffic modelling data is required to identify whether screening thresholds (discussed in **Section 3.4**) along the A419 will be exceeded for the Local Plan either alone or in-combination. Traffic data will be made available through the traffic modelling evidence base which is currently being undertaken to support the plan making process.
- 5.4.3 Where exceedances of the 1,000 AADT threshold are identified, these will be considered in an AA taking into consideration the outputs of potential air quality modelling in relation to habitat types and habitat responses, baseline data and future trends. Where adverse impacts on site integrity are identified, effective mitigation will need to be incorporated. This information will be available as the Local Plan develops and presented in the Regulation 19 HRA.

6 Preliminary water Appropriate Assessment

6.1 Introduction

- 6.1.1 The HRA screening process in Chapter 4 concludes that a number of Draft Local Plan policies and all allocations have the potential to result in likely significant water impacts as follows:
 - Cothill Fen SAC
 water quantity;
 - Kennet and Lambourn Floodplain SAC water quality and water quantity;
 - North Meadow and Clattinger Farm SAC
 water quantity;
 - Oxford Meadows SAC water quality and water quantity; and
 - River Lambourn water quality.
- This section of the report provides a preliminary AA of this issue where evidence allows. It also highlights additional work that will be required to complete the AA at Regulation 19.

6.2 Water quality impacts and information required to progress the Appropriate Assessment

- As noted in **Section 3.5**, urbanisation has the potential to reduce the quality of water entering a catchment through processes such as sedimentation, accidental spillage of chemicals and materials and operational surface water runoff. Water quality may also be reduced through effluent discharges at wastewater treatment works. This change in water quality can increase nutrient inputs into a catchment which can lead to algal blooms, reduce dissolved oxygen and increased turbidity. This can affect the overall condition of the receiving waterbody and may have adverse effects at hydrologically sensitive and connected habitats sites and their qualifying features. As outlined in **Table 3.2**, whilst no European sites are located in the Plan area, a number are located downstream and are hydrologically connected to the Plan area. These include the Kennet and Lambourn Floodplain SAC, Oxford Meadows SAC and the River Lambourn SAC.
- Wastewater treatment in the Plan area is provided via STWs operated and maintained by Thames Water. Treated wastewater is ultimately discharged to nearby waterbodies. Each STW is connected to development by a network of wastewater pipes (the sewerage system) which collects wastewater generated by homes and businesses to the STW. The EA control discharges from STW through the issue of permits.
- 6.2.3 Together the Government, the EA and the water companies are responsible for preparing plans and strategies and implementing a regulatory framework to ensure there is enough water for the future needs of both people and the environment and managing the treatment of wastewater. This is undertaken through a catchment-based approach and provides protection for European sties and ensures compliance with the WFD as discussed at paragraph 3.5.4.

- As set out in **Section 3.5**, the majority of the Plan area falls within the Thames RBD, with a smaller section of the Plan area within the Severn RBD. River Basin Management Plans are subject to HRA. A key output from the evaluation of these higher plans includes the identification of threats to the water environment and how these can be managed. The Severn RBMP⁷³, which applies to the Plan area, is discussed in detail in **Section 3.5** and **Appendix A**. The conclusion of the Severn RBMP HRA suggests that, at the strategic level, there will be no LSEs upon any European site. The RBMP HRA findings also recognise that, as water and land resources are closely linked, the RBMP should also inform decisions on land-use planning^{74,75}.
- A review of mapping data (**Figure 3.3**) indicates that no allocations are located within the nutrient sensitive catchment of the River Lambourn SAC. As the Local Plan develops this will be kept under review. Protective policy wording has been included in the Local Plan (at Policy CSE8 Biodiversity, Geodiversity and Nature Recovery) to ensure any development coming forward within this sensitive catchment area (including windfall) does not contribute to nutrient inputs at the SAC.
- 6.2.6 Policies set out in the Local Plan (Policy CSE9 Managing Flood Risk and U1 Wastewater and Sewage Infrastructure and Water Supply) will go towards the protection of water quality. Further outputs which build on the scoping WCS⁷⁶ will continue to support the Local Plan and will feed into the HRA outputs at Regulation 19. On-going dialogue will also be required with Thames Water and the Environment Agency to ensure adequate STW infrastructure is in place to accommodate future forecast growth and ensure WFD targets for 'Good Ecological Status' are maintained. This ongoing dialogue and outputs from the emerging evidence base will feed into the AA at Regulation 19.

6.3 Water quantity impacts and information required to progress the Appropriate Assessment

6.3.1 Urban development can reduce catchment permeability, and the presence of drainage networks may be expected to remove runoff from urbanised catchments. This may result in changes in run off rates from urbanised areas to European sites or watercourses which connect to them and therefore water levels. Water mains leakage and sewer infiltration may also affect water levels. In addition, supply to meet water demand associated with new development (residential and commercial / industrial) also has the potential to affect water balances at hydrologically sensitive European sites which are connected with the Plan area.

⁷³ Environment Agency (2022) Severn River Basin Management Plan. Available at: https://www.gov.uk/guidance/severn-river-basin-district-river-basin-management-plan-updated-2022 [Date Accessed: 05/06/25].

⁷⁴ Environment Agency (2022) River basin management plan for the Severn River Basin District Habitats Regulations Assessment. Available at:

https://assets.publishing.service.gov.uk/media/635247738fa8f554c470abf5/Severn_river_basin_management_plan_2022_HRA .pdf [Date Accessed: 05/06/25].

⁷⁵ Environment Agency (2022) River basin management plan for the Thames River Basin District Habitats Regulations Assessment. Available at:

https://assets.publishing.service.gov.uk/media/635248048fa8f554cca7b226/Thames_river_basin_management_plan_2022_HR A.pdf [Date Accessed: 05/06/25].

⁷⁶ Stantec (2025) Water Cycle Study. Scoping Report. Swindon Borough Council.

- As set out in **Section 3.5**, a number of high-level strategic water management plans are in place to demonstrate long term plans to accommodate the impacts of population growth, drought, environmental obligations and climate change uncertainty in order to balance supply and demand including WRMPs and Drought Plans. In addition, the abstraction of water is subject to a licensing process administered by the EA. Policy U1 Wastewater and Sewage Infrastructure and Water Supply sets out requirements for new
- 6.3.3 At Regulation 19 the AA will apply protective water quality policy wording from the Local Plan and draw on the wider strategic protective framework for the water environment. Ongoing consultation undertaken with Thames Water in terms of water resource availability for future growth and future outputs of the WCS will also input to the assessment.

development to be water efficient and ensure adequate water supply.

7 Preliminary recreational pressure Appropriate Assessment

7.1 Introduction

- 7.1.1 The HRA screening process in **Chapter 4** concluded that a number of allocations have the potential to result in LSEs at North Meadow and Clattinger Farm SAC due to increased recreational pressure.
- 7.1.2 This section of the report provides a preliminary AA of recreational pressures where evidence allows. It also highlights additional work that will be required to complete the AA at Regulation 19.

7.2 Recreational pressure impacts

7.2.1 Increased recreational pressure at European sites can result in damage to habitats and changes in behaviour to animals such as birds at nesting and feeding sites. This can be caused by erosion and compaction, troubling of grazing stock, spreading of invasive species, dog fouling, and tree climbing among other recreational impacts. Typically, disturbance of habitat and species is the unintentional consequence of people's presence which can impact distribution of habitat types and breeding success and survival. Increased development has the potential to increase recreational pressures upon European sites which are accessible to the public.

7.3 North Meadow and Clattinger Farm SAC baseline information

- 7.3.1 The qualifying feature of North Meadow and Clattinger Farm SAC is lowland hay meadows which is sensitive to the trampling effects of recreational pressure and eutrophication from dog faeces.
- 7.3.2 The conservation target for the SAC is to 'maintain the management measures (either within and / or outside the site boundary as appropriate) which are necessary to maintain the structure, functions and supporting processes associated with the lowland hay meadows feature'⁷⁷.
- 7.3.3 The North Meadow component of the SAC, which is open to the public, is identified as being of particular risk to recreational impacts and, as set out at **paragraphs 3.6.7** and **3.6.11**, and is subject to an interim recreational mitigation strategy⁷⁸. The Clattinger Farm component of the SAC has not been identified as at risk of public access and disturbance effects.

⁷⁷ Natural England (2018) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features. North Meadow & Clattinger Farm Special Area of Conservation (SAC). Available at: https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0016372.pdf [Date Accessed: 23/05/25].

⁷⁸ Cotswold District Council (2023) Interim Recreational Mitigation Strategy. Available at: https://www.swindon.gov.uk/downloads/download/2657/north meadow and clattinger farm

https://www.swindon.gov.uk/downloads/downloads/2657/north meadow and clattinger farm interim recreation mitigation stra tegy 2023-2028#:~:text=Swindon%20Borough%20Council-

[,]North%20Meadow%20and%20Clattinger%20Farm%20Interim%20Recreation%20Mitigation%20Strategy%202023,Farm%20Special%20Area%20of%20Conservation [Date Accessed: 23/05/25].

7.3.4 The Strategy sets out two recreational ZOI representing two main user groups of the SAC including local user groups and seasonal user groups. A review of residential allocations set out in the Local Plan in relation to these ZOI indicates that one residential allocation is located within the inner ZOI (Site s0030c) with 12 residential allocations located within the outer ZOI, see **Figure 7.1** and **Appendix D**.

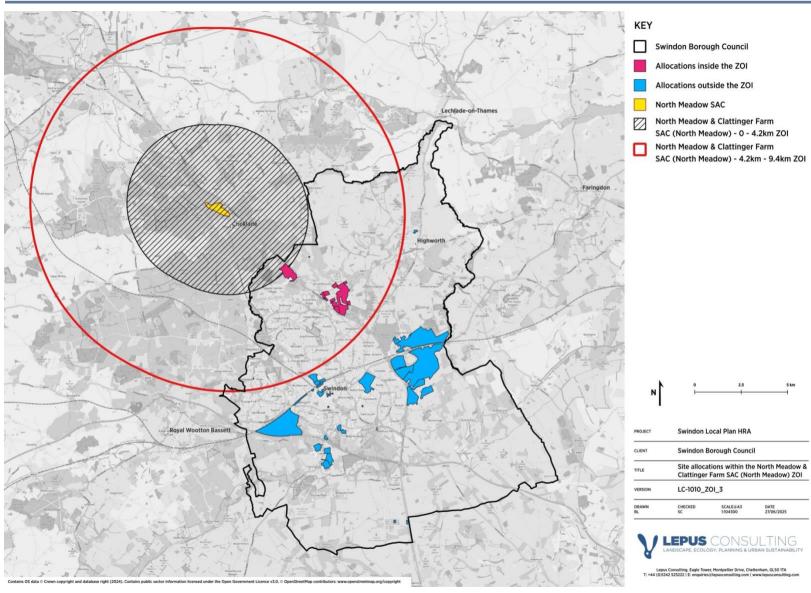


Figure 7.1: Site allocations in relation to the recreational ZOI of the North Meadow component of the North Meadow and Clattinger Farm SAC

- As noted in paragraph 3.6.10, the Strategy provides an interim approach covering the 7.3.5 period from 2023 to 2028, while further monitoring and surveys are undertaken, and will be reviewed within 5 years or earlier, if required. Within the inner and outer ZOI, all new development will be expected to provide mitigation at North Meadow through financial contributions to Strategic Access Management and Monitoring (SAMM) measures. SAMM aim to mitigate recreational impacts at the SAC itself and include measures such increased provision of wardens and rangers, monitoring, information packs, temporary walk boards, dog waste bins and signage to manage recreational impacts and raise awareness of the sensitivities of the SAC. The strategy notes that development within the inner zone and larger development with good transport links to the SAC in the outer zone, may also need to provide alternative greenspace as a recreational resource for new resident, known as Suitable Alternative Natural Greenspaces (SANG) or enhanced Green Infrastructure (GI). SANG or enhanced GI aims to divert recreational pressures away from a sensitive site (in this instance the SAC) by providing alternative recreational spaces for new residents. The strategy contains SANG guidelines for developers.
- 7.3.6 The strategy will be secured through policy wording set out in the Local Plan at Policy CSE8: Biodiversity, Geodiversity and Nature Recovery and through relevant area policies.

7.4 Information required to progress the Appropriate Assessment

7.4.1 At Regulation 19 the HRA process will evaluate protective policy wording required to secure recreational mitigation at North Meadow and Clattinger Farm SAC. Details will also be provided to ensure required mitigation can be delivered effectively and in perpetuity for all allocations within the inner and outer ZOIs. Consideration will also be given to policy wording which ensures adequate greenspace is provided for new development to ensure no adverse recreational impacts at any European site.

8 Next steps

8.1 Conclusions

- 8.1.1 This HRA report provides an assessment of the Local Plan which includes allocations and policies. It screens in the following LSEs at European sites:
 - Air quality LSEs in-combination at North Meadow and Clattinger Farm SAC;
 - Water quality and quantity LSEs in-combination at Cothill Fen SAC, Kennet and Lambourn Floodplain SAC, North Meadow and Clattinger Farm SAC, Oxford Meadows SAC, and the River Lambourn SAC; and
 - Recreational LSEs alone and in-combination at North Meadow and Clattinger Farm SAC.
- 8.1.2 This report also identifies information required to inform the AA at the Regulation 19 stage of the Plan making process. No conclusions have been drawn at this stage in the process in terms of adverse impacts on the site integrity of any European site (alone or incombination).

8.2 Next steps

- 8.2.1 Screening will be revisited at Regulation 19 when the Local Plan is further developed to take into consideration any changes.
- 8.2.2 The following information will be collated as the Local Plan develops, to inform the AA at Regulation 19:
 - The Regulation 19 version of the Local Plan will include an assessment of traffic modeling which is being undertaken to support the plan making process. This will allow a screening of likely significant air quality effects against Natural England's screening thresholds for North Meadow and Clattinger Farm SAC and inform any further work required to allow an AA of this impact pathway.
 - The Regulation 19 HRA will be informed by ongoing dialogue with Thames Water in terms of STW capacity and water resources. The Regulation 19 HRA will also draw on outputs from the updated WCS and take into consideration the high-level protective water framework and the Local Plan policy wording.
 - The Regulation 19 will take into consideration the updated interim recreational mitigation strategy for North Meadow and Clattinger Farm SAC and set out details regarding recreational mitigation where required. It will also take into consideration policies which aim to provide sufficient levels of recreational space to accommodate new growth in the Plan area.
- 8.2.3 At Regulation 19 a full AA will be presented in support of the Publication version of the Local Plan which will allow the Council, as the Competent Authority, to make the Integrity Test. The Council will take into consideration representations from Natural England under the provisions of the Habitats Regulations.

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Habitats Regulations Assessments

Sustainability Appraisals

Strategic Environmental Assessments

Landscape Character Assessments

Landscape and Visual Impact Assessments

Green Belt Reviews

Expert Witness

Ecological Impact Assessments

Habitat and Ecology Surveys

Biodiversity Net Gain



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CHELTENHAM

Appendix A: In-combination assessment

Plans and policies	Plan status	Summary of housing/employment	Potential in-combination LSE
Cotswold District Council ¹	The Cotswold District Council Local Plan 2011 - 2031 was adopted by the Council on 3 rd August 2018. The District Council is currently updating its Local Plan to make it 'Green to the Core' as well as considering development needs up to 2041. A Regulation 18 Consultation was undertaken in 2024 ²	The Adopted Local Plan allocates 8,400 dwellings and at least 24 hectares of B class employment land over the Plan period 2011 – 2031.	The combined impact of neighbouring authority growth, in-combination with the Local Plan, on air quality, hydrology and public access and disturbance impacts will be considered further in the HRA process.
West Berkshire Council ³	The West Berkshire Local Plan Review 2023 to 2041 (LPR) was adopted on 10 June 2025.	The Local Plan Review makes provision for minimum 9,270 homes between 1 April 2023 and 31 March 2041: average 515 homes per annum. Minimum requirement of 98,196 sqm of industrial floorspace and 57,531 sqm of office floorspace in 2023 – 2041 period.	The combined impact of neighbouring authority growth, in-combination with the Local Plan, on air quality, hydrology and public access and disturbance impacts will be considered further in the HRA process.

¹ Cotswold District Council (2018) Cotswold District Local Plan. Available at: https://www.cotswold.gov.uk/media/k2kjvq3b/cotswold-district-local-plan-2011-2031-adopted-3-august-2018-web-version.pdf [Accessed: 02/06/25].

² Cotswold District Council (2024) Evidence base and monitoring. Available at: https://www.cotswold.gov.uk/planning-and-building/planning-policy/local-plan-news-and-consultation/ [Accessed: 02/06/25].

³ West Berkshire Council. The Current Local Plan. Available at: https://www.westberks.gov.uk/article/40117/The-Current-Local-Plan [Accessed: 02/06/25].

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Plans and policies	Plan status	Summary of housing/employment	Potential in-combination LSE
Vale of White Horse District Council ⁴	Divided into two parts, Local Plan 2031 Part 1 was adopted in December 2016 and the Local Plan 2031 Part 2 was adopted in October 2019. Local Plans Part 1 and Part 2 have been reviewed (Regulation 10A) and continues to provide a suitable framework for development ⁵ . South Oxfordshire and the Vale of White Horse have prepared a Joint Local Plan 2041, which has been submitted to the Secretary of State for Housing, Communities and Local Government for examination by a planning inspector ⁶ .	The housing target outlined by Part 1 for the Vale of White Horse District is for at least 20,560 homes to be delivered in the plan period between 2011 and 2031 ⁷ . 12,495 dwellings will be delivered through strategic allocations. 1,840 dwellings remain to be identified and will be allocated through the Local Plan 2031 Part 2 or Neighbourhood Development Plans or through the Development Management process. Plan 2 outlines a housing requirement for unmet housing needs for Oxford of 22,760 dwellings between April 2011 to March 2031, with 2,252 to be delivered through strategic allocations and 2,420 to be delivered through additional allocations ⁸ .	The combined impact of neighbouring authority growth, in-combination with the Local Plan, on air quality, hydrology and public access and disturbance impacts will be considered further in the HRA process.

⁴ Vale of White Horse District Council (2016) Local Plan 2031 Part 1 Strategic sites and polices. Available at: https://www.whitehorsedc.gov.uk/wp-content/uploads/sites/3/2020/10/Local-Plan-2031-Part-1.pdf [Accessed: 05/06/25].

⁵ Vale of White Horse District Council (2016) Local Plan 2031. Available at: https://www.whitehorsedc.gov.uk/vale-of-white-horse-district-council/planning-and-development/local-plan-and-planning-policies/local-plan-2031/ [Accessed: 05/06/25].

⁶ Vale of White Horse District Council (2025) Joint Local Plan 2041. Available at: https://www.whitehorsedc.gov.uk/vale-of-white-horse-district-council/planning-and-development/local-plan-and-planning-policies/local-plan-2041/ [Accessed: 05/06/25].

⁷ Vale of White Horse District Council (2016) Local Plan 2031 Part 1 Strategic sites and polices. Available at: https://www.whitehorsedc.gov.uk/wp-content/uploads/sites/3/2020/10/Local-Plan-2031-Part-1.pdf [Accessed: 05/06/25].

⁸ Vale of White Horse District Council (2016) Local Plan 2031 Part 2 Detailed Policies and Additional Sites. Available at: https://www.whitehorsedc.gov.uk/wpcontent/uploads/sites/3/2021/03/VOWHDC-Master-1.pdf [Accessed: 05/06/25].

Plans and policies	Plan status	Summary of housing/employment	Potential in-combination LSE
Wiltshire Council ⁹	The current Local Plan is the Wiltshire Core Strategy (WCS), adopted in January 2015. The WCS, along with made plans, form the development plan for Wiltshire for the period up to 2026. Wiltshire Council was writing a new Local Plan - the Regulation 19 consultation occurred in autumn 2023 ¹⁰ and a draft Local Plan was published as part of this consultation ¹¹ . The Wiltshire Local Plan was submitted to the Secretary of State for Housing Communities and Local Government for independent examination in November 2024 ¹² .	The Core Strategy makes provision for at least 42,000 new homes in Wiltshire in the plan period from 2006 – 2026. The new Local Plan seeks to deliver 160ha of new employment land that should deliver 21,300 jobs, and approximately 36,740 new homes 13.	The combined impact of neighbouring authority growth, in-combination with the Local Plan, on air quality, hydrology and public access and disturbance impacts will be considered further in the HRA process.

⁹ Wiltshire Council. Local Plan. Available at: https://www.wiltshire.gov.uk/planning-policy-core-strategy [Accessed 05/06/25].

¹⁰ Wiltshire Council (2023) Wiltshire Local Plan Regulation 19 consultation. Available at: https://www.wiltshire.gov.uk/article/8048/Current-consultation-Reg-19-autumn-2023#FAQs [Accessed: 7/11/23].

¹¹ Wiltshire Council (2023) Wiltshire Local Plan Pre-Submission Draft 2020-2038 (Regulation 19). Available at: <a href="https://www.wiltshire.gov.uk/media/11976/Wiltshire-Local-Plan-Pre-Submission-Draft-2020-2038-Regulation-19/pdf/Wiltshire-Local-Plan Reg 19 web accessible version.pdf?m=1695730562743 [Accessed 06/08/24].

 $^{^{12} \} Wiltshire \ Council \ (2025) \ The \ Local \ Plan \ Review. \ Available \ at: \ \underline{https://www.wiltshire.gov.uk/article/8037/The-Local-Plan-review} \ [Accessed \ 05/06/25]$

¹³ Wiltshire Council (2023) Wiltshire Local Plan Pre-Submission Draft 2020-2038 (Regulation 19). Available at: <a href="https://www.wiltshire.gov.uk/media/11976/Wiltshire-Local-Plan-Pre-Submission-Draft-2020-2038-Regulation-19/pdf/Wiltshire-Local-Plan-Pre-Submission-Draft-2020-2038-Regulation-19/pdf/Wiltshire-Local-Plan Reg 19 web accessible version.pdf?m=1695730562743 [Accessed 05/06/25].

Plans and policies	Plan status	Summary of housing/employment	Potential in-combination LSE
Severn River Basin Management Plan (RBMP)	The Severn RBMP was updated in October 2022 ¹⁴ .	The Plan provides an overview of river basin planning in England and Wales for the Severn River Basin District. It includes objectives for each water body and a summary of the measures necessary to reach those objectives.	The RBMP was supported by an HRA ¹⁵ . This concluded that, at the strategic plan level, the RBMP is not likely to have any significant effects on any European sites, alone or in combination with other plans or projects. Given this conclusion, there was no requirement, at this strategic plan level, to progress to the next stage of the HRA (an 'appropriate assessment' to examine the question of adverse effects on the integrity of European sites). The RBMP does not specify exactly where or how measures should be implemented, this will be determined at either a lower-tier plan or project level and this is taken into consideration in the HRA. The HRA also draws on detailed mitigation measures and procedures currently in place. The overall effect of the RBMP is to promote management towards Good Ecological Potential (GEP) and Good Ecological Status (GES).

¹⁴ Environment Agency (2022) Severn River Basin Management Plan summary and cross border catchments. Available at : <a href="https://www.gov.uk/government/publications/severn-river-basin-management-plan-summary-and-cross-border-catchments-england-and-wales/severn-river-basin-management-plan-summary-and-cross-border-catchments-england-and-wales_[Accessed 05/06/25].

¹⁵ Environment Agency (2022) River basin management plan for the Severn River Basin District Habitats Regulations Assessment. Available at: https://assets.publishing.service.gov.uk/media/635247738fa8f554c470abf5/Severn_river_basin_management_plan_2022_HRA.pdf [Accessed 05/06/25].

Plans and policies	Plan status	Summary of housing/employment	Potential in-combination LSE
Thames River Basin	Updated December 2022.	The document summaries changes from the previous RMBP and includes:	This Plan aims to protect the water environment. It has the potential to have a
Management Plan (RBMP) ¹⁶		An overview of the changes in the state of the water environment	positive in-combination effect with the Local Plan on the water environment.
		 A summary of the progress towards achieving environmental objectives. 	
		Summary of the measures implemented since 2015.	
		 Identifies some of the main changes in the evidence used in the river basin planning. 	
Thames Water Resources Management	WRMP19 was published in April 2020. In October 2024, WRMP24 was published which builds on WRMP19 ¹⁸ .	The WRMP24 sets out the plan for delivering water for the next 50 years – until 2075 – for the 13,000 square km supplied by Thames Water.	This Plan aims to protect the water environment. It has the potential to have a positive in-combination effect with the Local
Plan (WRMP) ¹⁷		It outlines issues threatening water supply such as climate change, and solutions like drought response which help with future water security.	Plan on the water environment.
		The main objectives outlined are secure and wholesome supply, environmental improvement and social benefit, resilience, and cost.	
		The Plan also lists new water source developments such as river abstraction and new reservoirs.	
Thames Water Drought Plan ¹⁹	The Thames Water Drought Plan was prepared in 2022.	The Final Drought Plan indicates that Thames Water's security of supply is robust for the next 5 years to achieve protection from 1:100 year to 1:500 year droughts (although to the detriment of the environment).	It is likely that the Drought Plan will have a positive impact for hydrologically sensitive European sites.

¹⁶ Environmental Agency (2022) Thames Basin Management Plan Summary and cross boarder catchment (England and Wales). Available at: https://www.gov.uk/guidance/thames-river-basin-district-river-basin-management-plan-updated-2022 [Accessed: 05/06/25].

¹⁷ Thames Water (2024) Water Resource Management Plan. Available at: https://www.thameswater.co.uk/about-us/regulation/water-resources [Accessed: 06/06/25].

¹⁸ Thames Water (2024) Water resources management plan 2024. Available at: https://www.thameswater.co.uk/about-us/regulation/water-resources [Accessed 06/05/25]

¹⁹ Thames Water. Drought Plan 2022 and Drought Plan Addendum. Available at: https://www.thameswater.co.uk/media-library/home/about-us/regulation/drought-plan-2022/thames-water-drought-plan-2022.pdf and https://www.thameswater.co.uk/media-library/home/about-us/regulation/drought-plan-2022/drought-plan-addendum.pdf [Date Accessed 06/05/25]

Plans and	Plan status	Summary of housing/employment	Potential in-combination LSE
policies Swindon Local Transport Plan ²⁰	The Swindon Local Transport Plan covers the period 2011 to 2026.	The LTP contains policies to encourage active and sustainable modes of transport including bus, rail,	The impact of Swindon LTP, in-combination with Local Plan growth, on traffic related air
·	·	walking and cycling. It also covers behavioural changes and low emission vehicle technology.	quality will be considered further in the HRA process.
Wiltshire County Council Transport Plan ²¹	Local Transport Plan 4 (LTP4) was adopted in March 2025 and covers the period from 2025 – 2038. It uses a place-based approach to address the needs of three distinct areas: principal settlements, market towns, and rural communities.	LTP4 aims to set the policy direction for transport in Wiltshire and set out how the transport policy relates to other areas. It consists of a core strategy, place-based sub-strategies and county-wide sub-strategies. Issues covered by these sub-strategies include freight, parking, and electric vehicle infrastructure. Some of the objectives of LTP4 include: decarbonising private vehicles; providing safe transport which improves quality of life, health, and wellbeing; promoting more equal and inclusive access to opportunities; maximising sustainable economic growth opportunities by ensuring transport is reliable ²² .	The impact of LTP4, in-combination with Local Plan growth, on traffic related air quality will be considered further in the HRA process.
Wiltshire and Swindon Mineral Core Strategy 2006 – 2026 ²³	2006 – 2026 Adopted in June 2009 It is noted that minerals and waste will form part of the Swindon Local Plan.	This Plan provides a strategic policy framework for the areas of Wiltshire council and Swindon borough council, which sets out the context for sustainable minerals development but forms only one element of the overall mineral and waste development framework. It contains policies to manage the availability, extraction and use of primary, secondary and recycled mineral resources, and also those to protect the natural environment.	Mineral extraction projects have the potential to act in combination with development in the Local Plan to affect air quality and water resources.

²⁰ Swindon Borough Council (2011) Local Transport Plan. Available at: https://www.swindon.gov.uk/downloads/file/5171/swindon_local_transport_plan_2011_to_2026 [Date Accessed 06/05/25]

²¹ Wiltshire Council (2025) Wiltshire Local Transport Plan. Available at: https://www.wiltshire.gov.uk/article/2676/Wiltshire-Local-Transport-Plan [Accessed: 06/06/25].

²² Wiltshire Council (2025) Wiltshire Local Transport Plan 4 Executive summary. Available at: https://www.wiltshire.gov.uk/media/15912/LTP4-Executive-Summary.pdf?m=1745850494543 [Accessed: 06/06/25].

²³ Wiltshire Council (2009) Wiltshire and Swindon Mineral Core Strategy 2006 – 2026. Available at: <a href="https://www.wiltshire.gov.uk/media/8546/minerals-core-strategy-june-2009/pdf/minerals-core-strategy-june-2009/pdf/minerals-core-strategy-june-2009.pdf?m=637804441195500000 [Accessed: 06/06/25].

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Plans and policies	Plan status	Summary of housing/employment	Potential in-combination LSE
Wiltshire and Swindon Waste Core Strategy 2006 – 2026 ²⁴	2006 – 2026 Adopted in June 2009	The Waste Core Strategy forms one element of the Wiltshire and Swindon mineral and waste development framework. The strategy considers the key characterises of Wiltshire and Swindon such as population trends, economic performance and landscape importance. The strategy identifies how new facilities will be delivered to meet the associated projected growth in waste arisings. It also identifies future site locations for waste management and the approach to waste management in Wiltshire and Swindon.	Waste management projects have the potential to act in combination with development in the Local Plan to affect air quality and water resources.

²⁴ Wiltshire Council (2009) Wiltshire and Swindon Waste Core Strategy 2006 – 2026. Available at: <a href="https://www.wiltshire.gov.uk/media/8548/waste-core-strategy-july-2009/pdf/waste-core-strategy-july-200

Appendix B: European Site Conservation Objectives, Qualifying Features, Threats and Pressures

Cothill Fen SAC¹

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;
- The structure and function (including typical species) of qualifying natural habitats; and,
- The supporting processes on which qualifying natural habitats rely.

Qualifying features:

H7230. Alkaline fens; Calcium-rich springwater-fed fens

H91E0. Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion, Alnion incanae, Salicion albae*); Alder woodland on floodplains*

*denotes a priority habitat or species

Threats and Pressures at European site which may be affected by the Local Plan^{2,3}

- Air pollution impact of atmospheric nitrogen deposition;
- Habitat connectivity;
- Hydrology.

Hackpen Hill SAC⁴

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.

Qualifying Features:

H6210. Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*); Dry grasslands and scrublands on chalk or limestone S1654. *Gentianella anglica*; Early gentian

¹ Natural England (2018) Cothill Fen SAC Conservation Objective. Available at: https://publications.naturalengland.org.uk/file/5387395700883456 [Accessed: 05/06/25].

² Natural England (2014) Cothill Fen SAC SIP. Available at: https://publications.naturalengland.org.uk/file/6571721318465536 [Accessed: 05/06/25].

³ Natural England (2016) Cothill Fen SAC Conservation Objectives Supplementary Advice. Available at: https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0012889.pdf [Accessed: 05/06/25].

⁴ Natural England (2018) Hackpen Hill SAC Conservation Objective. Available at: https://publications.naturalengland.org.uk/file/5348983149166592 [Accessed: 05/06/25].

Hackpen Hill SAC4

Threats and Pressures at European site which may be affected by the Local Plan^{5,6}

- Habitat connectivity; and,
- · Air quality.

Kennet and Lambourn Floodplain SAC⁷

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 the habitats of qualifying species;
- The structure and function of the habitats of qualifying species;
- The supporting processes on which the habitats of qualifying species rely;
- The populations of qualifying species; and,
- The distribution of qualifying species within the site.

Qualifying Features:

S1016. Vertigo moulinsiana; Desmoulin's whorl snail

Threats and Pressures at European site which may be affected by the Local Plan^{8,9}

Hydrology

North Meadow and Clattinger Farm SAC¹⁰

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
- The structure and function (including typical species) of qualifying natural habitats, and
- The supporting processes on which qualifying natural habitats rely

Qualifying features:

H6510. Lowland hay meadows (Alopecurus pratensis, Sanguisorba officinalis)

⁵ Natural England (2014) Hackpen Hill SAC SIP. Available at: https://publications.naturalengland.org.uk/file/6672304073342976 [Date Accessed: 05/06/25].

⁶ Natural England (2019) Hackpen Hill SAC Conservation Objectives Supplementary Advice. Available at: https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0030162.pdf [Date Accessed: 05/06/25].

⁷ Natural England (2018) Kennet and Lambourn Floodplain SAC Conservation Objective. Available at: https://publications.naturalengland.org.uk/file/5573203527467008 [Date Accessed: 05/06/25].

⁸ Natural England (2014) River Lambourn and Kennet and Lambourn Floodplain SIP. Available at: https://publications.naturalengland.org.uk/file/5702742270017536 [Date Accessed: 05/06/25].

⁹ Natural England (2019) Kennet and Lambourn Floodplain SAC Conservation Objectives Supplementary Advice. Available at: https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0030044.pdf [Date Accessed: 05/06/25].

¹⁰ Natural England (2018) North Meadow and Clattinger Farm SAC Conservation Objective. Available at: https://publications.naturalengland.org.uk/file/4953376035176448 [Date Accessed: 05/06/25].

North Meadow and Clattinger Farm SAC¹⁰

Threats and Pressures at a European site which may be affected by the Local Plan¹¹, ¹²

- Hydrology;
- Public access/ disturbance;
- Habitat connectivity; and,
- Air quality.

Oxford Meadows SAC¹³

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.

Qualifying features:

H6510. Lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*) S1614. *Apium repens*; Creeping marshwort

Threats and Pressures at European site which may be affected by the Local Plan¹⁴, ¹⁵

- Habitat connectivity;
- Hydrology; and,
- Air quality.

Pewsey Downs SAC¹⁶

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;

¹¹ Natural England (2014) North Meadow and Clattinger Farm SAC SIP. Available at: https://publications.naturalengland.org.uk/file/4896312373805056 [Date Accessed: 05/06/25].

¹² Natural England (2018) North Meadow and Clattinger Farm SAC Conservation Objectives Supplementary Advice. Available at: https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0016372.pdf [Date Accessed: 05/06/25].

¹³ Natural England (2018) Oxford Meadows SAC Conservation Objectives. Available at: https://publications.naturalengland.org.uk/file/5150991062401024 [Date Accessed: 05/06/25].

¹⁴ Natural England (2014) Oxford Meadows SAC SIP. Available at: https://publications.naturalengland.org.uk/file/5980083154059264 [Date Accessed: 05/06/25].

¹⁵ Natural England (2019) Oxford Meadows SAC Conservation Objectives Supplementary Advice. Available at: https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0012845.pdf [Date Accessed: 05/06/25].

¹⁶ Natural England (2018) Pewsey Downs SAC Conservation Objective. Available at: https://publications.naturalengland.org.uk/file/6687829589753856 [Date Accessed: 05/06/25].

Pewsey Downs SAC¹⁶

- The structure and function of the habitats of qualifying species;
- The supporting processes on which qualifying natural habitats and habitats of qualifying species rely;
- The populations of qualifying species; and,
- The distribution of qualifying species within the site.

Qualifying features:

H6210. Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*) (important orchid sites); Dry grasslands and scrublands on chalk or limestone (important

orchid sites)*

S1654. Gentianella anglica; Early Gentian

*denotes a priority natural habitat or species

Threats and Pressures at European site which may be affected by the Local Plan¹⁷, ¹⁸

- Habitat fragmentation; and,
- Air pollution impact of atmospheric nitrogen deposition.

River Avon SAC¹⁹

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.

Qualifying features:

H3260. Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation; Rivers with floating vegetation often dominated by Water-crowfoot

S1016. Vertigo moulinsiana; Desmoulin's whorl snail

S1095. Petromyzon marinus; Sea lamprey

S1096. *Lampetra planeri*; Brook lamprey

S1106. Salmo salar; Atlantic salmon

S1163. Cottus gobio; Bullhead

Threats and Pressures at European site which may be affected by the Local Plan²⁰,²¹

¹⁷ Natural England (2015) Pewsey Downs SIP. Available at: https://publications.naturalengland.org.uk/file/6141388410322944 [Date Accessed: 05/06/25].

¹⁸ Natural England (2019) Pewsey Downs SAC Conservation Objectives Supplementary Advice. Available at: https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0012552.pdf [Date Accessed: 05/06/25].

¹⁹ Natural England (2018) River Avon SAC Conservation Objective. Available at: https://publications.naturalengland.org.uk/file/5809608165949440 [Date Accessed: 05/06/25].

²⁰ Natural England (2014) River Avon and Valley SIP. Available at: https://publications.naturalengland.org.uk/file/6247102287970304 [Date Accessed: 05/06/25].

²¹ Natural England (2022) River Avon and Valley SAC Conservation Objectives Supplementary Advice. Available at: https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0013016.pdf [Date Accessed: 05/06/25].

River Avon SAC¹⁹

- Hydrology; and,
- Disturbance and recreational impacts.

River Lambourn SAC²²

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.

Qualifying features:

H3260. Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitricho-Batrachion* vegetation; Rivers with floating vegetation often dominated by water-crowfoot S1096. *Lampetra planeri*; Brook lamprey S1163. *Cottus gobio*; Bullhead

Threats and Pressures at European site which may be affected by the Local Plan²³,²⁴

Hydrology.

²² Natural England (2018) River Lambourn SAC Conservation Objectives. Available at: https://publications.naturalengland.org.uk/file/4902613816705024 [Date Accessed: 05/06/25].

²³ Natural England (2014) River Lambourn and Kennet-Lambourn Floodplain SIP. Available at: https://publications.naturalengland.org.uk/file/5702742270017536 [Date Accessed: 05/06/25].

²⁴ Natural England (2019) River Lambourn SAC Conservation Objectives Supplementary Advice. Available at: https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0030257.pdf [Date Accessed: 05/06/25].

Appendix C: Screening evaluation of Local Plan polices

The following section of **Appendix C** provides a screening evaluation of policies which comprise the Regulation 18 Local Plan.

Vision and strategy

Policy number	Policy name	Justification: Activities that may result in an LSE on a European site	Screening category	HRA screening
n/a	Vision	The vision for Swindon provides a general statement of policy / general aspirations for the Borough over the Plan period. It sets out aspirations for sustainable development.	Category A	Screen Out
n/a	Strategic objectives	The seven strategic objectives provide a general statement of policy / general aspirations for the Borough around the themes of regeneration, place and belonging, homes for all, economic prosperity, connected communities and sustainable movement, low carbon and health and wellbeing.	Category A	Screen Out

Regeneration

Policy number	Policy name	Justification: Activities that may result in an LSE on a European site	Screening category	HRA screening
SS1	Swindon's Spatial Approach to Growth	 This policy sets out the spatial strategy for development in Swindon. Whilst no details regarding development are identified within the policy, it does support development. This policy supports development which has the potential for LSEs as follows: Air Quality – North Meadow and Clattinger Farm SAC. Hydrology (water quality and water quantity) – Cothill Fen SAC, Kennet and Lambourn Floodplain SAC, North Meadow and Clattinger Farm SAC, Oxford Meadows SAC, River Lambourn SAC and the Severy Estuary SAC, SPA and Ramar. Recreational impacts – North Meadow and Clattinger Farm SAC. 	Category I	Screen in
SS2	Settlement Strategy	This policy details the hierarchy of centres based on their role, function and scale. This policy does not directly trigger a change or development which could lead to a LSE at any European site, either alone or in-combination.	Category F	Screen out

Policy number	Policy name	Justification: Activities that may result in an LSE on a European site	Screening category	HRA screening
SGL 01	Swindon's Central Area	 This policy sets out development requirements for Swindon's Central Area to deliver up to 4,000 new homes and 6,000 new jobs over the Plan period with an ambition for a total of 8,000 homes over a longer period. It has the potential for LSEs as follows Air Quality – North Meadow and Clattinger Farm SAC. Hydrology (water quality and water quantity) – Cothill Fen SAC, Kennet and Lambourn Floodplain SAC, North Meadow and Clattinger Farm SAC, Oxford Meadows SAC, River Lambourn SAC and the Severy Estuary SAC, SPA and Ramar. 	Category L	Screen in
SGL 02	New Eastern Villages (NEV)	 This policy sets out development requirements for a new strategic growth location at New Eastern Village to deliver up to 10,000 new homes. It has the potential for LSEs as follows: Air Quality – North Meadow and Clattinger Farm SAC. Hydrology (water quality and water quantity) – Cothill Fen SAC, Kennet and Lambourn Floodplain SAC, North Meadow and Clattinger Farm SAC, Oxford Meadows SAC, River Lambourn SAC and the Severy Estuary SAC, SPA and Ramar. 	Category L	Screen in
SGL 03	Kingsdown	 This policy sets out development requirements for a new strategic growth location at Kingsdown to deliver up to 1,722 new homes. It has the potential for LSEs as follows: Air Quality – North Meadow and Clattinger Farm SAC. Hydrology (water quality and water quantity) – Cothill Fen SAC, Kennet and Lambourn Floodplain SAC, North Meadow and Clattinger Farm SAC, Oxford Meadows SAC, River Lambourn SAC and the Severy Estuary SAC, SPA and Ramar. Recreational impacts – North Meadow and Clattinger Farm SAC (within 9.4km Outer Zone of Influence). 	Category I	Screen in
SGL 04	Wichelstowe	 This policy sets out development requirements for a new strategic growth location at Wichelstowe to deliver up to 1,600 new homes. It has the potential for LSEs as follows: Air Quality – North Meadow and Clattinger Farm SAC. Hydrology (water quality and water quantity) – Cothill Fen SAC, Kennet and Lambourn Floodplain SAC, North Meadow and Clattinger Farm SAC, Oxford Meadows SAC, River Lambourn SAC and the Severy Estuary SAC, SPA and Ramar. 	Category L	Screen in

Policy number	Policy name	Justification: Activities that may result in an LSE on a European site	Screening category	HRA screening
SGL 05	East Wroughton	 This policy sets out development requirements for a new strategic growth location at Wichelstowe to deliver up to 1,013 new homes. It has the potential for LSEs as follows: Air Quality – North Meadow and Clattinger Farm SAC. Hydrology (water quality and water quantity) – Cothill Fen SAC, Kennet and Lambourn Floodplain SAC, North Meadow and Clattinger Farm SAC, Oxford Meadows SAC, River Lambourn SAC and the Severy Estuary SAC, SPA and Ramar. 	Category L	Screen in
SGL 06	North Tadpole	 This policy sets out development requirements for a new strategic growth location at Wichelstowe to deliver up to 513 new homes. It has the potential for LSEs as follows: Air Quality – North Meadow and Clattinger Farm SAC. Hydrology (water quality and water quantity) – Cothill Fen SAC, Kennet and Lambourn Floodplain SAC, North Meadow and Clattinger Farm SAC, Oxford Meadows SAC, River Lambourn SAC and the Severy Estuary SAC, SPA and Ramar. Recreational impacts – North Meadow and Clattinger Farm SAC (part of the site allocations are within the Inner 4.2km Zone of Influence). 	Category I	Screen in
UGA 01	Marlowe Avenue	 This policy sets out development requirements for a new strategic growth location at Wichelstowe to deliver up to 976 new homes. It has the potential for LSEs as follows: Air Quality – North Meadow and Clattinger Farm SAC. Hydrology (water quality and water quantity) – Cothill Fen SAC, Kennet and Lambourn Floodplain SAC, North Meadow and Clattinger Farm SAC, Oxford Meadows SAC, River Lambourn SAC and the Severy Estuary SAC, SPA and Ramar. 	Category L	Screen in
UGA 02	Pipers Way	 This policy sets out development requirements for a new strategic growth location at Wichelstowe to deliver up to 844 new homes. It has the potential for LSEs as follows: Air Quality – North Meadow and Clattinger Farm SAC. Hydrology (water quality and water quantity) – Cothill Fen SAC, Kennet and Lambourn Floodplain SAC, North Meadow and Clattinger Farm SAC, Oxford Meadows SAC, River Lambourn SAC and the Severy Estuary SAC, SPA and Ramar. 	Category L	Screen in
SP1	Sustainable Development	This policy sets out standards for sustainable development. It does not trigger development or change and would therefore not lead to a LSE at any European site, either alone or in-combination.	Category F	Screen out

Policy number	Policy name	Justification: Activities that may result in an LSE on a European site	Screening category	HRA screening
SD1	Effective Use of Land	This policy sets out requirements in terms of the effective use of land. It will not lead to development or any change which may have an LSE on any European site.	Category F	Screen out
SD2	Mixed-Use Development Principles	This policy sets out design requirements for mixed use development. It will not lead to development or any change which may have an LSE on any European site.	Category F	Screen out
SD3	High Quality Design	This policy sets out design principles for new development. It will not lead to development or any change which may have an LSE on any European site.	Category F	Screen out
SD4	Inclusive Design	This policy sets out requirements to ensure design of development is inclusive. It will not lead to development or any change which may have an LSE on any European site.	Category F	Screen out
SD5	Tall Buildings	This policy sets out requirements for the design of tall buildings. It will not lead to development or any change which may have an LSE on any European site.	Category F	Screen out
SD6	Villages and Developments in the Countryside	This policy sets out requirements for the design of new development within the villages and countryside. It will not lead to development or any change which may have an LSE on any European site.	Category F	Screen out
SD7	Residential Extensions and Alterations	This policy sets out requirements for the design of residential extensions and alterations within the villages and countryside. It will not lead to development or any change which may have an LSE on any European site.	Category F	Screen out
SD8	Historic Environment	This policy sets out requirements to protect and enhance heritage assets, conservation areas, scheduled monuments and assets of archaeological significance. It will not lead to development or any change which may have an LSE on any European site.	Category F	Screen out
SD9	Heritage Transport	This policy sets out requirements to safeguard heritage transport including canals and heritage railways. It will not lead to development or any change which may have an LSE on any European site.	Category F	Screen out

Housing

Policy number	Policy name	Justification: Activities that may result in an LSE on a European site	Screening category	HRA screening
SP2	Homes for the Community	 This policy sets out the housing requirement for the Plan area which has the potential for LSEs as follows: Air Quality – North Meadow and Clattinger Farm SAC. Hydrology (water quality and water quantity) – Cothill Fen SAC, Kennet and Lambourn Floodplain SAC, North Meadow and Clattinger Farm SAC, Oxford Meadows SAC, River Lambourn SAC and the Severy Estuary SAC, SPA and Ramar. Recreational impacts – North Meadow and Clattinger Farm SAC. 	Category I	Screen in
HC1	Housing Tenures and Sizes	This policy outlines the requirement to provide mixed tenures and house sizes in accordance with the local housing need. This policy will not lead to development or any chance which may have an LSE on any European site.	Category F	Screen out
HC2	Affordable Housing	This policy sets out requirements for affordable housing in the Borough. This policy will not lead to development or any chance which may have an LSE on any European site.	Category F	Screen out
НС3	Accessible Housing	This policy sets out requirements for accessible and adaptable housing in the Borough. This policy will not lead to development or any chance which may have an LSE on any European site.	Category F	Screen out
HC4	Specialist Accommodation	This policy sets out requirements for specialist housing in the Borough. This policy will not lead to development or any chance which may have an LSE on any European site.	Category F	Screen out
HC5	Houses in Multiple Occupation and Sub Division	This policy sets out the circumstances where HMO would be supported. This policy will not lead to development or any chance which may have an LSE on any European site.	Category F	Screen out
HC6	Rural Exception Sites and Rural Workers' Dwellings	This policy defines, outlines and sets out the requirements for development outside settlement boundaries and within countryside locations, including: affordable housing schemes, community-led development and rural workers' dwellings. This policy will not lead to development or any chance which may have an LSE on any European site.	Category F	Screen out
HC7	Custom and self build housing	This policy sets out a proposal for self-build and custom-build housing in compliance with Local Plan policies. This policy will not lead to development or any change which may have an LSE on any European site.	Category F	Screen out

Policy number	Policy name	Justification: Activities that may result in an LSE on a European site		HRA screening
HC8	Gypsy, traveller and travelling showpeople	 This policy sets out the requirements for provision of additional gypsy, traveller and travelling showpeople pitches with 35 new permanent pitches for Gypsy and Travellers and 19 new plots for Travelling Showpersons across the plan period, allocating 3 sites. This has the potential for LSEs as follows: Air Quality – North Meadow and Clattinger Farm SAC. Hydrology (water quality and water quantity) – Cothill Fen SAC, Kennet and Lambourn Floodplain SAC, North Meadow and Clattinger Farm SAC, Oxford Meadows SAC, River Lambourn SAC and the Severy Estuary SAC, SPA and Ramar. Recreational impacts – North Meadow and Clattinger Farm SAC. 	Category L	Screen in

Employment and Town Centres

Policy number	Policy name	Justification: Activities that may result in an LSE on a European site	Screening category	HRA screening
SP4	Fairer, Economic Growth	 This policy sets out the industrial floorspace and office space requirements for the Plan area which has the potential for LSEs as follows: Air Quality – North Meadow and Clattinger Farm SAC. Hydrology (water quality and water quantity) – Cothill Fen SAC, Kennet and Lambourn Floodplain SAC, North Meadow and Clattinger Farm SAC, Oxford Meadows SAC, River Lambourn SAC and the Severy Estuary SAC, SPA and Ramar. 	Category L	Screen in
FE1	Office (scale and location)	 This policy sets out the office space requirements and locations which has the potential for LSEs as follows: Air Quality – North Meadow and Clattinger Farm SAC. Hydrology (water quality and water quantity) – Cothill Fen SAC, Kennet and Lambourn Floodplain SAC, North Meadow and Clattinger Farm SAC, Oxford Meadows SAC, River Lambourn SAC and the Severy Estuary SAC, SPA and Ramar. 	Category L	Screen in
FE2	Industrial Land (scale and location)	 This policy sets out the industrial land space requirements and locations which has the potential for LSEs as follows: Air Quality – North Meadow and Clattinger Farm SAC. Hydrology (water quality and water quantity) – Cothill Fen SAC, Kennet and Lambourn Floodplain SAC, North Meadow and Clattinger Farm SAC, Oxford Meadows SAC, River Lambourn SAC and the Severy Estuary SAC, SPA and Ramar. 	Category L	Screen in
FE3	Network and Hierarchy of Centres	This policy details the hierarchy of centres based on their role, function and scale. This policy does not directly trigger a change or development which could lead to an LSE at any European site, either alone or in-combination.	Category F	Screen out
FE4	Development in Town Centres, District / Rural Centres and Local Shopping Parades	This policy sets out requirements for development in these centres to ensure a suitable mix of uses. This policy does not directly trigger a change or development which could lead to an LSE at any European site, either alone or in-combination.	Category F	Screen out
FE5	Concentration of Uses	This policy sets restrictions on the concentration of certain uses. This policy does not directly trigger a change or development which could lead to an LSE at any European site, either alone or in-combination.	Category F	Screen out

Policy number	Policy name	Justification: Activities that may result in an LSE on a European site		HRA screening
FE6	Evening, Night-time and Cultural Economy	This policy sets out circumstances where evening, night-time and cultural developments will be supported. This policy does not directly trigger a change or development which could lead to an LSE at any European site, either alone or incombination.	Category F	Screen out
FE7	Employment, Skills and Training	This policy sets out learning and skills requirements for new development. This policy does not directly trigger a change or development which could lead to an LSE at any European site, either alone or in-combination.	Category F	Screen out

Transport

Policy number	Policy name	Justification: Activities that may result in an LSE on a European site	Screening category	HRA screening
SP4	Better Connected, Active Neighbourhoods	This policy sets out the Council's aspirations for increased active travel and sustainable transport options to better connect neighbourhoods. This policy does not directly trigger a change or development which could lead to a likely significant effect at any European site, either alone or in-combination.	Category B	Screen out
ST1	Promoting Sustainable Transport	This policy sets out requirements for new development in terms of sustainable transport, including active travel. This policy does not directly trigger a change or development which could lead to a likely significant effect at any European site, either alone or in-combination.	Category F	Screen out
ST2	Improving Public Transport	This policy supports priorities for public transport over the Plan period focusing improvements on bus and railway infrastructure. This policy will not lead to development or any change which may have an LSE on any European site.	Category F	Screen out
ST3	Freight and Logistics	This policy sets out the Council's commitment to ensuring a coordinated approach to supporting sustainable freight movement, including a transition to rail freight where practical. This policy will not lead to development or any change which may have an LSE on any European site.	Category F	Screen out
ST4	Transport Assessments, Transport Statements and Travel Plans	This policy sets out the requirement for new development to provide Transport Assessments, Transport Statements and Travel Plans. This policy will not lead to development or any change which may have an LSE on any European site.	Category F	Screen out
TM5	Parking, and Electric Vehicle Management	This policy requires new development to demonstrate how it will support and encourage sustainable modes of transport. This policy will not lead to development or any change which may have an LSE on any European site.	Category F	Screen out

Environment and Climate

Policy number	Policy name	Justification: Activities that may result in an LSE on a European site	Screening category	HRA screening
SP5	Climate Stability and the Environment	This policy sets out requirements for new development to tackle climate change and protect the environment. This policy is an environmental protection policy and will not lead to development or any change which may have an LSE on any European site.	Category D	Screen out
CSE1	Carbon Reduction and Sustainable Design in new development	This policy sets out requirements for carbon reduction and sustainable design. This policy is an environmental protection policy and will not lead to development or any change which may have an LSE on any European site.	Category D	Screen out
CSE2	Whole Life Carbon Assessments (WCLA)	This policy sets out the requirements for WCLA for large scale major developments, and defines these, and encourages major developments to undertake a WCLA. This policy is an environmental protection policy and will not lead to development or any change which may have an LSE on any European site.	Category D	Screen out
CSE3	Green Infrastructure in New Developments	This policy seeks to protect, maintain and where possible enhance green infrastructure in the Borough in line with the Council's adopted Green Infrastructure Strategy. This policy is an environmental protection policy and will not lead to development or any change which may have an LSE on any European site.	Category D	Screen out
CSE4	The Green Infrastructure Network	This policy sets out protections for the Green Infrastructure Network. This policy is an environmental protection policy and will not lead to development or any change which may have an LSE on any European site.	Category D	Screen out
CSE5	Great Western Community Forest	This policy protects the Great Western Community Forest. This policy is an environmental protection policy and will not lead to development or any change which may have an LSE on any European site.	Category D	Screen out
CSE6	Trees	This policy outlines the requirements of development to protect, enhance and integrate visually or ecologically important trees, hedges and woodlands. It sets out the aim for development to achieve future canopy cover of 25% of the site through retaining existing and planting new trees. If this cannot be achieved onsite, the policy sets out the requirements for offsite provision. This policy is a plan-wide environmental protection policy and will not lead to development or any change which may have an LSE on any European site.	Category D	Screen out
CSE7	Landscape and Areas of Coalescence	This policy is intended to protect and enhance the features and unique characteristics of the landscapes that make up the borough. This policy is a plan-wide environmental protection policy and will not lead to development or any change which may have an LSE on any European site.	Category D	Screen out

Policy number	Policy name	Justification: Activities that may result in an LSE on a European site	Screening category	HRA screening
CSE8	Biodiversity, Geodiversity and Nature Recovery	This policy outlines the requirements for development proposals in terms of how to protect and enhance biodiversity and ecological networks. This policy also sets out the requirements to deliver the North Meadow and Clattinger Farm SAC Interim Mitigation Strategy. This policy implements a bespoke package of mitigation intended to reduce adverse recreational impacts upon the SAC. In addition, this policy requires the protection of water quality within the River Lambourn SAC catchment in terms of increased nutrient discharge from new development.	Category M	Screen in
CSE9	Managing flood risk	This policy sets out requirements in terms of flood risk from new development. It also implements requirements for Sustainable Drainage Systems and buffers. This policy is a plan-wide environmental protection policy and will not lead to development or any change which may have an LSE on any European site.	Category D	Screen out
CSE10	Unstable Land	This policy sets out the requirements for development on unstable land. This policy will not lead to development or any change which may have an LSE on any European site.	Category F	Screen out
CSE11	Contaminated Land	This policy sets out the requirements for the development of contaminated sites. This policy is a plan-wide environmental protection policy and will not lead to development or any change which may have an LSE on any European site.	Category F	Screen out
CSE12	Reducing Nuisance and Pollution	This policy sets out measures to reduce nuisance from pollution (such as noise, vibrations, air quality, odour, fumes and dust pollution). This policy is a plan-wide environmental protection policy and will not lead to development or any change which may have an LSE on any European site.	Category F	Screen out

Health and Wellbeing

Policy number	Policy name	Justification: Activities that may result in an LSE on a European site	Screening category	HRA screening
SP6	Healthy Living	This policy sets out requirements for new development to achieve healthy living. This policy will not lead to development or any change which may have an LSE on any European site.	Category B	Screen out
HL1	Health Impact Assessments	This policy sets out the requirements for major developments to positively design and create healthy places and outlines the requirements for Health Impact Assessments. This policy will not lead to development or any change which may have an LSE on any European site.	Category F	Screen out
HL2	Protecting Open Spaces	This policy sets out provisions to protect open space. It will not lead to development or any change which may have an LSE on any European site.	Category F	Screen out
HL3	Open Space in New Development	This policy sets out the requirements for new development to provide public open space. It will not lead to development or any change which may have an LSE on any European site.	Category F	Screen out
HL4	Child Friendly Places and Play	This policy sets out the requirements for new development to provide child friendly places to play. It will not lead to development or any change which may have an LSE on any European site.	Category F	Screen out
HL5	Community, Education and Health Infrastructure	This policy sets out the requirements for new development to provide community, education and health infrastructure depending on the scale of development. It will not lead to development or any change which may have an LSE on any European site.	Category F	Screen out
U1	Wastewater and Sewage Infrastructure and Water Supply	This policy sets out requirements for new development to ensure there is adequate water supply and sewerage infrastructure capacity both on and off the site to serve the development. It also sets out requirements for water efficiency. It will not lead to development or any change which may have an LSE on any European site.	Category F	Screen out
U2	Digital Communication	This policy sets out requirements for digital communication provisions at new development. It will not lead to development or any change which may have an LSE on any European site.	Category F	Screen out
U3	Energy Networks	This policy sets out requirements for new development to connect to energy networks. It will not lead to development or any change which may have an LSE on any European site.	Category F	Screen out
D1	Developer Contributions and Viability	This policy sets out requirements for new development to demonstrate why Local Plan requirements cannot be met due to viability issues. It also sets out requirements for contributions towards infrastructure etc. It will not lead to development or any change which may have an LSE on any European site.	Category F	Screen out

Appendix D: Local Plan Allocation Screening Evaluation

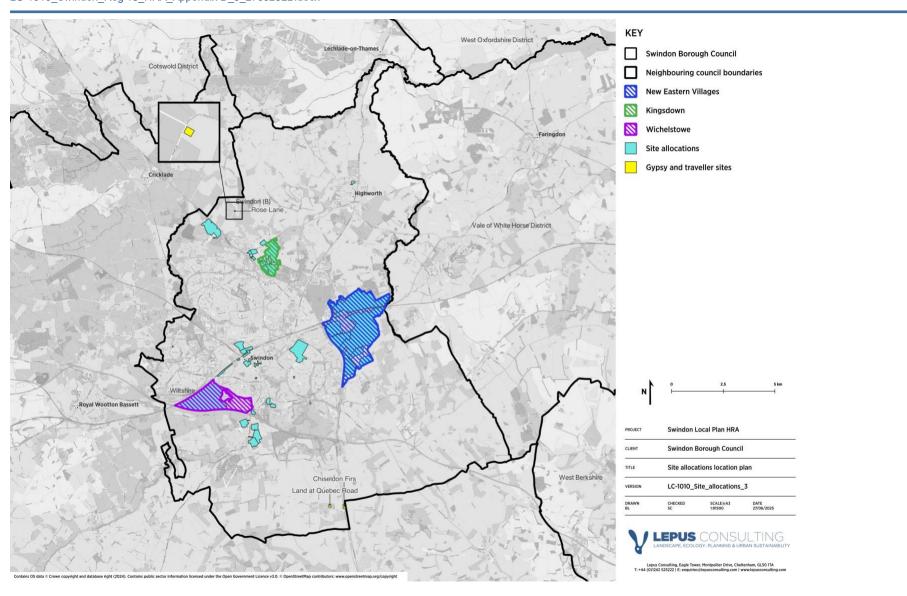


Figure D.1: Site allocations location plan

Table Notes:

Air Quality LSEs: All site allocations set out in the Local Plan have the potential to act cumulatively and in-combination with other plans and projects (see **Appendix A**) to increase traffic flows on the local and wider road network. An increase in traffic related emissions has the potential to change air quality at European sites. Air quality Likely Significant Effects (LSEs) are considered possible at North Meadow and Clattinger Farm SAC. As growth at all allocations (listed below) contributes towards a change in air quality, all allocations below have been screened in under Category L.

Water Quality and Quantity LSEs: **Table E.1** below screens impacts associated with the River Lambourn SAC nutrient neutrality catchment area. All site allocations set out in the Local Plan (including those listed below) have the potential to act cumulatively with one another and in-combination with other plans and projects to increase the quantity of water required for treatment at Wastewater Treatment Works (WwTWs). This may result in the deterioration of downstream water quality. In addition, new development set out in the Local Plan will increase demand for water supply which may also affect water levels at hydrologically sensitive European sites. Taking a precautionary approach, hydrology impacts from the combined effect of all developments together, acting incombination with other plans and projects (see **Appendix A**), have the potential to result in LSEs at hydrologically connected European sites listed in Table 3.2 of the Regulation 18 HRA report. Water quality and quantity impacts at all allocations listed below have therefore been screened in under Category L.

Recreational LSEs: Table D.1 screens recreational LSEs for each potential allocation drawing on Zones of Influence set out in the North Meadow and Clattinger Farm SAC Interim Recreational Mitigation Strategy (2023 - 2028). No allocations are situated within 400m of any European sites and therefore urbanisation effects can be discounted.

Table D.1: Screening evaluation of potential sites allocations (Clattinger and North Meadow SAC recreational LSEs and River Lambourn nutrient neutrality LSEs only)

Site reference	Site name	Allocation details	Located within Clattinger and North Meadow SAC recreational zone of influence?	Allocation within River Lambourn SAC nutrient neutrality catchment area
Central Area				
s0025	Bristol Street Car Park	Residential 102 units	No	No
UCS.0622	Land at Holbrook Way	Residential 8 units	No	No
s0099c	North Star (Oasis Leisure Centre)	Residential 743 units	No	No
s0101	Tented Market	Residential + retail 57 units	No	No
UCS.0959	Civic Campus	Residential + Civic 115 units	No	No
UCS.0960	Spring Gardens Car Park	Residential 60 units	No	No
s0508	The Parade (excluding old Debenhams building)	Residential + retail 245 units	No	No
s0519	Regent Place and Princes Street Car Park	Residential + community uses 262 units	No	No
s0543	Brunel Shopping Centre (Regent Street)	Residential + retail 432 units	No	No
s0564	Land to the North of the Station	Residential 1,358 units	No	No
UCS.0625	Queen Street Car Park	Residential	No	No

Site reference	Site name	Allocation details	Located within Clattinger and North Meadow SAC recreational zone of influence?	Allocation within River Lambourn SAC nutrient neutrality catchment area
s0430	Brunel West Car Park and House of Fraser, Swindon	Residential + offices + retail 522 units	No	No
s0544	Former House of Fraser and MSCP	Residential + offices + retail (part of above site)	No	No
s0433	Swindon Station Redevelopment	Residential + offices 438 units	No	No
New Eastern Villages				
SGL 02	New Eastern Villages	Residential-Led, Mixed Use 10,000 units	No	No
s0523	Land within Meadow Cottage	Residential 16 units	No	No
s0111	Thornhill Industrial Estate	Residential 76 units	No	No
s0112	Crown Timber Site	Residential 52 units	No	No
Kingsdown				
SGL 03	Kingsdown	Residential-Led, Mixed Use 1,552 units	Yes – Outer ZOI	No
s0375	Land North of Kingsdown Lane	Residential 77 units	Yes – Outer ZOI	No

Site reference	Site name	Allocation details	Located within Clattinger and North Meadow SAC recreational zone of influence?	Allocation within River Lambourn SAC nutrient neutrality catchment area
s0380	Kingsdown Nurseries (Turleys)	Residential 64 units	Yes – Outer ZOI	No
s0536	Stubbs Hill Farm (part)	Residential 29 units	Yes – Outer ZOI	No
Wichelstowe				
SGL 03	Wichelstowe	Residential-led Mixed Use 1,600. units	No	No
North Tadpole				
s0030c	Lower Widhill Farm (Hallam option 2)	Residential 352 units	Yes – half the site is located within the Inner ZOI and half within the Outer ZOI	No
s0106b	Tadpole Triangle (SBC)	Residential 10 units	Yes – Outer ZOI	No
s0528	Land off Tadpole Farm (SBC)	Residential 151 units	Yes – Outer ZOI	No
East Wroughton				
s0072	Land east of Swindon Road, Wroughton (South)	Residential 191 units	No	No
s0114	Land at North Wroughton	Residential 175 units	No	No
s0427b	Akers Land (western side)	Residential 300 units	No	No

Site reference	Site name	Allocation details	Located within Clattinger and North Meadow SAC recreational zone of influence?	Allocation within River Lambourn SAC nutrient neutrality catchment area
s0540b	Berkley (western side)	Residential 365 units	No	No
Marlowe Avenue				
s0542	Marlowe Avenue Regeneration Area	Residential 976 units	No	No
Pipers Way				
UCS.0022	Intel	Residential 276 units	No	No
s0501b	Wakefield House	Residential 228 units	No	No
s0297	Former Wroughton Park and Ride site	Residential 340 units	No	No
Non-strategic area sites				
s0532	Land west of Shaw Village Centre	Residential 6 units	Yes – Outer ZOI	No
s0042	Land at Pentylands Lane / Crane Furlong	Residential 53 units	No	No
s0097	Newburn Sidings	Residential 203 units	No	No
UCS.0034	Vacant Bus Depot	Residential 40 units	No	No

Site reference	Site name	Allocation details	Located within Clattinger and North Meadow SAC recreational zone of influence?	Allocation within River Lambourn SAC nutrient neutrality catchment area
s0527	Site of former Whitbourne House care home	Residential 37 units	No	No
s0050b	Land at Sams Lane (southern part) (Turley)	Residential 115 units	Yes – Outer ZOI	No
s0062	Land south of Highworth Road, Blunsdon	Residential 89 units	Yes – Outer ZOI	No
s0460	Land at 12 Turnpike Rd, Blunsdon (Marrons / Bellway Homes)	Residential 48 units	Yes – Outer ZOI	No
s0036	Land at Turnpike Rd, Blunsdon	Residential 93 units	Yes – Outer ZOI	No
Gypsy and Traveller Sites				
1	Chiseldon Firs		No	No
3	Rose Lane		Yes – Outer ZOI	No
4	Land and Quebec Road		No	No





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