

Habitats Regulations Assessment of the Huntingdonshire Pre-Submission Local Plan to 2046

Regulation 19 HRA

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LEPUS CONSULTING
LANDSCAPE, ECOLOGY, PLANNING & URBAN SUSTAINABILITY

Habitats Regulations Assessment of the Huntingdonshire Pre-Submission Local Plan to 2046

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Client comments can be sent to Lepus using the following address.

Eagle Tower,
Montpellier Drive
Cheltenham
Gloucestershire
GL50 1TA

Telephone: 01242 525222

E-mail: enquiries@lepusconsulting.com
www.lepusconsulting.com

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Acronyms & Abbreviations

AA	Appropriate Assessment
AADT	Average annual daily traffic flow
ALAN	Artificial light at night
ALS	Abstraction Licensing Strategy
APIS	Air Pollution Information System
AW	Affinity Water
BNG	Biodiversity Net Gain
BTO	British Trust for Ornithology
CAMS	Catchment Abstraction Management Strategy
CIEEM	Chartered Institute of Ecology and Environmental Management
CSZ	Core Sustenance Zones
DEFRA	Department for Environment, Food & Rural Affairs
DfT	Department for Transport
DLHC	Department for Levelling Up, Housing and Communities
DMRB	Design Manual for Roads and Bridges
DTA	David Tyldesley and Associates
EA	Environment Agency
FLL	Functionally Linked Land
FZ	Flood Zone
GES	Good Ecological Status
G&T	Gypsy and Traveller
GIS	Geographic Information System
ha	Hectares
HDV	Heavy-duty vehicle
HRA	Habitats Regulations Assessment
IAQM	Institute of Air Quality Management
IRZ	Impact Risk Zone
IWMS	Integrated Water Management Strategy
JNCC	Joint Nature Conservation Committee
LSE	Likely Significant Effect
LPA	Local Plan Area
MHCLG	Ministry of Housing, Communities & Local Government
NE	Natural England
NNR	National Nature Reserve

NOx	Nitrogen Oxides
NPPF	National Planning Policy Framework
ONS	Office for National Statistics
PPG	Planning Practice Guidance
pSAC	Possible/proposed Special Area of Conservation
pSPA	Potential Special Protection Area
RBMP	River Basin Management Plan
RIA	Recreational Impact Assessment
SAC	Special Area of Conservation
SAMM	Strategic Access Management and Monitoring
SANG	Suitable Alternative Natural Greenspace
SIP	Site Improvement Plan
SPA	Special Protection Area
SPD	Supplementary Planning Document
sqm	Square metres
SSSI	Site of Special Scientific Interest
SWFR	Surface Water Flood Risk
SWMC	Surface Water Management Catchment
SWMP	Surface Water Management Plan
UK	United Kingdom
WCS	Water Cycle Study
WeBS	Wetland Bird Survey
WFA	Whole Feature Assessment
WFD	Water Framework Directive
WRMP	Water Resource Management Plan
WRC	Water Recycling Centre
WRZ	Water Resource Zone
WwTW	Wastewater Treatment Works
ZoI	Zone of Influence

Executive summary

- E1. Lepus Consulting was commissioned by Huntingdonshire District Council to undertake a Habitats Regulations Assessment (HRA) of the Huntingdonshire Local Plan: Proposed Submission (Regulation 19) (hereafter referred to as the 'Local Plan'), in accordance with the Conservation of Habitats and Species Regulations 2017 (as amended).
- E2. This report presents the findings of the HRA screening assessment and Appropriate Assessment (AA) undertaken alongside preparation of the Local Plan. The assessment has been informed by previous HRA work undertaken at earlier stages of plan preparation and by the latest available evidence relating to European sites and the impact pathways considered through the HRA.
- E3. The screening assessment considered each Local Plan policy and site allocation and identified where implementation of the Local Plan could result in Likely Significant Effects (LSEs) on European sites, either alone or in combination with other plans and projects. In accordance with the Habitats Regulations, mitigation measures were not taken into account when determining whether LSEs could be excluded at the screening stage.
- E4. The screening assessment identified potential LSEs associated with recreational pressure, urbanisation, air quality, water quality and water quantity. These pathways were therefore taken forward for Appropriate Assessment in relation to the relevant European sites, comprising:
- Barnack Hills & Holes SAC;
 - Eversden and Wimpole Woods SAC;
 - Fenland SAC;
 - Nene Washes SAC, SPA and Ramsar;
 - Ouse Washes SAC, SPA and Ramsar;
 - Portholme SAC;
 - The Wash and North Norfolk Coast SAC;
 - The Wash SPA and Ramsar; and
 - Woodwalton Fen Ramsar.
- E5. The Appropriate Assessment considered whether the Local Plan could adversely affect the integrity of these European sites, either alone or in combination with other plans and projects, having regard to their qualifying features, conservation objectives and the environmental conditions and supporting processes necessary to maintain them. The assessment was informed by technical evidence prepared in support of the Local Plan, consultation with Natural England and other relevant bodies, and the mitigation and policy safeguards incorporated into the Local Plan.

- E6. Detailed assessment of air quality concluded that the changes associated with Local Plan growth would not adversely affect the integrity of the European sites considered. Assessment of water quality identified existing water quality pressures within the catchment and considered the additional changes associated with Local Plan growth. Taking account of the wastewater treatment improvements identified through the Water Cycle Study, including Technically Achievable Limit upgrades where required, the assessment concluded that the Local Plan would not adversely affect the integrity of hydrologically connected European sites through changes in water quality. Water quantity, recreational pressure and urbanisation effects were similarly assessed having regard to the relevant Local Plan policy provisions, strategic mitigation measures and wider regulatory mechanisms.
- E7. The Appropriate Assessment concludes that, with the mitigation measures and safeguards identified within the Local Plan and this HRA, the Huntingdonshire Local Plan will not adversely affect the integrity of any European site, either alone or in combination with other plans and projects.
- E8. Huntingdonshire District Council is the Competent Authority for the purposes of the Habitats Regulations and is responsible for undertaking the Integrity Test in light of the findings of this HRA. In reaching its decision, the Council must have regard to any representations made by Natural England in accordance with the Habitats Regulations.

1 Introduction

1.1 A new Local Plan for Huntingdonshire

- 1.1.1 Huntingdonshire District Council (hereafter referred to as ‘the Council’) is preparing a full update to the adopted Local Plan¹ to provide an up-to-date vision and framework to guide decision making on how, where, and when development can come forward in the district for the period up to 2046.
- 1.1.2 The new Huntingdonshire Local Plan, referred to as the ‘Local Plan’ hereafter, will cover the entirety of Huntingdonshire District. This area is henceforth referred to as the ‘Plan area’ and is illustrated in **Figure 1.1**. The Plan area includes the district’s five main towns of Huntingdon, Godmanchester, Ramsey, St Neots and St Ives, together with a number of large and small villages and hamlets.
- 1.1.3 An Issues and Options consultation ran between 26th April to 5th July 2023, with a further Issues and Options consultation taking place between 18th September 2024 and 27th November 2024. The Issues and Options stage sought views on the key planning challenges and potential approaches to meeting future development needs. The Council subsequently prepared the Regulation 18 Preferred Options draft Local Plan², which outlined its emerging strategy, preferred policy approaches and indicative site allocations and was consulted upon between 5 November and 17 December 2025. The responses to these consultations have informed the Proposed Submission Local Plan consultation at Regulation 19 of the Town and Country Planning (Local Planning) (England) Regulations 2012 (as amended)³.

1.2 Habitats Regulations Assessment

- 1.2.1 The application of Habitats Regulations Assessment (HRA) to land-use plans is a requirement of the Conservation of Habitats and Species Regulations 2017 (as amended)⁴ (the Habitats Regulations). HRA applies to plans and projects, including all Local Development Documents in England and Wales.
- 1.2.2 Where a plan is likely to have a significant effect on a European site (either alone, or in combination) and is not directly connected with, or necessary to, the management of the European site, 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 Huntingdonshire District Council (2019) Huntingdonshire’s Local Plan to 2036.

² Huntingdonshire District Council (2025) Local Plan update preferred options consultation draft.

³ The Town and Country Planning (Local Planning) (England) Regulations 2012 Statutory Instrument 767.

⁴ Conservation of Habitats and Species Regulations 2017 SI No. 2017/1012, TSO (The Stationery Office), London, as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.

- 1.2.3 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. Ramsar Sites are designated under the 1971 Ramsar Convention. The Planning and Infrastructure Act 2025⁵ modified the Habitats Regulations such that Ramsar Sites are now treated in the same way as European Sites for certain purposes. In addition, policy in England and Wales notes that the following sites should also be given the same level of protection as a European site⁶:
- A potential SPA (pSPA);
 - A possible/proposed SAC (pSAC); 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.
- 1.2.4 The Council, as the competent authority, is responsible for making the Integrity Test. The Integrity test asks whether the Local Plan will have an adverse effect upon the integrity of any European site (either alone, or in-combination) and will be undertaken in light of the conclusions of the HRA process having regard to representations made by Natural England (NE) under the provisions of the Habitats Regulations.
- 1.2.5 This HRA report has been prepared in line with Planning Practice Guidance for Appropriate Assessment⁷.

⁵ UK Parliament. (2025) Planning and Infrastructure Act 2025 (c. 34). London: The Stationery Office. Available at: <https://www.legislation.gov.uk/ukpga/2025/34> [Date Accessed: 18/06/26].

⁶ Ministry of Housing, Communities and Local Government (2025). National Planning Policy Framework. Para 194.

⁷ Ministry of Housing, Communities and Government (July 2019) Planning Practice Guidance Note, Appropriate Assessment, Guidance on the use of Habitats Regulations Assessment.

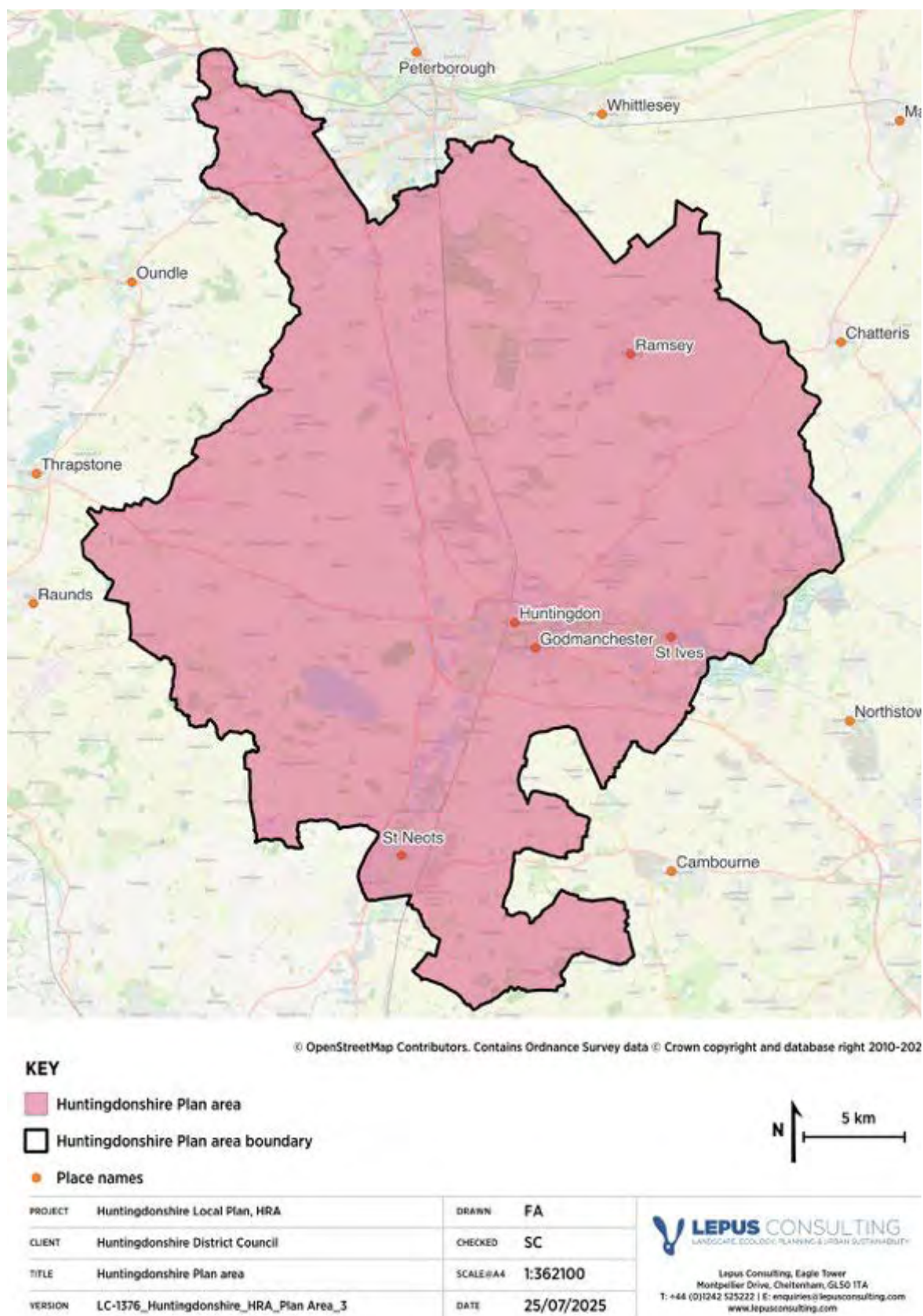


Figure 1.1: Huntingdonshire Plan Area

1.3 Previous HRA work

1.3.1 The Huntingdonshire Local Plan to 2036⁸ was adopted in May 2019 and set out a development strategy and planning policies. It was supported by an HRA Screening⁹, which considered likely significant effects upon the following European sites, located within 15km of the Plan area or hydrologically linked to the Plan area:

- Barnack Hills & Holes SAC;
- Eversden & Wimpole Woods SAC;
- Fenland SAC;
- Nene Washes SAC,
- Nene Washes SPA;
- Nene Washes Ramsar;
- Orton Pit SAC;
- Ouse Washes SAC,
- Ouse Washes SPA;
- Ouse Washes Ramsar;
- Portholme SAC;
- Rutland Water SPA;
- Rutland Water Ramsar;
- The Wash & North Norfolk Coast SAC;
- The Wash SPA;
- The Wash Ramsar;
- Upper Nene Valley Gravel Pits SPA;
- Upper Nene Valley Gravel Pits Ramsar; and,
- Woodwalton Fen Ramsar.

1.3.2 The AA of this HRA concluded that there would be no adverse impacts on the integrity of European sites, either alone, or in-combination, so long as the *“policies identified as key in [the HRA] report are retained, and/or the wording changes recommended for policies highlighted are adopted”*.

⁸ Huntingdonshire District Council (2019) Huntingdonshire's Local Plan to 2036, May 2019. Available at: <https://www.huntingdonshire.gov.uk/media/3872/190516-final-adopted-local-plan-to-2036.pdf> [Date accessed: 25/07/25]

⁹ Bodsey Ecology Limited (2017) Huntingdonshire's Local Plan to 2036 – Habitats Regulations Assessment 2017. Available at: <https://www.huntingdonshire.gov.uk/media/2684/habitats-regulations-assessment-2017.pdf> [Date accessed: 01/07/25]

Local Plan Update (Regulation 18 Preferred Options Consultation)

1.3.3 The Preferred Options consultation at Regulation 18 was supported by an HRA screening report¹⁰. This included a screening of all components of the plan, including policies and allocations, for likely significant effects (LSEs). Taking no account of mitigation measures, the screening stage identified potential impacts upon a number of European sites and recommended a full Appropriate Assessment (AA). The key threats and pressures screened in for consideration in the AA included the following:

- Air quality
- Water quality
- Water quantity
- Recreational pressure
- Urbanisation effects

1.3.4 NE provided a response to the Preferred Options consultation at Regulation 18 and the HRA Screening Report (October 2025) in December 2025. In this response NE indicate a requirement to consider impacts associated with a change in air quality from the Local Plan upon the following European sites and qualifying features:

- Nene Washes SAC and Ramsar – Spined loach (*Cobitis taenia*) and wetland plant assemblage.
- Ouse Washes SAC and Ramsar – Spined loach and wetland plant assemblage.

1.3.5 NE also highlighted the requirement to compare water quality modelling results to more stringent water quality targets for a number of European sites, in particular the Nene Washes SAC and Ramsar and the Ouse Washes SAC and Ramsar and confirm hydrological links to Orton Pit SAC. These water quality targets have subsequently been defined through consultation with NE. NE also required consideration of recreational impacts upon the Ouse Washes SAC, SPA and Ramsar (in relation to angling) and urbanisation and recreational impacts upon areas of functionally linked bird habitat for both the Ouse and Nene Washes SPAs and Ramsar sites. These requirements have been considered in the HRA process as summarised in the AA presented in **Chapters 5 – 9**.

1.4 Purpose of report

1.4.1 Lepus Consulting has been commissioned by the Council to carry out an HRA to support the preparation of the proposed submission draft of the Local Plan¹¹. The proposed submission draft is also known as the Regulation 19 version of the plan because Regulation 19 of the Local Plan Regulations 2012¹² requires that local plans are subject to particular stages of consultation.

¹⁰ Lepus Consulting (October, 2025) Habitats Regulations Assessment of the Huntingdonshire Local Plan. Local Plan Update Preferred Options Consultation HRA Screening Report.

¹¹ Rugby Borough Local Plan 2025 – 2042, Proposed Submission Draft, January 2026.

¹² The Town and Country (Local Planning) (England) Regulations 2012 Statutory Instrument 767.

2 Methodology

2.1 Overview

2.1.1 HRA is a rigorous precautionary process centred around the conservation objectives of a European site's qualifying interests. 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 is illustrated in **Figure 2.1**.

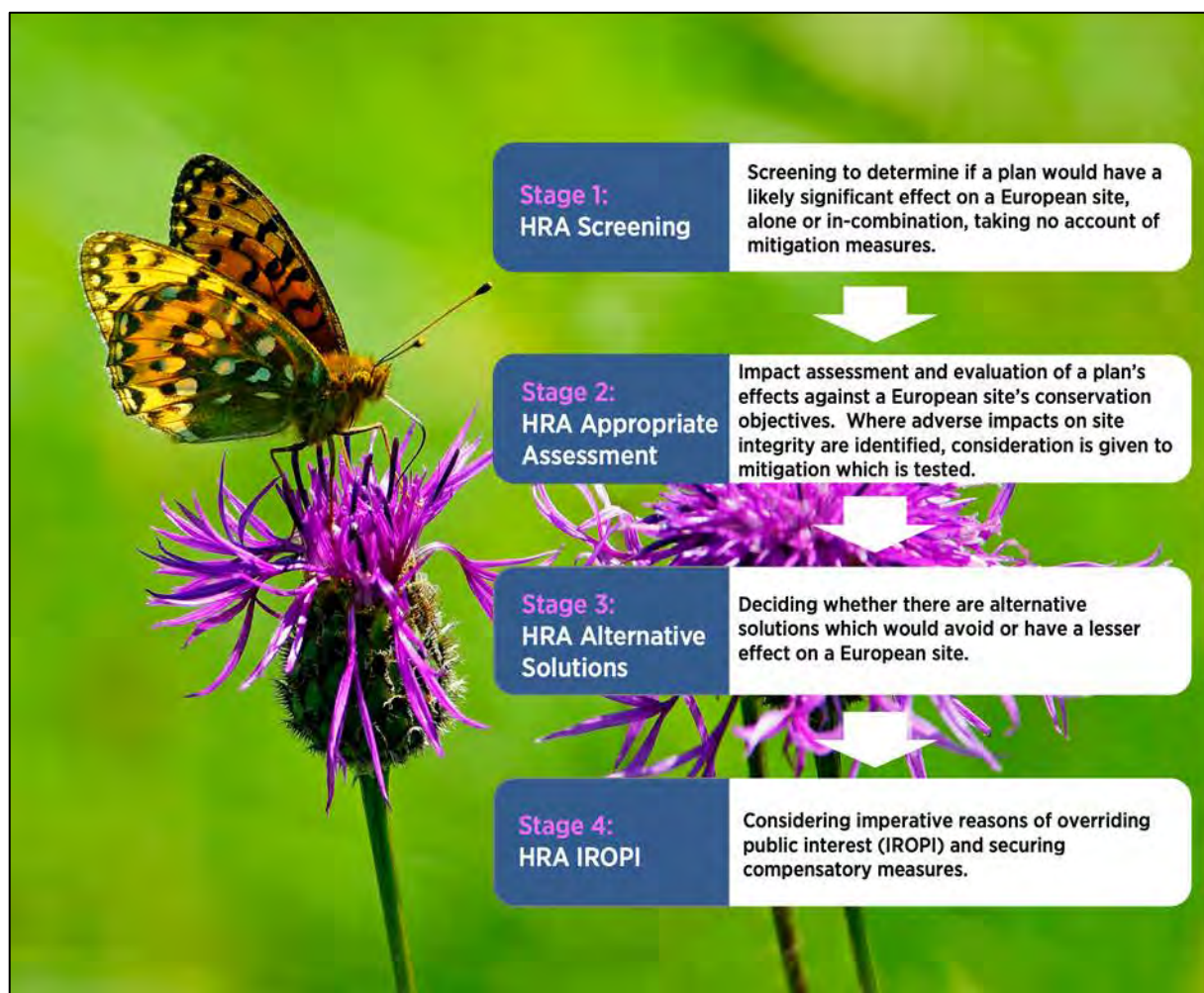


Figure 2.1: Stages in the Habitats Regulations Assessment process¹³

¹³ Based on the now withdrawn DTA Handbook. Source: Tyldesley, D., and Chapman, C. (2013) The Habitats Regulations Assessment Handbook (December) (2019) edition UK: DTA Publications Limited.

2.2 Stage 1: Screening for Likely Significant Effects

- 2.2.1 The first stage in the HRA process comprises the screening stage (see **Figure 2.1**). 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) able to be excluded (because it is not a plan); or (3) able to be 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 Local Plan which may lead to a likely significant effect (LSE) 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 elements 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 screening process uses a number of evaluation codes to summarise whether or not a plan component is likely to have LSEs alone, or in-combination. These codes are set out in **Table 2.1** and are used to inform the formal screening decision (Column 2).

Table 2.1: Screening evaluation categories¹⁴

Screening evaluation categories	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 in-combination.	Screen Out
L. Policies or proposals which might be likely to have a significant effect in-combination.	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

¹⁴ Adapted from the now withdrawn DTA HRA Handbook. Source: Tyldesley, D., and Chapman, C. (2013) The Habitats Regulations Assessment Handbook (December) (2019) edition UK: DTA Publications Limited.

- 2.2.3 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-323/17¹⁵) determined that mitigation measures are only permitted to be considered as part of the AA stage of the HRA process. Therefore, when assessing the LSEs of the Local Plan on European sites, the HRA screening process will take no account of incorporated mitigation or avoidance measures that are intended to avoid or reduce harmful effects on a site. 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.
- 2.2.4 Where screening concludes there are no LSEs from the Local Plan alone, it is next necessary to consider whether the effects of the Local Plan in-combination with other plans and projects would 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.
- 2.2.5 Plans and projects which are considered to be most relevant to the in-combination assessment of the Local Plan include those that have similar impact pathways. These include plans and projects with potential to increase development in the HRA study area. In addition, plans and projects with potential to increase traffic across the study area and which may act in-combination with the Local Plan, such as the transport^{16,17}, and waste and mineral¹⁸ plans, will also be considered. Plans which allocate water resources or are likely to influence water quality within the study area will also be considered. Finally, local plans of neighbouring authorities (listed below and detailed in **Appendix A**), which may increase development-related pressures at European sites, will be considered. It is recognised that the status of other plans and projects will change over the timescale of the development of the Local Plan; at the time of writing, neighbouring LPA Local Plans include the following:
- North Northamptonshire Local Plan¹⁹;
 - Peterborough Local Plan²⁰;
 - Fenland Local Plan²¹;

¹⁵ InfoCuria (2018) Case C-323/17. Available at: <http://curia.europa.eu/juris/document/document.jsf?docid=200970&doclang=EN> [Date accessed: 01/07/25]

¹⁶ Cambridgeshire County Council (2015) Third Cambridgeshire Local Transport Plan 2011-2031: Policies and Strategy. Available at: [https://www.cambridgeshire.gov.uk/asset-library/imported-assets/The_Local_Transport_Plan_3%20\(1\).pdf](https://www.cambridgeshire.gov.uk/asset-library/imported-assets/The_Local_Transport_Plan_3%20(1).pdf) [Date accessed: 25/06/26]

¹⁷ Cambridgeshire County Council (2015) Huntingdonshire Transport Strategy: Action Plan. Available at: <https://www.cambridgeshire.gov.uk/asset-library/huntingdonshire-transport-strategy-action-plan-march-2024.pdf> [Date accessed: 25/06/26]

¹⁸ Cambridgeshire County Council and Peterborough City Council (2021) Cambridgeshire and Peterborough Minerals and Waste Local Plan 2036. Available at: <https://www.cambridgeshire.gov.uk/business/planning-and-development/planning-policy/adopted-minerals-and-waste-plan> [Date accessed: 25/06/26]

¹⁹ North Northamptonshire Council (2016) North Northamptonshire Joint Core Strategy 2011-2031. Available at: <https://www.northnorthants.gov.uk/planning-strategies-and-plans/north-northamptonshire-local-plan> [Date accessed: 25/06/26]

²⁰ Peterborough City Council (2019) Peterborough Local Plan 2016 to 2036. Available at: <https://www.peterborough.gov.uk/council/planning-and-development/planning-policies/local-development-plan> [Date accessed: 25/06/26]

²¹ Fenland District Council (2014) Fenland Local Plan (Adopted May 2014). Available at: https://www.fenland.gov.uk/media/12064/Fenland-Local-Plan-Adopted-2014/pdf/Fenland_Local_Plan-Adopted_2014.pdf?m=1591111057500 [Date accessed: 25/06/26]

- East Cambridgeshire District Local Plan²²;
- South Cambridgeshire District Local Plan²³;
- Cambridge City Local Plan²⁴;
- Central Bedfordshire Local Plan²⁵; and,
- Bedford Borough Local Plan²⁶.

2.2.6 The approach taken to the consideration of in-combination effects will be compliant with the Wealden Judgement²⁷, which requires an in-combination approach that considers the development of neighbouring and nearby authorities when assessing LSEs.

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 objectives²⁸.

2.3.2 As part of this process, plan makers should take account of the potential consequences of no action and 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 the adverse effects for which they are targeted.

2.3.3 The AA aims to present information regarding 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 plan-making body (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.

²² East Cambridgeshire District Council (2023) East Cambridgeshire Local Plan 2015 (as amended 2023). Available at: <https://eastcambs.gov.uk/sites/default/files/2024-10/Local%20Plan%20adopted%2019%20October%202023%20-%20final%20with%20cover.pdf> [Date accessed: 25/06/26]

²³ South Cambridgeshire District Council (2018) South Cambridgeshire Local Plan (Adopted September 2018). Available at: <https://www.scambs.gov.uk/media/h0vjdxj/south-cambridgeshire-adopted-local-plan-2018-1.pdf> [Date accessed: 25/06/26]

²⁴ Greater Cambridge Shared Planning (2018) *Cambridge City Local Plan*. Available at: <https://www.greatercambridgeplanning.org/local-and-neighbourhood-planning/current-plans-the-adopted-local-plans/cambridge-city-council-adopted-development-plan/cambridge-city-local-plan-2018>. [Accessed: 24/07/26]

²⁵ Central Bedfordshire Council (2021) Central Bedfordshire Local Plan 2015-2035 (July 2021). Available at: https://www.centralbedfordshire.gov.uk/info/153/central_bedfordshire_local_plan_2015_to_2035/1034/adopted_local_plan [Date accessed: 25/06/26]

²⁶ Bedford Borough Council (2022) Local Plan 2040: Plan for Submission (April 2022). Available at: <https://edrms.bedford.gov.uk/OpenDocument.aspx?id=xivh8bP%2bAJZXEaq26SnEFQ%3d%3d&name=PLAN%20FOR%20SUBMISSION.pdf> [Date accessed: 25/06/26]

²⁷ 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: 25/06/26]

²⁸ MHCLG and DLHC (2019) Appropriate assessment: Guidance on use of Habitats Regulations Assessment. Available at: <https://www.gov.uk/guidance/appropriate-assessment> [Date accessed: 25/06/26]

2.4 Dealing with uncertainty

2.4.1 Uncertainty is an inherent characteristic of an HRA, and decisions can be made using currently available and relevant information. This concept is reinforced in the 7th September 2004 'Waddenzee' ruling²⁹:

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 AA. 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.

²⁹ EUR-Lex (2004) Case C-127/02. Available at: <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:62002CJ0127:EN:PDF>. [Date Accessed: 02/06/26]

3 Scoping of 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. This information will be used to inform the formal screening assessment of the Local Plan provided in **Chapter 4**. European sites identified as vulnerable to threats and pressures will form the basis of the HRA screening process and are mapped in **Figures 3.1** and **3.2**.

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 enable 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 when located 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 land or waterbodies outside a designated site for foraging, feeding, spawning, roosting, breeding or other activities.
- 3.2.3 There is no guidance that defines the study area for inclusion in an HRA. Planning Practice Guidance (PPG) for AA 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”*³⁰.

³⁰ MHCLG and DLHC (2019) Planning Practice Guidance Note, Appropriate Assessment, Guidance on the use of Habitats Regulations Assessment.

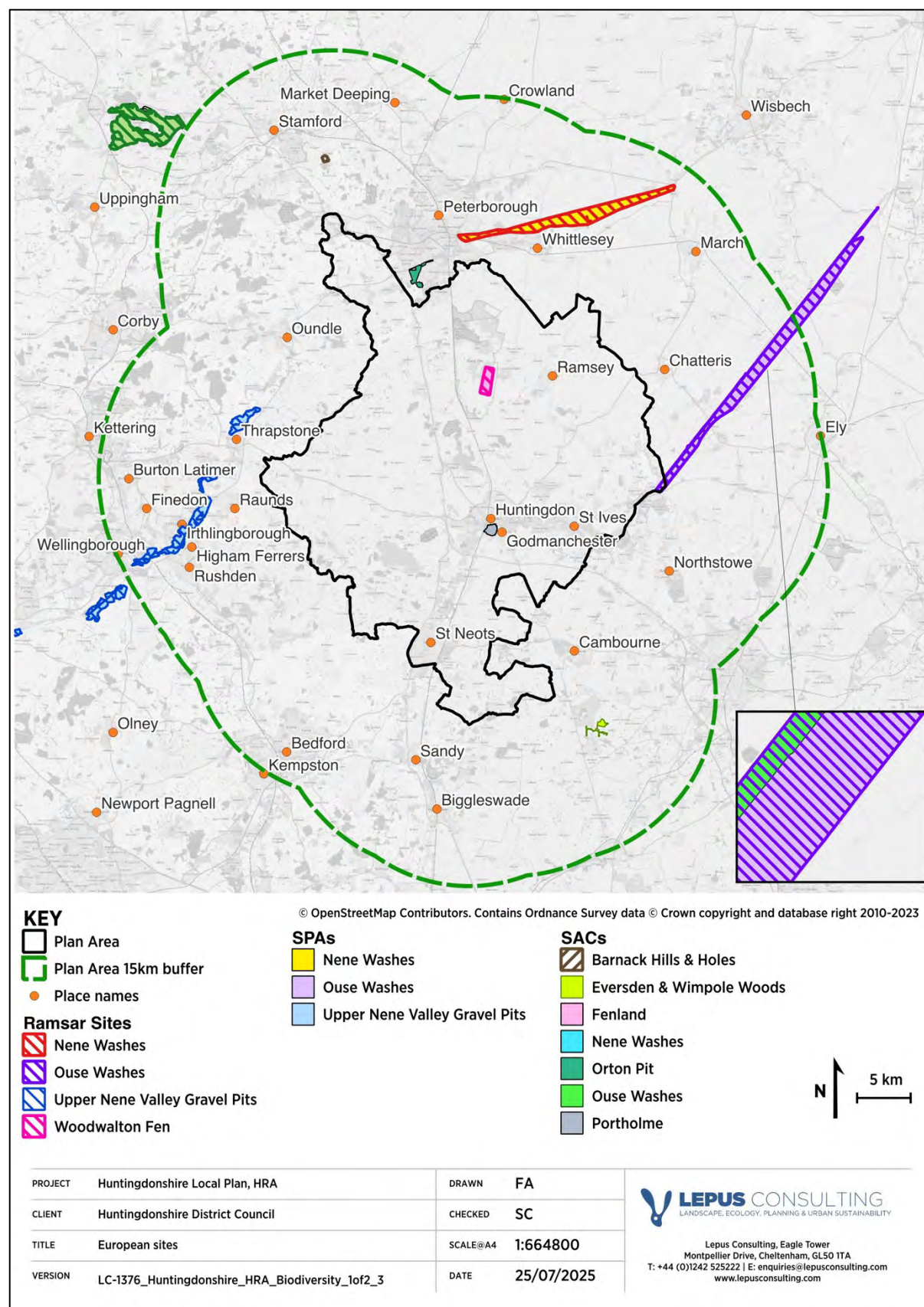


Figure 3.1: European sites scoped into the HRA process (1)

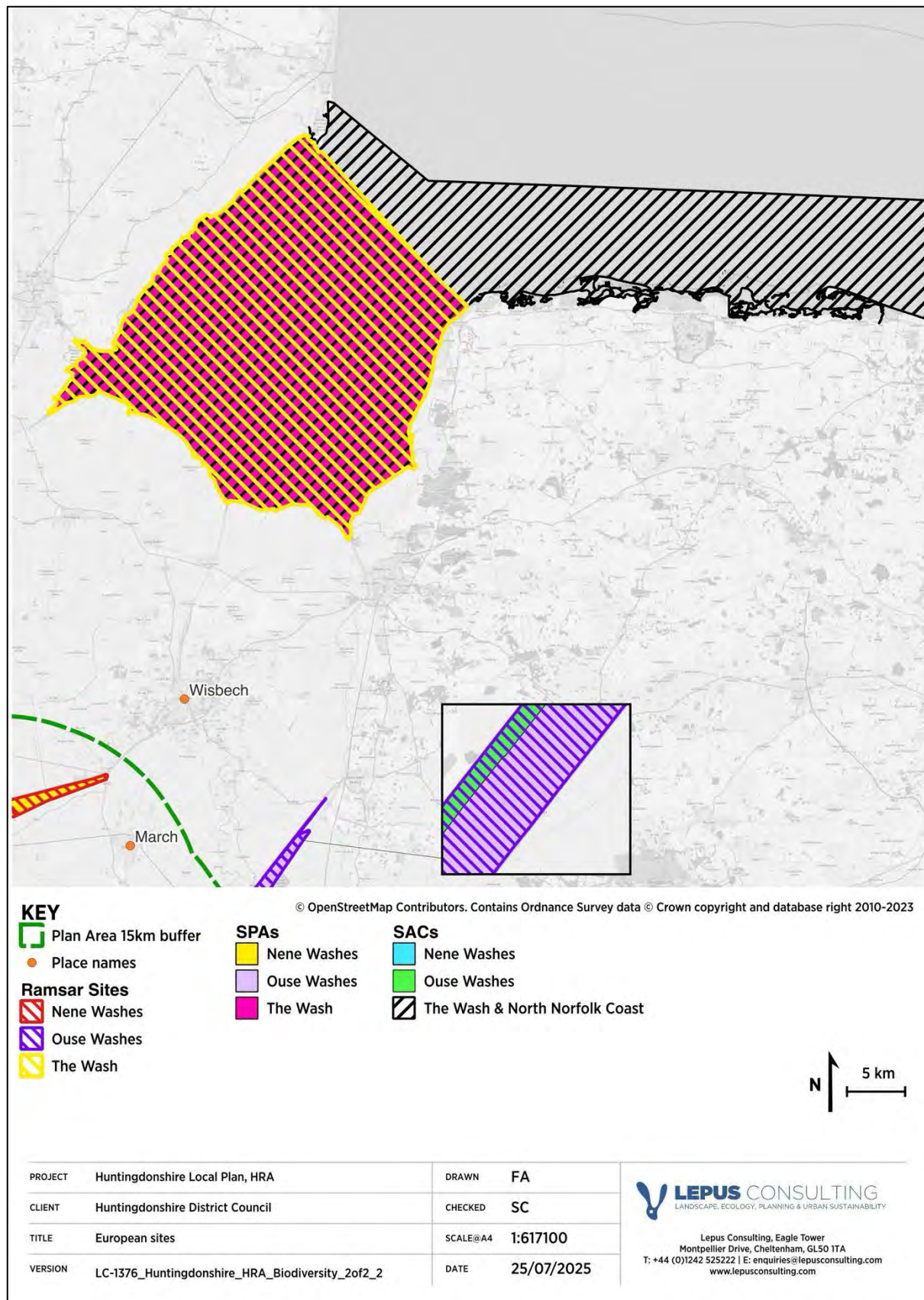


Figure 3.2: European sites scoped into the HRA process (2) to illustrate the location of The Wash SPA, The Wash Ramsar and The Wash & North Norfolk Coast SAC.

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 Joint Nature Conservation Committee (JNCC) and Natural England (NE), 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 on Conservation Objectives prepared by NE often provides more recent information on threats and pressures upon European sites than SIPs and has, therefore, also been reviewed.
- 3.3.3 A number of threats and pressures are unlikely to be exacerbated by the Local Plan and have not been considered.
- 3.3.4 Sites of Special Scientific Interest (SSSIs) are protected areas in the United Kingdom (UK). SSSIs are the building blocks of site-based nature conservation in the UK. An SSSI will be designated based on the characteristics of its fauna, flora, geology and/or geomorphology. The conservation status of SSSI features that overlap with European sites offer a useful indicator of habitat/species health at a particular location.
- 3.3.5 NE conducts Whole Feature Assessments (WFAs) which measure the condition of each notified feature across the whole of a 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.
- 3.3.6 SSSI features in either an 'Unfavourable – no change' or 'Unfavourable – declining' condition indicate that the European site may be particularly vulnerable to certain threats or pressures. It is important to remember that SSSI features may be in an unfavourable state due to the condition of features unrelated to its designation. However, it is considered that the conservation status of SSSI features that overlap with European sites offer a useful indicator of habitat/species health at a particular location.

3.3.7 NE defines zones around each SSSI which may be at risk from specific types of development; these are known as Impact Risk Zones (IRZs). 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 Site’, which have been secured as compensation for impacts on Natura 2000/Ramsar sites”³¹. 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 and likely vulnerabilities to development proposed within the Local Plan.

3.3.8 Based on previous HRA work undertaken to support the Local Plan (see **Section 1.4**), 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. This can result in adverse effects at European sites, such as eutrophication (nitrogen), acidification (nitrogen and sulphur) and direct toxicity (ozone, ammonia and nitrogen oxides)³².
- **Water resources and water levels:** Development can change runoff 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.
- **Water quality:** Surface water runoff 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.
- **Recreational pressure:** New housing development has the potential to increase recreational pressure upon European sites which are accessible to the public.
- **Urbanisation effects:** Development has the potential to result in disturbing activities (such as noise, lighting, cat predation and visual disturbance). Disturbance effects may impact upon European sites themselves, and their qualifying features, when outside a designated site boundary.

³¹ Natural England (2019) Natural England’s Impact Risk Zones for Sites of Special Scientific Interest User Guidance.

³² APIS. APIENs Home. Available at: <https://www.apis.ac.uk/APIENs>. [Date accessed: 02/06/26]

- 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*”³³. This HRA, therefore, also considers effects upon FLL or mobile species when located outside a designated site boundary within the above topic assessments.

3.4 Air quality

- 3.4.1 The main mechanisms through which air pollution can have an adverse effect is through eutrophication (nitrogen), acidification (nitrogen and sulphur) and direct toxicity (ozone, ammonia and nitrogen oxides). As highlighted through the review of threats and pressures at European sites (**Appendix B**), air pollution, and in particular atmospheric nitrogen deposition, has been identified as a threat or pressure for qualifying features of a number of European sites within the relevant SIPs and Supplementary Conservation Advice notes.
- 3.4.2 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 upsets the ammonium and nitrate balance of the ecosystem, which disrupts the growth, structure and resilience of some plant species.
- 3.4.3 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.
- 3.4.4 Natural England has developed a methodology for the assessment of traffic-related air quality impacts under the Habitats Regulations, which is relevant to the HRA of land use plans which may result in a change in traffic flows³⁴. For the assessment of air quality effects from local plans, Natural England has produced Standard Advice. This was issued for the Huntingdonshire Local Plan as part of the NE Regulation 18 consultation response (December 2025).
- 3.4.5 It comprises a number of discrete stages as follows which have been followed in the HRA process for the Local Plan. Stages 1 to 3 comprises the screening stage.
- Stage 1: Initial screening for credible risk of an effect
 - Stage 2: Detailed AQ modelling
 - Stage 3: Applying screening thresholds

³³ 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: 01/07/25]

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: 21/08/2026]

- Stage 4: Detailed assessment of ecological impacts
- Stage 5: Appropriate Assessment for habitats sites

3.4.6 The Institute of Air Quality Management (IAQM)³⁵ and the Chartered Institute of Ecology and Environmental Management (CIEEM)³⁶ have also prepared advice on the assessment of air quality impacts at designated sites. Taken together this guidance sets a methodology and thresholds for screening of air quality LSEs at the HRA screening stage (Stage 1 of the HRA process) and further AA of air quality impacts where relevant (Stage 2 of the HRA process).

Stage 1: Initial screening for credible risk of an effect

3.4.7 Stage 1 of NE's Standard Advice requires an initial screening assessment to determine if there is a credible risk of an air quality effect from the Local Plan. This should take account of whether significant emissions can reach a European site using distance criteria and also whether the qualifying habitats or supporting habitat of qualifying species associated with a European site are sensitive to air quality impacts.

3.4.8 The Local Plan will trigger development and therefore increase traffic-related emissions. Air quality impacts have been shown to typically affect European sites within 10km of a Plan boundary³⁷. For the purpose of decision-making, unless local circumstances support a wider zone, JNCC guidance notes that plan HRA should take account of the potential effects of traffic emissions on European sites located within 10km of the plan boundary. 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 scenario³⁸.

3.4.9 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.

3.4.10 Data obtained from the Office for National Statistics (ONS) in 2021 highlights the most common destinations for journeys to work arising from, and finishing in, the Plan area³⁹. The most common commuting destinations/origins are Peterborough (which lies just north of the Plan area), Fenland (which is located northeast of the Plan area) and South Cambridgeshire (which is located southeast of the Plan area). Other common commuting destinations/origins include the neighbouring areas of Bedford and East Cambridgeshire. This commuting pattern is reflected in the Economic and Employment Needs Assessment prepared in support of the Local Plan⁴⁰.

³⁵ IAQM (2019) A guide to the assessment of air quality impacts on designated nature conservation sites – version 1.0. Available at: <https://iaqm.co.uk/text/guidance/air-quality-impacts-on-nature-sites-2019.pdf>. [Date accessed: 21/08/2026]

³⁶ CIEEM (2021) Advisory Note: Ecological Assessment of Air Quality Impacts. Available at: <https://cieem.net/wp-content/uploads/2020/12/Air-Quality-advice-note.pdf>. [Date accessed: 21/08/2026]

³⁷ Chapman, C., and Kite, B. (2021) Guidance on Decision-making Thresholds for Air Pollution.

³⁸ Chapman, C., and Kite, B. (2021) Main Report Guidance on Decision-making Thresholds for Air Pollution.

³⁹ ONS (2023) Visualising people flows. Available at: <https://www.ons.gov.uk/visualisations/censusorigindestination/#workplace> [Date accessed: 02/06/26]

⁴⁰ Volterra (2025) Economic and Employment Needs Assessment.

- 3.4.11 European sites beyond 10km of the Plan area but within these key commuting areas which are sensitive to air quality effects are also considered within this HRA where they are linked to the Plan area via key strategic road links. These are roads which provide a clear route linking residential and employment areas within the Plan area.
- 3.4.12 Taking this information into consideration, a 10km buffer from the Plan area is considered precautionary, as it encompasses both the key commuting areas and strategic road links that connect to the Plan area.
- 3.4.13 It is widely accepted that air quality impacts are greatest within 200m of a road source, decreasing with distance^{41,42,43}. Baseline mapping data has been used to determine the proximity of European sites, and their qualifying features, to roads (within 200m) which may result in an exceedance of NE's screening thresholds.
- 3.4.14 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.
- 3.4.15 The results (shown in **Table 3.1**) indicate that nine European sites within 10km of the Plan area (which corresponds to the key commuting area) are sensitive to air quality impacts.
- 3.4.16 Of the nine European sites deemed sensitive to air quality impacts, Barnack Hills & Holes SAC, Eversden & Wimpole Woods SAC, Fenland SAC⁴⁴ and Woodwalton Fen Ramsar, are not located within 200m of a strategic road link. Therefore, these four sites can be scoped out of the HRA process in terms of air quality impacts. A review of Natural England data for Orton Pit SAC indicates that it is not sensitive to air quality impacts and therefore can also be scoped out of the HRA process. The remaining five European sites are scoped into the HRA process based on air quality impact pathways.

Table 3.1: Scoping of air quality impact pathways for European sites within the influence of the Local Plan⁴⁵

European sites within the influence of the Local Plan	Is the European site sensitive to air quality impacts (as per SIP Appendix B)?	Is there a strategic road link (A and B road or motorway) located within 200m of the site?
Barnack Hills & Holes SAC	Yes	No (the closest strategic road link, the B1443, is located approximately 240m north of the site).
Eversden & Wimpole Woods SAC	Yes	No (the closest strategic road link, the A1198, is located approximately 650m from the site).

⁴¹ 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.

⁴² Natural England (2018) Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations (NEA001).

⁴³ Bignal, K., Ashmore, M. & Power, S. (2004) The ecological effects of diffuse air pollution from road transport. English Nature Research Report No.580, Peterborough.

⁴⁴ Fenland SAC is split across three components which lie 27 miles apart. The component of the SAC within 10km of the Plan area is underpinned by Woodwalton Fen SSSI.

⁴⁵ Green shading in Chapter 3 scoping tables indicate threat / pressure at European site is scoped out. Red shading indicates threat / pressure at European site is scoped in for further consideration in the HRA process.

European sites within the influence of the Local Plan	Is the European site sensitive to air quality impacts (as per SIP Appendix B)?	Is there a strategic road link (A and B road or motorway) located within 200m of the site?
Fenland SAC	Yes	No (the closest strategic road link, the B660, is located approximately 1.9km to the north of the SAC).
Nene Washes SAC	Yes Spined loach identified by NE as being sensitive to air pollution in Regulation 18 consultation response	Yes, within 10km of the Plan area the following strategic road links run within 200m of the designation:
Nene Washes SPA	No	N/A
Nene Washes Ramsar	Yes Wetland plant assemblage identified by NE as being sensitive to air pollution in Regulation 18 consultation response	Yes, within 10km of the Plan area the following strategic road links run within 200m of the designation:
Orton Pit SAC	No	N/A
Ouse Washes SAC	Yes Spined loach identified by NE as being sensitive to air pollution in Regulation 18 consultation response	
Ouse Washes SPA	No	N/A
Ouse Washes Ramsar	Yes Wetland plant assemblage identified by NE as being sensitive to air pollution in Regulation 18 consultation response	
Portholme SAC	Yes	Yes (the A1307 is located approximately 40m from the SAC's northern boundary, the B1514 approximately 190m from this boundary, the B1044 approximately 150m from the eastern boundary, and the B1043 approximately 175m from the SAC's southern boundary).
Upper Nene Valley Gravel Pits SPA	No	N/A
Upper Nene Valley Gravel Pits Ramsar	No	N/A
Woodwalton Fen Ramsar	Yes	No (the closest strategic road link, the B660, is located approximately 1.9km to the north of the Ramsar).

- 3.4.17 The Local Plan will trigger housing and employment development. Therefore, there is potential for an increase in traffic-related emissions within 10km of the Plan area and key commuting areas. As a consequence, there is potential for an increase in traffic-related emissions along road links located within 200m of four European sites that have been identified as sensitive to air quality impacts.

Stage 2: Detailed air quality modelling

- 3.4.18 The next stage of the process involved detailed air quality modelling (outlined in full in **Chapter 5**). This was conducted by AQC, in accordance with Natural England's recommended staged approach, considering future traffic associated with the Local Plan and comparing predicted concentrations and deposition rates against relevant Critical Levels (CL_e) and Critical Loads (CL_o). Where Process Contributions exceed the screening threshold of 1% of the relevant CL_e or CL_o, further investigation was completed to consider the ecological significance of the predicted changes, including the spatial extent of effects, the location of qualifying habitats and supporting habitats, existing background conditions, predicted future trends in emissions and the conservation objectives of each European site.

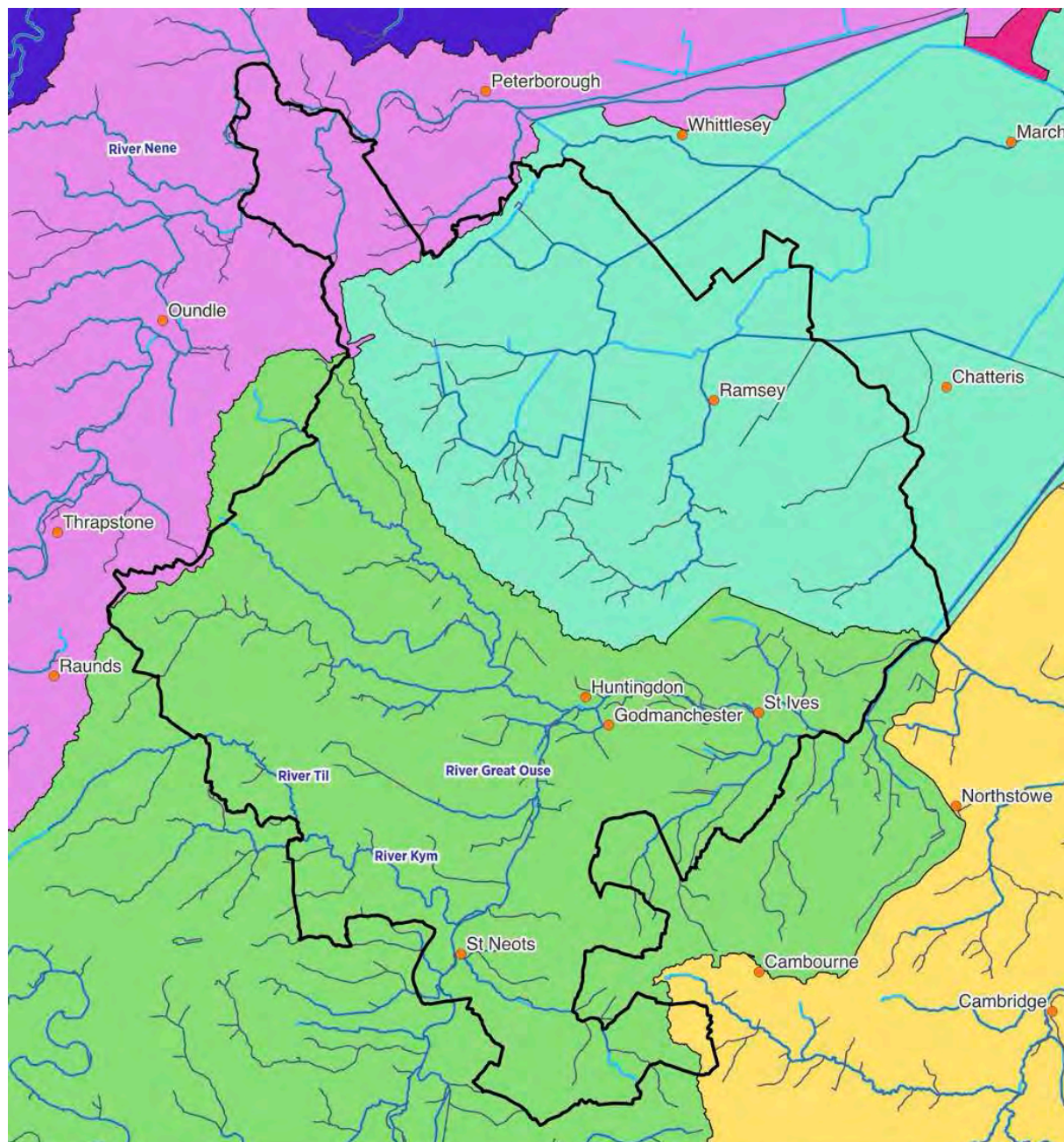
3.5 Water quality and water quantity

- 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) entering European sites and the quality of this water:
- Change in surface permeability and runoff rates;
 - Increased water demand to supply new homes and businesses;
 - Reduced quality of surface water runoff; and,
 - Increased effluent discharge for treatment.
- 3.5.2 It is noted that a change in water levels may have knock-on implications for the quality of water due to reduction in the dilution effect within a watercourse.
- 3.5.3 The Local Plan may also impact functionally linked watercourses and habitat through a deterioration in water quality, flows and loss, and/or deterioration of riparian and in-stream habitat.
- 3.5.4 Any change in the quality or quantity of water at water dependant European sites as a result of the Local Plan may result in adverse effects on the achievement of the conservation objectives which aim to maintain and restore the condition of these features for relevant qualifying species.
- 3.5.5 For a number of European sites, site specific water quality targets have been set to reflect baseline conditions and the tolerance of site features.

- 3.5.6 The main watercourse that flows through the Plan area is the River Great Ouse, with the River Nene also flowing along the northern Plan area boundary. The River Great Ouse and its tributaries, which include the River Kym and River Til, drain the southern section of the Plan area. These rivers form a network of watercourses that discharge at the Wash Estuary, through three European sites: The Wash SPA, The Wash Ramsar, and The Wash & North Norfolk Coast SAC. Several waterways that are part of the Middle Level Navigations waterway network are also located in the centre of the district, between the River Great Ouse and River Nene, and are largely used for land drainage. Numerous tributaries and smaller watercourses also flow through the Plan area, including Bury Brook, Cock Brook, Ellington Brook, Diddington Brook, West Brook, Marley Gap Brook, Billing Brook and Alconbury Brook.
- 3.5.7 The Plan area lies within the Anglian River Basin District. River Basin Districts are subdivided into surface water management catchments (SWMCs)⁴⁶. The majority of the northern half of the Plan area is located within the Old Bedford including the Middle Level SWMC and the majority of the southern part of the Plan area is located within the Ouse Upper and Bedford SWMC, with two small areas in the north and east falling into the Nene SWMC, and a very small portion of southeast Huntingdonshire falling within the Cam and Ely Ouse SWMC (see **Figure 3.3**).
- 3.5.8 River Basin Management Plans (RBMPs) provide a framework for protecting and enhancing the benefits provided by the water environment. To achieve this, and because water and land resources are closely linked, they also inform decisions on land-use planning. **Appendix A** provides a summary of the Anglian RBMP⁴⁷.
- 3.5.9 Catchment Abstraction Management Strategies (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. Through the CAMS process, the EA prepares an Abstraction Licensing Strategy (ALS) to manage water resources and contribute to implementation of the WFD, with strategies that feed into Water Resource Management Plans (WRMPs).

⁴⁶ DEFRA. River basin districts, England. Available at: <https://environment.data.gov.uk/catchment-planning/> [Date accessed: 02/06/26]

⁴⁷ Environment Agency (2022) Anglian river basin district river basin management plan: updated 2022. Available at: <https://www.gov.uk/guidance/anglian-river-basin-district-river-basin-management-plan-updated-2022> [Date accessed: 02/06/26]



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KEY

□ Plan Area

— Major watercourses

— Watercourse links

● Place names

SWMCs

■ Cam and Ely Ouse

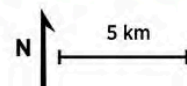
■ Nene

■ North West Norfolk

■ Old Bedford and Middle Level

■ Ouse Upper and Bedford

■ Welland



PROJECT	Huntingdonshire Local Plan, HRA	DRAWN	FA
CLIENT	Huntingdonshire District Council	CHECKED	SC
TITLE	Surface Water Management Catchments (SWMCs)	SCALE@A4	1:370500
VERSION	LC-1376_Huntingdonshire_HRA_SWMCs_1	DATE	18/07/2025

LEPUS CONSULTING
LANDSCAPE, ECOLOGY, PLANNING & URBAN SUSTAINABILITY

Lepus Consulting, Eagle Tower
Montpellier Drive, Cheltenham, GL50 1TA
T: +44 (0)1242 525222 | E: enquiries@lepusconsulting.com
www.lepusconsulting.com

Figure 3.3: Watercourses and Surface Water Management Catchments (SWMCs) in and around the Plan area

- 3.5.10 The Plan area is located predominantly within the Old Bedford including the Middle Level, and the Ouse Upper and Bedford ALS catchments. A small portion of the northern and eastern parts of the Plan area also falls within the Nene ALS catchment. A very small portion of southeast Huntingdonshire falls within the Cam and Ely Ouse ALS catchment. The ALSs outline the available water resources in each catchment area, alongside how these water resources are being used and the intention regarding management of further abstraction. European sites located within these catchment areas have the potential to be affected by water abstraction. The Old Bedford including the Middle Level ALS⁴⁸ lists the Ouse Washes SAC, SPA and Ramsar as vulnerable to the impacts of poor/unsustainable water abstraction practices. The Ouse Upper and Bedford ALS⁴⁹ lists Portholme SAC; the Ouse Washes SAC, SPA and Ramsar; The Wash & North Norfolk Coast SAC; and The Wash SPA, as able to be affected by abstraction practices within the ALS area. The Nene ALS⁵⁰ lists the Nene Washes SPA, Orton Pit SAC, the Upper Nene Valley Gravel Pits SPA and Ramsar, The Wash & North Norfolk Coast SAC, The Wash SPA and The Wash Ramsar as vulnerable to the impacts of poor/unsustainable water abstraction practices, due to the water-dependency of their qualifying features.
- 3.5.11 For the purposes of water resource planning and supply, the country is divided into Water Resource Zones (WRZs). WRZs are the largest possible zone for water resource management in which customers share the same risk of a resource shortfall. The Plan area is served by the Ruthamford North and Ruthamford South WRZs, as supplied by Anglian Water, and the Cambridge Water Company Wide WRZ, as supplied by Cambridge Water (see **Figure 3.4**). To increase resilience to drought, water trading with Affinity Water is discussed within the Anglian Water WRMP. Both Ruthamford North and South have been identified as being at risk of climate change impacts in the future; hence, Huntingdonshire's water supply is vulnerable to climate-related risks. The EA has designated the whole of the Anglian Water region as under serious water stress.
- 3.5.12 Decisions relating to water abstraction for supply and disposal of water are controlled through a number of licensing mechanisms and a high-level water planning framework which is subject to HRA. This ensures the protection of the water environment and compliance with the WFD. One element of this framework is the WRMP that each water service provider is obligated to produce and publish every five years. WRMPs articulate long term plans to accommodate the impacts of population growth, drought, environmental obligations and climate change uncertainty, in order to balance water supply and demand.

⁴⁸ Environment Agency (2017) Old Bedford including Middle Level abstraction licensing strategy. Available at: https://assets.publishing.service.gov.uk/media/5a82f227ed915d74e62386d3/ALS_2017_Old_Bedford.pdf [Date accessed: 04/06/26]

⁴⁹ Environment Agency (2017) Upper Ouse and Bedford Ouse abstraction licensing strategy. Available at: https://assets.publishing.service.gov.uk/media/5a820dd6e5274a2e87dc0e7f/ALS_2017_Upper_Ouse_and_Bedford_Ouse.pdf [Date accessed: 04/06/26]

⁵⁰ Environment Agency (2021) Nene Catchment Abstraction Licensing Strategy. Available at: <https://assets.publishing.service.gov.uk/media/606d91e28fa8f57359cf4346/CAMS-Nene-Catchment-Abstraction-Management-Strategy.pdf> [Date accessed: 04/06/26]

3.5.13 The water service providers for the Plan area are Anglian Water and Cambridge Water. Anglian Water's 2024 WRMP⁵¹ highlights the potential for a shortfall of 571 megalitres of water per day by 2050, with a deficit anticipated across 25 of the 27 WRZs that Anglian Water supplies, if no action is taken. The WRMP outlines a number of measures that need to be taken to ensure the continuation of sustainable sources of supply, including smart metering, leakage reduction and progressing strategic resource options (such as making effective use of the Lincolnshire and Fens reservoirs). The Anglian Water WRMP was supported by an HRA⁵² which recommended mitigation measures that, if implemented, should help to avoid adverse impacts upon the integrity of any European sites either alone, or in-combination. Cambridge Water's WRMP⁵³ also demonstrates the potential for a growing supply/demand deficit in the absence of effective management planning. The WRMP also places emphasis on leakage reduction, in addition to reducing household and non-household water consumption, and enforcing universal metering by 2030. The Cambridge Water WRMP was supported by an HRA⁵⁴ which concluded that, alone, the WRMP would have LSEs upon the following European sites, if the recommended mitigation measures were not implemented:

- Ouse Washes SAC;
- Ouse Washes SPA;
- Ouse Washes Ramsar;
- Fenland SAC; and,
- Eversden & Wimpole Woods SAC.

3.5.14 WRMPs are linked to Drought Plans. Drought Plans outline the steps that water companies must take in a drought event to ensure that the population maintains access to sufficient water supplies, without detrimentally impacting rivers and the environment. The Anglian Water Drought Plan⁵⁵ and the Cambridge Water Drought Plan⁵⁶ both cover the period from 2022 to 2027 and set out a series of actions to address droughts, including actions to reduce customer demand for water and identification circumstances wherein drought orders and permits may be required.

⁵¹ Anglian Water (2023) Our Water Resources Management Plan 2024. Available at: <https://www.anglianwater.co.uk/siteassets/household/about-us/wrmp/revised-draft-wrmp24-main-report-v2.pdf> [Date accessed: 01/06/26]

⁵² Mott MacDonald (2023) Anglian Water Revised Draft Water Resource Management Plan 2024 Environmental Report Sub-Report A: Habitats Regulations Assessment (HRA). Available at: <https://www.anglianwater.co.uk/SysSiteAssets/household/about-us/wrmp/revised-draft-wrmp24-environmental-report-sub-report-a---hra.pdf> [Accessed 20/06/26].

⁵³ Cambridge Water (2025) Final Water Resources Management Plan 2024. Available at: <https://www.cambridge-water.co.uk/media/zadnmcfe/cam-water-resources-management-plan-2024-final.pdf> [Date accessed: 01/06/26]

⁵⁴ Ricardo (2023) Habitats Regulations Assessment: Draft Water Resources Management Plan 2024. Available at: <https://www.cambridge-water.co.uk/media/twqh2ovj/cambridge-water-draft-wrmp24-hra-issue-3.pdf> [Date accessed: 01/06/26]

⁵⁵ Anglian Water (2022) Drought Plan 2022 Final Version. Available at: <https://www.anglianwater.co.uk/siteassets/household/about-us/aws-drought-plan-2022.pdf> [Date accessed: 01/06/26]

⁵⁶ Cambridge Water (2022) Cambridge Water drought plan. Available at: <https://www.cambridge-water.co.uk/media/udchgvd1/cambridge-water-final-drought-plan-2022.pdf> [Date accessed: 01/06/26]

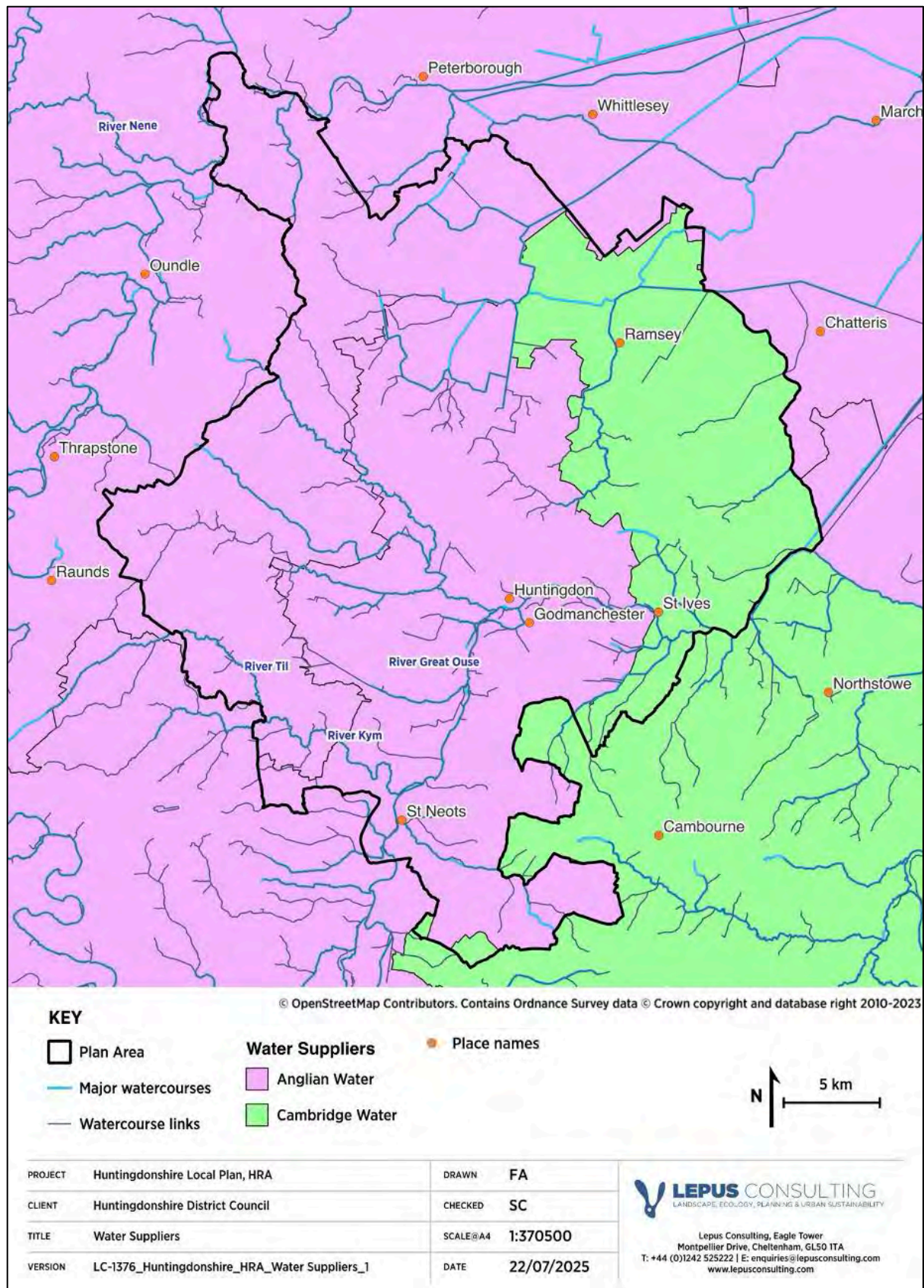


Figure 3.4: Watercourses and Water Suppliers in and around the Plan area

- 3.5.15 Anglian Water provide wastewater services for development in Huntingdonshire. Anglian Water use the term Water Recycling Centres (WRC) to refer to these services. There are 33 WRCs that are within or currently serving communities in Huntingdonshire. Twenty-nine of these are expected to serve growth from commitments or adopted plans⁵⁷. Sewerage Undertakers have a duty under Section 94 of the Water Industry Act 1991 to provide sewerage and treat wastewater arising from new domestic development⁵⁸. Environmental permits are used alongside water quality limits as a means of controlling the pollutant load discharged from a WRC to a receiving watercourse.
- 3.5.16 In March 2024, Huntingdonshire District Council completed a Stage 1 Water Cycle Study⁵⁹, comprising the first stage of the Integrated Water Management Strategy (IWMS) for Huntingdonshire. This assessed headroom at WRCs serving Huntingdonshire and identified a requirement for an increase in flow permits and potential upgrades to treatment processes.
- 3.5.17 The IWMS sets out the anticipated growth of the study area up to 2046 and outlines a set of objectives for assessing future water management options. The report also highlights that, according to the latest WFD assessment data, *“all of the watercourses in the study area have moderate or poor overall status”*, largely due to *“the water industry (sewage dischargers) and agricultural and rural land management (livestock, arable and land drainage)”* and pollution from *“urban and highway runoff”*. A Stage 2 Water Cycle Study (Integrated Water Management Strategy) was prepared in 2026⁶⁰. This included additional modelling of dissolved oxygen and nitrate to support the HRA. Although these parameters are not routinely assessed as part of Water Cycle Studies, the modelling provided further evidence to inform the assessment of potential effects on designated sites.

⁵⁷ Huntingdonshire District Council (2024) Huntingdonshire Integrated Water Management Strategy: Stage 1 Water Cycle Study Final Report. Available at: <https://www.huntingdonshire.gov.uk/media/ht0h2ww5/huntingdonshire-integrated-water-management-strategy-stage-1-water-cycle-study.pdf> [Date accessed: 14/06/26]

⁵⁸ Water Industry Act – 1991. Available at: <https://www.legislation.gov.uk/ukpga/1991/56/section/94>. [Date accessed: 01/06/26]

⁵⁹ JBA Consulting (2024) Huntingdonshire Integrated Water Management Strategy: Stage 1 Water Cycle Study Final Report.

⁶⁰ JBA Consulting (2026) Huntingdonshire Integrated Water Management Strategy: Stage 2 Water Cycle Study Final Report.

- 3.5.18 As noted in **paragraph 3.5.6**, the main watercourses in the Plan area drain into The Wash Estuary, which comprises three European sites: The Wash & North Norfolk Coast SAC, The Wash SPA, and The Wash Ramsar. These sites encompass the largest embayment in the UK, as well as extensive intertidal sand and mudflats, subtidal sandbanks, biogenic and geogenic reef, saltmarsh, and a barrier beach system. These systems support populations of Common Seal (*Phoca vitulina*) and Otter (*Lutra lutra*), and provide rich foraging grounds and important roosting habitat for a number of bird species for which the SPA and Ramsar sites are designated^{61,62,63}. The species and habitats for which the three European sites are designated are sensitive to changes in water quality and quantity^{64,65,66}. As the River Great Ouse and Nene flow through and around the Plan area and discharge at The Wash, there is a possibility for activity in the Plan area to adversely affect the quality of water flowing to the three European sites. Furthermore, as the Plan area falls partly within the same ALS catchment area as the Wash (the Nene ALS catchment area), water use/extraction activity within the Plan area has the potential to adversely affect the quantity of water at the European sites. Consequently, despite their location being outside of the Plan area, it is necessary to scope The Wash & North Norfolk Coast SAC, The Wash SPA, and The Wash Ramsar into the HRA process based on hydrological impact pathways.
- 3.5.19 The northern central section of the Plan area comprises the Great Fen, which was once part of a natural fenland landscape, with a large area of open water called Whittlesey Mere dominating the north, and a mosaic of bogs, fens and wet woodland to the south⁶⁷. The Fenland SAC (where it is underpinned by Woodwalton Fen SSSI and also Woodwalton National Nature Reserve (NNR)) and Woodwalton Fen Ramsar are located within the Great Fen area (see **Figure 3.5**) and, alongside surrounding supporting habitat (see **Figure 3.6**), have significant ecological importance (**Figure 3.7**).

⁶¹ Natural England (2018) European Site Conservation Objectives for The Wash & North Norfolk Coast SAC (UK0017075). Available at: <https://publications.naturalengland.org.uk/publication/5950176598425600> [Date accessed: 03/06/26]

⁶² JNCC (1988) Information Sheet on Ramsar Wetlands (RIS): The Wash. Available at: <https://jncc.gov.uk/jncc-assets/RIS/uk11072.pdf> [Date accessed: 03/06/26]

⁶³ Natural England (2019) European Site Conservation Objectives for The Wash SPA (UK9008021). Available at: <https://publications.naturalengland.org.uk/publication/5747661105790976> [Date accessed: 03/06/26]

⁶⁴ Natural England (2014) Site Improvement Plan: The Wash and North Norfolk Coast (SIP245). Available at: <https://publications.naturalengland.org.uk/publication/5327498292232192> [Date accessed: 03/06/26]

⁶⁵ Natural England (2024) The Wash & North Norfolk Coast SAC, Supplementary Advice. Available at: <https://designatedsites.naturalengland.org.uk/ConservationAdvice/SupplementaryAdvice.aspx?SiteCode=UK0017075&SiteName=the+wash+&SiteNameDisplay=The+Wash+and+North+Norfolk+Coast+SAC&countyCode=29&responsiblePerson=&SeaArea=&IFCAArea=&NumMarineSeasonality=2> [Date accessed: 03/06/26]

⁶⁶ Natural England (2024) The Wash SPA, Supplementary Advice. Available at: <https://designatedsites.naturalengland.org.uk/ConservationAdvice/SupplementaryAdvice.aspx?SiteCode=UK9008021&SiteName=the%20wash%20&SiteNameDisplay=The+Wash+SPA&countyCode=29&responsiblePerson=&SeaArea=&IFCAArea=&NumMarineSeasonality=21> [Date accessed: 03/06/26]

⁶⁷ Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire, Environment Agency, Natural England, and Huntingdonshire District Council (2010) Great Fen Masterplan, March 2010. Available at: <https://www.greatfen.org.uk/sites/default/files/2019-10/env03-great-fen-masterplan-2010.pdf> [Date accessed: 16/06/26]

- 3.5.20 The Council has partnered with the EA, NE, and the Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire, to carry out the Great Fen project⁶⁸. The aim of this project is to help restore the Great Fen and improve the connectivity of its habitats, ultimately aspiring to oversee the creation of a large-scale nature recovery network including the restoration of 14 square miles of wild fen over the next 50 to 100 years.
- 3.5.21 The Council has collaborated on the Great Fen Masterplan⁶⁹ to help achieve the aims of the Great Fen project. This masterplan advocates for the re-establishment of pastoral farming practices and promoting the occurrence of natural processes, which will benefit wildlife and locals alike. Good progress has been made to date⁷⁰ and the Local Plan should seek to facilitate further progress by aligning with the aims of the project. This will also require consideration of the SSSIs and National Nature Reserves (NNRs) that underpin the Woodwalton Fen European sites (Woodwalton Fen SSSI and Woodwalton Fen NNR) and other parts of the Great Fen area (Holme Fen SSSI and Holme Fen NNR). These national designations (see **Figure 3.5**) play a crucial role in the wider ecological landscape through provision of functional linkages and processes. Woodwalton Fen NNR supports many important species, including over 1,000 beetle species (of which over 200 are rare), over 900 species of moths and butterflies, over 400 species of wildflowers, and birds such as the Marsh Harrier (*Circus aeruginosus*)⁷¹ (see **Figures 3.6** and **3.7**). Holme Fen NNR also supports numerous species of birds, including the Nightingale (*Luscinia megarhynchos*) and the Long-eared Owl (*Asio otus*), as well as Dragonflies (*Anisoptera*), around 450 species of fungi, and an extensive Birch (*Betula*) population⁷².
- 3.5.22 The features of the Great Fen, including the qualifying features of Fenland SAC (where it is underpinned by Woodwalton Fen SSSI) and Woodwalton Fen Ramsar (**Appendix B**) and surrounding areas of supporting habitat, are dependent on wetland habitats which are reliant on surface and/or groundwater. Therefore, maintaining the quality and quantity of water supply is critical to these designations. These European sites, and areas of surrounding functionally linked habitat across the Great Fen area, are, therefore, scoped into the HRA process in terms of water quality and water quantity impacts.

⁶⁸ Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire, Environment Agency, Natural England, and Huntingdonshire District Council (n.d.) About the Great Fen. Available at: <https://www.greatfen.org.uk/about-great-fen> [Date accessed: 16/06/26]

⁶⁹ Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire, Environment Agency, Natural England, and Huntingdonshire District Council (2010) Great Fen Masterplan, March 2010. Available at: <https://www.greatfen.org.uk/sites/default/files/2019-10/env03-great-fen-masterplan-2010.pdf> [Date accessed: 25/06/26]

⁷⁰ Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire, Environment Agency, Natural England, and Huntingdonshire District Council (n.d.) Progress towards the Great Fen vision. Available at: <https://www.greatfen.org.uk/about-great-fen/restoration-project-progress> [Date accessed: 25/06/26]

⁷¹ Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire, Environment Agency, and Natural England, and Huntingdonshire District Council (n.d.) Sites to Visit – Nature Reserve, Woodwalton Fen. Available at: <https://www.greatfen.org.uk/woodwalton-fen> [Date accessed: 16/07/25]

⁷² Woodland Trust (n.d.) Holme Fen. Available at: <https://www.woodlandtrust.org.uk/visiting-woods/woods/holme-fen/> [Date accessed: 25/06/26]

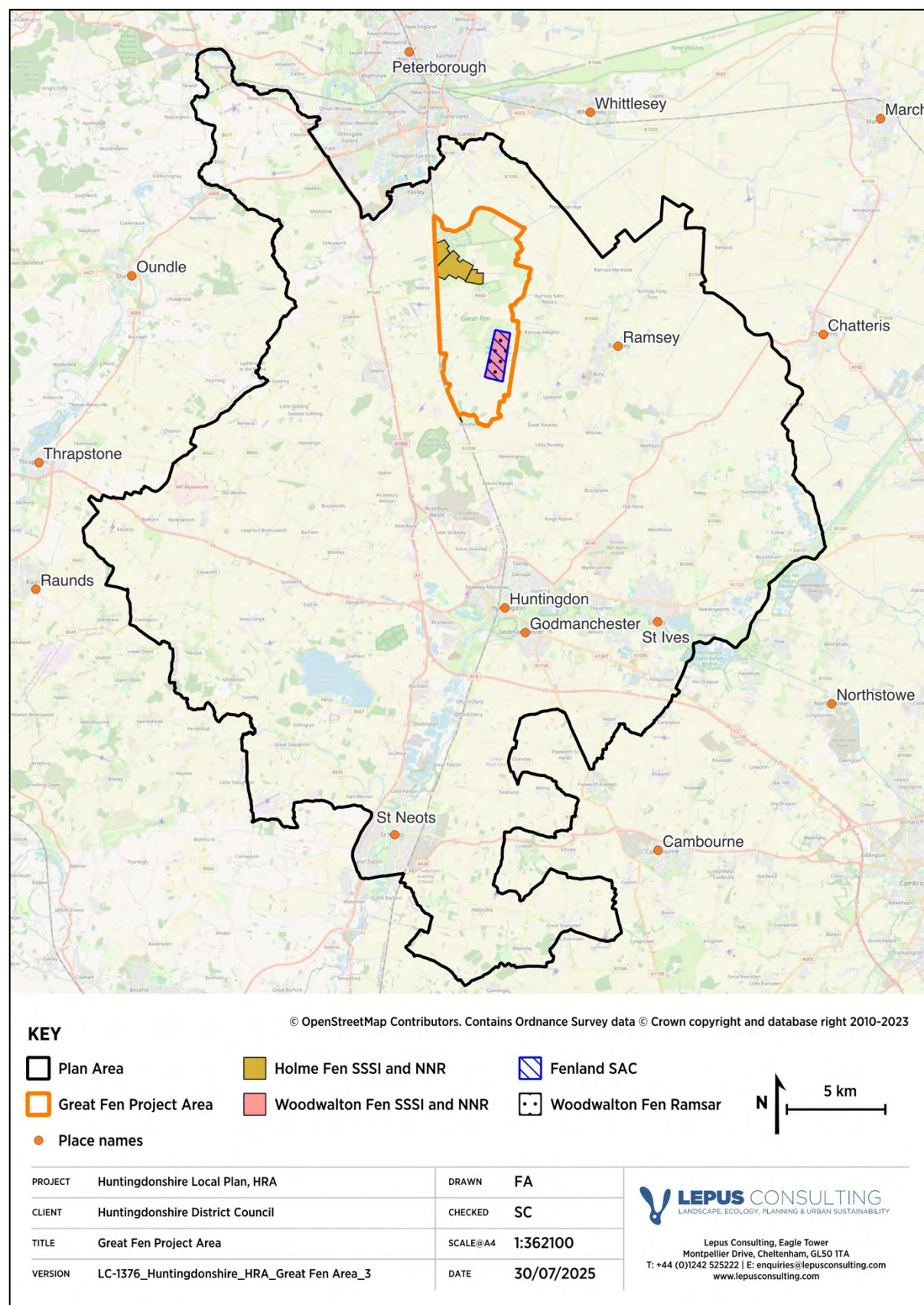


Figure 3.5: Great Fen project area and relevant biodiversity designations

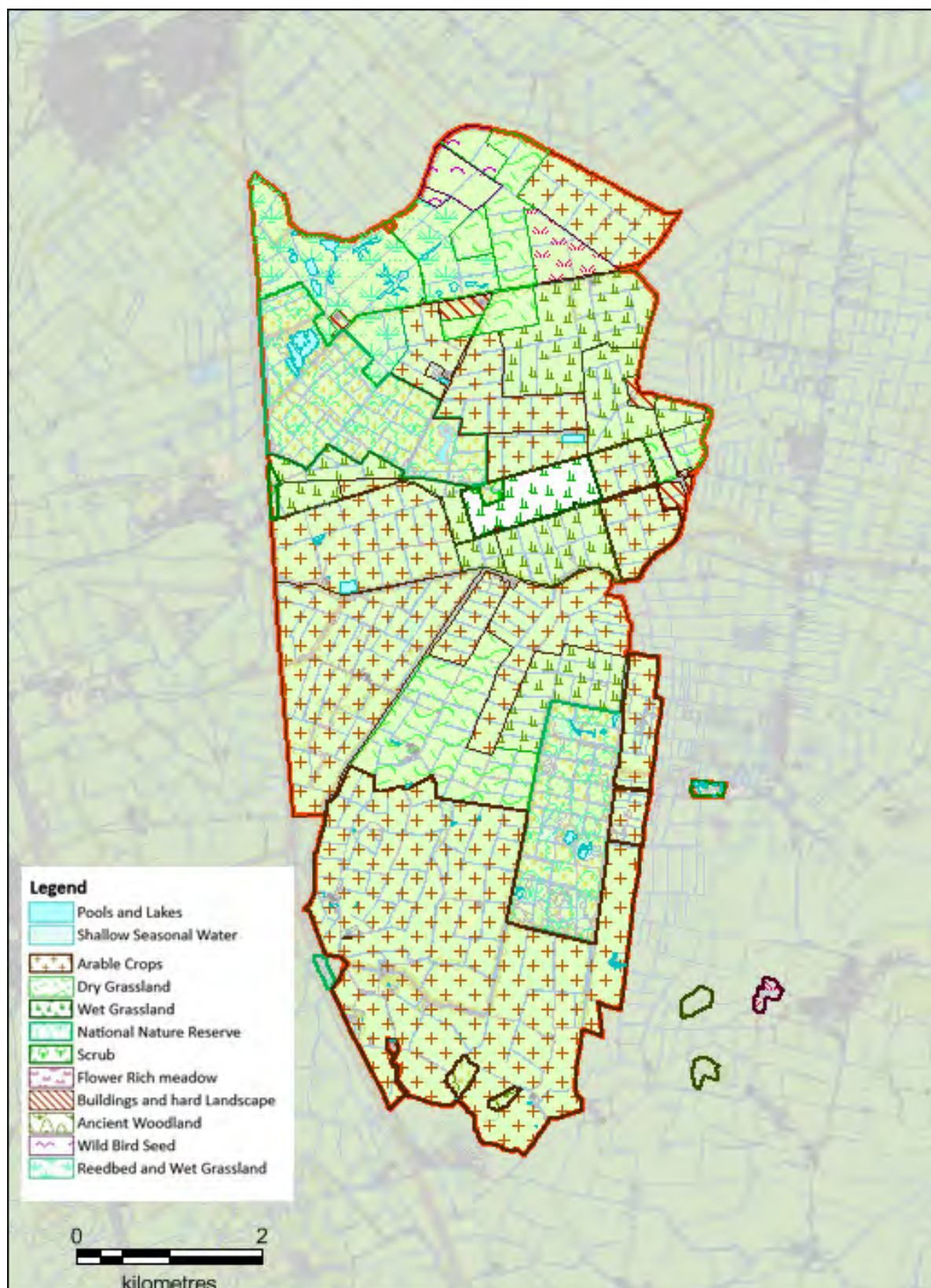


Figure 3.6: Habitats in the Great Fen area identified by Huntingdonshire District Council⁷³

⁷³ Huntingdonshire District Council (n.d.) Great Fen Masterplan Maps, Habitats. Available at: <https://www.huntingdonshire.gov.uk/planning/planning-policy-documents/great-fen-masterplan-maps/> [Date accessed: 25/06/26]

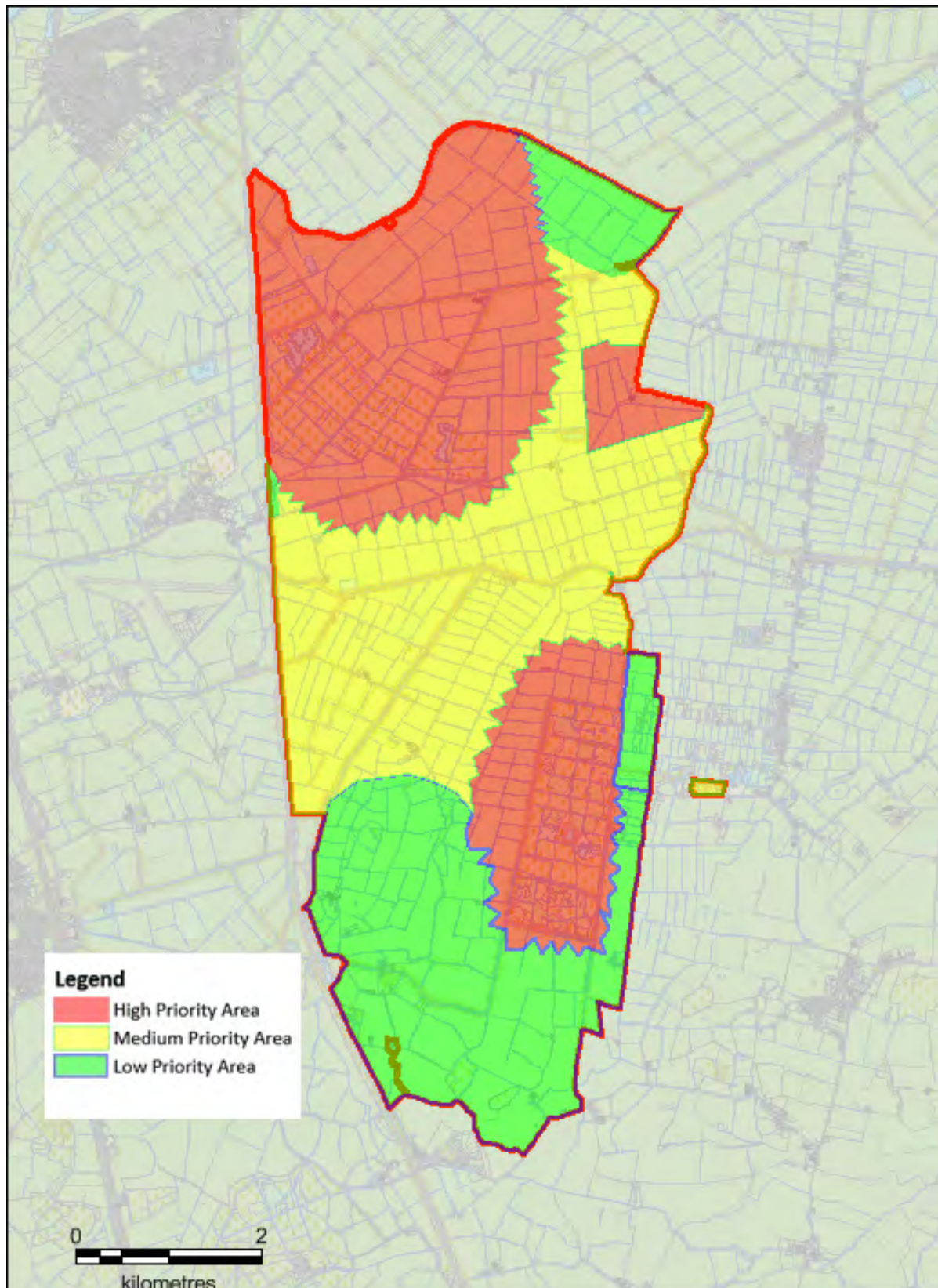


Figure 3.7: Ecological priority areas identified by Huntingdonshire District Council⁷⁴

⁷⁴ Huntingdonshire District Council (n.d.) Great Fen Masterplan Maps, Ecological Priorities. Available at: <https://www.huntingdonshire.gov.uk/planning/planning-policy-documents/great-fen-masterplan-maps/> [Date accessed: 25/06/26]

- 3.5.23 Taking into consideration potential changes in water supply (through abstraction for water supply) and water quality (through surface water run-off and discharges from WwTWs), European sites were screened for potential hydrological impact pathways. This review looked at European sites which are hydrologically linked to the Plan area and hydrologically sensitive, including impacts upon functionally linked watercourses. **Table 3.2** indicates those European sites that will be scoped into the screening assessment for further consideration in the HRA process based on hydrological impact pathways.

Table 3.2: Assessment of hydrological impact pathways for European sites within the influence of the Local Plan

European sites with hydrological links to the Plan area	Potential water quality LSEs	Potential water quantity LSEs	Will the European site be scoped in for further assessment in the HRA process?
Fenland SAC ⁷⁵	Fenland SAC is designated for its habitats, which support populations of Spined Loach (<i>Cobitis taenia</i>) and Great Crested Newt (<i>Triturus cristatus</i>). Fenlands are notably sensitive to changes in water quality, with changes to nutrient levels and water chemistry easily able to offset the balance of the ecosystem ⁷⁶ . The SAC is located within the Plan area; therefore, development under the Local Plan has the potential to adversely affect the SAC through changes to water quality. As such, the site is scoped in for further consideration in the HRA process based upon water quality impact pathways.	Fenland SAC (and the northern half of the Plan area) is located within the Old Bedford including <i>Woodwalton Fen that they can be effect on the integrity of the site</i> ". However, the Great Fen area (specifically the Woodwalton Fen area) has been identified as vulnerable to changes to water levels via flooding ⁷⁸ , which may become more prevalent as a result of decreased permeability of land associated with development under the Local Plan. Fenlands are highly sensitive to changes in water quantity ⁷⁹ ; hence, activity within the Plan area has the potential to habitats and supported species. Therefore, the SAC is scoped into the HRA process for water	Yes

⁷⁵ Fenland SAC is split across three components which lie 27 miles apart. The component of the SAC within 10km of the Plan area is underpinned by Woodwalton Fen SSSI.

⁷⁶ Natural England (2019) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features Fenland (SAC) Site Code: UK0014782. Available at: <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0014782.pdf> [Date accessed: 25/06/26]

⁷⁷ Environment Agency (2017) Old Bedford including Middle Level abstraction licensing strategy. Available at: https://assets.publishing.service.gov.uk/media/5a82f227ed915d74e62386d3/ALS_2017_Old_Bedford.pdf [Date accessed: 25/06/26]

⁷⁸ Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire, Environment Agency, Natural England, and Huntingdonshire District Council. Big Ideas: Flood Protection. Available at: <https://www.greatfen.org.uk/big-ideas/flood-protection#:~:text=Flooding%20is%20a%20particular%20risk,areas%20are%20below%20sea%20level>. [Date accessed: 25/06/26]

⁷⁹ Natural England (2019) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features Fenland (SAC) Site Code: UK0014782. Available at: <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0014782.pdf> [Date accessed: 25/06/26]

European sites with hydrological links to the Plan area	Potential water quality LSEs	Potential water quantity LSEs	Will the European site be scoped in for further assessment in the HRA process?
Nene Washes SAC	Nene Washes SAC⁸⁰ is designated for supporting the Spined Loach, which is sensitive to changes in water quality. The site is located approximately 2.1km north of the Plan area and is hydrologically such, the site is scoped in for further consideration in the HRA process based upon water quality impact	Nene Washes SAC is located within the Nene ALS catchment area. Consultation with NE has indicated that the SAC is highly vulnerable to changes in water levels. As such, the site is scoped into the HRA process for water quantity impact pathways.	Yes
Nene Washes SPA	Nene Washes SPA⁸¹ is designated for supporting numerous breeding and non-breeding bird species, such as the Northern Shoveler (<i>Anas clypeata</i>), which are sensitive to changes in water quality. The site is located approximately 2.1km north of the Plan area and is hydrologically connected to the Plan area via the River Nene and its tributaries. As such, the site is scoped in for further consideration in the HRA process based upon water quality impact pathways.	Nene Washes SPA is located within the Nene ALS catchment area and identified as vulnerable to changes in water levels as a result of abstraction in the Nene ALS. The Nene ALS catchment area covers some of the northern and eastern parts of the Plan area; hence, increased abstraction rates to serve development within the Plan area may adversely affect the water levels of the supporting habitat upon which bird species, such as the Northern Shoveler for which the site is designated, rely. As such, the site is scoped into the HRA process for water quantity	Yes

⁸⁰ Natural England (2018) European Site Conservation Objectives for Ouse Washes SAC (UK0013011). Available at: <https://publications.naturalengland.org.uk/publication/4894882430713856> [Date accessed: 25/06/26]

⁸¹ Natural England (2019) European Site Conservation Objectives for Nene Washes SPA (UK9008031). Available at: <https://publications.naturalengland.org.uk/publication/4894064390438912> [Date accessed: 25/06/26]

European sites with hydrological links to the Plan area	Potential water quality LSEs	Potential water quantity LSEs	Will the European site be scoped in for further assessment in the HRA process?
Nene Washes Ramsar	Nene Washes Ramsar ⁸² is designated for supporting “an assemblage of nationally rare breeding birds”, “a wide range of raptors”, “several nationally scarce plants”, “two vulnerable and two rare British Red Data Book invertebrate species” and the Tundra Swan (<i>Cygnus columbianus bewickii</i>). Many of these qualifying species are sensitive to changes in water quality. The site is located approximately 2.1km north of the Plan area and is hydrologically connected to the Plan area via the River Nene and its tributaries. As such, the Ramsar is scoped in for further consideration in the HRA process based upon water quality impact pathways.	Nene Washes Ramsar is located within the Nene ALS catchment area, which covers some of the northern and eastern parts of the Plan area. As the Nene Washes SPA is identified as vulnerable to changes in water levels as a result of abstraction in the Nene ALS, it can be assumed that the Nene Washes Ramsar site is similarly vulnerable given the similarity in qualifying features. Increased abstraction rates to serve development within the Plan area may adversely affect the water levels of the supporting habitat upon which qualifying bird species rely. As such, the Ramsar is scoped into the HRA process for water quantity impact pathways.	Yes
Orton Pit SAC	Orton Pit SAC ⁸³ is designated for its calcium-rich, nutrient-poor waters and Great Crested Newt. The site is located within 600m of the Plan area’s northern boundary; however, there is no identified hydrological pathway for water quality impacts associated with development within the Plan area. In particular, there are no WwtW serving planned growth that discharge upstream of watercourses adjacent to Orton Pit SAC. Therefore, there is unlikely to be an impact from growth during the Local Plan period and the SAC will be scoped out of the HRA process for water quality impact pathways.	as one of the water-dependent European sites located within the catchment area with the potential to be affected by abstraction practices. As the Plan area is partially located within the Nene ALS catchment area, additional abstraction to serve development within the area may result in changes to the water levels at Orton Pit, which could adversely affect both the habitat and species for which it is designated. Therefore, the SAC is scoped into the HRA process for water quantity impact pathways.	Yes

⁸² JNCC (1993) Information Sheet on Ramsar Wetlands (RIS): Nene Washes. Available at: <https://jncc.gov.uk/jncc-assets/RIS/UK11046.pdf> [Date accessed: 25/06/26]

⁸³ Natural England (2018) European Site Conservation Objectives for Orton Pit SAC (UK0030053). Available at: <https://publications.naturalengland.org.uk/publication/5289941760212992> [Date accessed: 25/06/26]

European sites with hydrological links to the Plan area	Potential water quality LSEs	Potential water quantity LSEs	Will the European site be scoped in for further assessment in the HRA process?
Ouse Washes SAC	Ouse Washes SAC⁸⁴ is designated for supporting the Spined Loach, which is sensitive to changes in water quality. The southern portion part of the Plan area. The site is downstream of, and hydrologically connected to, the Plan area via the As such, the SAC is scoped in for process based upon water quality impact pathways.	Ouse Washes SAC is located within The Old Bedford including the Middle Level ALS catchment area, adjacent to the Ouse Upper and Bedford ALS⁸⁵ catchment area. Both ALSs consider the Ouse Washes SAC as a proximate, water-dependent site that may be affected by abstraction practices within the area. Increased abstraction rates to serve development within the Plan area (also partly located within the two ALS catchment areas) may have an impact upon the supporting habitat for the Spined Loach for which the site is designated. As such, the SAC is scoped into the HRA process for water quantity impact pathways.	Yes
Ouse Washes SPA	Ouse Washes SPA⁸⁶ is designated for supporting numerous breeding and non-breeding bird species, such as the Northern Shoveler, which are sensitive to changes in water quality. The southern portion of the site coincides with the eastern part of the Plan area. The site is downstream of, and hydrologically connected to, the Plan area via the River Great Ouse and its tributaries. As such, the site is scoped in for further consideration in the HRA process based upon water quality impact pathways.	Ouse Washes SPA is located within The Old Bedford including the Middle Level ALS catchment area, adjacent to the Ouse Upper and Bedford ALS catchment area. Both ALSs consider the Ouse Washes SPA as a proximate, water-dependent site that may be affected by abstraction practices within the area. Increased abstraction rates to serve development within the Plan area (also partly located within the two ALS catchment areas) may have an impact upon the supporting habitat for the Northern Shoveler and other species of breeding and non-breeding birds for which the site is designated. As such, the SPA is scoped into the HRA process for water quantity impact pathways.	Yes

⁸⁴ Natural England (2018) European Site Conservation Objectives for Ouse Washes SAC (UK0013011). Available at: <https://publications.naturalengland.org.uk/publication/4894882430713856> [Date accessed: 25/06/26]

⁸⁵ Environment Agency (2017) Upper Ouse and Bedford Ouse abstraction licensing strategy. Available at: https://assets.publishing.service.gov.uk/media/5a820dd6e5274a2e87dc0e7f/ALS_2017_Upper_Ouse_and_Bedford_Ouse.pdf [Date accessed: 25/06/26]

⁸⁶ Natural England (2019) European Site Conservation Objectives for Ouse Washes SPA (UK9008041). Available at: <https://publications.naturalengland.org.uk/publication/6636062256398336> [Date accessed: 25/06/26]

European sites with hydrological links to the Plan area	Potential water quality LSEs	Potential water quantity LSEs	Will the European site be scoped in for further assessment in the HRA process?
Ouse Washes Ramsar		Ouse Washes Ramsar is located within The Old Bedford including the Middle Level ALS catchment area, adjacent to the Ouse Upper and Bedford ALS catchment. Both ALSs consider the Ouse Washes Ramsar as a proximate, water-dependent site that may be affected by abstraction practices within the area. Increased abstraction rates to serve development within the Plan area (also partly located within the two ALS catchment areas) may have an impact upon the supporting habitat for the Small Water Pepper and other aquatic species for which the site is designated. As such, the Ramsar is scoped into the HRA process for water quantity impact pathways.	Yes
Portholme SAC		Portholme SAC is located within the Ouse Upper and Bedford ALS catchment area and is identified in the associated ALS as vulnerable to changes in water levels as a result of abstraction activity in the area. Approximately half of the Plan area falls within this ALS catchment area. Therefore, the SAC is scoped into the HRA process based upon water quantity impact pathways as the meadows may be adversely affected by changes to water levels due to increased abstraction to serve development allocated under the Local Plan.	Yes

⁸⁷ JNCC (1976) Information Sheet on Ramsar Wetlands (RIS): Ouse Washes. Available at: <https://jncc.gov.uk/jncc-assets/RIS/UK11051.pdf> [Date accessed: 25/06/26]

⁸⁸ Natural England (2018) European Site Conservation Objectives for Portholme SAC (UK0030054). Available at: <https://publications.naturalengland.org.uk/publication/4802651548024832> [Date accessed: 25/06/26]

⁸⁹ Natural England (2014) Site Improvement Plan: Portholme SAC (SIP177). Available at: <https://publications.naturalengland.org.uk/publication/6533964571344896> [Date accessed: 25/06/26]

⁹⁰ Natural England (2019) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features Portholme Special Area of Conservation (SAC) Site Code: UK0030054. Available at: <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0030054.pdf> [Date accessed: 25/06/26]

European sites with hydrological links to the Plan area	Potential water quality LSEs	Potential water quantity LSEs	Will the European site be scoped in for further assessment in the HRA process?
The Wash & North Norfolk SAC	around the Plan area (the River Great Ouse and River Nene) discharge at The Wash Estuary, designated for numerous habitats (such as intertidal sandbanks and mudflats) and species (such as the Common Seal (<i>Phoca vitulina</i>) and Otter (<i>Lutra lutra</i>)) that are noted as sensitive to changes in water quality^{92,93}. As such, the site is scoped in for further consideration in the HRA process based upon water quality impact pathways.	The Wash & North Norfolk Coast SAC lies partly within the Nene changing water levels due to abstraction practices within the rates to serve development within the Plan area (also partly located within this ALS catchment) has potential to alter water levels at the site, adversely affecting the status of the water-dependent habitats and supporting species for which it is designated. The Ouse Upper and Bedford ALS also identified vulnerability to changing water levels due to abstraction practices within this catchment area (which covers approximately half of the Plan area). Therefore, the SAC is scoped into the HRA process based upon water quantity impact pathways.	Yes

⁹¹ Natural England (2018) European Site Conservation Objectives for The Wash & North Norfolk Coast SAC (UK0017075). Available at: <https://publications.naturalengland.org.uk/publication/5950176598425600> [Date accessed: 25/06/26]

⁹² Natural England (2014) Site Improvement Plan: The Wash and North Norfolk Coast (SIP245). Available at: <https://publications.naturalengland.org.uk/publication/5327498292232192> [Date accessed: 25/06/26]

⁹³ Natural England (2024) The Wash & North Norfolk Coast SAC, Supplementary Advice. Available at: <https://tinyurl.com/3kzmvxch> [Date accessed: 25/06/26]

⁹⁴ Environment Agency (2021) Nene Catchment Abstraction Licensing Strategy. Available at: <https://assets.publishing.service.gov.uk/media/606d91e28fa8f57359cf4346/CAMS-Nene-Catchment-Abstraction-Management-Strategy.pdf> [Date accessed: 25/06/26]

European sites with hydrological links to the Plan area	Potential water quality LSEs	Potential water quantity LSEs	Will the European site be scoped in for further assessment in the HRA process?
The Wash SPA	Two of the main waterbodies in and around the Plan area (the River Great Ouse and River Nene) discharge at The Wash Estuary, where The Wash SPA is located. The SPA ⁹⁵ is designated for numerous breeding and non-breeding bird species (such as the Grey Plover, <i>Pluvialis squatarola</i>) that are noted as sensitive to changes in water quality ^{96,97} . As such, the site is scoped in for further consideration in the HRA process based upon water quality impact pathways.	The Wash & North Norfolk Coast SPA lies partly within the Nene ALS catchment area. The site is identified in the Nene ALS as vulnerable to changing water levels as a result of abstraction practices within the area. Increased abstraction rates to serve development within the Plan area (also partly located within this ALS catchment area) has the potential to alter water levels at the site, adversely affecting habitats of the bird species for which it is designated. The site is also identified in the Ouse Upper and Bedford ALS as vulnerable to changing water levels as a result of abstraction practices within this nearby catchment area (which covers approximately half of the Plan area). Therefore, the SPA is scoped into the HRA process based upon water quantity impact pathways.	Yes

⁹⁵ Natural England (2018) European Site Conservation Objectives for The Wash & North Norfolk Coast SAC (UK0017075). Available at: <https://publications.naturalengland.org.uk/publication/5950176598425600> [Date accessed: 25/06/26]

⁹⁶ Natural England (2024) The Wash & North Norfolk Coast SAC, Supplementary Advice. Available at: <https://tinyurl.com/3kzmvxch> [Date accessed: 25/06/26]

⁹⁷ Natural England (2014) Site Improvement Plan: The Wash and North Norfolk Coast (SIP245). Available at: <https://publications.naturalengland.org.uk/publication/5327498292232192> [Date accessed: 25/06/26]

European sites with hydrological links to the Plan area	Potential water quality LSEs	Potential water quantity LSEs	Will the European site be scoped in for further assessment in the HRA process?
The Wash Ramsar	Two of the main waterbodies in and around the Plan area (the River Great Ouse and River Nene) discharge at The Wash Estuary, where The Wash Ramsar is located. The Ramsar ⁹⁸ is designated for numerous breeding and non-breeding bird species (such as the Grey Plover, <i>Pluvialis squatarola</i>) that are noted as sensitive to changes in water quality ⁹⁹ . As such, the site is scoped in for further consideration in the HRA process based upon water quality impact pathways.	The Wash & North Norfolk Coast Ramsar lies partly within the Nene ALS catchment and is vulnerable to changing water levels as a result of abstraction practices within the area. Increased abstraction rates to serve development within the Plan area (also partly located within this ALS catchment) has potential to alter water levels at the site, adversely affecting supporting habitats for the bird species for which it is designated. The site is also identified in the Ouse Upper and Bedford ALS as vulnerable to changing water levels due to abstraction practices within this catchment area (which covers approximately half of the Plan area). Therefore, the Ramsar is scoped into the HRA process based upon water quantity impact pathways.	Yes
Upper Nene Valley Gravel Pits SPA	Upper Nene Valley Gravel Pits SPA is designated for the Great Bittern, Gadwall, and European Golden Plover. The closest part of the European site to the Plan area is located approximately 3.5km from the eastern boundary. The SPA is positioned along the River Nene; however, it lies upstream of the Plan area. As such, LSEs upon water quality at the SPA are not anticipated to arise through development occurring under the Local Plan. Therefore, the SPA is scoped out of the HRA process for water quality impact pathways.	Upper Nene Valley Gravel Pits SPA is located within the Nene ALS catchment area. The site is noted as vulnerable to changing water levels due to abstraction within the Nene ALS. The Nene ALS catchment covers some of the northern and eastern parts of the Plan area. Increased abstraction rates to serve development within the Plan area may adversely affect the water levels of the habitats supporting qualifying bird species. As such, the site is scoped into the HRA process for water quantity impact pathways.	Yes

⁹⁸ Natural England (2018) European Site Conservation Objectives for The Wash & North Norfolk Coast SAC (UK0017075). Available at: <https://publications.naturalengland.org.uk/publication/5950176598425600> [Date accessed: 25/06/26]

⁹⁹ Natural England (2024) The Wash & North Norfolk Coast SAC, Supplementary Advice. Available at: <https://tinyurl.com/3kzmvxch> [Date accessed: 25/06/26]

European sites with hydrological links to the Plan area	Potential water quality LSEs	Potential water quantity LSEs	Will the European site be scoped in for further assessment in the HRA process?
Upper Nene Valley Gravel Pits Ramsar		Upper Nene Valley Gravel Pits noted as vulnerable to changing eastern parts of the Plan area. serve development within the Plan area may adversely affect the supporting the qualifying bird species. As such, the site is scoped into the HRA process for	Yes
Woodwalton Fen Ramsar	designated for its fenland habitat, which supports two species of British Red Data Book plants (Fen Violet (<i>Viola persicifolia</i>) and Fen Wood-rush (<i>Luzula pallidula</i>)), as well as many wetland invertebrates, aquatic beetles, flies and moths. Fenlands are notably sensitive to changes in water quality, with changes to nutrient levels and water chemistry easily able to offset the balance of the ecosystem^{100,101}. The site is located within the Plan area; therefore, development under the Local Plan has the potential to adversely affect the Ramsar through changes to water quality. As such, the site is scoped in for further consideration in the HRA process based upon water quality impact pathways.	Woodwalton Fen Ramsar (and the northern half of the Plan area) lies in the Old Bedford including the serve development within the Plan area may cause a decline in water levels, affecting the fenland habitat and supporting species for which the site is designated. Furthermore, the Woodwalton Fen area is vulnerable to changes to water levels via flooding¹⁰², which may become more prevalent due to decreased permeability of land associated with development are highly sensitive to changes in water quantity¹⁰³; hence, activity potential to threaten the status of supported species. Therefore, the Ramsar is scoped into the HRA process for water quantity impact pathways.	Yes

¹⁰⁰ Natural England (2014) Site Improvement Plan: Fenland SAC (SIP084). Available at: <https://publications.naturalengland.org.uk/publication/6024783481274368> [Date accessed: 25/06/26]

¹⁰¹ Natural England (2019) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features Fenland (SAC) Site Code: UK0014782. Available at: <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0014782.pdf> [Date accessed: 25/06/26]

¹⁰² Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire, Environment Agency, Natural England, and Huntingdonshire District Council. Big Ideas: Flood Protection. Available at: <https://www.greatfen.org.uk/big-ideas/flood-protection/#:~:text=Flooding%20is%20a%20particular%20risk,areas%20are%20below%20sea%20level>. [Date accessed: 25/06/26]

¹⁰³ Ibid.

3.6 Recreational pressure

- 3.6.1 Increased recreational pressure at European sites can result in damage to habitats in a number of ways, including 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; and tree climbing.
- 3.6.2 A common approach taken across the UK to address recreational impacts at European sites is to establish a buffer zone or Zone of Influence (Zol) based on detailed visitor survey data. The Zol 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 travelled to reach a particular site by 75% of the respondents to visitor surveys. Where available, buffer distances have been applied to determine potential pathways of recreational impacts from the Local Plan.
- 3.6.3 The broad principle of buffer zones is one component of the HRA screening process for recreational pressures. The recreational draw of a European site depends on a number of factors. These factors include the extent and range of facilities provided (in particular parking); accessibility, both within the European site and in terms of linkages to the wider area beyond the site; incorporation of a European site as part of a wider designation, such as a National Park; and promotion of the site. A review of Recreational Impact Assessments (RIAs) undertaken for other European sites across the UK indicates that visitors typically live within 4.2 km (overall median value) of nature conservation sites and that the majority (75%) live within 12.6 km¹⁰⁴. However, this review recognises that some visitors are prepared to travel longer distances to visit particular sites, for instance coastal and wetland sites.
- 3.6.4 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. This scoping exercise draws on a review of NE data which identifies vulnerabilities at each of the European sites located within 15km of the Plan area (**Appendix B**).
- 3.6.5 The following 14 European sites are located within 15km of the Plan area:
- Barnack Hills & Holes SAC;
 - Eversden & Wimpole Woods SAC;
 - Fenland SAC¹⁰⁵;
 - Nene Washes SAC,
 - Nene Washes SPA;
 - Nene Washes Ramsar;
 - Orton Pit SAC;
 - Ouse Washes SAC,

¹⁰⁴ Weitowitz, D, C. Panter, C. Hoskin, R. and Liley, D. (2019) The effect of urban development on visitor numbers to nearby protected nature conservation sites. *Journal of Urban Ecology*, 5(1). Available at: <https://academic.oup.com/jue/article/5/1/juz019/5602629>. [Date accessed: 25/06/26]

¹⁰⁵ Fenland SAC is split across three components which lie 27 miles apart. The component of the SAC within 10km of the Plan area is underpinned by Woodwalton Fen SSSI.

- Ouse Washes SPA;
- Ouse Washes Ramsar;
- Portholme SAC;
- Upper Nene Valley Gravel Pits SPA;
- Upper Nene Valley Gravel Pits Ramsar; and,
- Woodwalton Fen Ramsar.

3.6.6 Barnack Hills & Holes SAC¹⁰⁶ comprises semi-natural dry grassland and scrubland habitat on calcareous substrates within a disused medieval quarry and is an important orchid site. The SAC is also designated as an NNR. The features of the SAC have been identified as vulnerable to public access and disturbance, particularly from dog walkers which are compacting the grassland and increasing nitrogen loading and the spread of negative indicator species¹⁰⁷. The HRA of the adopted Local Plan highlighted the risk of increased visitor pressure from the nearby village of Barnack¹⁰⁸. A review of mapping data indicates that the site is only accessible on foot via a car park on Wittering Road to the north of the site. Given the site is a disused quarry it is steep in parts and paths are uneven. No visitor facilities are provided on the site itself and the visitor draw is likely to be limited, predominantly from the village of Barnack, but no further than 5km. Whilst Barnack does not lie within Huntingdonshire, as the European site is located just under 5km from the Plan area's northern boundary, it is possible that residential development concentrated in the north of the district could result in an increasing number of dog walkers visiting the SAC. Therefore, Barnack Hills & Holes SAC is scoped into the HRA process for further consideration of recreational pressures in the screening assessment.

¹⁰⁶ Natural England (2018) European Site Conservation Objectives for Barnack Hills & Holes SAC (UK0030031). Available at: <https://publications.naturalengland.org.uk/publication/5111783597539328> [Date accessed: 25/06/26]

¹⁰⁷ Natural England (2014) Site Improvement Plan: Barnack Hills & Holes SAC (SIP009). Available at: <https://publications.naturalengland.org.uk/publication/4529218465562624> [Date accessed: 25/06/26]

¹⁰⁸ Bodsey Ecology Limited (2017) Huntingdonshire's Local Plan to 2036 – Habitats Regulations Assessment 2017. Available at: <https://www.huntingdonshire.gov.uk/media/2684/habitats-regulations-assessment-2017.pdf> [Date accessed: 25/06/26]

- 3.6.7 The qualifying species of Eversden & Wimpole Woods SAC¹⁰⁹ is the Barbastelle Bat (*Barbastella barbastellus*). This SAC is situated approximately 4km to the south east of the Plan area. Public disturbance is not been identified as a threat to the SAC in the SIP^{110,111}. Public access is permitted through the woods, however, the supplementary advice for the SAC notes that *‘There is no evidence that daytime public access to woodland used by barbastelles causes disturbance to these bats. It seems very likely that light pollution during hours of darkness would be disturbing. Tree management that damaged actual or potential roosts, carried out for H&S reasons in areas used by the public, or indeed any other reason, would certainly cause serious disturbance to the bats’*¹¹². South Cambridgeshire District Council has published a Biodiversity Supplementary Planning Document (SPD) which identifies a key conservation area around the SAC of 5km and a 10km sustenance or wider conservation area¹¹³. These zones reflect urbanisation effects upon bats at this SAC which are addressed in detail at **Section 3.7**. Based on details presented in the Supplementary Advice for the SAC and the accompanying SIP, Eversden & Wimpole Woods SAC is scoped out of the HRA process for further consideration in terms of recreational pressures.
- 3.6.8 Nene Washes SAC¹¹⁴ and Ramsar¹¹⁵ are designated for supporting the Spined Loach (**Appendix B**). The Spined Loach is restricted to five east-flowing rivers in eastern England. This species appears to have limited means of dispersal; therefore, distribution records are patchy¹¹⁶. The Nene Washes SAC and Ramsar contain the highest recorded density of Spined Loach. Recreation is, however, not identified as a threat to the SAC or Ramsar for this species due to a lack of angling interest^{117,118} and, therefore, recreational impacts upon the Nene Washes SAC can be scoped out of any further assessment.

¹⁰⁹ Natural England (2018) European Site Conservation Objectives for Eversden and Wimpole Woods SAC (UK0030331). Available at: <https://publications.naturalengland.org.uk/publication/6736081810620416> [Date accessed: 25/06/26]

¹¹⁰ Natural England (2015) Site Improvement Plan: Eversden and Wimpole Woods SAC (SIP078). Available at: <https://publications.naturalengland.org.uk/publication/5757354431741952> [Date accessed: 25/06/26]

¹¹¹ Natural England (2018) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features, Eversden and Wimpole Woods Special Area of Conservation (SAC) Site Code: UK0030331. Available at: <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0030331.pdf> [Date accessed: 25/06/26]

¹¹² Natural England (2018) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features, Eversden and Wimpole Woods Special Area of Conservation (SAC) Site Code: UK0030331. Available at: <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0030331.pdf> [Date accessed: 25/06/26]

¹¹³ Greater Cambridge Shared Planning (2022) Biodiversity Supplementary Planning Document Adopted Final February 2022. Available at: <https://www.greatercambridgeplanning.org/media/2504/gcsp-biodiversity-spd-final-copy-march-2022-1.pdf> [Date accessed: 25/06/26]

¹¹⁴ Natural England (2018) European Site Conservation Objectives for Nene Washes SAC (UK0030222). Available at: <https://publications.naturalengland.org.uk/publication/5559224163631104> [Date accessed: 25/06/26]

¹¹⁵ JNCC (1993) Information Sheet on Ramsar Wetlands (RIS): Nene Washes. Available at: <https://jncc.gov.uk/jncc-assets/RIS/UK11046.pdf> [Date accessed: 25/06/26]

¹¹⁶ JNCC. 1149 Spined loach *Cobitis taenia*. Available at: <https://sac.jncc.gov.uk/species/S1149/> [Date accessed: 25/06/26]

¹¹⁷ Natural England (2014) Site Improvement Plan: Nene Washes (SIP146). Available at: <https://publications.naturalengland.org.uk/publication/5376938197647360> [Date accessed: 25/06/26]

¹¹⁸ Natural England (2019) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features, Nene Washes (SAC) Site Code: UK0030222. Available at: <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0030222.pdf> [Date accessed: 25/06/26]

- 3.6.9 The qualifying species of the Nene Washes SPA¹¹⁹ include a number of internationally important species of birds which are reliant on the Washes seasonally flooded habitat for providing breeding and wintering habitat. The Nene Washes Ramsar is also designated for Tundra Swan and a number of breeding birds, raptors and nationally scarce plants and invertebrates (**Appendix B**). The Nene Way long distance path runs along the northern bank of the River Nene, providing public access from Peterborough eastwards past Whittlesey to Ring's End. The SPA and Ramsar designations have been identified as vulnerable to disturbance caused by human activity upon bird populations, specifically through visitors engaging in recreational activities such as angling, wildfowling, bird watching and skating at the site¹²⁰. As the SPA and Ramsar are located approximately 2km from the northern boundary of the Plan area, residential development allocated in the Plan has the potential to increase recreational pressure upon the designation; therefore, both sites are scoped into the HRA process for further consideration of this impact pathway.
- 3.6.10 The Ouse Washes SAC¹²¹ is designated for the Spined Loach. Consultation with NE has indicated that Spined Loach in the Ouse Washes SAC are particularly vulnerable to recreational impacts and therefore this impact pathway is scoped into the HRA process in terms of this impact pathway. The Ouse Washes SPA¹²² is designated for supporting numerous breeding and non-breeding bird species. The Ouse Washes Ramsar¹²³ is also designated for supporting a number of bird species, as well as relict fenland fauna and "*several nationally scarce plants*", such as the Small Water Pepper. The conservation of habitats at the Ouse Washes SPA is noted to be dependent on control of access and recreational activities¹²⁴. The Ouse Washes SPA and Ramsar designations extend into the eastern section of the Plan area. The Ouse Washes encompasses two canalised main river channels of the River Great Ouse that run along each side of its length, with an extensive area of wet grassland and field drains in between¹²⁵. Public access is possible along both the main river channels and the open access land in the fields between. Given the location of these designations within the Plan area, the SPA and Ramsar will be scoped into the HRA process for further consideration of recreational impacts.

¹¹⁹ Natural England (2019) European Site Conservation Objectives for Nene Washes SPA (UK9008031). Available at: <https://publications.naturalengland.org.uk/publication/4894064390438912> [Date accessed: 25/06/26]

¹²⁰ Natural England (2019) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features, Nene Washes (SPA) Site Code: UK9008031. Available at: <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK9008031.pdf> [Date accessed: 25/06/26]

¹²¹ Natural England (2018) European Site Conservation Objectives for Ouse Washes SAC (UK0013011). Available at: <https://publications.naturalengland.org.uk/publication/4894882430713856> [Date accessed: 25/06/26]

¹²² Natural England (2019) European Site Conservation Objectives for Ouse Washes SPA (UK9008041). Available at: <https://publications.naturalengland.org.uk/publication/6636062256398336> [Date accessed: 25/06/26]

¹²³ JNCC (1976) Information Sheet on Ramsar Wetlands (RIS): Ouse Washes. Available at: <https://jncc.gov.uk/jncc-assets/RIS/UK11051.pdf> [Date accessed: 25/06/26]

¹²⁴ Natural England (2019) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features, Ouse Washes (SPA) Site Code: UK9008041. Available at: <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK9008041.pdf> [Date accessed: 25/06/26]

¹²⁵ Natural England (2019) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features, Ouse Washes (SPA) Site Code: UK9008041. Available at: <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK9008041.pdf> [Date accessed: 25/06/26]

- 3.6.11 It is noted that qualifying bird species associated with the Nene Washes SPA and Ramsar and the Ouse Washes SPA and Ramsar may also use functionally linked land within the wider area, outside the designation boundaries. Functionally linked bird habitat associated with the SPA and Ramsar is likely to primarily consists of surrounding arable farmlands and pasturelands that host non-breeding wildfowl and waders. These off-site habitats serve as critical complementary areas for daytime foraging and nighttime roosting, particularly when the main washland is deep underwater. In addition to these areas, functionally linked habitat may include the interconnecting drainage ditch network that is located beyond the designations. Qualifying species of birds located within areas of functionally linked land may also be vulnerable to recreational impacts. NE's SSSI IRZs around these designations include the area immediately surrounding the Nene Washes SPA and Ramsar and the Ouse Washes SPA and Ramsar and extending up to several kilometers into the wider Cambridgeshire and Fens landscape and encompassing adjacent SSSI designations (such as Berry Fen SSSI) and RSPB reserves such as the Ouse Fen reserve, these areas are frequently referred to as "Goose and Swan Functional Land" IRZ.
- 3.6.12 Orton Pit SAC¹²⁶ is designated for its calcium-rich, nutrient-poor waters and the Great Crested Newt. The site is privately owned with no public access; therefore, recreational impact pathways can be scoped out of the HRA process¹²⁷.
- 3.6.13 Portholme SAC¹²⁸, designated for its lowland hay meadows, is located within the centre of the Plan area. The meadows have not been identified as vulnerable to recreational pressure^{129,130} in the SIP or Supplementary Advice documents provided by NE; however, in their comments on the HRA for the adopted Local Plan, NE expressed concern surrounding the sensitivity of meadow flora communities to existing recreational activities such as walking and dog walking. The SAC is open access land with three Public Rights of Way, including the Ouse Valley Way, passing through the SAC with parking provided to its immediate north. Development under the Local Plan that is concentrated within walkable and drivable distance from the SAC has the potential to increase the extent of recreational pressure. Therefore, Portholme SAC is scoped into the HRA process based upon the recreational pressure impact pathway.

¹²⁶ Natural England (2018) European Site Conservation Objectives for Orton Pit SAC (UK0030053). Available at: <https://publications.naturalengland.org.uk/publication/5289941760212992> [Date accessed: 02/06/26]

¹²⁷ Froglife. Hampton Nature Reserve (Private Site). Available at: <https://www.froglife.org/what-we-do/improving-habitats/froglife-reserves/hampton-nature-reserve/> [Date accessed: 22/06/26]

¹²⁸ Natural England (2018) European Site Conservation Objectives for Portholme SAC (UK0030054). Available at: <https://publications.naturalengland.org.uk/publication/4802651548024832> [Date accessed: 02/06/26]

¹²⁹ Natural England (2014) Site Improvement Plan: Portholme SAC (SIP177). Available at: <https://publications.naturalengland.org.uk/publication/6533964571344896> [Date accessed: 02/06/26]

¹³⁰ Natural England (2019) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features Portholme Special Area of Conservation (SAC) Site Code: UK0030054. Available at: <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0030054.pdf> [Date accessed: 02/06/26]

3.6.14 Upper Nene Valley Gravel Pits SPA¹³¹ and Ramsar¹³² comprise a series of disused sand and gravel pits along the River Nene valley which provide valuable nesting and feeding conditions for major inland concentrations of wintering water birds. Disturbance from recreation (particularly walkers and dogs) affects wintering birds at these designations by reducing the time available for feeding and increasing energy expenditure when birds take flight to avoid sources of recreational disturbance¹³³. North Northamptonshire Council, West Northamptonshire Council and Bedford Borough Council jointly commissioned a study on the recreational impacts at the Upper Nene Valley Gravel Pits designations to inform the HRAs of their respective Local Plans. This project consisted of two surveys:

- Visitor Access Survey¹³⁴; and,
- Bird Disturbance Survey¹³⁵.

3.6.15 These surveys identified bird disturbance from walkers with dogs, walkers, watersports activities, wildfowling and anglers. Visitor survey results showed that 75% of visitors on a short visit, directly from home, during the winter, lived within a 5.9km Zol of the SPA. This distance has informed a recommended zone within which new development is likely to have an adverse in-combination recreational effect upon the SPA. As the SPA and Ramsar sites are located approximately 3.5km from Huntingdonshire, the Plan area falls within this Zol. Therefore, both designations are scoped into the HRA process for further consideration of recreational impacts.

¹³¹ Natural England (2019) European Site Conservation Objectives for Upper Nene Valley Gravel Pits SPA (UK9020296). Available at: <https://publications.naturalengland.org.uk/publication/5495529882517504> [Date accessed: 25/06/26]

¹³² JNCC (2011) Information Sheet on Ramsar Wetlands (RIS): Upper Nene Valley Gravel Pits. Available at: <https://jncc.gov.uk/jncc-assets/RIS/UK11083.pdf> [Date accessed: 25/06/26]

¹³³ Natural England (2014) Site Improvement Plan: Upper Nene Valley Gravel Pits SPA (SIP254). Available at: <https://publications.naturalengland.org.uk/publication/6732225261338624> [Date accessed: 25/06/26]

¹³⁴ Panter, C., Bishop, E. & Liley, D. (2023) Upper Nene Valley Gravel Pits Visitor Access Study. Report by Footprint Ecology for West Northamptonshire, North Northamptonshire, and Bedford Borough Council. Available at: <https://northnorthants.moderngov.co.uk/documents/s24657/Appendix%20C%20-%20Upper%20Nene%20Valley%20Gravel%20Pits%20Visitor%20Access%20Study.pdf> [Date accessed: 25/06/26]

¹³⁵ Wild Frontier Ecology (2023) Upper Nene Valley Gravel Pits SPA Bird Disturbance Study, March 2023. Available at: <https://www.wildlifebcn.org/sites/default/files/2024-03/Upper%20Nene%20Valley%20Gravel%20Pits%20Special%20Protection%20Area%20%E2%80%93%20Bird%20Disturbance%20Study%20%E2%80%93%20March%202023.pdf> [Date accessed: 25/06/26]

- 3.6.16 Fenland SAC (where it is underpinned by Woodwalton SSSI and Woodwalton NNR)¹³⁶ and Woodwalton Ramsar¹³⁷ are located near the centre of the Plan area. The SAC is designated for its meadow and fen habitats, as well as Great Crested Newt and Spined Loach. The Ramsar is designated for Fen Violet and Fen Wood-rush, as well as numerous wetland invertebrates, aquatic beetles, flies and moths. The conservation of meadow habitats at Fenland SAC are noted to be dependent on recreation/visitor management¹³⁸. The site is bound by watercourses including Wheatley's Drain and Great Raveley Drain and crossed by a number of smaller watercourses. Given the location of the SAC and Ramsar within the Plan area and availability of informal public access across promoted routes, these designations will be scoped into the HRA process for further consideration of recreational impacts.
- 3.6.17 Rutland Water SPA¹³⁹ and Ramsar¹⁴⁰ are designated for numerous breeding and non-breeding bird species. These designations lie just over 15km from the Plan area. However, advertising itself as the "*playground of the East Midlands*"¹⁴¹, Rutland Water has a notable recreational draw and has been identified as vulnerable to associated recreational threats and pressures¹⁴² from a range of activities, including watersports, dog walking, cycling, golfing, fishing, and bird watching¹⁴³. Given the extent of recreational draw to this European site, it has also been included for assessment in this scoping assessment. However, the HRA¹⁴⁴ completed to inform the Rutland Local Plan established a recreational ZoI of 6-7km within which recreational impacts from new development were considered likely at Rutland Water SPA and Ramsar. The Huntingdonshire Plan area does not fall within 7km of Rutland Water, being located 15.1km to its southeast. It can, therefore, be concluded that development under the Local Plan will not increase recreational pressure upon the SPA or Ramsar site. As such, these designations have been scoped out of the HRA process based upon this impact pathway.
- 3.6.18 **Table 3.3** summarises European sites where recreational effects associated with the Local Plan will be considered further in the HRA process.

¹³⁶ Natural England (2018) European Site Conservation Objectives for Fenland SAC (UK0014782). Available at: <https://publications.naturalengland.org.uk/publication/6712672527581184> [Date accessed: 25/06/26]

¹³⁷ JNCC (1995) Information Sheet on Ramsar Wetlands (RIS): Woodwalton Fen. Available at: <https://jncc.gov.uk/jncc-assets/RIS/UK11078.pdf> [Date accessed: 25/06/26]

¹³⁸ Natural England (2019) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features Fenland (SAC) Site Code: UK0014782. Available at: <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0014782.pdf> [Date accessed: 25/06/26]

¹³⁹ Natural England (2023) European Site Conservation Objectives for Rutland Water SPA (UK9008051). Available at: <https://publications.naturalengland.org.uk/publication/4978639963684864> [Date accessed: 25/06/26]

¹⁴⁰ JNCC (1991) Information Sheet on Ramsar Wetlands (RIS): Rutland Water. Available at: <https://jncc.gov.uk/jncc-assets/RIS/UK11062.pdf> [Date accessed: 25/06/26]

¹⁴¹ Discover Rutland (n.d.) Rutland Water. Available at: <https://discover-rutland.co.uk/listing/rutland-water/> [Date accessed: 25/06/26]

¹⁴² Natural England (2014) Site Improvement Plan: Rutland Water SPA (SIP208). Available at: <https://publications.naturalengland.org.uk/publication/5985520903520256> [Date accessed: 25/06/26]

¹⁴³ Discover Rutland (n.d.) Rutland Water. Available at: <https://discover-rutland.co.uk/listing/rutland-water/> [Date accessed: 25/06/26]

¹⁴⁴ Rutland County Council (2023) Local Plan 2021-2041 Habitats Regulations Assessment, Preferred Options (regulation 18) Consultation – HRA Review. Available at: <https://www.rutland.gov.uk/sites/default/files/2023-11/Preferred%20Options%20HRA%20November%202023.pdf> [Date accessed: 25/06/26]

Table 3.3: Summary of recreational impact pathways for European sites within the influence of the Local Plan

European sites within the influence of the Local Plan	Potential recreation LSEs	Will the European site be scoped in for further assessment in the HRA process?
Barnack Hills & Holes SAC		Yes
Eversden & Wimpole Woods SAC		No
Fenland SAC		Yes
Nene Washes SAC		No
Nene Washes SPA		Yes
Nene Washes Ramsar		Yes
Orton Pit SAC	There is no public access to Orton Pit SAC and therefore recreational LSEs will be scoped out of the HRA process.	No
Ouse Washes SAC	The qualifying features of the Ouse Washes SAC is noted by NE to be sensitive to recreational impacts. Recreational LSEs will therefore be scoped into the HRA process.	Yes
Ouse Washes SPA	The qualifying features of the Ouse Washes SPA are sensitive to recreational impacts associated with public access. Recreation LSEs are possible and will therefore be considered further in the HRA process. Consideration will be given to impacts on associated areas of FLL.	Yes
Ouse Washes Ramsar	The qualifying features of the Ouse Washes Ramsar are sensitive to recreational impacts associated with public access. Recreation LSEs are possible and will therefore be considered further in the HRA process.	Yes
Portholme SAC	Given the location of Portholme SAC within the Plan area, the vulnerability of its features to recreational impacts and public access at the site, this SAC will be scoped into the HRA process.	Yes
Rutland Water SPA		No

European sites within the influence of the Local Plan	Potential recreation LSEs	Will the European site be scoped in for further assessment in the HRA process?
Rutland Water Ramsar	Given the Plan area is outside the recreational Zol for Rutland Water, this Ramsar will be scoped out of the HRA process as recreational LSEs are considered unlikely.	No
Upper Nene Valley Gravel Pits SPA	Given the location of the Plan area within the recreational pressure Zol for the SPA this site will be scoped into the HRA process.	Yes
Upper Nene Valley Gravel Pits Ramsar	Given the location of the Plan area within the recreational pressure Zol for the Ramsar this site will be scoped into the HRA process.	Yes
Woodwalton Fen Ramsar	Given the location of Woodwalton Ramsar within the Plan area, the vulnerability of its meadow and fen habitats and access at the Ramsar, it will be scoped into the HRA process.	Yes

3.7 Urbanisation effects

- 3.7.1 Urbanisation effects typically occur when development is located close to a European site boundary. Impacts may include noise disturbance, lighting effects, cat predation, fly-tipping, wildfire, littering and vandalism. Strategic mitigation schemes elsewhere in the UK have set out to limit development (i.e. avoid a net increase in residential dwellings) on the basis of site-specific evidence on how to safeguard against these impacts.
- 3.7.2 As with recreational impacts, it is common practice for urbanisation mitigation strategies in the UK to involve the implementation of a buffer zone. Typically, these zones extend around 400m from the edge of a designation. This accounts for likely impacts from pets (e.g. cat predation) and the distance from which people tend to access a site on foot. However, urbanisation effects may also take place at FLL (see definition in **paragraph 3.3.9**), which is especially relevant for European sites which are designated for species which rely on the wider landscape for activities such as feeding, commuting and foraging. For instance, certain species of birds use a variety of habitats outside the designation boundary of a European site as feeding or roosting habitat and bats may use the wider landscape for foraging and commuting. These habitats may be functionally linked where they play an important role in maintaining or restoring the population of a qualifying species at a favourable conservation status. The tests set out in the Habitats Regulations need to be applied to plans which may significantly affect FLL. This scoping exercise focuses upon European sites falling within 400m of the Plan area, but also takes FLL into consideration.

- 3.7.3 Portholme SAC is located within the Plan area, immediately south of Huntingdon and north west of Godmanchester, two of the district's towns, and also in close proximity to key roads and public transport routes. As outlined in **paragraph 3.6.13**, the grasslands for which Portholme SAC is designated are sensitive to recreational impacts, such as trampling by walkers and dog walkers (see **Section 3.6**). Urbanisation effects, such as noise and light pollution, are unlikely to affect the conservation status of the lowland hay meadow beyond those impacts associated with recreational pressure and direct footfall from home. Urbanisation effects are not therefore identified as a threat in either the SIP for the SAC or NE's supplementary conservation advice. As such, the Portholme SAC will be scoped out of the HRA process based upon the urbanisation effects impact pathway.
- 3.7.4 The three Ouse Washes designations are all located within 400m of the Plan area, with a small portion of each site falling within the Plan area, to the east. The Spined Loach for which Ouse Washes SAC is designated is unlikely to be adversely impacted by urbanisation effects; therefore, the SAC will be scoped out of the HRA process in terms of urbanisation effects. Many birds are particularly sensitive to urbanisation effects, such as noise and light pollution which can disrupt breeding and nesting habits¹⁴⁵. As such, the Ouse Washes SPA and Ramsar will be scoped into the HRA process based upon the urbanisation effects impact pathway.
- 3.7.5 Consideration will also be given to urbanisation impacts upon qualifying species of bird associated with the Ouse Washes SPA and Ramsar and the Nene Washes SPA and Ramsar sites when located outside the designation boundaries (on areas of FLL) as discussed in **paragraph 3.6.11**.
- 3.7.6 Orton Pit SAC is located approximately 550m from the Plan area's northern boundary. Great Crested Newts for which the SAC is designated have been known to travel approximately 500m from their breeding pond habitat during the terrestrial phase of their lifecycle¹⁴⁶. Newts forage, disperse and rest on land. Depending on the location of the ponds within the SAC, the terrestrial habitat of this species may include land outside the SAC boundary. Therefore, any development within 500m of this SAC has the potential for urbanisation effects. Whilst the SAC is not accessible to the public (see **paragraph 3.6.12**), it is vulnerable to illegal activities including off-roading, vandalism, arson and disturbance from dogs jumping into ponds¹⁴⁷. Given the proximity of the SAC to the Plan area, it will be scoped into the HRA process based upon the urbanisation effects impact pathway.

¹⁴⁵ U.S. National Science Foundation (2020) Noise and light pollution affect breeding habits in birds. Available at: <https://www.nsf.gov/news/noise-light-pollution-affect-breeding-habits-birds> [Date accessed: 25/06/26]

¹⁴⁶ Langton, T.E.S.; Beckett, C. L.; Foster, J. P. (2001) Great Crested Newt Conservation Handbook, Froglife, Halesworth. Available at: https://www.froglife.org/wp-content/uploads/2013/06/GCN-Conservation-Handbook_compressed.pdf [Date accessed: 25/06/26].

¹⁴⁷ Natural England (2014) Site Improvement Plan: Orton Pit SAC (SIP159). Available at: <https://publications.naturalengland.org.uk/publication/5570370673311744> [Date accessed: 25/06/26]

- 3.7.7 Fenland SAC is designated for its meadows and fen habitats, and species including the Spined Loach and Great Crested Newt. With the exception of the Spined Loach, these qualifying features, and functionally linked habitat which supports them, has the potential to be affected by urbanisation effects due to its location in the Plan area. Great Crested Newts may be vulnerable to urbanisation effects where habitat within 500m of a breeding pond is affected (as described above in **paragraph 3.7.6**). The meadow and fen qualifying habitats may be vulnerable to impacts such as fly-tipping, anti-social behaviour and littering. Fenland SAC is, therefore, scoped into the HRA process for further consideration of urbanisation effects.
- 3.7.8 Woodwalton Fen Ramsar, which has the same geographical location as Fenland SAC (where it is underpinned by Woodwalton SSSI and Woodwalton NNR), is designated for fen habitat, invertebrates and nationally scarce plants. Research by Ganguly and Candolin (2023)¹⁴⁸ highlights the potential for artificial light at night (ALAN) to affect ecologically important invertebrates which are themselves responsible for providing key ecosystem functions. The invertebrates for which Woodwalton Fen Ramsar is designated may be adversely affected by illumination and fen habitat and plants affected by fly-tipping and littering as a result of development under the Local Plan. As such, Woodwalton Fen Ramsar is scoped into the HRA process based upon urbanisation effects. As set out in **Section 3.5**, consideration of the wider context of the Fenland SAC and Woodwalton Fen Ramsar will be of great importance during the next stages of the HRA process. These designations lie within the Great Fen area, which provides a range of habitats of significant ecological importance, and for which there are aspirations to restore and reconnect the wider landscape thorough the Great Fen Project¹⁴⁹. It is important that urbanisation effects from the Local Plan do not compromise the aims of this project and maximise restoration to ensure functionally linked and supporting habitat plays a role in their long-term conservation.

¹⁴⁸ Ganguly, A., Candolin, U. (2023) 'Impact of light pollution on aquatic invertebrates: Behavioural responses and ecological consequences', *Behavioural Ecology and Sociobiology*, 77(104), <https://doi.org/10.1007/s00265-023-03381-z>

¹⁴⁹ Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire, Environment Agency, Natural England, and Huntingdonshire District Council (n.d.) About the Great Fen. Available at: <https://www.greatfen.org.uk/about-great-fen> [Date accessed: 25/06/26]

- 3.7.9 The Upper Nene Valley Gravel Pits SPA and Ramsar are not located within 400m of the Plan area; however, these designations must be considered on the basis of FLL. The SPA and Ramsar are designated for a breeding bird assemblage of lowland open waters and their margins, wintering waterbird species and an assemblage of over 20,000 waterbirds in the non-breeding season¹⁵⁰. Qualifying bird species of the Upper Nene Valley Gravel Pits SPA and Ramsar designations use a variety of habitats outside the SPA and Ramsar boundary for nocturnal and diurnal foraging and roosting. These areas of habitat are considered to be FLL. Golden Plover and Lapwing (*Vanellus vanellus*)¹⁵¹ are qualifying features of the Upper Nene Valley Gravel Pits SPA and Ramsar designations. These species often spend time feeding or roosting on grassland, wetland and arable land outside the designation boundaries. The British Trust for Ornithology (BTO) Wetland Bird Survey (WeBS) Alert for the Upper Nene Valley Gravel Pits SPA¹⁵² reports that Golden Plover have shown a 76% decline since baseline analysis, (high alert, red). Lapwing, which are part of the waterbird assemblage, have shown a 45% decline since baseline analysis, and the waterbird assemblage a 26% decline (medium alert, amber).
- 3.7.10 There is limited information regarding the use of FLL by Golden Plover and Lapwing within surrounding area to the SPA. However, due to the continued decline in Golden Plover and Lapwing populations, NE has been involved in a partnership project with the Wildlife Trust in surveying and analysing potential FLL within 10km of the SPA. The mapping is based on field criteria for Golden Plover and Lapwing and historic biological records and will be progressively enhanced by additional records obtained from Golden Plover and Lapwing records in an ongoing manner¹⁵³.
- 3.7.11 The Plan area falls within 10km of the Upper Nene Valley Gravel Pits SPA and Ramsar sites. Therefore, both designated sites will be scoped into the HRA process due to potential urbanisation effects upon areas of FLL.

¹⁵⁰ Natural England (2019) European Site Conservation Objectives for Upper Nene Valley Gravel Pits SPA (UK9020296). Available at: <https://publications.naturalengland.org.uk/publication/5495529882517504> [Date accessed: 25/06/26]

¹⁵¹ Lapwing are part of the waterbird assemblage

¹⁵² WeBS Report Online. Available at: <https://app.bto.org/webs-reporting/alerts.jsp> [Date accessed: 25/06/26]

¹⁵³ Natural England (2025) E-mail to Lepus Consulting, 25 July

- 3.7.12 Whilst Eversden & Wimpole Woods SAC is not located within 400m of the Plan area, urbanisation effects upon its qualifying species, the Barbastelle Bat, have been taken into consideration. Barbastelle bats are rare within the UK, with few breeding sites currently known¹⁵⁴. Maternity colonies use cracks and crevices within woodlands or buildings for breeding, with caves and underground structures used for hibernation. The majority of Barbastelles tend to forage up to 7km from their woodland roosts¹⁵⁵, however, they will travel up to 20km from roost sites to reach productive hunting grounds¹⁵⁶. As noted in **paragraph 3.6.7**, South Cambridgeshire District Council has published a Biodiversity SPD which identifies a key conservation area around the SAC of 5km and a 10km sustenance or wider conservation area, which has been reflected in the NE SSSI IRZs for this SAC.
- 3.7.13 Development set out in the Local Plan has the potential to disrupt FLL upon which bats rely for foraging or commuting. Potential impacts from development on FLL can include:
- Loss of / damage to roost sites;
 - Loss of flyways used for commuting/foraging;
 - Strategic loss or disruption of key flyways between different roosts;
 - Loss of/degradation to foraging habitat; and,
 - Artificial lighting and noise.
- 3.7.14 In addition to direct loss or degradation of habitat (designated or FLL), development has the potential to result in the fragmentation of connecting wildlife corridors which would hinder bat movements. Diverse habitat corridors of wetland, grassland, scrub, hedgerow and woodland habitats are also likely to provide an abundance of insects and prey upon which bats may feed. As well as being sensitive to development, bats are also vulnerable to impacts associated with renewable energy projects.
- 3.7.15 Core Sustenance Zones (CSZ), or core areas, are the defined areas surrounding bat roosts which link to connecting flightlines and foraging zones for bats¹⁵⁷. The CSZ for Barbastelle Bats is 7km. Given the Plan area lies approximately 4km from Eversden & Wimpole Woods SAC, urbanisation effects upon the SAC will be scoped in for further consideration in the HRA process.
- 3.7.16 **Table 3.4** summarises European sites where urbanisation effects associated with the Local Plan, either at European sites or upon areas of FLL, will be considered further in the HRA process.

¹⁵⁴ Bat Conservation Trust. Barbastelle Bat. Available at: <https://www.bats.org.uk/about-bats/what-are-bats/uk-bats/barbastelle> [Date accessed: 22/07/25]

¹⁵⁵ Cambridge Approaches (2020) Barbastelle bat. Available at: <https://cambridgeapproaches.org/barbastelle-bats-are-they-important-when-considering-ewr-route/#:~:text=Barbastelles%20forage%20on%20average%20up,afield%20within%20the%20surrounding%20countryside> [Date accessed: 22/07/25]

¹⁵⁶ Natural England (2024) Definition of Favourable Conservation Status for barbastelle bat Defining Favourable Conservation Status Project. Available at: <https://publications.naturalengland.org.uk/file/5434520078385152#:~:text=Foraging%20requirements,and%20others%20009%2C%202012> [Date accessed: 23/07/25]

¹⁵⁷ Bat Conservation Trust. Core Sustenance Zones. Available at: <https://www.bats.org.uk/our-work/landscapes-for-bats/core-sustenance-zones> [Date accessed: 22/07/25]

Table 3.4: Summary of urbanisation impact pathways for European sites within the influence of the Local Plan

European sites within the influence of the Local Plan	Potential urbanisation LSEs	Will the European site be scoped in for further assessment in the HRA process?
Eversden & Wimpole Woods SAC	Development set out in the Local Plan has the potential to have urbanisation effects upon areas of scoped into the HRA process.	Yes
Fenland SAC	urbanisation LSEs are possible, and it will therefore be scoped into the HRA process.	Yes
Orton Pit SAC	Plan area, given its susceptibility to illicit activities it will be scoped into the HRA process.	Yes
Nene Washes SPA	The qualifying features of the SPA are vulnerable to urbanisation LSEs. Given the potential for areas of SPA will therefore be scoped into the HRA process.	
Nene Washes Ramsar	The qualifying features of the Ramsar are potential for FLL to be located within 400m of the Plan area this Ramsar will therefore be scoped into	
Ouse Washes SAC	The qualifying features associated with the SAC are will therefore be scoped out of the HRA process.	No
Ouse Washes SPA	The qualifying features of the SPA are vulnerable to of the Plan area this SPA will therefore be scoped into the HRA process. Consideration will also be given to urbanisation impacts upon birds when	Yes
Ouse Washes Ramsar	The qualifying features of the Ramsar are therefore be scoped into the HRA process. Consideration will also be given to urbanisation impacts upon birds when using areas of associated	Yes
Portholme SAC	Lowland hay meadows are not sensitive to urban impacts such as noise and visual disturbance and	No
Upper Nene Valley Gravel Pits SPA	There is potential for FLL associated with this SPA designation to be present within the Plan area and therefore it will be scoped in for further consideration in the HRA process.	Yes
Upper Nene Valley Gravel Pits Ramsar	There is potential for FLL associated with this Ramsar designation to be present within the Plan area and therefore it will be scoped in for further consideration in the HRA process.	Yes
Woodwalton Fen Ramsar	area urbanisation LSEs are possible, and it will therefore be scoped into the HRA process.	Yes

3.8 European sites threats and pressures

3.8.1 The impact pathways with potential to affect European sites are summarised in **Table 3.5**. European sites identified as vulnerable to threats and pressures will form the basis of the HRA screening process and are mapped in **Figures 3.1** and **3.2**.

Table 3.5: Summary of impact pathways to European sites which may be associated with the Local Plan

European site name	Air Pollution Impact Pathway?	Water Quality Impact Pathway?	Water Quantity Impact Pathway?	Recreational Pressure Impact Pathway?	Urbanisation Effects Impact Pathway?
Barnack Hills & Holes SAC	No	No	No	Yes	No
Eversden & Wimpole Woods SAC	No	No	No	No	Yes
Fenland SAC	No	Yes	Yes	Yes	Yes
Nene Washes SAC	Yes	Yes	Yes	No	No
Nene Washes SPA	No	Yes	Yes	Yes	Yes
Nene Washes Ramsar	Yes	Yes	Yes	Yes	Yes
Orton Pit SAC	No	No	Yes	No	Yes
Ouse Washes SAC	Yes	Yes	Yes	Yes	No
Ouse Washes SPA	No	Yes	Yes	Yes	Yes
Ouse Washes Ramsar	Yes	Yes	Yes	Yes	Yes
Portholme SAC	Yes	Yes	Yes	Yes	No
Rutland Water SPA	No	No	No	No	No
Rutland Water Ramsar	No	No	No	No	No
The Wash & North Norfolk Coast SAC	No	Yes	Yes	No	No
The Wash SPA	No	Yes	Yes	No	No
The Wash Ramsar	No	Yes	Yes	No	No
Upper Nene Valley Gravel Pits SPA	No	No	Yes	Yes	Yes
Upper Nene Valley Gravel Pits Ramsar	No	No	Yes	Yes	Yes
Woodwalton Fen Ramsar	No	Yes	Yes	Yes	Yes

4 Screening of Proposed Submission Local Plan

4.1 Policy and allocations screening

4.1.1 This section of the report screens the Proposed Submission Local Plan for LSEs at European sites. Each policy and allocation which forms the Local Plan was evaluated against the HRA screening criteria (see **Table 2.1**), taking into consideration case law and best practice (see **Section 2.2**). The screening assessment concluded LSEs in-combination at a number of European sites. **Appendix C** and **Appendix D** provide the output of this screening exercise which has informed the test of likely significance i.e. will the Local Plan have an LSE, alone or in-combination, at a European site.

4.1.2 It is concluded that LSEs, either from the Local Plan alone, or in-combination with other plans or projects, could be screened out for most policies. This is because the policies fall 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
- **Category F:** Policies or proposals that cannot lead to development or other change

4.1.3 A number of policies were, however, considered likely to have an LSE as they fell into **Category L** – Policies or proposals which might be likely to have a significant effect in combination and **Category M** – Bespoke area, site or case-specific policies or proposals intended to avoid or reduce harmful effects on a European site. All allocations were screened in under **Category L** because they had the potential for LSEs in combination.

4.1.4 The following policies (**Table 4.1**) and all allocations will, therefore, be explored in the AA (Stage 2 of the HRA process) in more detail.

Table 4.1: Summary of screened in policies

(Note: only policies screened into the HRA process have been included in the summary table below. The screening outcome for all policies is provided in **Appendix C**).

Policy Number	Policy Name
Policy LP1	How much development do we expect?
Policy LP2	Our strategy for change
Policy LP3	Distribution of growth
Policy LP6	Market Towns
Policy LP7	Service Centres
Policy LP8	Local Services Villages
Policy LP9	Villages

Policy Number	Policy Name
Policy LP10	
Policy LP16	
Policy LP23	
Policy LP35	Protecting and enhancing established employment areas
Policy LP36	Expansion and diversification of rural businesses
Policy LP37	
Policy LP38	Enabling key clusters and innovation-led growth
Policy LP39	Enabling logistics and distribution
Policy LP40	Helping tourism and recreation in the countryside
Policy LP41	Defining our retail hierarchy
Policy LP42	Promoting town centre vitality and viability
Policy LP43	
Policy LP44	Services and facilities outside designated centres
Policy LP51	Gypsies, travellers and travelling showpeople
Policy LP57	

4.1.5 Whilst no site allocation falls within the 5.9km recreational ZOI associated with the Upper Nene Valley Gravel Pits SPA and Ramsar, potential windfall developments within this zone over the Plan period must be considered. In addition, potential urbanisation LSEs within the wider 10km buffer zone surrounding these designations must also be assessed, particularly in relation to impacts of windfall and renewable energy schemes on Golden Plover and Lapwing habitat. Therefore, the Upper Nene Valley Gravel Pits SPA and Ramsar will be screened into the HRA process.

4.1.6 Based on the location of site allocations outside an area with potential for recreation and urbanisation LSEs (impact risk areas are discussed in **sections 3.6** and **3.7**), a number of LSEs can be screened out of the HRA process. These include recreational LSEs at Barnack Hills & Holes SAC and urbanisation LSEs at Fenland SAC, Orton Pit SAC and Woodwalton Fen Ramsar.

4.2 Screening Conclusion

4.2.1 The Local Plan is not directly connected with, or necessary, to the management of any European site. Therefore, as required under the Habitats Regulations, an assessment of LSEs of the Local Plan upon European sites has been undertaken. The screening checks (**Appendix C** and **Appendix D**) indicate that the Local Plan has the potential to have LSEs upon the following European sites:

- **Air quality:** Nene Washes SAC, Nene Washes Ramsar, Ouse Washes SAC, Ouse Washes Ramsar and Portholme SAC.

- **Water quality:** Fenland SAC; Nene Washes SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; and Woodwalton Fen Ramsar.
- **Water quantity:** Fenland SAC; Nene Washes SPA; Nene Washes Ramsar; Orton Pit SAC; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; Upper Nene Valley Gravel Pits SPA; Upper Nene Valley Gravel Pits Ramsar; and Woodwalton Fen Ramsar.
- **Recreational pressure:** Fenland SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; Upper Nene Valley Gravel Pits SPA; Upper Nene Valley Gravel Pits Ramsar; and Woodwalton Fen Ramsar.
- **Urbanisation effects:** Eversden & Wimpole Woods SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SPA; Ouse Washes Ramsar, Upper Nene Valley Gravel Pits SPA and Upper Nene Valley Gravel Pits Ramsar.

4.2.2 The screening assessment takes no account of mitigation measures that the Local Plan 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 an AA.

5 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 (**Appendix C**) and all allocations when taken cumulatively (**Appendix D**) have the potential to result in LSEs at Nene Washes SAC, Nene Washes Ramsar, Ouse Washes SAC, Ouse Washes Ramsar and Portholme SAC due to changes in air quality. These European sites contain qualifying habitats, or supporting habitats for qualifying species, which are sensitive to atmospheric nitrogen deposition and associated acidification.
- 5.1.2 To inform this Appropriate Assessment, Huntingdonshire District Council commissioned air quality modelling following Natural England's standard methodology for assessing traffic-related air pollution under the Habitats Regulations. The modelling assessed changes in nitrogen oxides (NO_x), ammonia (NH₃), nitrogen deposition and acid deposition associated with the proposed submission Local Plan.
- 5.1.3 The Appropriate Assessment follows Natural England's Standard Advice for Local Plans together with guidance published by the Institute of Air Quality Management (IAQM) and the Chartered Institute of Ecology and Environmental Management (CIEEM). The role of this chapter is to interpret the modelling outputs in an ecological context and determine whether the Local Plan would adversely affect the integrity of any European site, either alone or in combination with other plans and projects.

5.2 Appropriate Assessment

- 5.2.1 Air quality modelling undertaken by AQC follows Natural England's recommended staged approach. The modelling considers future traffic associated with the Local Plan and compares predicted concentrations and deposition rates against relevant Critical Levels (CL_e) and Critical Loads (CL_o). Consistent with Natural England's guidance, exceedance of the precautionary 1% screening threshold does not automatically indicate an adverse effect on site integrity but identifies where further ecological assessment is required. Where Process Contributions exceed 1% of the relevant CL_e or CL_o, this chapter considers the ecological significance of the predicted changes, including the spatial extent of effects, the location of qualifying habitats and supporting habitats, existing background conditions, predicted future trends in emissions and the conservation objectives of each European site.
- 5.2.2 The modelling concludes that NO_x and acid deposition can be screened out for all assessed European sites (see Appendix G). Ammonia requires further assessment for Nene Washes SAC/Ramsar and Ouse Washes SAC/Ramsar, whilst nitrogen deposition requires further assessment for Portholme SAC, Nene Washes SAC/Ramsar and Ouse Washes SAC/Ramsar. The Appropriate Assessment presented below focuses on those pollutants requiring further ecological interpretation.

5.3 Portholme SAC

Baseline

- 5.3.1 Portholme SAC is designated for its lowland hay meadows (*Alopecurus pratensis* and *Sanguisorba officinalis*), which are sensitive to atmospheric nitrogen deposition. Increased nitrogen inputs have the potential to alter soil nutrient availability, favour competitive grasses and reduce the diversity and composition of the qualifying habitat. The conservation objectives for the SAC therefore require the extent, distribution, structure and function of the qualifying habitat to be maintained or restored.

Appropriate Assessment

- 5.3.2 Air quality modelling demonstrates that the Local Plan will not result in exceedances of the Critical Levels (CL_e) for nitrogen oxides (NO_x) or ammonia (NH₃), whilst acid deposition remains below the relevant Critical Load (CL_o).
- 5.3.3 Nitrogen deposition exceeds the precautionary 1% screening threshold within a limited area adjacent to the affected road network and therefore requires further ecological assessment. The accompanying isopleth map (**Figure 5.1**) demonstrates that the greatest increases in nitrogen deposition are confined to the area immediately adjacent to the affected road and decline rapidly with increasing distance from the carriageway. The spatial extent and magnitude of the predicted change therefore provide important context for the Appropriate Assessment but, as the qualifying lowland hay meadow is sensitive to increased nitrogen inputs, further consideration is required of whether the predicted deposition could affect the composition, structure and function of the qualifying habitat.
- 5.3.4 The lower Critical Load for the qualifying lowland hay meadow habitat at Portholme SAC is 10 kg N/ha/yr. At the worst-case modelled location, 44 m from the road, total nitrogen deposition is predicted to decrease from 17.6 kg N/ha/yr in the 2023 baseline to 15.1 kg N/ha/yr in the 2046 With Local Plan scenario. The Local Plan alone contributes 0.036 kg N/ha/yr at this location, equivalent to 0.36% of the Critical Load and therefore below the 1% screening threshold. In combination with other plans and projects, the predicted contribution is 0.46 kg N/ha/yr, equivalent to 4.6% of the Critical Load. The Critical Load is therefore exceeded under both existing and future conditions, and the in-combination contribution exceeds the 1% screening threshold. Further ecological consideration is consequently required through Appropriate Assessment.

Distance from road	2023 baseline	2046 Zero Growth	2046 Base	2046 With Local Plan	Local Plan PC	In combination PC
44 m	17.6 (176% CL)	14.6 (146%)	15.0 (150%)	15.1 (151%)	0.036 (0.36% CL)	0.46 (4.6% CL)
65 m	16.9 (169%)	14.3 (143%)	14.6 (146%)	14.6 (146%)	0.029 (0.29%)	0.33 (3.3%)
129 m	15.9 (159%)	13.9 (139%)	14.0 (140%)	14.1 (141%)	0.018 (0.18%)	0.16 (1.6%)
200 m	15.4 (154%)	13.7 (137%)	13.8 (138%)	13.8 (138%)	0.012 (0.12%)	0.09 (0.9%)

Table 5.1: *Nitrogen deposition at the worst-case modelled transect (Transect A), Portholme SAC*

- 5.3.5 The modelling also demonstrates that overall nitrogen deposition is predicted to decrease between the 2023 baseline and the 2046 assessment year as a consequence of improvements in vehicle emissions and wider emissions reduction policies. Appendix A3 of the air quality modelling considers whether the Local Plan would retard these predicted improvements. At the worst-case transect within Portholme SAC, the Local Plan alone is predicted to delay reductions in nitrogen deposition by between 0.16 and 0.27 years, whilst the Local Plan in combination with other plans and projects is predicted to delay reductions by between 1.3 and 3.5 years. However, the modelling concludes that these estimates are highly precautionary and are likely to overestimate any delay because they do not account for continued improvements in vehicle technology and emissions beyond those incorporated within the assessment. Overall nitrogen deposition under the Local Plan scenario remains lower than existing (2023) conditions across the site.
- 5.3.6 Taking account of the limited spatial extent of the predicted exceedance, the small contribution of the Local Plan to overall nitrogen deposition, the absence of any predicted measurable change to the extent, distribution, structure or function of the qualifying habitat, the reduction in future background deposition, and the findings of the retardation assessment, it is concluded that the Huntingdonshire Local Plan would not undermine the conservation objectives of Portholme SAC. Accordingly, the Appropriate Assessment concludes that the Local Plan will not result in an adverse effect on the integrity of Portholme SAC through changes in air quality, either alone or in combination with other plans and projects.
- 5.3.7 It is also worth noting that Portholme SAC comprises lowland hay meadow within the functional floodplain of the Great Ouse. The ecological functioning of the qualifying habitat is therefore influenced by its hydrological regime, including periodic inundation, as well as by traditional meadow management. The influence of floodplain processes and meadow management on nutrient cycling could be investigated further if necessary.

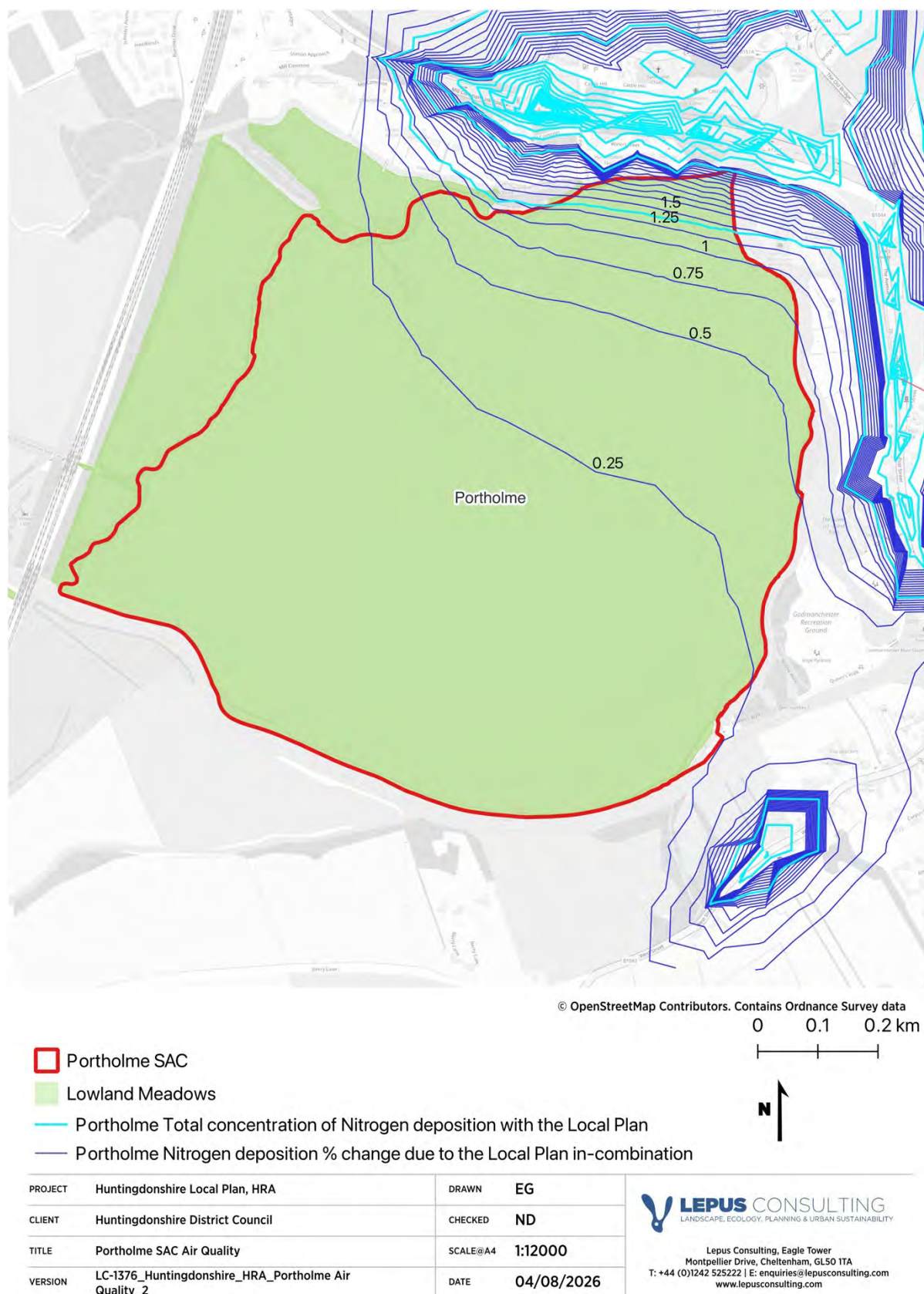


Figure 5.1: Isopleth map for Portholme SAC

5.4 Nene Washes Ramsar

Baseline

- 5.4.1 The Nene Washes Ramsar Site is designated for its internationally important floodplain wetland, associated plant and invertebrate communities, and assemblages of breeding and wintering waterbirds. Whilst the qualifying bird species are not themselves directly affected by atmospheric pollutants, the wetland habitats that contribute to the ecological character of the Ramsar Site may be sensitive to elevated ammonia concentrations and nitrogen deposition.

Appropriate Assessment

- 5.4.2 Air quality modelling demonstrates that the predicted environmental concentration (PEC) for nitrogen oxides (NO_x) remains below the relevant Critical Level (CL_e), whilst total acid deposition remains below the relevant Critical Load (CL_o; see Tables 4 and 7 of the air quality modelling report in **Appendix G**). The PEC represents the total predicted environmental concentration or deposition, taking account of the Local Plan and other sources. NO_x and acid deposition therefore do not require further assessment.
- 5.4.3 For ammonia (NH₃) concentration and nitrogen deposition, the process contribution from the Local Plan alone remains below the precautionary 1% screening threshold; however, the in-combination contribution exceeds the 1% threshold and these pollutants are therefore taken forward for Appropriate Assessment (see Tables 5, 6 and 8 of the air quality modelling report in **Appendix G**).
- 5.4.4 The Nene Washes Ramsar Site includes qualifying wetland habitats and plant communities that are potentially sensitive to atmospheric ammonia and nitrogen deposition. The modelling demonstrates that annual mean ammonia concentrations are below the Critical Level of 3 µg/m³ at all modelled receptors except the closest receptor on Transect G, where the 2023 baseline concentration is 3.25 µg/m³. Nitrogen deposition exceeds the relevant Critical Load of 10 kg N/ha/yr across all modelled transects and distances. The spatial extent of these in-combination exceedances is shown in **Figures 5.2 to 5.4**. The implications of the predicted in-combination changes for the ecological character of the Ramsar Site are therefore considered below.
- 5.4.5 In terms of overall nitrogen deposition, the modelling predicts a decrease between the 2023 baseline and the 2046 assessment year as a consequence of improvements in vehicle emissions and wider emissions reduction policies. Appendix A3 of the air quality modelling report in **Appendix G** considers the extent to which the Local Plan would retard these predicted improvements. At the worst-case Nene Washes transect (Transect E), the Local Plan alone is predicted to delay reductions in nitrogen deposition by between 0.17 and 1.09 years, whilst the Local Plan in combination with other plans and projects is predicted to delay reductions by between 1.5 and 13 years. These retardation periods are precautionary modelled estimates rather than predictions of the period for which existing deposition levels would persist.

- 5.4.6 The calculation assumes a linear trajectory in nitrogen deposition between 2023 and 2046 which continues thereafter, whilst the assessment of future background deposition incorporates reductions only to 2030 because the Nitrogen Futures modelling does not extend beyond that date. The air quality modelling therefore identifies the calculated retardation periods as particularly worst-case. Notwithstanding the calculated retardation, nitrogen deposition under the 2046 With Local Plan scenario is lower than under the 2023 baseline across Transect E, the worst-case transect within the Nene Washes.
- 5.4.7 Taking account of the spatial extent of the predicted in-combination exceedances, the fact that the Local Plan alone contribution remains below the precautionary 1% screening threshold, the predicted reduction in nitrogen deposition between 2023 and 2046, and the findings of the retardation assessment, it is concluded that the Huntingdonshire Local Plan would not undermine the ecological character of the Nene Washes Ramsar Site. The Appropriate Assessment therefore concludes that the Huntingdonshire Local Plan will not result in an adverse effect on the integrity of the Nene Washes Ramsar Site or its ecological character through changes in air quality, either alone or in combination with other plans and projects.

5.5 Nene Washes SAC

Baseline

- 5.5.1 Nene Washes SAC is designated solely for spined loach (*Cobitis taenia*). The conservation objectives seek to maintain or restore the extent, distribution, structure and function of the habitats supporting the qualifying species, together with the ecological processes on which it relies, including appropriate hydrological conditions, water quality, substrate and aquatic vegetation.

Appropriate Assessment

- 5.5.2 Air quality modelling demonstrates that the predicted environmental concentration (PEC) for nitrogen oxides (NO_x) remains below the relevant Critical Level (CLE), whilst total acid deposition remains below the relevant Critical Load (CLo; see Tables 4 and 7 of the air quality modelling report in Appendix G). The PEC represents the total predicted environmental concentration or deposition, taking account of the Local Plan and other sources.
- 5.5.3 For ammonia (NH₃) concentration and nitrogen deposition, the predicted process contribution from the Local Plan alone is below the precautionary 1% screening threshold. When considered in combination with other plans and projects, the predicted process contribution exceeds the 1% screening threshold for both ammonia concentration and nitrogen deposition and therefore requires Appropriate Assessment (see Tables 5, 6 and 8 of the air quality modelling report in Appendix G). The isopleth mapping (**Figures 5.2 to 5.4**) demonstrates that the area over which the 1% threshold is exceeded is very restricted in spatial extent and confined to land closest to the affected road network.

- 5.5.4 The Nene Washes SAC is designated solely for Spined Loach (*Cobitis taenia*), which occurs within the drainage channels and associated aquatic habitats of the washlands. The conservation status of the qualifying feature depends upon the maintenance of appropriate hydrology, water quality, channel morphology, substrate and aquatic vegetation. The air quality assessment has therefore considered the potential for effects upon the aquatic vegetation supporting the qualifying feature. However, the predicted in-combination exceedances of the 1% screening threshold relate to atmospheric NH₃ concentrations and nitrogen deposition to vegetation. The qualifying feature and its supporting aquatic vegetation occur within the aquatic environment and are not exposed to these effects in the same manner as terrestrial vegetation. The modelled exceedances therefore do not provide a mechanism by which the conservation status of Spined Loach, or the aquatic habitat supporting the species, would be adversely affected. Accordingly, no adverse effect on the integrity of the Nene Washes SAC is predicted through this pathway.

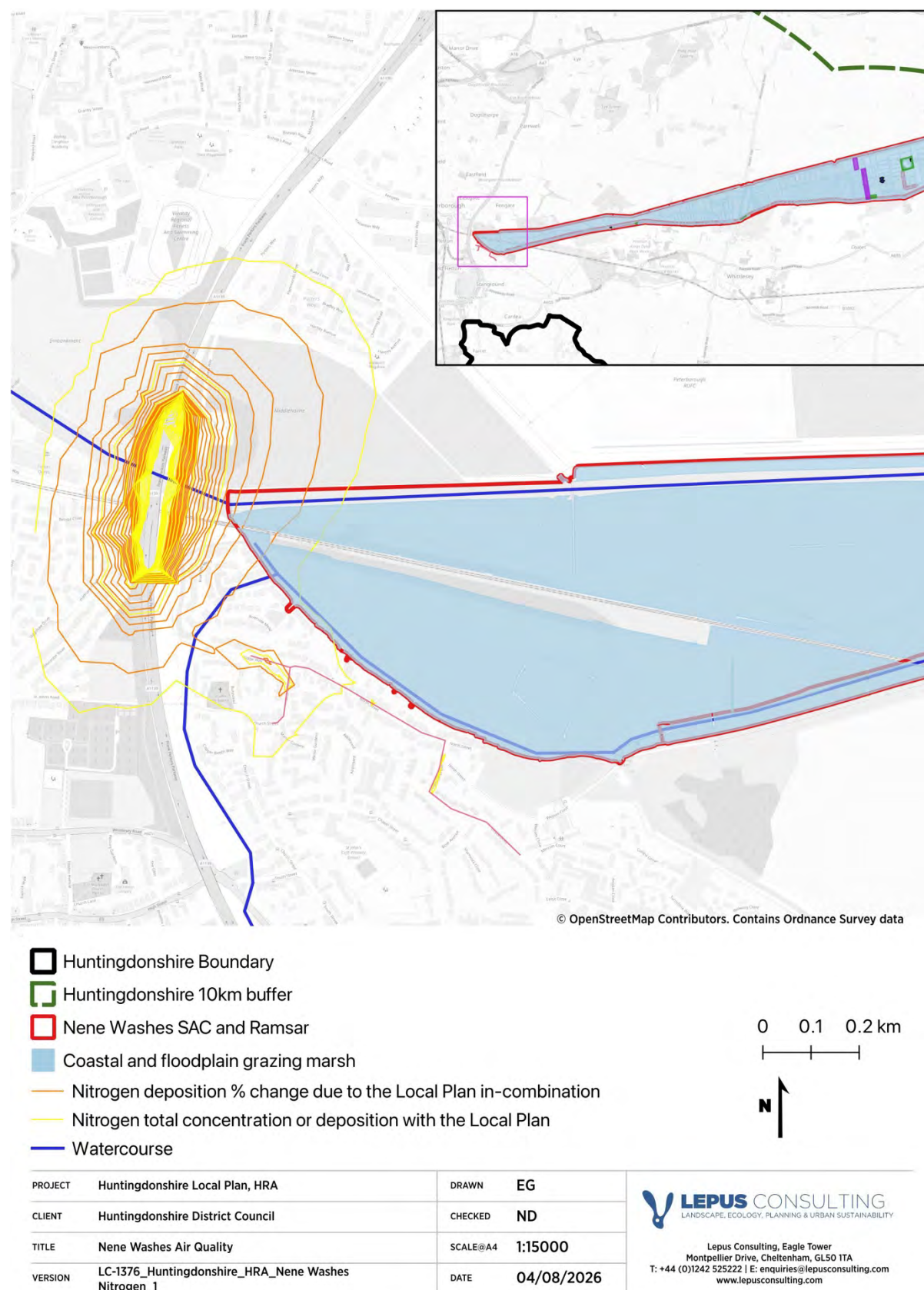


Figure 5.2: Isopleth map of the west of Nitrogen deposition in the west of Nene Washes SAC and Ramsar

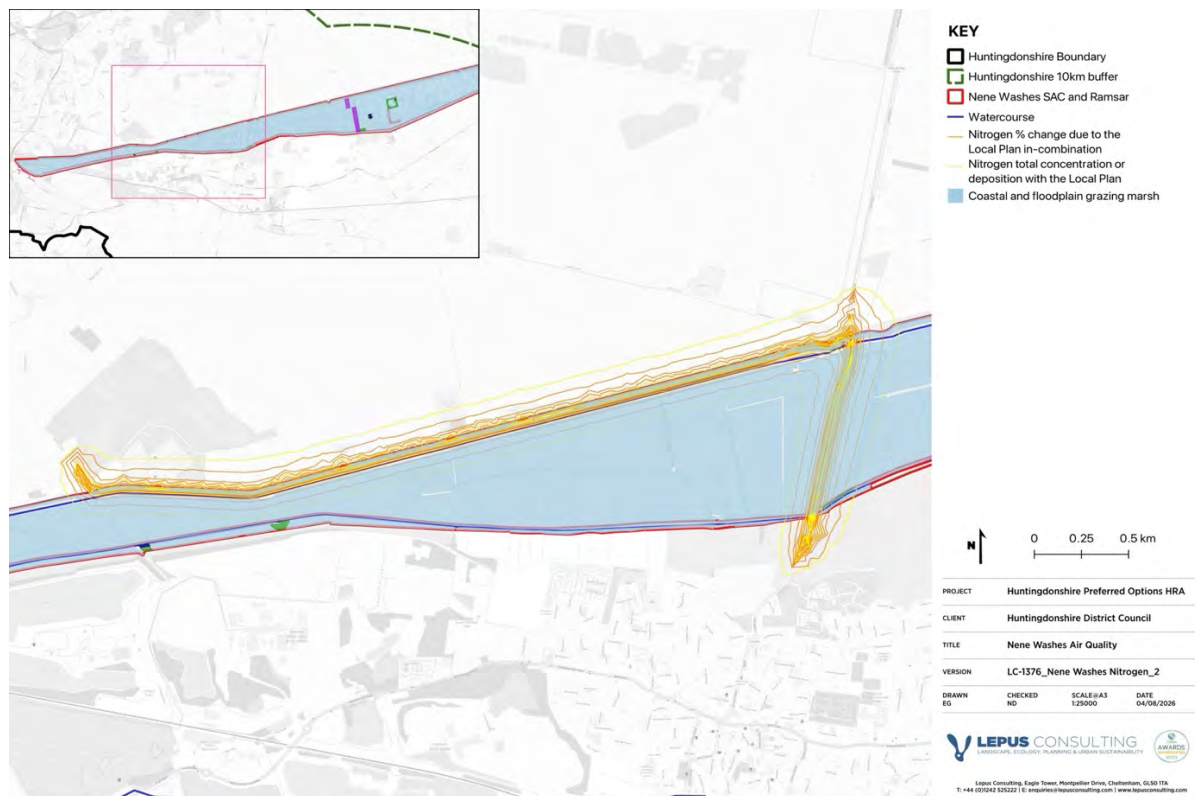


Figure 5.3: Isopleth map of Nitrogen deposition in Nene Washes SAC and Ramsar

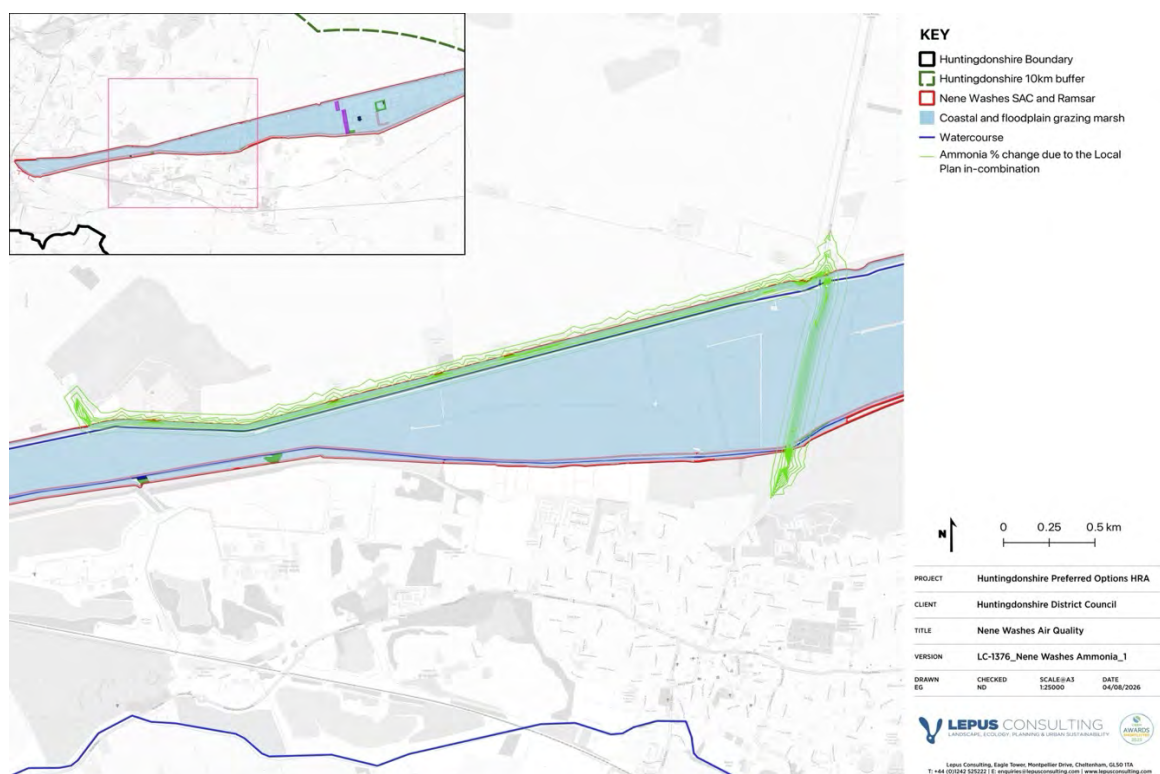


Figure 5.4: Isopleth Map of Ammonia in Nene Washes SAC and Ramsar Ouse Washes Ramsar

5.6 Ouse Washes Ramsar

Baseline

- 5.6.1 The Ouse Washes Ramsar Site is designated for its internationally important floodplain wetland, associated wetland plant and invertebrate communities, and assemblages of breeding and wintering waterbirds. Whilst the qualifying bird species are not themselves directly affected by atmospheric pollutants, the wetland habitats that underpin the ecological character of the Ramsar site may be sensitive to elevated ammonia concentrations and nitrogen deposition where increases are of sufficient magnitude and duration.

Appropriate Assessment

- 5.6.2 Air quality modelling demonstrates that the predicted environmental concentration (PEC) for nitrogen oxides (NO_x) remains below the relevant Critical Level (CL_e), whilst acid deposition remains below the relevant Critical Load (CL_o). Predicted process contributions for ammonia (NH₃) concentration and nitrogen deposition exceed the precautionary 1% screening threshold at limited locations immediately adjacent to affected road links and therefore require Appropriate Assessment. The modelling demonstrates that pollutant concentrations and deposition decline rapidly with increasing distance from the carriageway. The accompanying isopleth maps (**Figures 5.5 to 5.8**) show that only a limited proportion of the Ouse Washes SAC and Ramsar site falls within the area where the Local Plan contribution exceeds the precautionary 1% screening threshold, with the substantial majority of both designated sites lying outside the affected area.
- 5.6.3 The isopleth mapping demonstrates that the predicted exceedances of the 1% screening threshold are confined to narrow strips immediately adjacent to the affected road network and do not extend across the majority of the designated sites (**Figures 5.5 to 5.8**). Although the precautionary screening threshold is exceeded at limited locations, the predicted increases in ammonia concentration and nitrogen deposition are highly localised and represent a relatively small contribution to overall pollutant concentrations and deposition. The assessment therefore considers whether these localised increases represent a credible impact pathway to the qualifying features of the Ouse Washes SAC and Ramsar Site.
- 5.6.4 The Ouse Washes SAC is designated solely for the Spined Loach (*Cobitis taenia*). The qualifying feature occurs within the Counter Drain and associated aquatic habitat, with aquatic vegetation forming part of its supporting habitat. Natural England identified this supporting aquatic vegetation as the reason for considering air quality effects at the SAC. The air quality assessment has therefore considered this potential pathway. However, the predicted exceedances of the 1% screening thresholds relate to atmospheric NH₃ concentrations and nitrogen deposition to short vegetation. The qualifying feature and its supporting aquatic vegetation occur within the aquatic environment and are not exposed to these effects in the same manner as terrestrial vegetation. The modelled exceedances therefore do not provide a mechanism by which the conservation status of Spined Loach, or the aquatic habitat supporting the species, would be adversely affected. Accordingly, no adverse effect on the integrity of Ouse Washes SAC is predicted through this pathway.

- 5.6.5 The Ouse Washes Ramsar Site includes qualifying wetland habitats and plant communities that are, in principle, sensitive to atmospheric ammonia and nitrogen deposition. However, the Appropriate Assessment considers the Local Plan's contribution to pollutant concentrations and deposition rather than existing background exceedances alone. Whilst Critical Levels and Critical Loads may already be exceeded under baseline conditions, the magnitude of the Local Plan contribution reduces rapidly with increasing distance from the affected road network, and exceedances of the 1% screening threshold are restricted to limited areas adjacent to existing road infrastructure, as shown by the isopleth mapping (**Figures 5.5 to 5.8**).
- 5.6.6 The modelling also demonstrates that nitrogen deposition is generally predicted to decrease between the 2023 baseline and the 2046 assessment year as a consequence of improvements in vehicle emissions and wider emissions reduction policies. Appendix A3 of the air quality modelling report considers the extent to which the Local Plan could retard these predicted improvements. At the worst-case transect within the Ouse Washes SAC and Ramsar Site, the Local Plan alone is predicted to delay reductions in nitrogen deposition by between 0.15 and 0.53 years, whilst the Local Plan in combination with other plans and projects is calculated to delay reductions by between 7.2 and 24 years.
- 5.6.7 These figures represent a theoretical delay in the rate of improvement, calculated by dividing the predicted process contribution by the assumed annual rate of reduction in nitrogen deposition; they do not represent a predicted duration of ecological effect. The air quality modelling report identifies this calculation as highly precautionary because the assumed future reduction in background deposition is itself likely to be underestimated. At the closest receptors on the worst-case transect, nitrogen deposition under the 2046 Local Plan scenario is predicted to be broadly comparable with the 2023 baseline, with reductions predicted with increasing distance from the road.
- 5.6.8 Taking account of the limited spatial extent of the predicted exceedances of the 1% screening threshold, the rapid reduction in predicted contributions with increasing distance from the affected road network, the absence of a credible impact pathway to the sole qualifying feature of the Ouse Washes SAC, the spatially limited exposure of Ramsar wetland habitats, the wider forecast reductions in nitrogen deposition, and the findings of the precautionary retardation assessment, it is concluded that the Huntingdonshire Local Plan would not undermine the conservation objectives of Ouse Washes SAC or the ecological character of the Ouse Washes Ramsar Site. The Appropriate Assessment therefore concludes that the Huntingdonshire Local Plan will not result in an adverse effect on the integrity of Ouse Washes SAC or the ecological character of the Ouse Washes Ramsar Site through changes in air quality, either alone or in combination with other plans and projects.



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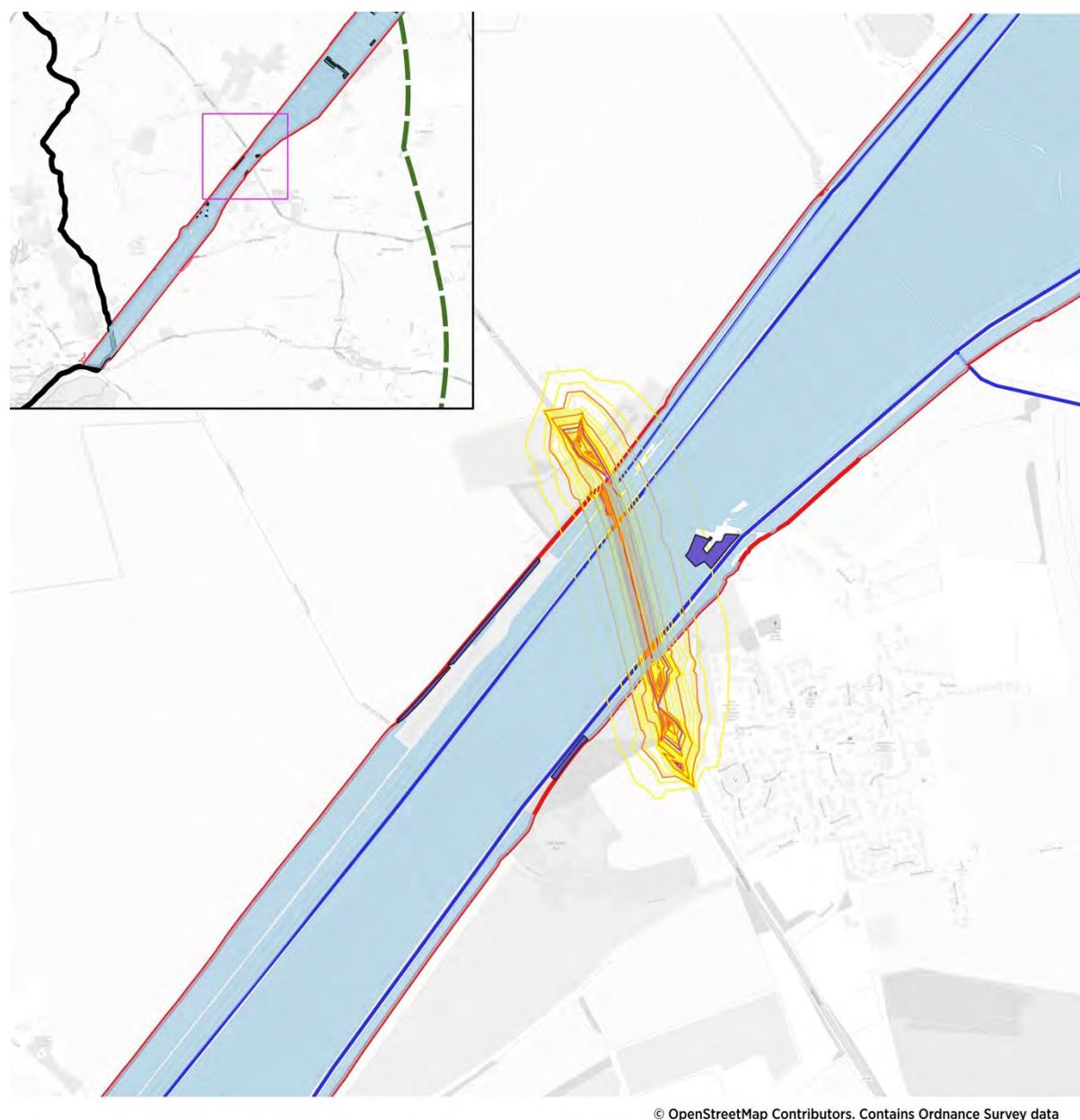
- Huntingdonshire Boundary
- Huntingdonshire 10km buffer
- Ouse Washes SAC and Ramsar
- Coastal and floodplain grazing marsh
- Watercourse
- Nitrogen total concentration or deposition with the Local Plan
- Ouse S NDep ICC Nitrogen % change due to the Local Plan in-combination
- Nitrogen % change due to the Local Plan alone

0 250 500 m



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CLIENT Huntingdonshire District Council	CHECKED ND	
TITLE Ouse Washes Air Quality	SCALE@A4 1:30000	
VERSION LC-1376_Huntingdonshire_HRA_Ouse Washes Nitrogen_1	DATE 04/08/2026	

Figure 5.5: Isopleth Map of Nitrogen deposition in the south of Ouse Washes SAC and Ramsar



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- Huntingdonshire Boundary
- Huntingdonshire 10km buffer
- Ouse Washes SAC and Ramsar
- Coastal and floodplain grazing marsh
- Watercourse
- Nitrogen total concentration or deposition with the Local Plan
- Ouse S NDep ICC Nitrogen % change due to the Local Plan in-combination
- Nitrogen % change due to the Local Plan alone

0 250 500

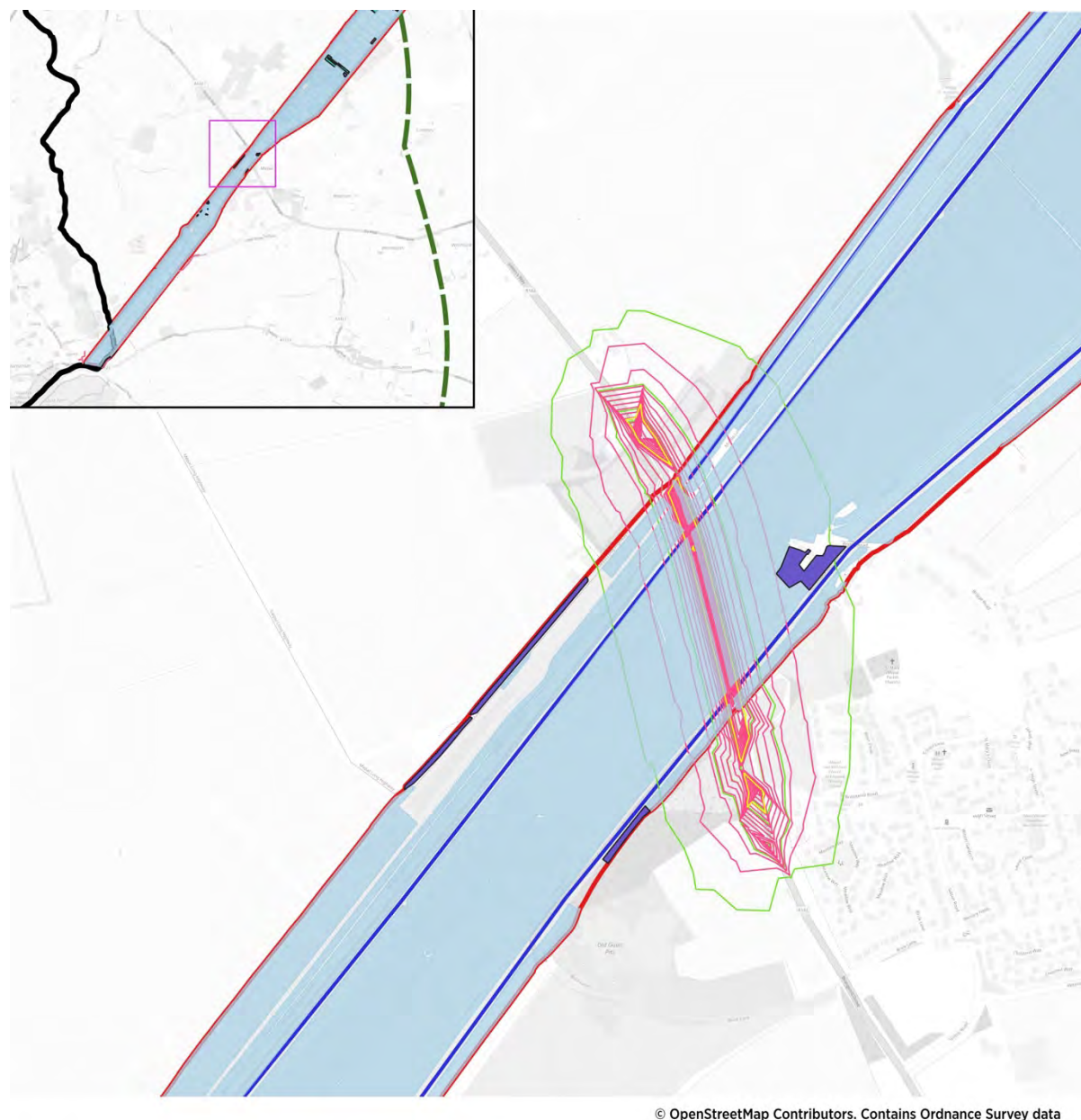


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VERSION LC-1376_Huntingdonshire_HRA_Ouse Washes Nitrogen_2	DATE 04/08/2026

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LANDSCAPE, ECOLOGY, PLANNING & URBAN SUSTAINABILITY

Lepus Consulting, Eagle Tower
Montpellier Drive, Cheltenham, GL50 1TA
T: +44 (0)1242 525222 | E: enquiries@lepusconsulting.com
www.lepusconsulting.com

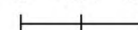
Figure 5.6: Isopleth Map of Nitrogen deposition in the centre of Ouse Washes SAC and Ramsar



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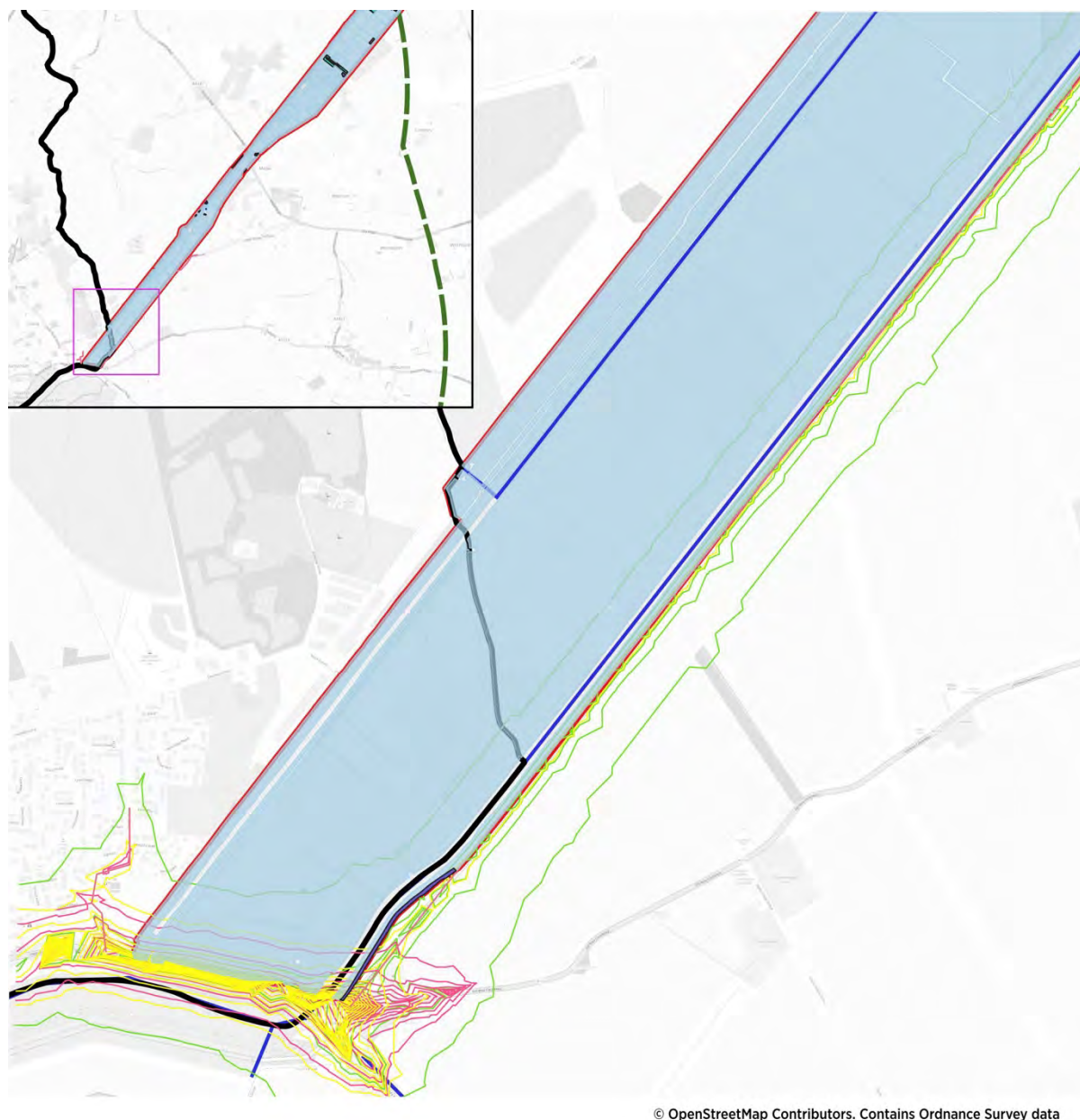
- Huntingdonshire Boundary
- Huntingdonshire 10km buffer
- Ouse Washes SAC and Ramsar
- Coastal and floodplain grazing marsh
- Ammonia % change due to the Local Plan in-combination
- Ammonia % change due to the Local Plan alone
- Ammonia total concentration or deposition with the Local Plan
- Watercourse

0 0.1 0.2 km



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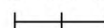
Figure 5.7: Isopleth Map of Ammonia in the centre of Ouse Washes SAC and Ramsar



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- Huntingdonshire Boundary
- Huntingdonshire 10km buffer
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- Ammonia % change due to the Local Plan alone
- Ammonia total concentration or deposition with the Local Plan
- Watercourse

0 0.1 0.2 km



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CLIENT Huntingdonshire District Council	CHECKED ND	
TITLE Ouse Washes Air Quality	SCALE@A4 1:20000	
VERSION LC-1376_Huntingdonshire_HRA_Ouse Washes Ammonia_2	DATE 04/08/2026	

Figure 5.8: Isopleth Map of Ammonia in the south of Ouse Washes SAC and Ramsar

5.7 Ouse Washes SAC

Baseline

- 5.7.1 The Ouse Washes SAC is designated solely for Spined Loach (*Cobitis taenia*). The conservation objectives seek to maintain or restore the extent, distribution, structure and function of the habitats supporting the qualifying species, together with the ecological processes on which they rely, including appropriate water quality, hydrology and aquatic vegetation.

Appropriate Assessment

- 5.7.2 Natural England identified aquatic vegetation supporting Spined Loach as the reason for considering air quality effects at the SAC. The qualifying feature occurs within the Counter Drain and associated aquatic habitat, with aquatic vegetation forming part of its supporting habitat. The air quality assessment has therefore considered this potential pathway. However, the predicted exceedances of the 1% screening thresholds relate to atmospheric NH₃ concentrations and nitrogen deposition to short vegetation. The qualifying feature and its supporting aquatic vegetation occur within the aquatic environment and are not exposed to these effects in the same manner as terrestrial vegetation. The modelled exceedances therefore do not provide a mechanism by which the conservation status of Spined Loach, or the aquatic habitat supporting the species, would be adversely affected. No adverse effect on the integrity of Ouse Washes SAC is therefore predicted through this pathway.

5.8 Conclusions

- 5.8.1 The HRA screening assessment identified the potential for likely significant effects on Nene Washes SAC and Ramsar, Ouse Washes SAC and Ramsar, and Portholme SAC as a result of changes in air quality associated with development proposed through the Huntingdonshire Local Plan.
- 5.8.2 The Appropriate Assessment has considered the findings of the air quality assessment, including detailed dispersion modelling, isopleth mapping and the retardation assessment of future nitrogen deposition. The assessment demonstrates that predicted exceedances of the precautionary screening threshold for ammonia and nitrogen deposition are limited in extent, represent a small contribution to overall pollutant concentrations and deposition, and are not sufficient to adversely affect the qualifying features, supporting habitats or ecological character of the designated sites.
- 5.8.3 Accordingly, it can be concluded that the Huntingdonshire Local Plan will not result in adverse effects on the integrity of Nene Washes SAC and Ramsar, Ouse Washes SAC and Ramsar, Portholme SAC or Woodwalton Fen Ramsar through changes in air quality, either alone or in combination with other plans and projects.

6 Water quality appropriate assessment

6.1 Introduction

- 6.1.1 As noted in **Section 3.5**, development has the potential to affect the quality of water entering a catchment through processes including sedimentation, accidental spillages of chemicals and materials, operational surface water runoff and increased effluent discharges from WwTWs. Increased nutrient inputs can lead to algal blooms, reduced dissolved oxygen and increased turbidity, potentially affecting the condition of receiving waterbodies and hydrologically connected European sites and their qualifying features.
- 6.1.2 The HRA screening process (see **Appendix C**) identified the potential for LSEs from changes in water quality at a number of European sites. Screening considered the hydrological connectivity between the Plan area and European sites, together with the potential for development supported by the Local Plan to affect water quality.
- 6.1.3 The following European designations are located downstream of the Plan area and were considered to be potentially hydrologically connected.
- Fenland SAC;
 - Nene Washes SAC;
 - Nene Washes SPA;
 - Nene Washes Ramsar;
 - Ouse Washes SAC;
 - Ouse Washes SPA;
 - Ouse Washes Ramsar;
 - Portholme SAC;
 - The Wash & North Norfolk Coast SAC;
 - The Wash SPA;
 - The Wash Ramsar; and
 - Woodwalton Fen Ramsar.

6.2 Appropriate Assessment

Overview

- 6.2.1 Water quality modelling undertaken by JBA Consulting as part of the Huntingdonshire Water Cycle Study has been used to inform this Appropriate Assessment. The modelling considered three scenarios:

- Baseline – representing existing conditions using the latest version of the SIMCAT model, with wastewater treatment works serving growth updated using flow data from 2021–2025;
- Future – representing the increase in treated effluent flows associated with growth over the Local Plan period; and
- Technically Achievable Limit (TAL) – representing a scenario where wastewater treatment works are upgraded to achieve technically achievable limits to investigate whether deterioration in water quality could be prevented.

6.2.2 The modelling assessed ammonia, biochemical oxygen (BOD), dissolved oxygen (DO), nitrate and phosphate against the water quality standards provided by Natural England. The results are presented in **Table 6.1**.

6.2.3 Additional modelling was undertaken for dissolved oxygen and nitrate to support the HRA. Outputs were obtained from the latest version of the water quality model to provide further evidence in relation to the potential effects on designated sites.

6.2.4 The modelling results for each hydrologically connected European site are presented in **Table 6.1**. The implications of these results are considered separately below for each European site and its qualifying features.

Table 6.1: Water quality modelling results

Sites	Standard	Baseline Concentration (mg/l)	Future Concentration (mg/l)	Technically Achievable Limit result (mg/l)
Fenland SAC (Woodwalton Ramsar)				
Ammonia	0.6	0.3313	0.3305	0.3131
BOD	5	5.2939	5.2866	5.2646
Dissolved O ₂ (DO)	5 – (0.028 x (salinity))	5.31 (5 th Percentile) 5.62 (10 th Percentile)	5.32 (5 th Percentile) 5.62 (10 th Percentile)	5.36 (5 th Percentile) 5.66 (10 th Percentile)
Nitrate	N/A	29.3	29.1	29.1
Total P	An annual mean of less than 0.1mg/L total phosphorus	0.2105	0.211	0.1832
Nene Washes SAC, SPA & Ramsar				
Ammonia	0.6	0.075	0.075	0.049
BOD	5	3.1278	3.129	2.9739
Dissolved O ₂ (DO)	5 – (0.028 x (salinity))	8.11 (5 th Percentile) 8.59 (10 th Percentile)	8.11 (5 th Percentile) 8.59 (10 th Percentile)	8.33 (5 th Percentile) 8.71 (10 th Percentile)
Nitrate	N/A	9.10	9.11	9.11

Sites	Standard	Baseline Concentration (mg/l)	Future Concentration (mg/l)	Technically Achievable Limit result (mg/l)
Total P	An annual mean of less than 0.1mg/L total phosphorus	0.1491	0.1499	0.0694
Ouse Washes SAC, SPA & Ramsar				
Ammonia	0.6	0.1201	0.147	0.0576
BOD	5	2.8613	2.8681	2.7131
Dissolved O ₂ (DO)	5 – (0.028 x (salinity))	8.10 (5 th Percentile) 8.41 (10 th Percentile)	8.05 (5 th Percentile) 8.32 (10 th Percentile)	8.36 (5 th Percentile) 8.58 (10 th Percentile)
Nitrate	N/A	8.78	8.91	8.91
Total P	An annual mean of less than 0.1mg/L total phosphorus	0.2519	0.2541	0.1403
Portholme SAC				
Ammonia	0.6	0.1274	0.2975	0.0815
BOD	5	3.4381	3.3988	3.3934
Dissolved O ₂ (DO)	4.0 mg/l (at 35 salinity)	5.55 (5 th Percentile) 5.83 (10 th Percentile)	5.51 (5 th Percentile) 5.76 (10 th Percentile)	5.51 (5 th Percentile) 5.78 (10 th Percentile)
Nitrate	N/A	9.55	9.40	9.40
Total P	0.12	0.3303	0.369	0.3599
The Wash and North Norfolk SAC and the Wash SPA & Ramsar				
Ammonia	0.6	0.1195	0.1259	0.0961
BOD	5	2.0721	2.0743	2.0086
Dissolved O ₂ (DO)	Levels equating to High Ecological Status (specifically ≥ 5.7mg L ⁻¹ (at 35 salinity) for 95% of year).	8.50 (5 th Percentile) 8.83 (10 th Percentile)	8.49 (5 th Percentile) 8.81 (10 th Percentile)	8.64 (5 th Percentile) 8.93 (10 th Percentile)
Nitrate	N/A	8.79	8.81	8.81
Total P	0.12	0.1506	0.1513	0.0866

6.3 Fenland SAC and Woodwalton Fen Ramsar

Fenland SAC Baseline

- 6.3.1 Fenland SAC is designated for *Calcareous fens with Cladium mariscus and species of the Caricion davallianae*. Within the Huntingdonshire area, the hydrologically connected component of the SAC is Woodwalton Fen.
- 6.3.2 The qualifying habitat is dependent upon maintaining suitable hydrological conditions and good water quality. Increases in nutrient concentrations, organic loading or reductions in dissolved oxygen have the potential to alter the structure and function of the fen communities and adversely affect the integrity of the SAC.
- 6.3.3 The conservation objectives for Fenland SAC are to maintain or restore the extent and distribution of the qualifying habitat, together with its structure, function and supporting processes. This includes maintaining the hydrological and hydrochemical conditions necessary to support the qualifying calcareous fen habitat.

Woodwalton Fen Ramsar

- 6.3.4 Woodwalton Fen Ramsar Site is designated under Ramsar Criterion 1 as a near-natural remnant of the East Anglian fens, supporting a range of open fen and swamp communities. The site also qualifies under Ramsar Criterion 2 for its nationally rare wetland plants, including fen violet (*Viola persicifolia*), fen wood-rush (*Luzula pallidula*) and fen ragwort (*Senecio paludosus*), together with an important wetland invertebrate assemblage that includes 20 British Red Data Book species. Aquatic beetles, flies and moths are particularly well represented.
- 6.3.5 The ecological character of the Ramsar Site is dependent upon maintaining the hydrological and hydrochemical conditions that support these fen and swamp communities and their associated plant and invertebrate assemblages. Changes in nutrient concentrations, organic loading or dissolved oxygen therefore have the potential to alter vegetation communities and associated habitat conditions and adversely affect the features for which the Ramsar Site is designated.

Appropriate Assessment for Fenland SAC and Woodwalton Fen Ramsar

- 6.3.6 The modelling indicates that ammonia concentrations remain below the Natural England assessment standard under all scenarios. Dissolved oxygen concentrations remain above the relevant standard, whilst nitrate concentrations decrease slightly from 29.3 mg/l under the baseline scenario to 29.1 mg/l under the future scenario. These results demonstrate that Local Plan growth would not result in deterioration in these water quality parameters.
- 6.3.7 BOD exceeds the agreed assessment standard of 5 mg/l under all scenarios, with a baseline concentration of 5.2939 mg/l and a future concentration of 5.2866 mg/l. Total phosphorus also exceeds the Natural England target of 0.1 mg/l under baseline and future conditions, increasing slightly from 0.2105 mg/l to 0.211 mg/l. Under the TAL scenario, phosphorus reduces to 0.1832 mg/l but remains above the Natural England target.

- 6.3.8 For total phosphorus, the modelled increase between the baseline and future scenarios is 0.0005 mg/l, from 0.2105 mg/l to 0.211 mg/l. Implementation of TAL upgrades would reduce the modelled concentration to 0.1832 mg/l, below both the baseline and future scenarios, although it would remain above the Natural England target of 0.1 mg/l.
- 6.3.9 Total phosphorus concentrations under existing baseline conditions are substantially above the Natural England target of 0.1 mg/L. This reflects existing nutrient pressures within the wider catchment, including diffuse agricultural inputs. Against this existing position, the Local Plan would result in a negligible increase in total phosphorus of 0.0005 mg/L, from 0.2105 mg/L to 0.211 mg/L. Improvements to wastewater treatment infrastructure under the TAL scenario would reduce the modelled concentration to 0.1832 mg/L by the end of the Plan period. The improvements associated with the TAL scenario would therefore more than offset the negligible increase arising from Local Plan growth, resulting in a lower total phosphorus concentration than under existing baseline conditions.
- 6.3.10 Taking account of these results and the mitigation measures set out in **Section 6.8**, it is concluded that the Huntingdonshire Local Plan would not result in an adverse effect on the integrity of Fenland SAC through changes in water quality, either alone or in combination with other plans and projects.

6.4 Nene Washes

Nene Washes Ramsar Baseline

- 6.4.1 Nene Washes Ramsar comprises an internationally important floodplain wetland supporting nationally scarce plants, rare invertebrates and important populations of waterbirds. The site qualifies under Ramsar Criterion 2 for its assemblage of nationally rare breeding birds, nationally scarce plants and rare invertebrates, and under Criterion 6 for its internationally important population of Bewick's swan (*Cygnus columbianus bewickii*).
- 6.4.2 The ecological character of the Ramsar site is dependent upon the hydrological and water quality conditions that maintain its wetland habitats and associated plant and invertebrate communities. Changes in nutrient concentrations, organic loading or dissolved oxygen therefore have the potential to alter the habitats and ecological processes supporting the Ramsar features.

Nene Washes SAC Baseline

- 6.4.3 Nene Washes SAC is designated solely for Spined Loach (*Cobitis taenia*). The species occurs within the drainage channels of the washlands, with Moreton's Leam supporting the highest recorded density of Spined Loach in the UK and populations also occurring within smaller ditches.
- 6.4.4 The conservation status of Spined Loach is dependent upon the maintenance of suitable aquatic habitat and supporting processes. Water quality is therefore relevant insofar as changes in nutrient concentrations, organic loading or dissolved oxygen could affect the aquatic habitat and vegetation supporting the qualifying species.

Nene Washes SPA Baseline

- 6.4.5 Nene Washes SPA supports an internationally important assemblage of breeding and non-breeding waterbirds, including Bewick's Swan (*Cygnus columbianus bewickii*), Wigeon (*Mareca penelope*), Gadwall (*Mareca strepera*), Teal (*Anas crecca*), Pintail (*Anas acuta*), Garganey (*Spatula querquedula*), Shoveler (*Spatula clypeata*) and Black-tailed Godwit (*Limosa limosa*).
- 6.4.6 The qualifying bird species are dependent upon the wetland habitats of the Nene Washes for feeding, breeding and roosting. Water quality is therefore relevant principally through its potential to affect the extent, structure and function of these supporting habitats and the ecological processes upon which the qualifying bird populations depend. Natural England's conservation objectives specifically require the maintenance or restoration of the habitats of the qualifying features and the supporting processes upon which those habitats rely.

Appropriate Assessment for Nene Washes Ramsar, SAC and SPA

- 6.4.7 The modelling demonstrates that ammonia concentrations remain below the Natural England assessment standard of 0.6 mg/L under the baseline, future and TAL scenarios. BOD also remains below the relevant standard of 5 mg/L under all three scenarios. The change between the baseline and future scenarios is negligible for both parameters.
- 6.4.8 Total phosphorus exceeds the Natural England target of less than 0.1 mg/L under baseline conditions. The future scenario increases the modelled annual mean concentration from 0.1491 mg/L to 0.1499 mg/L, an increase of 0.0008 mg/L. This represents a negligible increase attributable to Local Plan growth.
- 6.4.9 Under the TAL scenario, improvements to wastewater treatment infrastructure reduce the modelled total phosphorus concentration to 0.0694 mg/L. The TAL scenario therefore more than offsets the negligible increase associated with Local Plan growth, reduces phosphorus concentrations below existing baseline levels and, importantly, achieves the Natural England target of less than 0.1 mg/L.
- 6.4.10 Taking account of these results, the Local Plan would not result in deterioration in the water quality conditions supporting the qualifying features of Nene Washes SAC, the qualifying bird populations and supporting habitats of Nene Washes SPA, or the ecological character of Nene Washes Ramsar Site. With the implementation of the mitigation measures set out in **Section 6.8**, the modelled phosphorus concentration at the end of the Plan period would be lower than the existing baseline and below the Natural England target. It is therefore concluded that the Huntingdonshire Local Plan would not result in an adverse effect on the integrity of Nene Washes SAC or SPA, or the ecological character of Nene Washes Ramsar Site, through changes in water quality, either alone or in combination with other plans and projects.

6.5 Ouse Washes

Ouse Washes Ramsar Baseline

- 6.5.1 Ouse Washes Ramsar Site qualifies under Ramsar Criterion 1 as an extensive example of seasonally flooded washland, and under Criterion 2 for its nationally scarce wetland plants, rare invertebrates and nationally rare breeding waterbirds. The site also qualifies under Criterion 5 for its internationally important assemblage of wintering waterbirds and Criterion 6 for internationally important populations including Bewick's Swan (*Cygnus columbianus bewickii*), Whooper Swan (*Cygnus cygnus*), Wigeon (*Mareca penelope*), Gadwall (*Mareca strepera*), Teal (*Anas crecca*), Pintail (*Anas acuta*) and Shoveler (*Spatula clypeata*).
- 6.5.2 The ecological character of the Ramsar Site is dependent upon the hydrological and water quality conditions that maintain its wetland habitats and associated plant, invertebrate and waterbird communities. Changes in nutrient concentrations, organic loading or dissolved oxygen therefore have the potential to affect the habitats and ecological processes supporting the Ramsar features.

Ouse Washes SAC Baseline

- 6.5.3 Ouse Washes SAC is designated for Spined Loach (*Cobitis taenia*). The species occurs within the extensive network of drainage channels within the washlands, with the Counter Drain providing particularly important habitat characterised by clear water and abundant aquatic vegetation.
- 6.5.4 Water quality is relevant to the qualifying feature because changes in nutrient concentrations, organic loading and dissolved oxygen have the potential to affect the aquatic habitats and vegetation upon which Spined Loach depends.

Ouse Washes SPA Baseline

- 6.5.5 Ouse Washes SPA supports internationally important populations and assemblages of breeding and non-breeding waterbirds associated with the seasonally flooded washland and its network of wet grassland, open water and drainage channels. Qualifying species include Bewick's Swan (*Cygnus columbianus bewickii*), Whooper Swan (*Cygnus cygnus*), Wigeon (*Mareca penelope*), Gadwall (*Mareca strepera*), Teal (*Anas crecca*), Pintail (*Anas acuta*) and Shoveler (*Spatula clypeata*).
- 6.5.6 The qualifying bird species are dependent upon the wetland habitats of the Ouse Washes for feeding, breeding and roosting. Water quality is therefore relevant principally through its potential to affect supporting habitats, associated invertebrate communities and the availability of food resources upon which the qualifying bird populations depend.

Appropriate Assessment

- 6.5.7 The modelling demonstrates that ammonia concentrations remain below the Natural England assessment standard of 0.6 mg/L under the baseline, future and TAL scenarios. BOD also remains below the relevant standard of 5 mg/L under all three scenarios. Additional modelling undertaken by JBA demonstrates that dissolved oxygen remains above the relevant Natural England standard under the baseline, future and TAL scenarios, with negligible variation between scenarios. The change between the baseline and future scenarios is small for ammonia and BOD.
- 6.5.8 Total phosphorus exceeds the Natural England target of less than 0.1 mg/L under baseline conditions. The future scenario increases the modelled annual mean concentration from 0.2519 mg/L to 0.2541 mg/L, an increase of 0.0022 mg/L. The elevated phosphorus concentration is therefore principally an existing water quality pressure, with Local Plan growth resulting in a small additional increase.
- 6.5.9 Under the TAL scenario, improvements to wastewater treatment infrastructure reduce the modelled total phosphorus concentration to 0.1403 mg/L. Whilst this remains above the Natural England target, it represents a substantial improvement compared with both the baseline and future scenarios. The TAL improvements therefore more than offset the increase associated with Local Plan growth, such that total phosphorus concentrations at the end of the Plan period would be lower than under existing baseline conditions. This is consistent with the WCS modelling, which identifies a reduction in phosphorus under the TAL scenario at Ouse Washes.
- 6.5.10 Total phosphorus concentrations at the Ouse Washes are already substantially above the Natural England target under existing baseline conditions, reflecting existing nutrient pressures within the wider catchment, including diffuse agricultural inputs. Against this existing baseline, the Local Plan would result in only a small increase in total phosphorus. With implementation of the mitigation measures set out in **Section 6.8**, including improvements to wastewater treatment infrastructure under the TAL scenario, total phosphorus concentrations at the end of the Plan period would be lower than under existing baseline conditions, although they would remain above the Natural England target.
- 6.5.11 Taking account of these results, the Local Plan would not result in deterioration in the water quality conditions supporting Spined Loach within Ouse Washes SAC, the qualifying bird populations and supporting habitats of Ouse Washes SPA, or the ecological character of Ouse Washes Ramsar Site. It is therefore concluded that the Huntingdonshire Local Plan would not result in an adverse effect on the integrity of Ouse Washes SAC or SPA, or the ecological character of Ouse Washes Ramsar Site, through changes in water quality, either alone or in combination with other plans and projects.

6.6 Portholme SAC

Baseline

- 6.6.1 Portholme SAC is designated for Lowland Hay Meadows, characterised by Meadow Foxtail (*Alopecurus pratensis*) and Great Burnet (*Sanguisorba officinalis*). The site comprises an extensive area of traditionally managed floodplain meadow associated with the River Great Ouse and is subject to seasonal flooding.

- 6.6.2 The qualifying grassland habitat is dependent upon the maintenance of appropriate hydrological and nutrient conditions. Water quality is therefore relevant through the potential for floodwater to influence nutrient inputs to the meadow, which could affect the composition, structure and function of the qualifying vegetation.
- 6.6.3 The conservation objectives for Portholme SAC are to maintain or restore the extent, distribution, structure and function of the qualifying habitat together with the supporting natural processes upon which it relies. This includes maintaining the hydrological regime and appropriate water quality necessary to sustain the characteristic floodplain meadow vegetation and prevent deterioration of the site's ecological condition.

Appropriate Assessment

- 6.6.4 The modelling demonstrates that ammonia concentrations remain below the Natural England assessment standard of 0.6 mg/L under the baseline, future and TAL scenarios. BOD also remains below the relevant standard of 5 mg/L under all three scenarios. Additional modelling undertaken by JBA demonstrates that dissolved oxygen remains above the relevant Natural England standard under the baseline, future and TAL scenarios, with only limited variation between scenarios.
- 6.6.5 Total phosphorus is substantially above the Natural England target of 0.12 mg/L under existing baseline conditions, with a modelled concentration of 0.3303 mg/L. The future scenario increases the concentration to 0.369 mg/L. Under the TAL scenario, improvements to wastewater treatment infrastructure reduce the modelled concentration to 0.3599 mg/L. Whilst this reduces the increase associated with Local Plan growth, the resulting concentration remains above both the Natural England target and the existing baseline concentration.
- 6.6.6 Portholme SAC is designated for Lowland Hay Meadows rather than an aquatic habitat. The qualifying vegetation is influenced by river water principally during periods of flooding, when floodwater may introduce nutrients to the floodplain meadow. The modelled increase in phosphorus concentration within the River Great Ouse is unlikely to translate directly into an equivalent increase in nutrient availability within the meadow soils or vegetation. The ecological effect will depend upon the frequency, volume, duration and extent of inundation, together with nutrient retention and cycling within the floodplain meadow.
- 6.6.7 Taking account of the terrestrial nature of the qualifying habitat, the intermittent pathway through flooding, and the reduction in phosphorus concentrations achieved under the TAL scenario compared with the unmitigated future scenario, the predicted change in river-water phosphorus concentration would not result in a change in nutrient conditions sufficient to alter the composition, structure or function of the Lowland Hay Meadows qualifying habitat. Taking account of these results and the mitigation measures set out in **Section 6.8**, it is therefore concluded that the Huntingdonshire Local Plan would not result in an adverse effect on the integrity of Portholme SAC through changes in water quality, either alone or in combination with other plans and projects.

6.7 The Wash and North Norfolk Coast SAC, The Wash SPA and Ramsar

- 6.7.1 The Wash and North Norfolk Coast SAC, The Wash SPA and The Wash Ramsar Site are located a considerable distance downstream of the Huntingdonshire Local Plan area. Although hydrologically connected to the Plan area via the River Great Ouse and River Nene catchments, the considerable distance downstream, together with the associated dilution and attenuation of any changes in water quality arising from Local Plan development, substantially limits the potential for effects upon these designations. The modelling results are considered below.

Appropriate Assessment

- 6.7.2 The modelling demonstrates that ammonia and BOD remain below the relevant Natural England standards under the baseline, future and TAL scenarios. Additional modelling undertaken by JBA demonstrates that dissolved oxygen remains above the standard required to maintain High Ecological Status under all three scenarios, with negligible variation between them.
- 6.7.3 Total phosphorus exceeds the Natural England target of 0.12 mg/L under baseline conditions. Local Plan growth results in a negligible increase from 0.1506 mg/L to 0.1513 mg/L. Under the TAL scenario, improvements to wastewater treatment infrastructure reduce the modelled concentration to 0.0866 mg/L, which is below both the existing baseline concentration and the Natural England target.
- 6.7.4 Given the considerable distance downstream, the negligible change associated with Local Plan growth and the reduction in total phosphorus below both baseline conditions and the Natural England target under the TAL scenario, the Local Plan would not result in deterioration in the water quality conditions supporting these designations. Taking account of the mitigation measures set out in **Section 6.8**, it is concluded that the Huntingdonshire Local Plan would not result in an adverse effect on the integrity of The Wash and North Norfolk Coast SAC or The Wash SPA, or the ecological character of The Wash Ramsar Site, through changes in water quality, either alone or in combination with other plans and projects.

6.8 Mitigation

- 6.8.1 The Water Cycle Study identifies improvements to wastewater treatment infrastructure as necessary to ensure that growth proposed through the Huntingdonshire Local Plan can be accommodated without unacceptable deterioration in water quality. The Technically Achievable Limit (TAL) modelling demonstrates the water quality improvements that can be achieved through upgrades to relevant wastewater treatment works (**Table 6.1**). At Portholme SAC, where phosphorus concentrations remain above baseline conditions under the TAL scenario, the implications for the qualifying Lowland Hay Meadows habitat have been considered separately in the Appropriate Assessment above.

- 6.8.2 Natural England has advised that sufficient hydraulic and environmental capacity should be demonstrated before development is permitted¹⁵⁸. The phasing of development should therefore be aligned with the delivery of the necessary wastewater infrastructure. Where sufficient capacity or appropriate mitigation cannot be demonstrated, development should not proceed until the necessary measures are in place.
- 6.8.3 The Statement of Common Ground between Huntingdonshire District Council and Anglian Water confirms that the Water Cycle Study has informed Anglian Water's strategic planning and that future wastewater infrastructure requirements will be considered through its investment planning processes¹⁵⁹. Wastewater discharges will also remain subject to environmental permitting and regulation by the Environment Agency.
- 6.8.4 These measures ensure that development will be linked to the availability of sufficient wastewater treatment capacity and the delivery of the infrastructure necessary to avoid adverse effects on the integrity of hydrologically connected European sites.

6.9 Water quality conclusion

- 6.9.1 Taking account of the findings of the Water Cycle Study, the site-specific Appropriate Assessments set out above and the mitigation measures identified in **Section 6.8**, it is concluded that the Huntingdonshire Local Plan will not result in an adverse effect on the integrity of any European site, either alone or in combination with other plans and projects, as a result of changes in water quality.

¹⁵⁸ Huntingdonshire District Council and Anglian Water (2026) Statement of Common Ground Between Huntingdonshire District Council and Anglian Water. Available at: <https://huntingdonshire.gov.uk/media/lb5dchqh/statement-of-common-ground-between-hdc-and-anglian-water.pdf> [Date accessed: 19/08/26]

¹⁵⁹ Ibid.

7 Water quantity appropriate assessment

7.1 Introduction

7.1.1 As noted in **Section 3.5**, 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 a change in 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 employment development supported by the Local Plan) also has the potential to affect water balances at hydrologically sensitive European sites which are connected to the Plan area.

7.1.2 European sites which are located within an ALS area within which the Local Plan is also located have been screened in for further consideration in this AA (see **Table 3.2** for scoping outputs).

7.1.3 The following European sites have the potential to be impacted by water quantity effects as a result of the Local Plan:

- Fenland SAC
- Nene Washes SAC
- Nene Washes SPA
- Nene Washes Ramsar
- Orton Pit SAC
- Ouse Washes SAC
- Ouse Washes SPA
- Ouse Washes Ramsar
- Portholme SAC
- The Wash & North Norfolk Coast SAC
- The Wash SPA
- The Wash Ramsar
- Upper Nene Valley Gravel Pits SPA
- Upper Nene Valley Gravel Pits Ramsar
- Woodwalton Fen Ramsar

7.2 Mitigation and Appropriate Assessment

- 7.2.1 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. This is undertaken through a catchment-based approach and provides protection for European sites and ensures compliance with the WFD¹⁶⁰.
- 7.2.2 Anglian Water's 2024 WRMP¹⁶¹ identifies the potential for a water supply shortfall of 571 megalitres per day by 2050 if no action is taken, with deficits anticipated across 25 of its 27 Water Resource Zones (WRZs). The WRMP identifies measures to maintain sustainable supplies, including smart metering, leakage reduction and strategic resource options. The Anglian Water WRMP was supported by an HRA¹⁶² which recommended mitigation measures that, if implemented, should help to avoid adverse impacts upon the integrity of any European sites either alone, or in-combination.
- 7.2.3 Cambridge Water's WRMP ¹⁶³ also demonstrates the potential for a growing supply/demand deficit in the absence of effective management planning. The WRMP also places emphasis on leakage reduction, in addition to reducing household and non-household water consumption, and enforcing universal metering by 2030. The Cambridge Water WRMP was supported by an HRA¹⁶⁴ which concluded that, alone, the WRMP would have LSEs upon a number of European sites, if the recommended mitigation measures were not implemented including the Ouse Washes SAC, SPA and Ramsar, Fenland SAC and Eversden & Wimpole Woods SAC.
- 7.2.4 The Local Plan has been supported by an IWMS (Phase 2 WCS)¹⁶⁵ which provides an assessment of water resources in relation to Local Plan growth. This concludes that the growth forecast in each of the Water Resource Zones which feed the Plan area exceeds the forecast number of properties throughout the WRMP24 plan period, suggesting planned combined demand from growth is likely to be ahead of supply. Anglian Water and Cambridge Water were consulted through the preparation of the IWMS (however no reply was received from Cambridge Water).

¹⁶⁰ European Commission. Water Framework Directive. Available at: https://environment.ec.europa.eu/topics/water/water-framework-directive_en [Accessed 11.06.24].

¹⁶¹ Anglian Water (2023) Our Water Resources Management Plan 2024. Available at: <https://www.anglianwater.co.uk/siteassets/household/about-us/wrmp/revised-draft-wrmp24-main-report-v2.pdf> [Date accessed: 01/06/26]

¹⁶² Mott MacDonald (2023) Anglian Water Revised Draft Water Resource Management Plan 2024 Environmental Report Sub-Report A: Habitats Regulations Assessment (HRA). Available at: <https://www.anglianwater.co.uk/SysSiteAssets/household/about-us/wrmp/revised-draft-wrmp24-environmental-report-sub-report-a---hra.pdf> [Accessed 20/06/26].

¹⁶³ Cambridge Water (2025) Final Water Resources Management Plan 2024. Available at: <https://www.cambridge-water.co.uk/media/zadnmcfe/cam-water-resources-management-plan-2024-final.pdf> [Date accessed: 01/06/26]

¹⁶⁴ Ricardo (2023) Habitats Regulations Assessment: Draft Water Resources Management Plan 2024. Available at: <https://www.cambridge-water.co.uk/media/twqh2ovj/cambridge-water-draft-wrmp24-hra-issue-3.pdf> [Date accessed: 01/06/26]

¹⁶⁵ JBA Consulting (2026) Huntingdonshire Integrated Water Management Strategy: Stage 2 Water Cycle Study Final Report.

- 7.2.5 Anglian Water has commenced preparation of WRMP29 for the period from 2030 onwards. Local Plan growth projections, including major strategic development, will need to be reflected in future water resource planning. The IWMS identifies a need for further engagement with Cambridge Water to establish whether growth within AMP8 can be accommodated within existing plans and whether subsequent plans can be adapted to reflect Local Plan growth.
- 7.2.6 The IWMS recommends continued engagement between HDC, neighbouring authorities within the same WRZs, Anglian Water and Cambridge Water to ensure that planned growth is reflected in future water resource planning. This is particularly important where Local Plan growth is forecast to exceed the growth assumptions currently incorporated within WRMP24. The Council should therefore continue to work with the water companies, through cooperative work such as the 2026 Statement of Common Ground with Anglian Water¹⁶⁶, to align Local Plan growth with future water resource planning and infrastructure delivery.
- 7.2.7 As set out in **Section 3.5**, abstractions for water supply are managed by the EA through licences issued in line with their CAMS process.
- 7.2.8 Water supply issues will also be addressed through the higher-level water planning framework and licensing process (RBMP, WRMP, Drought Plans and CAMS). Local Plan policies to improve water efficiency (Policy LP 24 - Water Efficiency) will also ensure water supplies at European sites can be met to meet the requirements of European sites. Policy LP 24 (Water Efficiency) sets a water efficiency target of 90L per person per day.

7.3 Conclusion

- 7.3.1 To minimise strain placed upon water quantity by development coming forward through the Local Plan, there has been pursuit of both water policies, such as LP24 on water efficiency, and ongoing dialogue with water companies regarding infrastructure delivery, illustrated by outputs such as the 2026 Statement of Common Ground¹⁶⁷. It can be concluded on the basis of such policies and cooperative efforts that there will be no adverse impacts on the integrity of any European site, either alone or in-combination, due to a change in water quantity as a result of the Local Plan.

¹⁶⁶ Huntingdonshire District Council and Anglian Water (2026) Statement of Common Ground Between Huntingdonshire District Council and Anglian Water. Available at: <https://huntingdonshire.gov.uk/media/lb5dchqh/statement-of-common-ground-between-hdc-and-anglian-water.pdf> [Date accessed: 19/08/26]

¹⁶⁷ Ibid.

8 Recreational pressure appropriate assessment

8.1 Introduction

8.1.1 The following section of the AA focuses on assessing the ecological impacts of increased recreational pressures from the Local Plan upon the qualifying features of the following European sites which were screened into the HRA process (**Chapter 4**):

- Fenland SAC;
- Nene Washes SAC;
- Nene Washes SPA;
- Nene Washes Ramsar;
- Ouse Washes SAC;
- Ouse Washes SPA;
- Ouse Washes Ramsar;
- Portholme SAC;
- Upper Nene Valley Gravel Pits SPA;
- Upper Nene Valley Gravel Pits Ramsar; and
- Woodwalton Fen Ramsar.

8.1.2 Policies with the potential to have LSE recreational impacts and therefore which will be assessed in the recreational pressure AA include the following:

- LP1- How much development do we expect?
- LP2 – Our strategy for change
- LP3 – Distribution of growth
- LP6 – Market towns
- LP7 – Service centres
- LP8 – Local service villages
- LP9 - Villages
- LP10 – Hamlets and the countryside
- LP51 – Gypsies, Travellers and Travelling Showpeople

8.1.3 Development, and specifically housing growth, has the potential to increase recreational pressure at European sites. These pressures can cause the loss of, or damage to, the features for which a European site is designated¹⁶⁸. Recreational activities can lead to impacts such as:

- Habitat loss
- Habitat fragmentation
- Habitat damage through trampling and erosion

¹⁶⁸ Natural England. Public Access and Disturbance Theme Plan A strategic approach to identifying and addressing significant effects on the features of Natura 2000 sites.

- Disturbance to plants and animals from increased numbers of people undertaking a range of different open air recreational activities
- Disturbance to plants and animals from dogs
- Pollution and contamination caused by dog fouling (eutrophication)

8.1.4 **Appendix D** identifies all proposed allocations that could have a LSE arising from recreational pressure on designated sites, as they promote new housing.

8.2 Fenland SAC and Woodwalton Fen Ramsar

Baseline information

8.2.1 As noted in **Section 3.6**, Fenland SAC (where it is underpinned by Woodwalton SSSI and Woodwalton NNR)¹⁶⁹ and Woodwalton Ramsar¹⁷⁰ are located near the centre of the Plan area. The SAC is designated for its meadow and fen habitats, as well as Great Crested Newt and Spined Loach. The Ramsar is designated for Fen Violet and Fen Wood-rush, as well as numerous wetland invertebrates, aquatic beetles, flies and moths.

8.2.2 The underpinning SSSI is designated for seven features of which five are in an 'unfavourable - no change' condition (ditches, floodplain fen (lowland), lowland moor grassland and rush pasture, Fen Woodrush and vascular plant assemblage), one is 'unrecorded' (Fen Violet) and one is in a 'favourable' condition (wet woodland)¹⁷¹. The unfavourable condition status is not attributed to recreational pressure but potentially linked to water quality.

8.2.3 The conservation of meadow habitats at Fenland SAC are noted to be dependent on recreation/visitor management¹⁷². Fenland SAC and Woodwalton Fen Ramsar are both sensitive to recreational pressure due to the vulnerability of their fen, meadow and wetland habitats¹⁷³.

¹⁶⁹ Natural England (2018) European Site Conservation Objectives for Fenland SAC (UK0014782). Available at: <https://publications.naturalengland.org.uk/publication/6712672527581184> [Date accessed: 18/06/26]

¹⁷⁰ JNCC (1995) Information Sheet on Ramsar Wetlands (RIS): Woodwalton Fen. Available at: <https://jncc.gov.uk/jncc-assets/RIS/UK11078.pdf> [Date accessed: 18/06/26]

¹⁷¹ Natural England. Designated Sites View: Woodwalton Fen SSSI.

¹⁷² Natural England (2019) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features Fenland (SAC) Site Code: UK0014782.

¹⁷³ Natural England (2019) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features Fenland (SAC) Site Code: UK0014782.

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- 8.2.4 Woodwalton Fen is a large, 209ha site managed by Natural England and owned by the Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire¹⁷⁴. A site visit was undertaken in January 2026 to assess the existing baseline recreational use at the site and impacts currently taking place upon its qualifying features. The output of these site visits is summarised in **Appendix E**. These site surveys indicated that there are no official Public Rights of Way (PRoW) across the site due to private ownership, however there is public access on promoted and managed routes. Parking provision at the site is limited, with no formal car park present. However, informal parking was observed at the time of the survey along a track off Chapel Road, which could accommodate approximately 20 vehicles. Access to the site is provided via a bridge crossing the Great Raveley Drain and access to the designated sites is limited to small tracks and lanes. Extensive signage is present at the main entrance, including site information and clear notices prohibiting access for dogs, bicycles, and unauthorised vehicle within the site.
- 8.2.5 The results of the baseline recreation study walkover indicated that evidence of path erosion at the site was minimal. Access management by Natural England was evident with promoted routes being clearly signposted throughout the site. The baseline recreation study concluded that there was no evidence of recreational adverse impacts upon the qualifying features of the SAC or Ramsar at the time of the survey.
- 8.2.6 The closest residential and mixed-use allocations to the SAC and Ramsar are located in the settlements of Abbots Ripton to the south, Bury to the east, Holme to the north west and Sawtry to the west. Allocations within approximately 5km of the SAC and Ramsar are listed below and illustrated in **Appendix D, Figure D.1**. The closest of these allocations is 3.7km in Bury (Bury 3). All other allocations made in the Local Plan are considerably further away from these designated sites close to Huntingdon which is located over 8.5km to the south. Access from all Local Plan allocations to the SAC and Ramsar is limited to small tracks and lanes.
- Abbots Ripton 1: 15 residential units – approximately 5.5km to the south
 - Bury 1: 30 residential units – approximately 5.1km to the east
 - Bury 3: 170 residential units – approximately 3.7km to the east
 - Holme 1: 50 residential units – approximately 3.8km to the north west
 - Ramsey 2: 20 residential units – approximately 6.1km to the east
 - Sawtry 1: 330 residential units – approximately 6.1km to the west
 - Sawtry 2: 170 residential units – approximately 5.8km to the west
 - Sawtry 3: 330 residential units – approximately 4.8km to the west
- 8.2.7 The Local Plan contains policies which protect and secure open spaces and local greenspace for recreation as summarised below:
- Policy LP 4 – Green and Blue Infrastructure Priority Areas. This policy recognises the importance of green and blue infrastructure priority areas across Huntingdonshire as identified in the Local Nature Recovery Strategy for

¹⁷⁴ <https://www.greatfen.org.uk/woodwalton-fen>

Cambridgeshire and Peterborough¹⁷⁵ and the Huntingdonshire Nature Recovery Network Report¹⁷⁶. It also recognises the requirement for development in the Local Plan to contribute positively to the Great Fen Masterplan (see **paragraph 5.2.21**). Priority Areas identified in Policy LP 2 include the locations listed below. These locations include the Great Fen within which Fenland SAC and Woodwalton Ramsar are located. In addition, proposals at Paxton Pits will be supported by Policy LP 4 where they help to deliver the objectives of the Nature Reserve Management Plan (2017) or successor documents and/ or the objectives of the Reserve Management Strategy for the planned extension to Paxton Pits Nature Reserve (2007) or successor documents¹⁷⁷.

- Fen-edge Woodlands
- Folksworth-Elton-Ashton Wold
- Grafham-Brampton-River Kym
- Great Fen
- Great Ouse Valley
- Hail Weston-Bushmead
- Holme-Conington
- West Cambridgeshire Hundreds
- Nene Valley
- River Corridors (Kym, Alconbury Brook, Ellington Brook & Fen Rivers)
- Policy LP 12 – How will infrastructure be provided. This policy sets out requirements for new development and links to the Infrastructure Delivery Study which supports the Local Plan and sets requirements in terms of green space provision.
- Policy LP 13 – Securing infrastructure provision. This policy sets provisions for securing funding for infrastructure costs set out in the Infrastructure Delivery Study which include recreation provision and green infrastructure.
- Policy LP 19 – Green and blue infrastructure. This policy sets out the role that provision and enhancement of strategic green and blue infrastructure have in achieving the strategy and balancing built development. This policy also sets out the Council's approach to protecting and enhancing Huntingdonshire's green and blue infrastructure for the benefit of biodiversity and the environment as well as for local residents for recreation and leisure. The supporting text to this policy notes that the Local Plan is pursuing the Fields in Trust plus the National Allotment and Leisure Gardeners Society standard for open spaces.
- Policy LP 52 – Protecting our open spaces, outdoor sport and recreational facilities. This policy seeks to protect areas of open space, sports and

¹⁷⁵ Local Nature Recovery Strategy for Cambridgeshire and Peterborough <https://naturalcambridgeshire.org.uk/local-nature-recovery-strategy-for-cambridgeshire-and-peterborough-now-live/>

¹⁷⁶ The Wildlife Trust for Bedfordshire, Cambridgeshire & Northamptonshire (2024) An Interim Nature Recovery Network for Huntingdonshire. Draft report.

¹⁷⁷ <https://paxton-pits.org.uk/about-paxton-pits/habitat-management/>

recreational facilities from development that would lead to their partial or complete loss.

8.2.8 As set out in the above policy requirements (Policy LP 19) Open Space Standards have been developed by the Council based on the Fields in Trust (FIT) Standard plus the National Allotment and Leisure Gardeners Society Standard. This is a nationally recognised standard that seeks a total overall quantum of open space of 3.2ha/1,000 people and when considered alongside outdoor sport and play standard space this rises to a total of 5.35ha/1,000 people. The requirement to achieve this standard is set out in Policy LP 19. This standard provides a greater overall level of provision of accessible natural greenspace (when compared to the NE GI Framework standard of 3ha/1000) and it is supported by the Local Plan infrastructure and viability evidence base.

8.2.9 There are a number of alternative recreational options located within close proximity to site allocations within the Plan area. These include the following which provide alternative recreational destinations with a range of visitor facilities.

- Hinchingsbrook Country Park which covers 150 acres of open grasslands, mature woodland and lakes. Visitor facilities include a range of promoted routes, a café, play areas, toilets, a countryside centre and parking.
- Holt Island Nature Reserve which comprises a 2.8 ha reserve includes the remnants of the once-worked Osier beds, native tree species and beds of phragmites reed mixed with sedge. Visitors are directed across the site on a raised boardwalk with promoted routes and Holt Cabin.
- Riverside Park Huntingdon which extends over approximately 14ha and includes 2km paths along the riverbank, from the bridge over the River Great Ouse near the Old Bridge Hotel to Hartford Church. Visitor facilities include promoted walking routes, parking and a children's play area
- Grafham Water is an 800-hectare reservoir and SSSI, managed by Anglian Water, and nature reserve which offers outdoor activities like walking, cycling, sailing, and fishing and contains a nature reserve, cafes, and family-friendly play areas. Visitor facilities include a visitor centre, toilets, parking, cafes, nature trails, cycle hire and cycling routes, water sport activities, angling opportunities, play areas,
- Barford Road Pocket Park is located in Eynesbury, StNeots and covers approximately 45 acres of grassland, wildflower meadows, woodland, hedgerows, and reedbeds along the River Great Ouse. Visitor facilities include fitness and play trails and promoted routes including a board walk.
- Paxton Pits is a Local Nature Reserve (LNR) and a SSSI which is managed by Huntingdonshire District Council and The Friends of Paxton Pits. It comprises a series of lakes, meadows and woodland rich in wildlife, with guided, accessible trails. Facilities include a visitor centre including café and free parking for cars and bikes.

- 8.2.10 Taking into consideration the outputs from the results of the baseline recreation study walkover and the Local Plan policies regarding the protection and requirements for open space, and alternative areas of open space closer to Local Plan allocations, it can be concluded that there will be no adverse recreational impacts upon Fenland SAC and Woodwalton Ramsar from the Local Plan alone or in-combination.

8.3 Nene Washes SPA and Ramsar

Baseline information

- 8.3.1 The Nene Washes SPA and Ramsar designated sites are located at their closest point approximately 2km to the north of the Plan area. As noted in **Section 3.6**, the qualifying species of the Nene Washes SPA¹⁷⁸ include a number of internationally important species of birds which are reliant on the Washes seasonally flooded habitat for providing breeding and wintering habitat. The Nene Washes Ramsar is also designated for Tundra Swan and a number of breeding birds, raptors and additionally nationally scarce plants and invertebrates (**Appendix B**).
- 8.3.2 The Nene Washes SPA and Ramsar are underpinned by the Nene Washes SSSI. The SSSI is designated for 14 features of waterfowl, one of which is in an 'unfavourable – declining' condition. It is also designated for ditches ('unfavourable - recovering' condition), Lowland wet neutral grassland (MG11, MG13) ('unfavourable - no change' condition), and lowland wet neutral grassland ('unfavourable – recovering'). The unfavourable condition status of these SSSI features is not attributed to recreational pressure but is noted to be potentially linked to climate change and milder winters on the continent.
- 8.3.3 The SIP for the SPA (and SAC) does not identify recreational impacts as a threat¹⁷⁹. Natural England's conservation advice notes that: *'Although visitor numbers aren't accurately measured, human disturbance should be low due to the remoteness of the site and lack of infrastructure. It is popular with bird watchers particularly from nearby counties. Parts of the site are also used for wildfowling, angling and skating. Wildfowling causes disturbance to wintering birds until the end of January, particularly in the Low Wash and the High Wash'*¹⁸⁰. The conservation advice also notes that: *'Anglers are able to use Moreton's Leam, but aren't thought to cause a disturbance problem. Public access is along a footpath on the South Barrier Bank; it is little used and far enough away from the centre of the washes to be unlikely to cause significant disturbance.'*

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- 8.3.4 As noted in **Section 3.6**, the Nene Way long distance path runs along the northern bank of the River Nene, providing public access from Peterborough eastwards past Whittlesey to Ring's End.

¹⁷⁸ Natural England (2019) European Site Conservation Objectives for Nene Washes SPA (UK9008031). Available at: <https://publications.naturalengland.org.uk/publication/4894064390438912> [Date accessed: 18/06/26]

¹⁷⁹ Natural England (2014) Site Improvement Plan Nene Washes SAC and SPA.

¹⁸⁰ Natural England (2019) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features Nene Washes SPA Site Code: UK9008031.

- 8.3.5 A review of allocations indicates that the closest residential allocation to the SPA and Ramsar is located within the settlement of Stilton. one for eight residential units (Stilton 1) and 55 residential units on Stilton 2. These allocations are more than 8.5km to the south west of the SPA and Ramsar and are bound on all sites by residential development and the A1(M) on their eastern boundary. There are also a number of small residential allocations located in Sawtry and Ramsey (as listed in **paragraph 8.2.6**), however, all other Local Plan allocations are situated significantly further away from the SPA and Ramsar and more than 22km to the south around the town of Huntingdon.
- 8.3.6 A review of SSSI IRZ data associated with the underpinning Nene Washes SSSI indicates that no Local Plan allocation either triggers consultation with Natural England or is located within an IRZ associated with the Nene Washes SSSI.
- 8.3.7 The local plan contains a number of policies which protect and secure open spaces and local greenspace for recreation as summarised in **paragraphs 8.2.7 to 8.2.10**. In addition, as listed in **paragraph 8.2.11** there are a number of alternative recreational options located within close proximity to site allocations within the Plan area.
- 8.3.8 Taking into consideration the location of allocations in relation to the Nene Washes SPA and Nene Washes Ramsar, the Local Plan policies regarding the protection and requirements for open space and alternative areas of open space closer to Local Plan allocations, it can be concluded that there will be no adverse recreational impacts upon the Nene Washes SPA and Nene Washes Ramsar from the Local Plan either alone or in combination.

8.4 Ouse Washes SAC, SPA and Ramsar

- 8.4.1 The Ouse Washes comprise one of the most extensive areas of seasonally flooded washland in the UK. The SPA and Ramsar designations encompass two canalised main river channels of the River Great Ouse that run along each side of its length, with an extensive area of wet grassland and field drains in between¹⁸¹. The SAC designation covers the Old Bedford River Counter Drain only. These designations are linear in nature and predominantly located outside the Plan area, however they extend for approximately 1.2km into the eastern edge of the Plan area close to Earith (**Figure 3.6**).
- 8.4.2 The Ouse Washes supports a wide range of wetland habitats, including open water, ditches and wet grassland. The SAC is designated for Spined Loach (*Cobitis taenia*) and the SPA for the large assemblages of breeding and non-breeding waterbirds, including internationally important wintering populations of Swans and wildfowl. The features of the Ramsar include the internationally important bird assemblages, the extensive area of seasonally-flooded washland, relict fenland invertebrates and several nationally scarce plants, such as the Small Water Pepper (*Polygonum minus*).

¹⁸¹ Natural England (2019) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features, Ouse Washes (SPA) Site Code: UK9008041. Available at: <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK9008041.pdf> [Date accessed: 05/02/26].

- 8.4.3 The Ouse Washes SAC, SPA and Ramsar are underpinned by the Ouse Washes SSSI. This SSSI is designated for 21 bird features (both breeding and non-breeding) eight of which are in an 'unfavourable – no change' condition. It is also designated for ditches ('unfavourable - recovering' condition), lowland wet neutral grassland (MG11, MG13) ('unfavourable - no change' condition), and a vascular plant assemblage. The unfavourable condition status of these features is not noted on NE's designated site viewer to be attributed to recreational pressure.
- 8.4.4 The SIP for the SPA and SAC does not identify recreational impacts as a threat¹⁸². The conservation advice for the SPA however notes that: *'The nature, scale, timing and duration of some human activities can result in the disturbance of birds at a level which may significantly affect their behaviour, and consequently impact on the long-term viability of their populations. The location of birds will depend on the flood conditions, with swans preferring deeper water for roosting. The section closest to Earith tends to be least preferred, probably because of disturbance by walkers and dogs on footpaths along the flood banks. There are footpaths along the barrier banks. In general these are quiet because of the location of the site and difficult access, but there is significant disturbance immediately north of Earith, particularly from dog walkers. Numbers of visitors to the RSPB reserve at Manea are small and are unlikely to result in disturbance. Numbers of visitors to the WWT reserve at Welney are larger but access is restricted and disturbance is also unlikely there.'*¹⁸³. Whilst recreation is not identified in the conservation advice for the SAC as a threat to its qualifying feature (Spined Loach), in their Regulation 18 consultation response, NE raised the potential adverse impacts associated with activities such as angling on Spined Loach populations and requested consideration of this in the AA.
- 8.4.5 It is noted that qualifying bird species associated with the Ouse Washes SPA and Ramsar may also use functionally linked land within the wider area, outside the designation boundaries. Functionally linked bird habitat associated with the SPA and Ramsar is likely to primarily consists of surrounding arable farmlands and pasturelands that host non-breeding wildfowl and waders. These off-site habitats serve as critical complementary areas for daytime foraging and nighttime roosting, particularly when the main washland is deep underwater. In addition to these areas, functionally linked habitat may include the interconnecting drainage ditch network that is located beyond the designations. Qualifying species of birds located within areas of functionally linked land may also be vulnerable to recreational impacts. NE's SSSI IRZs around these designations include the area immediately surrounding the Nene Washes SPA and Ramsar and the Ouse Washes SPA and Ramsar and extending up to several kilometers into the wider Cambridgeshire and Fens landscape and encompassing adjacent SSSI designations (such as Berry Fen SSSI) and RSPB reserves such as the Ouse Fen reserve, these areas are frequently referred to as "Goose and Swan Functional Land" IRZ.

¹⁸² Natural England (2014) Site Improvement Plan Nene Washes SAC and SPA.

¹⁸³ Natural England (2019) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features, Ouse Washes (SPA) Site Code: UK9008041. Available at: <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK9008041.pdf> [Date accessed: 05/02/26].

- 8.4.6 A strategic approach to mitigation was set out in the Norfolk Green Infrastructure and Recreational Impact Avoidance and Mitigation Strategy ('GIRAMS')¹⁸⁴ for a number of European sites located in Norfolk including the Ouse Washes SAC, SPA and Ramsar designations. This Strategy built on visitor survey results¹⁸⁵ to establish mitigation approaches. The current GIRAMS strategy has been in place since 2020 in Norfolk. In 2024 the GIRAMS strategy was revisited to reflect changes in public access and recreation patterns following COVID and also a study of the North Norfolk Coast and the Wash¹⁸⁶ which identified a new direction for visitor management and highlighted the need to reduce visitor numbers in a strategic way. The Norfolk Recreational Impact Avoidance and Mitigation Action Plan was prepared in 2024¹⁸⁷. This covers a number of European sites within Norfolk which have a varying levels of accessibility.
- 8.4.7 The Norfolk Action Plan includes the Ouse Washes SPA, SAC and Ramsar designations. However, due to a lack of visitor survey data, the Action Plan notes that there is uncertainty around the scale of any ZoI associated with these designations. A preliminary ZoI of 7km is noted in the Action Plan for the Ouse Washes. The Action Plan sets out measures, with associated approximate costs, that provide a package of mitigation for all the European sites, including the Ouse Washes. For the Ouse Washes mitigation measures comprise monitoring surveys for detection/spread of invasive species (e.g. Floating Pennywort) and a watching brief on recreation use. The combined costs attributed to this package sets a suitable per dwelling tariff that can be applied across Norfolk in order to fund the mitigation for cumulative and in-combination recreational impacts from housing growth in Norfolk. It is noted that no costs are included for the Ouse Washes in the Action Plan.
- 8.4.8 The Action Plan notes that mitigation will also need to include measures away from the European sites. These largely comprise measures that relate to providing alternative recreation provision, typically referred to as Suitable Alternative Natural Greenspace (SANG) and whilst these are part of the overall 2020 GIRAMS approach they were outside the scope of the Norfolk Action Plan.

Appropriate Assessment

- 8.4.9 The Ouse Washes is large linear site approximately 330ha in area and 30km in length with multiple landowners, including areas managed by the Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire, the Royal Society for the Protection of Birds (RSPB), and the Wildfowl & Wetlands Trust. A number of towns and villages surround the site. Of note is the town of Earith in the south, as this is the only town local to the Ouse Washes which is located within the Huntingdonshire Plan area. Recreational access from this town is noted in NE's SIP for the SPA (**paragraph 8.4.4**). Much of the designated site is surrounded by open agricultural fields.

¹⁸⁴ Hooton, S. and Mills, R. (2020) Norfolk Green Infrastructure and Recreational Impact Avoidance and Mitigation Strategy. Report by Place Services for Norfolk Strategic Planning Framework.

¹⁸⁵ Panter, C., Liley, D. and Lowen, S. (2017) Visitor surveys at European Protected Sites across Norfolk in 2015 and 2016. Unpublished report by Footprint Ecology for Norfolk County Council.

¹⁸⁶ Liley, D. et al. (2022) The Wash and North Norfolk Coast Limits of Acceptable Change Study. 682. Footprint Ecology / Norfolk County Council.

¹⁸⁷ Liley, D., Saunders, P., Bishop, R., Rush, E. & Panter, C. (2024) Norfolk Recreational Impact Avoidance and Mitigation Strategy Action Plan. Report by Footprint Ecology.

- 8.4.10 As set out in the Baseline Study of Recreational Use and Impact (**Appendix E**), the southern extent of the site, at Earith, provides formalised public access in the form of two car parks: a small car park at Earith Sluice on the River Delph, which can accommodate approximately five vehicles, and a second car park to the east at the Earith Bridge Picnic Area, which can accommodate approximately 20 vehicles.
- 8.4.11 At Earith, PRoWs are located on the raised banks of both river channels enclosing the Ouse Washes, with one well signposted PRoW running along the eastern boundary of the site adjacent to the River Delph. This route is clearly signed, with kissing gates at access points, and showed a significant level of use, including footprints and dog fouling. This footpath is separated from the Ouse Washes by a hedgerow and tree line, providing a physical and visual buffer that reduces potential disturbance from recreational users to birds using the central section.
- 8.4.12 Stretches of PRoW which are accessible from the A1123 are similarly screened from the Ouse Washes by hedgerow, scrub, and trees; however, this screening is not however continuous along the full length of the road where it borders the site, leaving some areas more exposed. The bridge at the Earith Sluice and the Earith Bridge, crossing the River Delph and the New Bedford River respectively, provides no screening.
- 8.4.13 PRoW which are accessible along the B1381, which runs parallel to the New Bedford River on the eastern side of the site, are screened by a low scrub barrier from the designations. A further PRoW along the eastern side of the site, beginning at the Earith Bridge Picnic Area, appears to have been historically well used. Although access was blocked at the time of the site walkover, there was evidence of continued informal use. Whilst no formal access exists onto the washlands, vehicular gates for land management purposes are present, with signs of limited unofficial recreational access beyond these points.
- 8.4.14 Parking was noted to be informal and recreational access more limited in other areas of the designations moving in a north easterly direction away from Earith. With intermittent vegetation in places screening PRoW from the designated sites.
- 8.4.15 On the whole, walkovers undertaken as part of the Baseline Study (**Appendix E**) indicate that public access and recreational use to the Ouse washlands is limited, with most of the PRoWs being located along the boundaries of the designated site, running along the banks of the River Delph and the New Bedford River. These river banks are raised along the length of the designated site.

- 8.4.16 The Baseline Study (**Appendix E**) concluded that recreational pressure at the Ouse Washes is generally low and largely constrained to PRoWs, with very limited evidence of access into the washlands that support the SPA and Ramsar bird assemblages. The linear nature of the site means that most recreational use occurs along riverbanks and site boundaries, where PRoWs, roads and access points are located, rather than within the core washland itself. Hedgerows, tree lines, embankments and topography provide visual and physical screening between recreational routes and the washlands, reducing the potential for disturbance to birds. However, this screening is not continuous, and there are localised sections where views across the Ouse Washes are unobstructed and disturbance from the presence of people and dogs could occur. Flooding at the time of survey limited the assessment of unofficial access onto the Washes, though this flooding is likely to act as a natural deterrent for much of the year. Overall, while recreational use is evident and locally concentrated, its effects appear spatially limited, with the majority of the Ouse Washes remaining relatively undisturbed.
- 8.4.17 Angling activity was noted to be present along parts of the site, although none was observed during the visit. Fishing rights for the Ouse Washes and the wider River Great Ouse are leased to local angling clubs and preservation societies. In order to fish, membership must be obtained or a valid day ticket purchased. Spined Loaches are a small bottom dwelling species which is rarely directly affected by angling because they are of no commercial or angling interest. They are tiny bottom-dwellers with very small mouths which makes them difficult to catch on a standard rod and line. In addition, given they are a legally protected species listed in the Habitats Directive, deliberately targeting the Spined Loach requires a special licence. Indirect impacts associated with angling may include predation by large coarse fish stocks, trampling of bankside vegetation and submerged water plants by anglers and disturbance of sediments¹⁸⁸. Fishing and coarse fish stocks on the Ouse Washes are managed through a dual structure divided between statutory government regulation and local angling club enforcement. Local angling groups enforce strict club rules to prevent fishermen from accidentally harming the Spined Loach or disrupting their ecosystem in terms of areas of access and fishing timings. This is likely to provide mitigation for indirect angling impacts upon Spined Loach populations.
- 8.4.18 A review of allocations indicates that the closest residential allocation to the SAC, SPA and Ramsar are located within the settlements of Bluntisham, Colne, Somersham and Needlingworth as listed below. Other Local Plan allocations are located more than 7km¹⁸⁹ from these designations to the west and south beyond St Ives.
- Bluntisham 1: 35 residential units located approximately 1.5km to the west
 - Bluntisham 2: 85 residential units located approximately 1.9km to the west
 - Colne 1: 15 residential units located approximately 1.4km to the north west
 - Needlingworth 1: 1750 residential units located approximately 6km to the west
 - Needlingworth 2: 100 residential units located approximately 4.7km to the west

¹⁸⁸ English Nature (1998) The habitat and management requirements of spined loach *Cobitis taenia* No. 244 - English Nature Research Reports.

¹⁸⁹ 7km reflects the ZoI for the Ouse Washes as provided in the Norfolk Action Plan – see **paragraph 8.4.7**

- Somersham 1: 120 residential units located approximately 4.3km to the north west
- Somersham 2: 50 residential units located approximately 3.5km to the north west
- Somersham 3: 45 residential units located approximately 4.6km to the north west

8.4.19 The above allocations are located either directly adjacent to or in close proximity to FLL associated with the SPA and Ramsar; potential Goose and Swan Functional Land SSSI IRZ (**paragraph 8.4.6**). A review of SSSI IRZ data flags up rural residential development of more than 10 units in Colne and Bluntisham, and of more than 50 units in Somersham and Needlingworth, outside existing settlements/urban areas as requiring consultation with NE.

8.4.20 The local plan contains a number of policies which protect and secure open spaces and local greenspace for recreation as summarised in **paragraphs 8.2.7 to 8.2.10**. Priority Areas identified in Policy LP 4 include the Great Ouse Valley and River Corridors. Site allocation policy wording for Bluntisham 1 and Bluntisham 2 notes that development must include provision of amenity and open space to mitigate recreational impacts on nearby nature sites. Policy wording for Needlingworth 1 will include approximately 65.5ha of green infrastructure, sustainable drainage and flood mitigation use. In addition, as listed in **paragraph 8.2.9** there are a number of alternative recreational options located within close proximity to site allocations within the Plan area.

8.4.21 Taking into consideration the location of allocations in relation to the SPA and Ramsar, local angling group codes of conduct and rules in place to protect the Spined Loach, Local Plan policies regarding the protection and requirements for open space and alternative areas of open space closer to Local Plan allocations, it can be concluded that there will be no adverse recreational impacts upon the Ouse Washes SPA and Ouse Washes Ramsar from the Local Plan alone or in-combination.

8.5 Portholme SAC

8.5.1 Portholme SAC is one of the largest remaining examples of traditionally managed lowland hay meadow in England and is designated for its species-rich grassland habitat, specifically *H6510 Lowland hay meadows* (Annex I habitat, EU Habitats Directive). The site supports characteristic plant communities associated with periodically flooded meadows along the River Ouse. Conservation objectives seek to maintain or restore the extent, distribution, structure and function of the qualifying habitat, including its typical species, and to protect the natural processes, particularly appropriate flooding and management regimes, that sustain its ecological value. Portholme SAC is underpinned by Portholme SSSI. The neutral lowland grassland feature is assessed as being in an 'unfavourable - recovering' condition.

8.5.2 The grasslands for which Portholme SAC is designated may be impacted by recreational impacts due to its location within the Plan area, the sensitivity of its lowland hay meadow habitat, and the availability of public access. These pressures may include trampling, soil compaction, erosion, disturbance to grazing management, nutrient enrichment from dog fouling and the spread of invasive species, such as trampling by walkers and dog walkers which can damage vegetation and soils.

- 8.5.3 The SIP for Portholme SAC does not identify recreational impacts as a threat¹⁹⁰. The conservation advice for the SAC notes that management of visitor access is likely to be a conservation measure for the site but does not identify threats associated with current levels of access¹⁹¹.

Appropriate Assessment

- 8.5.4 Portholme SAC is a large, 90ha open field of floodplain hay meadow bordered on two sides by the River Great Ouse and mostly owned by the London Angling Society, with a small 4 acre portion in the south west owned by The Thomas Miller Charity¹⁹². Huntingdon is located to the north of Portholme SAC, with Godmanchester to the east and agricultural fields to the south.
- 8.5.5 As set out in the Baseline Study of Recreational Use and Impact (**Appendix E**) the entirety of the site is open access, with three PRoWs, including the Ouse Valley Way, forming a triangle across the site with further unofficial routes leading across the centre of the site.
- 8.5.6 The central area of the site was inundated at the time of the baseline site survey which meant it was not possible to follow the PRoW across the site and made it difficult to see evidence of recreational impacts in that area.
- 8.5.7 Access to the site is provided via three main access points. The primary access point is located on the eastern side of the site from Godmanchester. Two car parks serve this access: Post Street Car Park, which provides 29 marked parking spaces, including two disabled bays, with free parking available for up to 23 hours, and a smaller car park adjacent to Queen Elizabeth School and Colman Creative Academy on Post Street, which can accommodate approximately 15 vehicles and includes a public toilet. Both car parks provide access to Queen's Walk, a paved public footpath that runs along the River Great Ouse and includes benches, numerous litter and dog waste bins, and areas of open green recreational space and play provision. Queen's Walk is well signed and includes portage points along the River Great Ouse, with clear directional signage leading users towards a pedestrian crossing over Godmanchester Lock. Beyond this point, access to Portholme SAC is facilitated via a kissing gate.
- 8.5.8 A second access point is located to the north of the SAC, off Mill Common in Huntingdon. An unofficial car park is present at this location and was observed to be in heavy use during the site visit, with capacity for approximately 15 vehicles. Footpath signage directs users towards the PRoW network across Portholme SAC, and access is provided via a bridge crossing the River Great Ouse, followed by a kissing gate and with information signage provided at the site entrance.

¹⁹⁰ Natural England (2014) Site Improvement Plan Portholme SAC.

¹⁹¹ Natural England (2019) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features Portholme Special Area of Conservation (SAC) Site Code: UK0030054.

¹⁹² <https://www.brampton-cambs-pc.gov.uk/uploads/portholme-meadows-summary.pdf>

- 8.5.9 The third access point is located to the west of the SAC and is accessible on foot only, linking Portholme to the Ouse Valley Way walking route. This access point was flooded at the time of the site survey, and was therefore not fully assessed past the kissing gate onto the SAC itself. This path also connects to a PRoW running north adjacent to the SAC, however, due to the flooded access, this footpath was not walked.
- 8.5.10 Information boards outlining the importance and history of the Portholme SAC are present at each of the main access points. Outside of these formal access locations, no additional recreation site management measures were evident across Portholme.
- 8.5.11 The Baseline Survey concludes that whilst a network of PRoWs and informal routes are present across the SAC, evidence of path erosion was minimal and largely confined to the perimeter of the site at the time of the survey. Signs of path use displayed in the form of minor trampled vegetation but little to no erosion was evident. This is likely attributed to the open access nature of the site which allows multiple routes to be taken and therefore no specific paths becoming significantly eroded. In addition, seasonal flooding and inundation of the central areas of Portholme SAC appeared to limit recreational access across much of the site interior. Although dog walking was common and dogs were observed off lead, dog fouling was infrequently observed, and no evidence of littering was recorded. The baseline study concluded that whilst recreational activity at Portholme SAC was evident, it did not appear to be resulting in significant adverse effects on the qualifying hay meadow habitat at the time of survey.
- 8.5.12 A review of allocations indicates that there are a number of allocations within close proximity to the SAC in Huntingdon and Godmanchester as set out below. The majority of allocations are separated from the SAC by major routes connecting Huntingdon including the A1307, B1043 and B1514.
- Brampton 1: 10 residential units located approximately 2.6km to the north west
 - Brampton 2: Open space and car parking facilities
 - Godmanchester 1: 85 residential units located approximately 250m to the north
 - Godmanchester 2: 550 residential units located approximately 875m to the south east
 - Hemingford Abbots 1: 3,800 residential units located approximately 2.5km to the south east
 - Huntingdon 2: 12 residential units located approximately 1.4km to the north east
 - North Huntingdon 3: 4,900 residential units located approximately 2.6km to the north east
- 8.5.13 The Local Plan contains a number of policies which protect and secure open spaces and local greenspace for recreation as summarised in **paragraphs 8.2.7 to 8.2.10**. Site allocation policy wording for Brampton 1 requires provision of 0.4ha of open space. Brampton 2 adjoins and is located south of Hinchingbrooke Country Park County Wildlife Site and policy wording includes requirements to enhance opportunities in relation to green infrastructure and nature conservation sites through enhanced biodiversity net gain and natural and open space as well as providing infrastructure such as car parking to enable the enjoyment of the park.

- 8.5.14 Policy wording for Godmanchester 1 requires the provision of amenity and open space for users to mitigate the recreational impacts on nearby nature sites. Policy wording for Godmanchester 2 requires development to provide at least 0.8ha of land for an extension to Godmanchester Lawn Cemetery on land immediately adjoining the existing cemetery and green infrastructure to include a mixture of strategic green space, amenity open space, play space, accessible natural green space and flood mitigation. In the north western part of the Godmanchester 2 site, in the area comprising all land around Stoneyhill Brook and bordering Silver Street, policy wording requires the provision of natural green space or biodiversity net gain totalling a minimum of 6.8ha.
- 8.5.15 Policy wording for Hemingford Abbots 1 requires the provision of green infrastructure appropriate to the scale of development to include a mixture of strategic green space, accessible natural green space, amenity green space, flood mitigation areas, and land for biodiversity net gain including about 26ha to be established as a country park.
- 8.5.16 Policy wording for North Huntingdon 3 requires strategic green infrastructure, public open space uses, biodiversity net gain and other planting appropriate to the scale of development. In addition, and as listed in **paragraph 8.2.9** there are a number of alternative recreational options located within close proximity to site allocations within the Plan area.
- 8.5.17 Taking into consideration the location of allocations in relation to the SAC, the Local Plan policies regarding the protection and requirements for open space and alternative areas of open space closer to Local Plan allocations, it can be concluded that there will be no adverse recreational impacts upon Portholme SAC from the Local Plan alone or in combination.

8.6 Upper Nene Valley Gravel Pits SPA and Ramsar

Baseline information

- 8.6.1 As noted in **Section 3.6**, the Upper Nene Valley Gravel Pits SPA¹⁹³ and Ramsar¹⁹⁴ comprise a series of disused sand and gravel pits along the River Nene valley which provide valuable nesting and feeding conditions for major inland concentrations of wintering water birds. These bird species are sensitive to recreation disturbance. A bird disturbance survey and visitor survey commissioned by North Northamptonshire Council, West Northamptonshire Council and Bedford Borough Council indicates that recreational impacts have the potential to take place within a 5.9km Zol of the SPA. A 5.9km radius from the SPA coincides with the western section of the Plan area.

¹⁹³ Natural England (2019) European Site Conservation Objectives for Upper Nene Valley Gravel Pits SPA (UK9020296). Available at: <https://publications.naturalengland.org.uk/publication/5495529882517504> [Date accessed: 18/06/26]

¹⁹⁴ JNCC (2011) Information Sheet on Ramsar Wetlands (RIS): Upper Nene Valley Gravel Pits. Available at: <https://jncc.gov.uk/jncc-assets/RIS/UK11083.pdf> [Date accessed: 18/06/26]

- 8.6.2 North Northamptonshire Council and West Northamptonshire Council produced the Upper Nene Valley Gravel Pits Special Protection Area Technical Guidance and Mitigation Strategy in 2026 which replaces previous guidance in relation to the SPA¹⁹⁵. This document is non-statutory guidance but sets out how the Upper Nene Valley Gravel Pits SPA should be considered and is intended to be a material consideration in the determination of planning applications and to assist the Councils in discharging their duties as competent authorities under the Conservation of Habitats and Species Regulations 2017 (as amended).
- 8.6.3 This guidance notes that new residential units and overnight accommodation within this 5.9km Zol (**Figure 8.1**) will be required to mitigate in-combination effects of the development through contributions to a series of SPA Strategic Access Management and Monitoring (SAMM) Strategy measures designed to mitigate recreational impacts of development upon the SPA. Where development is considered likely to have an ‘alone’ effect on the SPA due to its size, location and availability (or lack thereof) of surrounding semi-natural greenspace, the guidance requires that Suitable Alternative Natural Greenspace (SANG) may also be required to provide an alternative recreation space for new residents, or an alternative package of SANG-like mitigation agreed with Natural England and the planning authority where it can be demonstrated that the alternative mitigation solution is sufficient. The guidance notes that developments of approximately 500 dwellings and greater should consider the possibility of ‘alone’ effects: applicants for these large proposals are advised to contact Natural England through its Discretionary Advice Service as early as possible.
- 8.6.4 It is however possible that windfall may come forward in areas of Huntingdonshire that lie within the 5.9km Zol. The supporting text for Policy LP 52 notes the requirement for new development within the 5.9km Zol to consider recreational impacts upon the SPA and Ramsar in compliance with the North Northamptonshire Council and West Northamptonshire Council Upper Nene Valley Gravel Pits Special Protection Area Technical Guidance and Mitigation Strategy¹⁹⁶.
- 8.6.5 A review of local plan allocations indicates that there are no allocations with the 5.9km Zone of Influence.

¹⁹⁵ North Northamptonshire Council and West Northamptonshire Council (2026) Upper Nene Valley Gravel Pits Special Protection Area Technical Guidance and Mitigation Strategy. Available at: <https://www.northnorthants.gov.uk/planning-strategies-and-plans/upper-nene-valley-gravel-pits-special-protection-area> [Date Accessed: 17/06/26].

¹⁹⁶ North Northamptonshire Council and West Northamptonshire Council (2026) Upper Nene Valley Gravel Pits Special Protection Area Technical Guidance and Mitigation Strategy. Available at: <https://www.northnorthants.gov.uk/planning-strategies-and-plans/upper-nene-valley-gravel-pits-special-protection-area> [Date Accessed: 17/06/26].

8.7 Recreation effects conclusion

- 8.7.1 The Appropriate Assessment has considered the potential for recreational pressure associated with growth proposed through the Local Plan to affect European sites. Taking account of the location and scale of proposed growth, the available visitor evidence, relevant Local Plan policy provisions and the strategic mitigation measures identified within the Cambridgeshire and Peterborough Recreational Mitigation Strategy, it can be concluded that the Local Plan will not result in an adverse effect on the integrity of any European site through recreational pressure, either alone or in-combination with other plans and projects.
- 8.7.2 Compliance with mitigation policy wording set out in LP 52 (and the Upper Nene Valley Gravel Pits Special Protection Area Technical Guidance and Mitigation Strategy) will ensure no adverse impacts upon the SPA or Ramsar due to increased recreational pressure from the Local Plan either alone or in-combination with other plans and projects.

9 Urbanisation effects appropriate assessment

9.1 Introduction

- 9.1.1 This AA focuses on assessing the ecological in-combination urbanisation effects from development set out in the Local Plan upon the following European sites and associated areas of functionally linked land (FLL).
- Eversden & Wimpole Woods SAC
 - Nene Washes SPA and Ramsar
 - Ouse Washes SPA and Ramsar
 - Upper Nene Valley Gravel Pits SPA and Ramsar
- 9.1.2 The HRA screening process (**Chapter 4**) concluded that the several policies have the potential to result in LSEs on this SPA and Ramsar as a result of urbanisation effects on areas of FLL.
- 9.1.3 In addition, a number of allocations were also screened in including:
- Godmanchester 1: Former RGE Engineering site and HDC Car Park, The Avenue
 - Somersham 2: Dews Bus and Coach Depot, Chatteris Road
 - Bluntisham 1: Land off 18 Holliday's Road
 - Great Gransden 1: South of Caxton Road
 - Houghton and Wyton 1: Ruddles Lane
 - Bythorn 1: Home Farm, Bythorn
 - Waresley 1: Land between West Lodge and Home Farm

- 9.1.4 As noted in **Section 3.7**, urbanisation effects may include the direct loss / damage to European themselves and areas of associated FLL, construction and operation related noise pollution, light pollution, vibration, visual disturbance, dumping of waste, predation from domestic pets, vandalism, spread of invasive plant species and encroachments from properties among other impacts.
- 9.1.5 Species such as bats are particularly sensitive to noise disturbance and artificial sources of light pollution, which can disrupt bat echolocation. Bird species are also vulnerable to disturbance from noise, vibration, lighting and visual impacts. An increase in these sources of disturbance has the potential to cause birds to fly away, resulting in energy expenditure and abandonment of feeding or resting places.
- 9.1.6 In addition to direct impacts upon areas of FLL, urbanisation also has the potential to cause the fragmentation of connecting habitat (such as hedgerows and water features) between designated sites and other areas of FLL. Fragmentation can lead to the isolation of habitat and an increase in urban edge effects. Habitat loss, including that of FLL, can lead directly to the mortality of qualifying species, whereby a minimum amount of habitat is required to thrive and survive. Habitat size is also directly linked to species diversity. In other instances, the continued survival of displaced species relies on their capacity to find new suitable habitats. FLL, including ecological corridors, is crucial to supporting qualifying species and preventing the fragmentation of habitats.
- 9.1.7 The tests set out under the Habitats Regulations need to be applied in respect of plans which may significantly affect FLL that plays an important role in contributing to the favourable conservation status of the relevant species for which a European site is designated.
- 9.1.8 Both direct and indirect impacts upon species may include the following:
- Physical loss of habitats both within a designation boundary and at areas of FLL
 - Habitat fragmentation through loss of habitat or visual barriers to movement
 - Increased disturbance from human activity e.g. noise, lighting, visual disturbance etc
 - Direct mortality e.g. collision with structures

- 9.1.9 In addition to being sensitive to urban development, species such as bats and birds are also vulnerable to impacts arising from renewable energy development. Such projects can result in direct mortality, as well as the fragmentation of key commuting and foraging routes, thereby affecting how species use and navigate the landscape. For instance, there is emerging evidence that solar farms may negatively affect bats. Studies indicate that solar installations can alter the quality of foraging habitats, thereby reducing prey availability and disrupting normal hunting behaviour^{197,198,199}. Furthermore, the physical layout of solar arrays may contribute to habitat fragmentation, further impeding bat movement across the landscape. NE has commissioned a body of research into the ecological effects of solar farms, in particular on birds²⁰⁰. This literature review notes that the polarising effect of solar panels has the potential to induce drinking behaviour in some bird taxa, where the birds mistake the panels for water. It also highlights potential collision risks to birds from the infrastructure associated with solar farms. Both NE (through their SSSI IRZs) and the RSPB flag up potential issues associated with development of solar farms in sensitive locations but support renewable energy where located on sites which are not important for wildlife²⁰¹.

9.2 Eversden & Wimpole Woods SAC

Baseline information

- 9.2.1 Eversden & Wimpole Woods SAC consists of an ancient coppice woodland (Eversden Wood) and high forest woodland (Wimpole Wood) set within a landscape which includes copses, green lanes, ancient woodland and parkland. A colony of barbastelle bats, *Barbastella barbastellus*, is associated with this site and is the sole reason for the SAC designation on Eversden and Wimpole Woods. The evidence suggests that trees in Wimpole Wood are used as a summer maternity roost. The bats also use the whole site as a foraging area. Some of the woodland is also used as a flight path when bats forage outside the site²⁰².

¹⁹⁷ Barré, K., Baudouin, A., Froidevaux, J. S. P., Chartendrault, V. and Keribiriou, C. (2023) Insectivorous bats alter their flight and feeding behaviour at ground-mounted solar farms. *Journal of Applied Ecology*. 61(2). Available online: <https://besjournals.onlinelibrary.wiley.com/doi/10.1111/1365-2664.14555>.

¹⁹⁸ Tinsley, E., Froidevaux, J. S. P., Zsebők, S., Szabadi, K. L. and Jones, G. (2023) Renewable energies and biodiversity: Impact of ground-mounted solar photovoltaic sites on bat activity. *Journal of Applied Ecology*. 60(9). Available online: <https://besjournals.onlinelibrary.wiley.com/doi/10.1111/1365-2664.14474>.

¹⁹⁹ Bat Conservation Trust. Climate change mitigation position statement, Renewable energy. Available at: <https://www.bats.org.uk/our-work/biodiversity-policy-advocacy/position-statements-1/climate-change-mitigation-position-statement> [Date accessed: 01/08/25]

²⁰⁰ Natural England (2017) Evidence review of the impact of solar farms on birds, bats and general ecology (NEER 012). Available at: <http://publications.naturalengland.org.uk/publication/6384664523046912> [Date Accessed: 30/06/25].

²⁰¹ RSPB (2024) Solar Power Briefing Note. Available at: <https://www.rspb.org.uk/helping-nature/what-we-do/influence-government-and-business/nature-and-climate-emergency/solar-energy> [Date Accessed: 30/06/25].

²⁰² Natural England (2018) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features Eversden and Wimpole Woods SAC Site Code: UK0030331.

- 9.2.2 Barbastelle bats forage over a wide area, with a typical nightly foraging radius of 7km depending on habitat suitability in the wider area. They are fast, agile flyers and specialist foragers in a range of habitats beyond the woodland and into the wider countryside including more open habitats such as wood pasture, parklands, wetlands and herb-rich meadows. Bats also typically forage and commute along linear features, such as hedgerows, rivers and woodland edges. They consume mainly small moths, but also flies and beetles²⁰³. This wider area of habitat is often defined by The Bat Conservation Trust as the “Core Sustenance Zones” (CSZ) which refers to the area surrounding a communal bat roost within which habitat availability and quality will have a significant influence on the resilience and conservation.
- 9.2.3 The conservation advice for the SAC in relation to supporting off-site habitat including flight lines and foraging areas notes the requirement to ‘*Maintain the presence, structure and quality of any linear landscape features which function as flight-lines between the SAC and surrounding foraging areas used by Barbastelles and maintain core areas of feeding habitat outside of the SAC boundary that are critical to Barbastelle bats during their breeding period*’.
- 9.2.4 As noted in **paragraph 3.6.7**, a draft protocol has been prepared by the Greater Cambridgeshire Shared Planning Service to facilitate sustainable development and secure a diverse and healthy landscape for bats, people and other wildlife. This is contained in the Greater Cambridgeshire Shared Planning Biodiversity SPD at Biodiversity Issue B9 – Eversden and Wimpole Woods Special Area of Conservation Bat Protocol). The protocol identifies a key conservation area around the SAC of 5km and a 10km sustenance or wider conservation area which is reflected in NE’s SSSI IRZs (**Figure 9.1**). All new development within this CSZ has the potential to have an adverse impact upon the qualifying features of the SAC when located outside the designation and using areas of FLL.

²⁰³ Buglife in partnership with Plantlife and the Bat Conservation Trust. Back from the Brink. Species Information Guide. Barbastelle *Barbastella barbastellus*

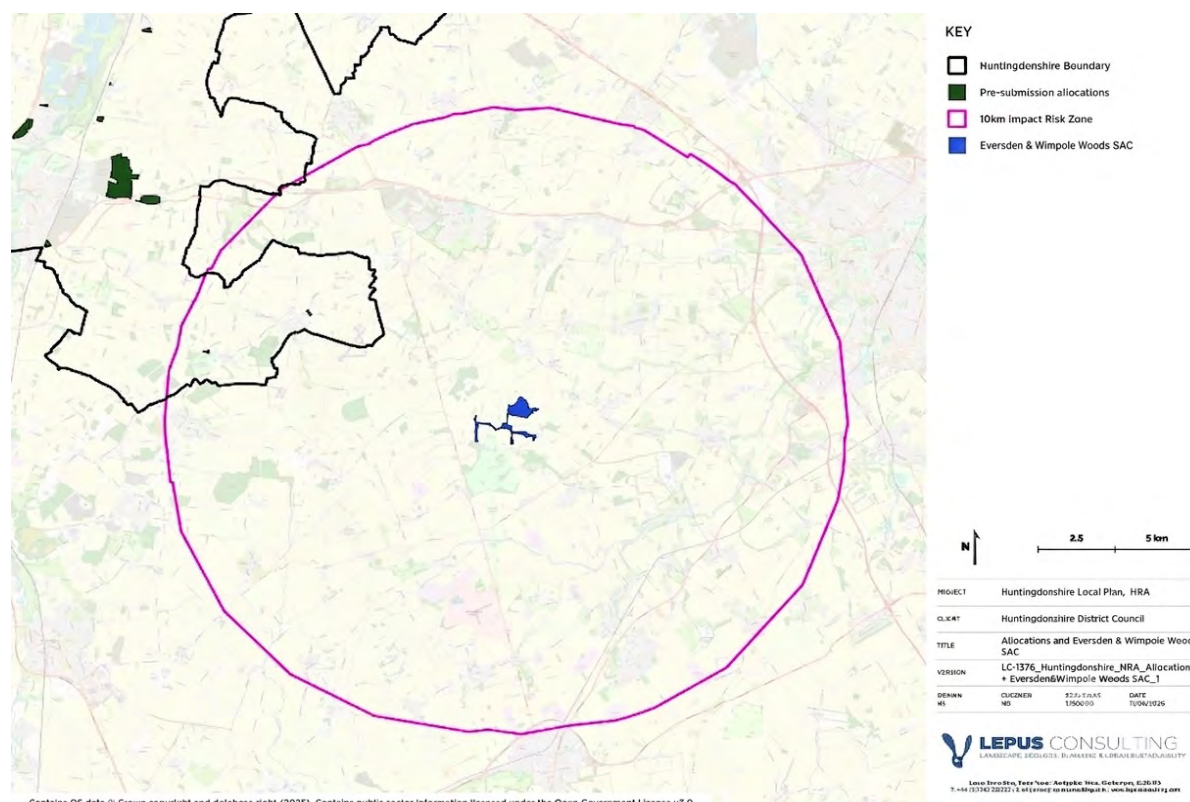


Figure 9.1: Allocations within 10km of Eversden and Wimpole Woods SAC Appropriate Assessment

9.2.5 No allocations are located within the 5km key conservation area for the SAC. Two allocations are however located within the 10km sustenance or wider conservation area associated with Eversden and Wimpole Woods SAC as listed below and illustrated on **Figure 9.1**. Both sites comprise an area of grassland with tree boundaries.

- Waresley 1: Land between the West Lodge and Home Farm, Wareley – allocated for 8 residential units; and
- Great Gransden 1: South of Caxton Road – allocated for commercial development.

9.2.6 There is also potential for windfall development located within 5km and 10km of the SAC to have an adverse impact on site integrity.

- 9.2.7 In their Regulation 18 response, NE recommended that development at these allocations should avoid impacting potentially FLL (e.g. trees, hedgerows, watercourses, wet grassland) which may be used by foraging, roosting or commuting bats (particularly Barbastelle bats). NE also recommended that the allocation policy should include a requirement for an ecologically sensitive lighting strategy to be implemented, in line with the Institute of Lighting Professionals' Guidance Note 8 - GN08 Bats and Artificial Lighting (2023)²⁰⁴ or successor documents. In addition, all development proposals within this area, including windfall, with the exception of householder applications, should aim to retain mature trees, woods and copses, and to provide new habitat linkages through new tree planting and the integration of existing hedgerow networks with new ones in line with the Greater Cambridgeshire Eversden & Wimpole Woods Special Area of Conservation protocol.
- 9.2.8 In response to NE's recommendations wording has been included within both site allocation policies to specify the requirement for the retention and conservation of key habitat features and that the lighting design be prepared in accordance with GN08 or successor documents.
- 9.2.9 In addition, Policy LP52 – Protecting our nature conservation sites – sets out detailed mitigation requirements for development that may be located within either the 5km or 10km zone established for the SAC. This includes a requirement retain mature trees, woods and copses, and to provide new habitat linkages through new tree planting and the integration of existing hedgerow networks with new one and comply with requirements for ecologically sensitive lighting, in line with GN08 or successor documents.
- 9.2.10 The Local Plan includes one allocation for ground mounted solar voltaic panels at Houghton and Wyton 1. Given the location of this allocation outside the 10km area associated with the Eversden & Wimpole Woods SAC CSZ it is unlikely to have an adverse impact on the integrity of the SAC, or areas of associated FLL, either alone or in-combination.

Conclusion

- 9.2.11 Taking into consideration the policy provisions set out in the Local Plan, it can be concluded that there will be no adverse impacts on the integrity of the Eversden and Wimpole Woods SAC, either alone or in-combination, as a result of urbanisation effects.

²⁰⁴ Bat Conservation Trust and the Institute of Lighting Professionals' (2023) Bats and Artificial Lighting at Night.

9.3 Nene Washes SPA and Ramsar and Ouse Washes SPA and Ramsar

Baseline information

- 9.3.1 The Nene Washes comprise an extensive mosaic of low lying wet grassland and rough pasture. They total around 15 square kilometres and are located on the lower reaches of the River Nene, extending eastwards from Peterborough towards and past Whittlesey, ending at Ringsend. The grasslands associated with the Nene Washes play a land drainage role as a flood water storage area, and this washland, is therefore subject to regular winter flooding²⁰⁵. These habitats support internationally significant populations of wintering wildfowl and providing a crucial breeding ground for rare and at-risk wetland birds (**Appendix B**). The Nene Washes SPA and Ramsar are located approximately 2km from the Plan area and therefore direct urbanisation effects upon these designations are not likely.
- 9.3.2 The Ouse Washes comprise a flood storage reservoir, approximately 30km long and 1km wide constructed to drain an extensive area of the fens. It encompasses two canalised main river channels of the River Great Ouse that run each side of its length, and an extensive area of wet grassland and field drains in between²⁰⁶. It comprises a washland habitat which is subject to regular winter flooding. The extensive network of field drains, and high groundwater levels, keeps the low-lying grassland wet in the summer months. The SPA and Ramsar support high numbers of wintering wildfowl and breeding waders (**Appendix B**). The Ouse Washes SPA and Ramsar extends into the eastern section of the Plan area. Urbanisation effects upon the qualifying features associated with these designations are therefore possible.
- 9.3.3 As noted at **paragraph 3.6.11**, the qualifying bird species associated with the Nene Washes SPA and Ramsar and the Ouse Washes SPA and Ramsar (see **Appendix B**) may also use FLL within the wider area, outside the designation boundaries. Functionally linked bird habitat associated with the SPA and Ramsar is likely to primarily consists of surrounding arable farmlands and pasturelands that host non-breeding wildfowl and waders. These off-site habitats serve as critical complementary areas for daytime foraging and nighttime roosting, particularly when the main washland is deep underwater. In addition to these areas, FLL may include the interconnecting drainage ditch network that is located beyond the designations. Qualifying species of birds located within areas of FLL may be vulnerable to urbanisation impacts. It is important to maintain an unobstructed line of sight for qualifying birds, to enable them to detect predators. Development near habitat used by these species can obstruct lines of sight and therefore the habitat suitability for feeding or roosting. NE's SSSI IRZs around these designations include the area immediately surrounding the Nene Washes SPA and Ramsar and the Ouse Washes SPA and Ramsar and extending up to several kilometres into the wider Cambridgeshire and Fens landscape and encompassing adjacent SSSI designations (such as Berry Fen SSSI) and RSPB reserves such as the Ouse Fen reserve, these areas are frequently referred to as "Goose and Swan Functional Land" IRZ.

²⁰⁵ Natural England (2019) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features Nene Washes Special Protection Area (SPA) Site Code: UK9008031.

²⁰⁶ Natural England (2019) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features Ouse Washes Special Protection Area (SPA) Site Code: UK9008041.

- 9.3.4 The SIP for the SPA and SAC does not identify urbanisation impacts as a threat²⁰⁷. The conservation advice for the SPA notes that: *'The nature, scale, timing and duration of some human activities can result in the disturbance of birds at a level which may significantly affect their behaviour, and consequently impact on the long-term viability of their populations. Disturbance associated with human activity may take a variety of forms including noise, light, sound, vibration, trampling and sight of people, animals and structures. Angling occurs on the watercourses within the Ouse Washes, although there are restrictions within the refuge areas during the wildfowling season.'*²⁰⁸
- 9.3.5 Taking a precautionary approach, it is assumed for the purposes of this AA that areas of arable, grassland and wetland habitat have the potential to provide FLL for these bird species²⁰⁹. The ability of land to act as FLL is governed by a number of factors which include the following:
- Distance from the European site (sites closer to the SPA and Ramsar site are more likely to provide roosting and /or foraging opportunities for birds).
 - Availability of priority habitat which may support qualifying species associated with the SPA and Ramsar.
 - Site characteristics including:
 - Current land use of a site;
 - Land uses within the surrounding area;
 - Site size (sites of less than 1ha in size can be screened out);
 - Habitat type;
 - Cropping regime, including how often the site is planted with a suitable crop;
 - Visibility (for example are there unrestricted sight-lines);
 - Field boundaries (trees/hedgerows/field drains); and
 - Presence of permanent waterbodies, areas of seasonal flooding.
 - Existing factors that may affect habitat suitability, including:
 - Existing PRow and their usage, especially by users with dogs;
 - Proximity to existing built up areas; and
 - Existing farming practices (for example the use of bird scarers/deterrents).
 - Noise and visual disturbance - drawing on the Waterbird Disturbance Tool Kit²¹⁰.
 - Cat predation ranges.
 - Presence of large and/or multiple overhead power lines.

²⁰⁷ Natural England (2014) Site Improvement Plan Nene Washes SAC and SPA.

²⁰⁸ Natural England (2019) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features, Ouse Washes (SPA) Site Code: UK9008041. Available at: <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK9008041.pdf> [Date accessed: 05/02/26].

²⁰⁹ North Northamptonshire Council and West Northamptonshire Council. Functionally linked land: information for applicants for planning permission on sites within 10km of the Upper Nene Valley Gravel Pits Special Protection Area. Available at: <https://www.northnorthants.gov.uk/planning-strategies-and-plans/upper-nene-valley-gravel-pits-special-protection-area> [Date accessed: 17/07/25]

²¹⁰ The Waterbird Disturbance Mitigation Toolkit. TIDE tools - tide-toolbox.eu. Available at: https://gat04-live-1517c8a4486c41609369c68f30c8-aa81074.divio-media.org/filer_public/8f/bd/8fbdd7e9-ea6f-4474-869f-ec1e68a9c809/11367.pdf [Date Accessed: 04/08/25]

- 9.3.6 Urbanisation effects can result in changes to feeding or roosting behaviour, increased energy expenditure due to more frequent flights, abandonment of nest sites, disrupted incubation of eggs and desertion of supporting habitat (both within or outside the designated site boundary where appropriate). In addition, it is necessary to maintain an open landscape to facilitate movement of birds between the SPA / Ramsar designations and any off-site supporting habitat.
- 9.3.7 An increase in noise and vibration levels, artificial lighting and sources of visual disturbance has the potential to cause birds to fly away, resulting in energy expenditure and abandonment of feeding or resting places. Research suggests that disturbance is more likely to have an impact on bird populations where it is not continuous in nature. Sources of disturbance which are irregular and infrequent are also likely to have a greater impact, as birds are less likely to be habituated to these sources of disturbance.
- 9.3.8 Disturbance, excluding recreational pressure, which is addressed in **Chapter 8**, is therefore a function of the scale of disturbance, the distance of the source of disturbance and its frequency and duration. Research undertaken as part of the Waterbird Disturbance and Mitigation Toolkit²¹¹ suggests that the qualifying birds associated with these European designations are likely to respond to visual and noise stimuli at varying distances up to approximately 300m for some species. It is noted that the waterbird disturbance toolkit was developed for an estuary setting which may not be appropriate to the setting of development in the Plan area. This distance does however provide a useful guide.
- 9.3.9 Other urbanisation effects, such as householder related garden waste dumping, vandalism, or anti-social behaviours, are likely where housing is located within close proximity to development. For other mitigation strategies across the UK, a distance of 400m has been used to represent the distance within which cat predation is likely to occur and the distance from which people will access designated sites by foot (rather than accessing sites from car parking locations as with recreational impacts).

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- 9.3.10 A review of mapping data indicates that no allocations are located within 400m of either the Nene Washes SPA / Ramsar or the Ouse Washes SPA / Ramsar. Direct urbanisation effects are therefore unlikely.
- 9.3.11 Two allocations are however located within 400m of the Goose and Swan Functional Land IRZ associated with the Ouse Washes SPA and Ramsar (including the Ouse Fen Nature Reserve and Berry Fen SSSI) as listed below:
- Somersham 2 - Dews Bus and Coach Depot, Chatteris Road, for 50 residential units; and
 - Bluntisham 1 – Land off 18 Holliday's Road, for 35 residential units.
- 9.3.12 Taking into consideration the factors listed at **paragraph 9.3.4**, the suitability of the sites and surrounding land to provide FLL has been considered.

²¹¹ https://www.tide-toolbox.eu/tidetools/waterbird_disturbance_mitigation_toolkit/

- 9.3.13 Somersham 2 at Dews Bus and Coach Depot is located approximately 3.2 km to the north west of the Ouse Washes SPA and Ramsar. Whilst this site is located outside Natural England's Goose and Swan IRZ, it is immediately adjacent to this area. The site comprises greenfield and hardstanding areas bounded by hedgerows and trees, which are likely to restrict bird sightlines towards the SPA and Ramsar. Residential development associated with the settlement of Somersham is located immediately to the west of the site and is likely to represent an existing source of disturbance, with arable fields located to the east. Development at this allocation may therefore have indirect urbanisation impacts on potential areas of functionally linked land associated with the Ouse Washes SPA and Ramsar to the east. However, as the existing bus depot is unlikely to comprise functionally linked land itself, the principal consideration relates to avoiding disturbance of the surrounding land, including areas such as the lakes at Colne Fen. Appropriate mitigation measures, including the retention or enhancement of boundary screening and the implementation of an ecologically sensitive lighting strategy, should be incorporated at the project level to minimise the potential for disturbance.
- 9.3.14 The site allocation policy supporting text for Somersham 2 notes the location of this allocation immediately adjacent to the Goose and Swan IRZ and requires development at this site to consider mitigation measures such as adequate screening around the site boundary, implementation of an ecologically sensitive lighting strategy and provision of adequate levels of amenity and open space.
- 9.3.15 Bluntisham 1 at Land off 18 Holliday's Road is located approximately 1.5km to the west of the Ouse Washes SPA and Ramsar. Whilst this site is located outside NE's Goose and Swan IRZ and not within 400m of it, the site is located within 150m of the RSPB Ouse Fen Reserve and within 230m of Berry Fen SSSI. This site comprises green field and a small area of hard standing with a building. The site is bound by hedgerows which may restrict bird sight lines towards the SPA and Ramsar. Residential development associated with Bluntisham is located to the west of the site and likely to comprise a source of disturbance for birds. Arable fields are located to the east, south and north. Development at this allocation may therefore have indirect urbanisation impacts upon potential areas of FLL associated with the Ouse Washes SPA and Ramsar.
- 9.3.16 The site allocation policy supporting text for Bluntisham 1 notes the location of this allocation within 150m of the RSPB Ouse Fen Reserve and within 230m of Berry Fen SSSI. This site allocation policy requires development at this site to consider appropriate mitigation measures and adequate levels of amenity and open space.
- 9.3.17 In addition, there is the potential for windfall to be located within 400m of the Ouse Washes SPA and Ramsar and areas of FLL associated within both the Ouse and Nene Washes areas of FLL. The location of windfall is unknown at this level of the plan making process and therefore it is not possible to assess individual sites at this stage against the factors listed at **paragraph 9.3.4**. The impact of windfall will therefore need to be taken into consideration in a project level HRA.

- 9.3.18 Policy LP 52 of the Local Plan recognises the location of potentially FLL in the plan area (Swan and Goose IRZ associated with the Ouse Washes SPA and Ramsar). The policy requires development proposals that may affect internationally designated sites, either alone or in combination with other plans or projects, to be subject to assessment under the Conservation of Habitats and Species Regulations 2017 (as amended). The supporting text also highlights the presence of the Ouse Washes Swan and Goose Impact Risk Zone within the plan area and identifies the need for proposals to consider potential impacts on functionally linked land where relevant. This provides an appropriate policy framework to ensure that potential effects on the Ouse Washes SPA and Ramsar, including impacts on functionally linked habitat, are identified and addressed through the planning application process.
- 9.3.19 No development will be located within 400m of either the Nene Washes SPA or Nene Washes Ramsar or associated areas of FLL and therefore it can be concluded that there will be no adverse impact from the Local Plan from urbanisation effects upon these designations either alone or in-combination.
- 9.3.20 The ground mounted solar voltaic panel allocation at Houghton and Wyton 1 is located significantly beyond areas of FLL land associated with either the Nene or Ouse Washes European sites at 8km to the west at its closest point. It is therefore unlikely to have an adverse impact on the integrity of these European sites, or areas of associated FLL, either alone or in-combination.

Conclusion

- 9.3.21 Taking into consideration the planning policy requirements for site allocations Somersham 2, Bluntisham 1, Policy LP52 and the hierarchical nature of plan making, it can be concluded that there will be no adverse impacts on the integrity of these European sites or areas of associated FLL, either alone or in-combination, as a result of urbanisation effects.

9.4 Upper Nene Valley SPA and Upper Nene Valley Ramsar

Baseline information

- 9.4.1 The Upper Nene Valley Gravel Pits SPA and Ramsar is comprised of a cluster of disused sand and gravel pits which extend along the River Nene floodplain from Clifford Hill to Thorpe Waterville. These shallow and deep open waters and associated marginal features, such as sparsely-vegetated islands, gravel bars and shorelines and habitats which include reed-swamp, marsh, wet ditches, rush pasture, rough grassland and scattered scrub, provide valuable resting and feeding habitat for wintering water birds, especially ducks and waders²¹². The SPA is designated for the following individual qualifying species:
- Eurasian Bittern (*Botaurus stellaris*)
 - European Golden Plover (*Pluvialis apricaria*)

²¹² Natural England (2017) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features Upper Nene Valley Gravel Pits Special Protection Area (SPA) Site Code: UK9020296.

- Gadwall (*Mareca strepera*)
- Waterbird assemblage (non-breeding)²¹³

- 9.4.2 As set out in **Section 3.7**, qualifying bird species of the Upper Nene Valley Gravel Pits SPA and Ramsar designations, use a variety of habitats outside the SPA and Ramsar boundary for nocturnal and diurnal foraging and roosting. These areas of habitat comprise FLL where they provide a crucial supporting role in maintaining the conservation status of the qualifying bird species at the SPA and Ramsar. Golden Plover and Lapwing²¹⁴ are qualifying features of the Upper Nene Valley Gravel Pits SPA and Ramsar designations. These species often spend time feeding or roosting on grassland, wetland and arable land outside the designation boundaries. Golden Plover and Lapwing feed on earthworms, beetles, insects and their larvae on surrounding agricultural land, however it is not known whether they remain faithful to specific fields or select fields based on crop type / food availability.
- 9.4.3 The British Trust for Ornithology (BTO) Wetland Bird Survey (WeBS) Alert for the Upper Nene Valley Gravel Pits SPA²¹⁵ reports that Golden Plover has shown a 76% decline since baseline analysis, (high alert, red). Lapwing, which are part of the waterbird assemblage, has shown a 45% decline since baseline analysis, and the waterbird assemblage a 26% decline (medium alert, amber).
- 9.4.4 Taking a precautionary approach, it is assumed for the purposes of this AA that areas of arable, grassland and wetland habitat have the potential to provide FLL for these bird species²¹⁶. The ability of land to act as FLL is governed by a number of factors which are listed at **paragraph 9.3.4**.
- 9.4.5 An increase in noise and vibration levels, artificial lighting and sources of visual disturbance has the potential to cause birds to fly away, resulting in energy expenditure and abandonment of feeding or resting places. Research suggests that disturbance is more likely to have an impact on bird populations where it is not continuous in nature. Sources of disturbance which are irregular and infrequent are also likely to have a greater impact, as birds are less likely to be habituated to these sources of disturbance. Disturbance, excluding recreational pressure, which is addressed in **Chapter 8**, is therefore a function of the scale of disturbance, the distance of the source of disturbance and its frequency and duration. As set out in **Table 9.1**, research suggests that these species are likely to respond to visual and noise stimuli at 300m.

²¹³ During the non-breeding season, the SPA regularly supports an assemblage of waterfowl species numbering more than 20,000 birds. The main component species of this non-breeding waterfowl assemblage, which are not already covered under individual features, and which are present in either nationally important numbers or comprise 2,000 or more individuals include: Wigeon (*Anas penelope*), Mallard (*Anas platyrhynchos*), Northern Shoveler (*Anas clypeata*), Pochard (*Aythya farina*), Tufted Duck (*Aythya fuligula*), Great-crested Grebe (*Podiceps cristatus*), Mute Swan (*Cygnus olor*), Great Cormorant (*Phalacrocorax carbo*), Lapwing (*Vanellus Vanellus*) and Coot (*Fulica atra*).

²¹⁴ Lapwing are part of the waterbird assemblage.

²¹⁵ WeBS Report Online. Available at: <https://app.bto.org/webs-reporting/alerts.jsp>

²¹⁶ North Northamptonshire Council and West Northamptonshire Council (2026) Upper Nene Valley Gravel Pits Special Protection Area Technical Guidance and Mitigation Strategy.

Table 9.1: Waterbird Disturbance Toolkit – Species disturbance distances

Bird species listed in Waterbird Disturbance Toolkit	Visual disturbance distance	Noise disturbance distance
Golden Plover (<i>Pluvialis apricaria</i>)	200m	300m - 107-112dB
Lapwing (<i>Vanellus vanellus</i>)	300m	200m - 115-120dB

9.4.6 Other urbanisation effects, such as householder related garden waste dumping, vandalism, or anti-social behaviours, are likely where housing is located within close proximity to development. For other mitigation strategies across the UK, a distance of 400m has been used to represent the distance from which people will access designated sites by foot (rather than accessing sites from car parking locations as with recreational impacts).

Appropriate Assessment

9.4.7 As set out in **paragraph 3.7.10**, mapping indicates that Golden Plover and Lapwing often spend time feeding or roosting on land outside the SPA. These areas can be located up to 10km from the SPA and may be considered FLL to the Upper Nene Valley Gravel Pits SPA. This FLL 10km zone is reflected in the Upper Nene Valley Gravel Pits Special Protection Area Technical Guidance and Mitigation Strategy that has been prepared jointly by North and West Northamptonshire Council²¹⁷. The 10km radius from the SPA coincides with the western section of the Plan area.

9.4.8 One allocation is located within 10km of the Upper Nene Valley Gravel Pits SPA and Upper Nene Valley Gravel Pits Ramsar; Home Farm Bythorn (Bythorn 1) (see **Figure 9.2**). This site allocates a total of 15 residential units. The nature of development proposed at this location do not trigger any SSSI IRZ threshold.

9.4.9 Taking into consideration the factors listed at **paragraph 9.4.4**, the suitability of the site and surrounding land to provide FLL for Golden Plover or Lapwing has been considered.

9.4.10 Bythorn 1 is located approximately 6km to the east to the Upper Nene Valley Gravel Pits SPA and Ramsar. This site comprises buildings and hard standing associated with Home Farm. The site is bound by hedgerows and trees which restrict bird sight lines towards the SPA and Ramsar. It is therefore unlikely that development will directly result in the loss of FLL for Golden Plover or Lapwing

²¹⁷ North Northamptonshire Council and West Northamptonshire Council (2026) Upper Nene Valley Gravel Pits Special Protection Area Technical Guidance and Mitigation Strategy.

- 9.4.11 The settlement of Bythorn is located to the east of the site and arable fields are located to the west and south. Land between the allocation at Home Farm and the Ramsar and SPA designation is predominantly agricultural in nature. Whilst there are a number of restrictions to bird sight lines, in the form of hedgerows and existing infrastructure, there is potential that Golden Plover and Lapwing may use these arable fields for feeding. Should this be the case the fields adjacent to this allocation may provide a supporting role in maintaining the conservation status of these qualifying bird species. Development at Home Farm may therefore have indirect urbanisation impacts upon potential areas of adjacent FLL.
- 9.4.12 The supporting text for the site allocation policy for Bythorn 1 recognises the location of this allocation within the wider 10km FLL zone. It requires new development to comply with guidance set out in the Upper Nene Valley Gravel Pits Special Protection Area Technical Guidance and Mitigation Strategy, which sets out mitigation requirements around avoiding disturbance impacts.
- 9.4.13 In addition, there is the potential for windfall to be located within 10km of the Upper Nene Valley Gravel Pits SPA and Ramsar. The location of windfall is unknown at this level of the plan making process and therefore it is not possible to assess individual sites at this stage against the factors listed at **paragraph 9.4.4**. The impact of windfall will therefore need to be taken into consideration in a project level HRA. This requirement is secured through Policy LP 52 where supporting text notes the requirement for development to comply with mitigation set out in the Upper Nene Valley Gravel Pits Special Protection Area Technical Guidance and Mitigation Strategy.
- 9.4.14 The exact details of the required mitigation measures will be provided at the planning application stage. This reflects the hierarchical nature of plan making and ensures that mitigation is indicative of final site proposals. Given there are widely used techniques available to mitigate urbanisation impacts, there is no uncertainty over the deliverability of these allocations. This approach is compliant with case law which requires the Competent Authority to be satisfied that mitigation solutions can be achieved in practice^{218, 219}, whilst recognising the multi-staged planning and approval procedural approach to plan making²²⁰.
- 9.4.15 The ground mounted solar voltaic panel allocation at Houghton and Wyton 1 is located significantly beyond the 10km buffer associated with the Upper Nene Valley Gravel Pits SPA/Ramsar. It is therefore unlikely to have an adverse impact on the integrity of the SPA/Ramsar, or areas of associated FLL, either alone or in-combination.

²¹⁸ Ltd (NANT Ltd) v Suffolk Coastal District Council, Court of Appeal, 17 February 2015.

²¹⁹ Opinion of Advocate General Kokott delivered on 9 June 2005. Commission of the European Communities v United Kingdom of Great Britain and Northern Ireland. Failure of a Member State to fulfil obligations - Directive 92/43/EEC - Conservation of natural habitats - Wild fauna and flora. Case C-6/04.

²²⁰ R (o a o Devon Wildlife Trust) v. Teignbridge DC [2015] EWHC 2159 (Admin). 28 July 2015.

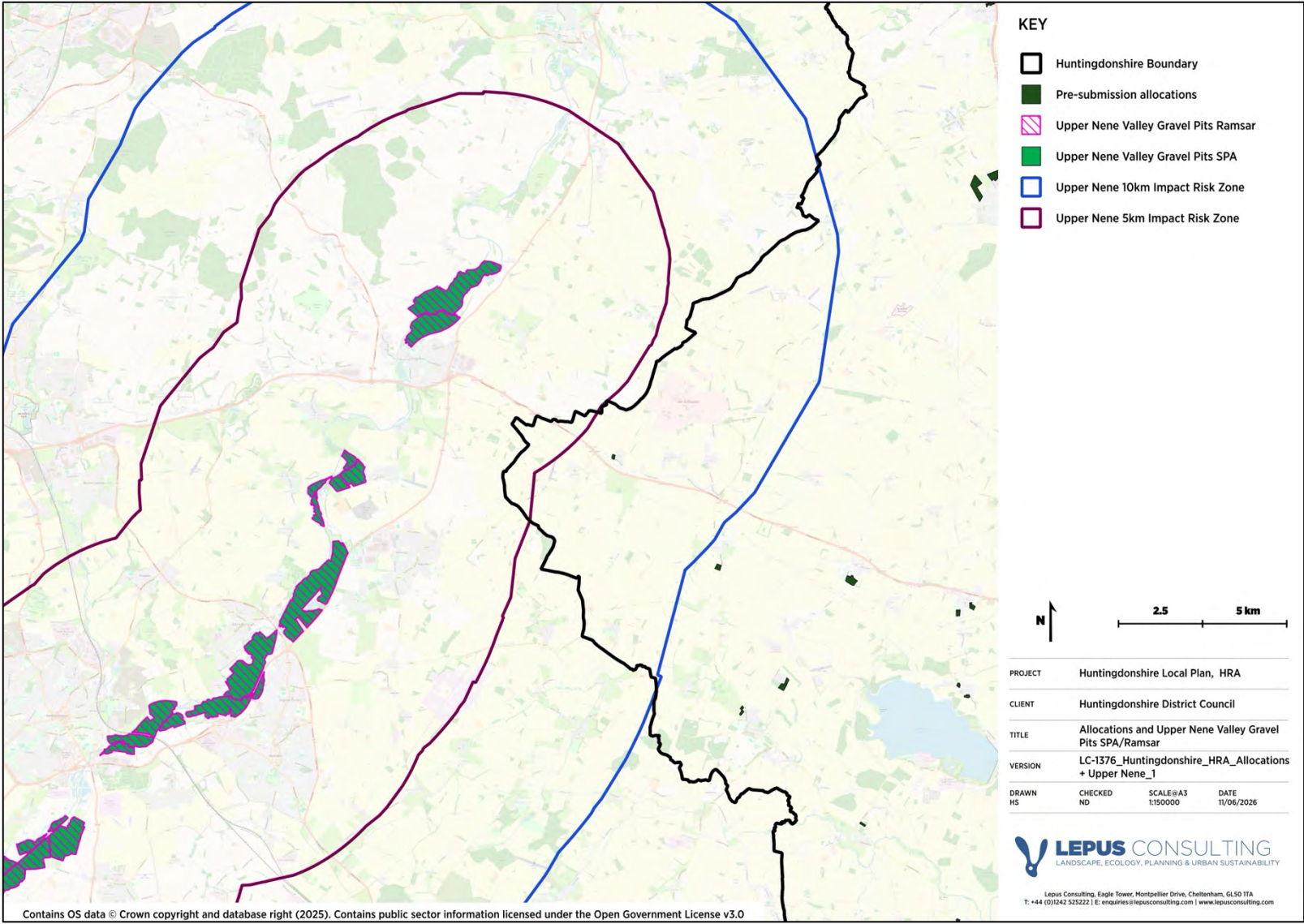


Figure 9.2: Allocations within 10km of Upper Nene Valley Gravel Pits SPA and Ramsar

9.5 Urbanisation conclusion

- 9.5.1 Taking into consideration the planning policy requirements in the supporting text for the site allocation policy for Bythorn 1 and Policy LP 52 and the hierarchical nature of plan making, it can be concluded that there will be no adverse impacts on the integrity of the Upper Nene Valley Gravel Pits SPA/Ramsar, either alone or in-combination, as a result of urbanisation effects.

10 Next steps

10.1 Conclusions

- 10.1.1 The Huntingdonshire Local Plan is not directly connected with or necessary to the management of any European site. A screening assessment was therefore undertaken to identify whether implementation of the Local Plan could result in Likely Significant Effects (LSEs) on European sites. Taking no account of mitigation measures, the screening assessment identified the potential for LSEs through recreational disturbance, air quality, water quality and water quantity.
- 10.1.2 The HRA therefore progressed to Appropriate Assessment to consider these impact pathways in greater detail. The assessment drew upon the latest available evidence prepared in support of the Local Plan, including the Air Quality Assessment, Water Cycle Study, water quality modelling, Water Resources Planning evidence, visitor survey information and advice provided by Natural England.
- 10.1.3 The Precautionary Principle has been applied throughout the Appropriate Assessment where uncertainty exists. The assessment has taken account of the mitigation measures embedded within the Local Plan, together with the strategic mitigation measures identified through the evidence base, including the Cambridgeshire and Peterborough Recreational Mitigation Strategy, wastewater infrastructure improvements, Technically Achievable Limit (TAL) upgrades, environmental permitting requirements and the wider statutory and regulatory framework governing water resources and wastewater treatment.
- 10.1.4 Taking account of the findings of the Appropriate Assessment and the identified mitigation measures, it can be concluded that implementation of the Huntingdonshire Local Plan will not result in adverse effects on the integrity of Barnack Hills & Holes SAC, Eversden and Wimpole Woods SAC, Fenland SAC, Nene Washes SAC, SPA and Ramsar, Ouse Washes SAC, SPA and Ramsar, Portholme SAC, The Wash and North Norfolk Coast SAC, The Wash SPA, The Wash Ramsar or Woodwalton Fen Ramsar, either alone or in combination with other plans and projects.

10.2 Next Steps

- 10.2.1 The purpose of this report is to inform the Habitats Regulations Assessment of the Huntingdonshire Local Plan using the best available evidence.
- 10.2.2 Huntingdonshire District Council, as the Competent Authority, is responsible for undertaking the Integrity Test in light of the conclusions presented within this report.
- 10.2.3 This report will be submitted to Natural England for consultation. In accordance with the Habitats Regulations, Huntingdonshire District Council must have regard to Natural England's representations before determining whether to adopt the conclusions of this Habitats Regulations Assessment.

Appendix A: In-Combination Assessment

Plans and policies	Plan status	Summary of housing/employment key elements of the Local Plan that could cause in combination effects	Summary of HRA findings	Potential in combination LSE
North Northamptonshire Local Plan ¹	The North Northamptonshire Joint Core Strategy was adopted in July 2016 and forms part of the adopted development plan for the area. North Northamptonshire Council is preparing a new Local Plan to guide development to 2045, which will replace the Joint Core Strategy and the Part 2 Local Plans. A Scoping Consultation was undertaken in May 2026, with consultation on the Proposed Local Plan Content and Evidence scheduled for late 2026.	The adopted Local Plan allows for the provision of 1,750 (rounded up to 2,000 when including a buffer as required by national policy) homes per annum from 2011-2031. The adopted Local Plan states that North Northamptonshire has an “ <i>over-supply of committed employment land</i> ”; hence, no further employment land was allocated, but a selection of new strategic sites were identified.	An HRA of the Local Plan was not available at the time of writing.	Yes. This plan will trigger change or development close to the Plan area. There is potential for in-combination air quality, hydrology, recreation and urbanisation LSEs on European sites and areas of functionally linked land (FLL). The HRA will take these in-combination impacts into consideration.
Peterborough Local Plan ²	The Peterborough Local Plan was adopted in July 2019. Work on a new Local Plan (which will cover the period up to 2044) is	The adopted Local Plan allows for the provision of 942 homes per annum from 2016 to 2021 (the first five years of the plan period), which then increases to 982 homes per annum from 2021 to 2036 (the remainder of the plan	The screening stage of the HRA ⁴ process completed to inform the new, emerging Peterborough Local Plan (for the period up to 2044) concluded that LSEs are	Yes. This plan will trigger change or development close to the Plan area. There is potential for in-combination air quality, hydrology, recreation and urbanisation LSEs on European

¹ North Northamptonshire Joint Planning Unit (2016) North Northamptonshire Joint Core Strategy 2011-2031. Available at: <https://cms.northnonthants.gov.uk/media/3595/download> [Date accessed: 09/06/26]

² Peterborough City Council (2019) Peterborough Local Plan 2016 to 2036. Available at <https://cccandpcc.sharepoint.com/sites/PCCPlanningPolicyPublicData/Shared%20Documents/Forms/AllItems.aspx?id=%2Fsites%2FPCCPlanningPolicyPublicData%2FShared%20Documents%2FPlanning%20Policy%2FAdopted%20Local%20Plan%2FPeterborough%20Local%20Plan%2F1%2EPeterborough%20Local%20Plan%2024%20July%202019%2Epdf&parent=%2Fsites%2FPCCPlanningPolicyPublicData%2FShared%20Documents%2FPlanning%20Policy%2FAdopted%20Local%20Plan%2FPeterborough%20Local%20Plan&p=true&ga=1> [Date accessed: 19/06/26]

Plans and policies	Plan status	Summary of housing/employment key elements of the Local Plan that could cause in combination effects	Summary of HRA findings	Potential in combination LSE
	currently underway, with a Draft Local Plan published for public consultation towards the end of 2026. The Proposed Submission version of the Local Plan is now in preparation, intended for public consultation in 2026.	period), in line with the updated Standard Method. The adopted Plan allows for the provision of the 76ha of employment land from April 2015 to March 2036 <i>“including land already committed with planning permission”</i> . Further employment land is allocated under this Plan (amounting to <i>“around 160ha”</i>) to allow for losses, flexibility and job choice. The draft Local Plan review will allocate approximately 22,130 new dwellings over the plan period and 90ha of employment land ³ .	possible for Barnack Hills & Holes SAC; Nene Washes SAC, SPA and Ramsar; Orton Pit SAC; and Rutland Water SPA and Ramsar. Hence, an Appropriate Assessment (AA) is recommended.	sites and areas of FLL. The HRA will take these in-combination impacts into consideration.
Fenland Local Plan ⁵	The Fenland Local Plan was adopted in May 2014. The Fenland Local Plan 2021–2040 Draft Local Plan ⁶ was published for consultation in August 2022 as an emerging policy document but was not adopted. Fenland District Council is preparing a new Local Plan ('Fenland 50') to	The adopted Local Plan allows for the provision of 11,000 new homes over the plan period 2011-2031, at a delivery rate of approximately 550 new homes per annum. The adopted Plan also allows for the provision of 85 ha of employment land (B1/B2/B8 land for employment uses) during 2011 to 2031.	An HRA ⁹ was prepared for the withdrawn Fenland Local Plan 2021–2040. The assessment concluded that the plan would not result in likely significant effects on European sites, either alone or in combination. The HRA for the emerging Fenland 50 Local Plan has not yet been published.	Yes. This plan will trigger change or development close to the Plan area. There is potential for in-combination air quality, hydrology, recreation and urbanisation LSEs on European sites and areas of FLL. The HRA will take these in-combination impacts into consideration.

³ Peterborough City Council (2025) Local Plan Review. Available at: <https://www.peterborough.gov.uk/council/planning-and-development/planning-policies/local-plan-review> [Date accessed: 09/10/25]

⁵ Fenland District Council (2014) Fenland Local Plan (Adopted May 2014). Available at: https://www.fenland.gov.uk/media/12064/Fenland-Local-Plan-Adopted-2014/pdf/Fenland_Local_Plan-Adopted_2014.pdf?m=1591111057500 [Date accessed: 09/10/25]

⁶ Fenland District Council (2022). Fenland Local Plan 2021-2040, Draft Local Plan Consultation. Available at: https://fenland.gov.uk/media/18814/Draft-Local-Plan-August-2022/pdf/Draft_Local_Plan_for_Consultation_Aug_2022.pdf?m=637967739565370000 [Date accessed 19/06/26]

⁹ Fenland District Council (2022) Habitats Regulations Assessment of the Fenland Local Plan Consultation Draft (Regulation 18): Main Report. Available at: https://www.fenland.gov.uk/media/18819/CD07-1-Habitats-Regulation-Assessment-Screening-Main-Report/pdf/CD07-1a_Draft_Local_Plan_HRA_Main_Report_August_2022.pdf?m=1661248724390 [Date accessed: 09/10/25]

Plans and policies	Plan status	Summary of housing/employment key elements of the Local Plan that could cause in combination effects	Summary of HRA findings	Potential in combination LSE
	2050. The plan is currently at an early stage of preparation, with adoption anticipated in October 2028. ⁷	The Local Plan review aims to allocate approximately 10,525 new dwellings over the Plan period and 215ha of employment land ⁸ . Fenland District Council is preparing a new Local Plan ('Fenland 50') to 2050; however, the plan is at an early stage of preparation, and no housing or employment land requirements have yet been published.		
East Cambridgeshire District Local Plan 2015 (as amended 2023) ¹⁰	The East Cambridgeshire District Council Local Plan was adopted in April 2015 and is now referred to as the East Cambridgeshire Local Plan 2015 (as amended 2023). The wider Cambridgeshire Local Plan review processes are being progressed by individual authorities ¹¹ .	Over the plan period (2011 to 2031) the Local Plan will allow for the provision of 5,400 new homes and at least 179 ha of employment land for B1/B2/B8 uses. The Local Plan will also allow for the provision of at least an additional 3,000m ² (net) of convenience and 10,000m ² (net) of comparison retail floorspace in the district from 2012 to 2031.	The HRA of the adopted Local Plan set out wording to strengthen policy wording to ensure no adverse impacts on European sites. It reached a conclusion of no adverse impacts on site integrity at any European site ¹² .	Yes. This plan will trigger change or development close to the Plan area. There is potential for in-combination air quality, hydrology, recreation and urbanisation LSEs on European sites and areas of FLL. The HRA will take these in-combination impacts into consideration.

⁷ Fenland District Council (2026) Fenland 50 – Local Plan. Available at: <https://fenland.gov.uk/article/18746/Fenland-50-Local-Plan-Timetable>. (Date accessed: 12/06/26)

⁸ Fenland District Council (2022) Fenland Local Plan 2021-2040, Draft Local Plan Consultation, August 2022. Available at: https://www.fenland.gov.uk/media/18814/Draft-Local-Plan-August-2022/pdf/Draft_Local_Plan_for_Consultation_Aug_2022.pdf?m=1661177156537 [Date accessed: 09/10/25]

¹⁰ East Cambridgeshire District Council (2023) East Cambridgeshire Local Plan 2015 (as amended 2023). Available at: <https://eastcambs.gov.uk/sites/default/files/2024-10/Local%20Plan%20adopted%2019%20October%202023%20-%20final%20with%20cover.pdf> [Date accessed: 09/10/25]

¹¹ East Cambridgeshire District Council (2025) Emerging Local Plan. Available at: <https://eastcambs.gov.uk/planning-and-building-control/planning-policy-and-guidance/emerging-local-plan> [Date accessed: 09/10/25]

¹² East Cambridgeshire District Council (2018) Habitats Regulations Assessment. Available at: <https://eastcambs.gov.uk/sites/default/files/2024-10/HRA%20Appropriate%20Assessment%20Post%20Submission%20Local%20Plan%20-%20published%2015.6.18.pdf> [Date accessed: 09/10/25].

Plans and policies	Plan status	Summary of housing/employment key elements of the Local Plan that could cause in combination effects	Summary of HRA findings	Potential in combination LSE
South Cambridgeshire District Local Plan ¹³	The South Cambridgeshire Local Plan was adopted in September 2018 and covers the period to 2031. Preparation of the joint Greater Cambridge Local Plan is ongoing in accordance with the Greater Cambridge Local Development Scheme 2025. ¹⁴	Over the plan period (2011 to 2031) the adopted Local Plan will allow for the provision of 19,500 new homes, with an average delivery of 975 homes per annum. The Local Plan will also allow for the provision of at least the 143,000m ² of additional floorspaces or 43 ha of 'B' use employment land required over the plan period. The new joint Greater Cambridge Local Plan proposes approximately 58,500 jobs and 44,400 new homes over the Plan period ¹⁵ .	An HRA ¹⁶ was completed to inform the adopted Local Plan, which concluded no LSEs upon any European sites alone, or in-combination, as a result of the plan. An HRA ¹⁷ has also been recently completed to inform the emerging new joint Greater Cambridge Local Plan. This HRA also concluded no LSEs upon European sites alone, or in-combination.	Yes. This plan will trigger change or development close to the Plan area. There is potential for in-combination air quality, hydrology, recreation and urbanisation LSEs on European sites and areas of FLL. The HRA will take these in-combination impacts into consideration.
Cambridge City Local Plan ¹⁸	The Cambridge Local Plan was adopted in October 2018 and guides development to 2031. It replaces the Cambridge Local Plan 2006 and forms part of the adopted	The Local Plan makes provision for at least 14,000 additional dwellings between 2011 and 2031 to meet objectively assessed housing need, equating to an average of 700 dwellings per year. Growth is focused within and around the existing urban area, including Areas of Major Change, Opportunity Areas, previously developed land and limited Green Belt	The Habitats Regulations Assessment (HRA) Screening report identified potential impact pathways. These were considered through the HRA process, including updates during the examination and	Yes. The Local Plan proposes significant housing and employment growth (approximately 14,000 dwellings and 22,100 jobs), which has the potential to contribute to in-combination recreational disturbance, air quality, water resource, water quality and

¹³ South Cambridgeshire District Council (2018) South Cambridgeshire Local Plan (Adopted September 2018). Available at: <https://www.greatercambridgeplanning.org/media/5tab2sun/south-cambridgeshire-adopted-local-plan-2018.pdf> [Date accessed: 19/06/26]

¹⁴ Greater Cambridge Shared Planning (2025) Greater Cambridge Local Development Scheme (local plan timetable). Available at: <https://scambs.moderngov.co.uk/documents/s137870/Appendix+A+-+Greater+Cambridge+Local+Development+Scheme+2025.pdf> [Date accessed: 15/06/26]

¹⁵ Greater Cambridge Shared Planning (2021) First Proposals, Greater Cambridge Local Plan, Preferred Options (Regulation 18: Preferred Options 2021). Available at: <https://consultations.greatercambridgeplanning.org/sites/gcp/files/2021-10/First%20Proposals%20-%20FINAL%20FURTHER%20REVISED%2028.10.21-red.pdf> [Date accessed: 09/10/25]

¹⁶ ENVIRON (2014) South Cambridgeshire Local Plan Submission Habitats Regulations Assessment: Screening Report. Available at: https://www.scambs.gov.uk/media/214d5ryv/hra-screening_0.pdf [Date accessed: 09/10/25]

¹⁷ Greater Cambridge Shared Planning (2024) Draft Planning Obligations Supplementary Planning Document: Habitats Regulations Assessment Screening Report (November 2024). Available at: https://oc2.greatercambridgeplanning.org/docfiles/1313/Habitats_Regulations_Assessment_Screening_Report_Planning_Obligations_2024.pdf [Date accessed: 09/10/25]

¹⁸ Greater Cambridge Shared Planning (2018) *Cambridge City Local Plan*. Available at: <https://www.greatercambridgeplanning.org/local-and-neighbourhood-planning/current-plans-the-adopted-local-plans/cambridge-city-council-adopted-development-plan/cambridge-city-local-plan-2018>. [Accessed: 24/07/26]

Plans and policies	Plan status	Summary of housing/employment key elements of the Local Plan that could cause in combination effects	Summary of HRA findings	Potential in combination LSE
	development plan for Cambridge,	releases. The Plan also support approximately 22,100 new jobs by 2031, including around 8,800 B-use class jobs, and provides for at least 12 ha of employment land, including strategic employment allocations associated with the Cambridge Cluster.	assessment of the Main Modifications.	urbanisation effects on European sites and areas of functionally linked land. Although the Cambridge Local Plan HRA concluded that these effects could be mitigated, they should be considered alongside growth proposed by the emerging plan through the in-combination assessment.
Central Bedfordshire Local Plan ¹⁹	The Central Bedfordshire Local Plan was adopted in July 2021. Work on a new Local Plan (to be adopted by December 2028) is currently underway and publication of a first draft (issues and options) for public consultation is scheduled for 2026.	Over the plan period (2015 to 2035), the adopted Local Plan will allow for the provision of 44,756, delivered at a varying rate (with most homes expected to be delivered between 2017 and 2029). The Local Plan will also allow for the provision of 118 ha of employment land over the plan period.	An HRA ²⁰ was completed to inform the adopted Local Plan. This HRA concluded that, due to mitigation provided through the comprehensive policies in the Local Plan, no LSEs were anticipated from the plan alone. Due to neighbouring authorities' mitigative efforts and proposed development locations, in-combination LSEs were also deemed unlikely.	Yes. This plan will trigger change or development close to the Plan area. There is potential for in-combination air quality, hydrology, recreation and urbanisation LSEs on European sites and areas of FLL. The HRA will take these in-combination impacts into consideration.

¹⁹ Central Bedfordshire Council (2021) Central Bedfordshire Local Plan 2015-2035 (July 2021). Available at: Central Bedfordshire Council (2021) Central Bedfordshire Local Plan 2015-2035 (July 2021). Available at: <https://centralbedfordshirecouncil.sharepoint.com/sites/Communications/Website%20and%20intranet/Forms/AllItems.aspx?id=%2Fsites%2FCommunications%2FWebsite%20and%20intranet%2FWebsite%20Documents%2FPlanning%2FLocal%20Plan%2FLocal%20Plan%20Documents%2F15%5F%20Adoption%20documents%2F2%5F%20Central%20Bedfordshire%20Local%20Plan%202015%20E2%80%93%202035%2FCentral%20Bedfordshire%20Local%20Plan%202015%20E2%80%93%202035%2Epdf&parent=%2Fsites%2FCommunications%2FWebsite%20and%20intranet%2FWebsite%20Documents%2FPlanning%2FLocal%20Plan%2FLocal%20Plan%20Documents%2F15%5F%20Adoption%20documents%2F2%5F%20Central%20Bedfordshire%20Local%20Plan%202015%20E2%80%93%202035&p=true&ga=1> [Date accessed: 19/09/25]

²⁰ Enfusion (2017) Central Bedfordshire Council Draft Central Bedfordshire Local Plan: Pre-Submission Regulation 19 Consultation, Habitats Regulations Assessment (HRA) Screening Report (December 2017). Available at: <https://centralbedfordshirecouncil.sharepoint.com/sites/Communications/Website%20and%20intranet/Website%20Documents/Planning/Local%20Plan/Local%20Plan%20Web%20update%20180502/Technical%20Reports/C33%20Habitats%20Regulation%20Assessment.pdf?CT=1751450510164&OR=ItemsView> [Date accessed: 09/10/25]

Plans and policies	Plan status	Summary of housing/employment key elements of the Local Plan that could cause in combination effects	Summary of HRA findings	Potential in combination LSE
Bedford Borough Local Plan ²¹	The Bedford Borough Local Plan 2030 was adopted in January 2020 and sets out the strategy for growth and development across the borough to 2030. The proposed Bedford Borough Local Plan 2040 ²² was intended to provide for growth beyond the Local Plan 2030 period but was withdrawn in October 2025. A new Local Plan 2050 ²³ is now being prepared under the revised plan-making system.	The Local Plan 2030 seeks to meet Bedford Borough's housing needs by delivering 14,550 homes between 2015 and 2030, including the allocation of 3,169 additional dwellings. The plan also supports employment growth through the allocation of employment land. The Bedford Borough Local Plan 2050 will apply to the entire administrative area of the borough of Bedford.	There are no European or Ramsar sites within Bedford Borough. HRA work ²⁴ undertaken for Bedford Borough's Local Plans concluded that the Plan is not anticipated to result in likely significant effects on any European sites, either alone or in combination with other plans or projects. Nevertheless, screening is required to assess potential effects on designated sites beyond the borough boundary, in consultation with Natural England.	Yes. This plan will trigger change or development close to the Plan area. There is potential for in-combination air quality, hydrology, recreation and urbanisation LSEs on European sites and areas of FLL. The HRA will take these in-combination impacts into consideration.
Cambridgeshire Local Transport Plan 2011-2031: Policies and Strategy ²⁵	Published July 2015	Identifies eight key transport-related challenges that the county faces from 2011-2031 and sets out strategies for tackling each of these challenges. This document is complemented by	The Local Transport Plan was supported by an HRA ²⁸ , which concluded that the Plan was	No. Policies set out in the Local Transport Plan are likely to encourage a modal shift from the

²¹ Bedford Borough Council (2020) Local Plan 2030. Planning for the future. Available at: <https://www.bedford.gov.uk/files/local-plan-2030.pdf/download?inline> [Date accessed: 19/06/26]

²² Bedford Borough Council (2022) Local Plan 2040. Available at:

<https://edrms.bedford.gov.uk/OpenDocument.aspx?id=xivh8bP%2bAJZXEaq26SnEFQ%3d%3d&name=PLAN%20FOR%20SUBMISSION.pdf> [Accessed date 19/06/26].

²³ Bedford Borough Council (2026) New Bedford Borough Local Plan 2050. Available at: <https://www.bedford.gov.uk/files/notice-commencement-bedford-borough-local-plan-20500.pdf/download?inline>. [Date accessed 19/06/26].

²⁴ AECOM (202) Bedford Borough Local Plan 2040: Habitats Regulations Assessment (April 2022). Available at:

<https://edrms.bedford.gov.uk/OpenDocument.aspx?id=No1L4FLZTYpNCVF5ihsPQ%3d%3d&name=Bedford%20Local%20Plan%20HRA%20April%202022.pdf> [Date accessed: 22/06/25]

²⁵ Cambridgeshire County Council (2015) Third Cambridgeshire Local Transport Plan 2011-2031: Policies and Strategy. Available at: [https://www.cambridgeshire.gov.uk/asset-library/imported-assets/The_Local_Transport_Plan_3%20\(1\).pdf](https://www.cambridgeshire.gov.uk/asset-library/imported-assets/The_Local_Transport_Plan_3%20(1).pdf) [Date accessed: 09/10/25]

²⁸ Cambridgeshire County Council (2015) HRA Screening: Cambridgeshire LTP2 Refresh (October 2014). Available at: [https://www.cambridgeshire.gov.uk/asset-library/imported-assets/Final_HRA_Report%20\(1\).pdf](https://www.cambridgeshire.gov.uk/asset-library/imported-assets/Final_HRA_Report%20(1).pdf) [Date accessed: 09/10/25]

Plans and policies	Plan status	Summary of housing/employment key elements of the Local Plan that could cause in combination effects	Summary of HRA findings	Potential in combination LSE
		the Long-Term Transport Strategy ²⁶ (which outlines the changes required in relation to the county's services and transport infrastructure) and Transport Delivery Plans ²⁷ (which outline the transport schemes the county intends to deliver over two-to-three-year periods).	anticipated to have no LSEs on European sites.	private car and positive impacts upon air quality.
Cambridgeshire and Peterborough Minerals and Waste Local Plan 2036 ²⁹	Adopted July 2021	Outlines 12 objectives for mineral and waste management in the Cambridgeshire and Peterborough areas, for the period up to 2036. These objectives intend to guide sustainable waste management and the delivery of a "steady, adequate but sustainable supply of minerals to meet current and projected future need".	An HRA was not available at the time of writing.	Yes. This plan has the potential to trigger in-combination air, water and urbanisation effects at European sites and upon areas of FLL. The HRA will take these in-combination impacts into consideration.
Anglian River Basin Management Plan (RBMP) ³⁰	The Anglian RBMP was updated in December 2022	The RBMP provides an overview of river basin planning in England for the Anglian River Basin District. It includes an assessment of the status of waterbodies in the River Basin District, objectives for these waterbodies and a summary of the measures necessary to reach these objectives.	The RBMP was supported by an HRA ³¹ . 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.	The RBMP actions are focused on water bodies and the improvement of European sites that are water dependent. The achievement of these aims will be considered in the HRA process. Whilst development activities arising from Local Plans may inhibit the ability of the RBMP to achieve objectives relating to

²⁶ Cambridgeshire County Council (2015) Third Cambridgeshire Local Transport Plan 2011-2031: Long Term Transport Strategy. Available at: https://www.cambridgeshire.gov.uk/asset-library/imported-assets/R-TP-The_Long_Term_Transport_Strategy.pdf [Date accessed: 09/10/25]

²⁷ Cambridgeshire County Council (2015) Transport Delivery Plan. Available at: <https://www.cambridgeshire.gov.uk/residents/travel-roads-and-parking/transport-plans-and-policies/transport-delivery-plan> [Date accessed: 09/10/25]

²⁹ Cambridgeshire County Council and Peterborough City Council (2021) Cambridgeshire and Peterborough Minerals and Waste Local Plan 2036. Available at: <https://www.cambridgeshire.gov.uk/business/planning-and-development/planning-policy/adopted-minerals-and-waste-plan> [Date accessed: 19/06/25]

³⁰ Environment Agency (2022) Anglian river basin district river basin management plan: updated 2022. Available at: <https://www.gov.uk/guidance/anglian-river-basin-district-river-basin-management-plan-updated-2022> [Date accessed: 09/10/25]

³¹ Environment Agency (2022) River basin management plan for the Anglian River Basin District: Habitats Regulations Assessment (September 2022). Available at: https://assets.publishing.service.gov.uk/media/635242f8e90e07768c1a73a0/Anglian_river_basin_management_plan_2022_HRA.pdf [Date accessed: 09/10/25]

Plans and policies	Plan status	Summary of housing/employment key elements of the Local Plan that could cause in combination effects	Summary of HRA findings	Potential in combination LSE
				European sites, the overall effect of the RBMP is to promote management towards Good Ecological Status (GES).
Anglian Water's Water Resource Management Plan (WRMP) 2024 ³²	Published September 2024	The WRMP24 sets out how Anglian Water will maintain a sustainable and secure supply of safe drinking water over the plan period.	The WRMP was supported by an HRA ³³ . It concluded no adverse impacts on the integrity of any European sites either alone, or in-combination, so long as adjustments are made to the application of measures described in the individual assessments.	This plan aims to protect the water environment and takes account for future water demand. The achievement of these aims will be considered in the HRA process. It is unlikely that the WRMP will have alone or in-combination effects on the water environment.
Anglian Water Drought Plan ³⁴	Published April 2022. A Draft Drought Plan 2027 has since been published for statutory public consultation. ³⁵	The Drought Plan outlines the operational steps that will be conducted if a drought occurs in the five-year period from 2022 to 2027. It proposes ongoing leakage reduction measures, water efficiency, and monitoring and metering activities. The Draft Drought Plan 2027 provides an overview of the operational and tactical actions that would be implemented to manage a drought during the period 2027–2032, while maintaining public water supplies and minimising environmental impacts.	An HRA ³⁶ was prepared in support of the Drought Plan. It concluded no adverse impacts on the integrity of any European sites, either alone, or in-combination.	This plan aims to protect the water environment in times of drought. The achievement of these aims will be considered in the HRA process. It is unlikely that the Drought Plan will have alone, or in-combination, effects on the water environment.

³² Anglian Water (2023) Our Water Resources Management Plan 2024. Available at: <https://www.anglianwater.co.uk/siteassets/household/about-us/wrmp/revised-draft-wrmp24-main-report-v2.pdf> [Date accessed: 09/10/25]

³³ Mott MacDonald (2023) Anglian Water Revised Draft Water Resource Management Plan 2024 Environmental Report Sub-Report A: Habitats Regulations Assessment (HRA). Available at: <https://www.anglianwater.co.uk/SysSiteAssets/household/about-us/wrmp/revised-draft-wrmp24-environmental-report-sub-report-a---hra.pdf> [Date accessed: 09/10/25].

³⁴ Anglian Water (2022) Drought Plan 2022 Final Version. Available at: <https://www.anglianwater.co.uk/siteassets/household/about-us/aws-drought-plan-2022.pdf> [Date accessed: 09/10/25]

³⁵ Anglian Water (2026) Draft Drought Plan 2027. Available at: <https://www.anglianwater.co.uk/siteassets/household/corporate/drought-plan/aws-draft-drought-plan-2027.pdf> [Date accessed: 15/06/26]

³⁶ Ricardo (2022) Anglian Water Drought Plan 2022: Habitat Regulations Assessment – Stage 1 Screening and Stage 2 Appropriate Assessment Report. Available at: <https://www.anglianwater.co.uk/SysSiteAssets/household/about-us/aws-drought-plan-2022---hra.pdf> [Date accessed: 09/10/25]

Plans and policies	Plan status	Summary of housing/employment key elements of the Local Plan that could cause in combination effects	Summary of HRA findings	Potential in combination LSE
Affinity Water (AW) Water Resource Management Plan (WRMP) 2024 ³⁷	Published October 2024	Whilst the Plan area is not located within the AW WRMP area, to increase resilience to drought, water trading with AW is discussed within the Anglian WRMP. Within AW's WRMP there is a focus on climate change resilience, the implementation of smart meters and working towards better pipe connections to increase water availability.	An HRA ³⁸ was undertaken in support of the WRMP, which set out a series of mitigation measures. The HRA concluded that, provided the mitigation measures are included in the WRMP, it would not result in an adverse effect on any European sites.	This plan aims to protect the water environment and takes account for future water demand. The achievement of these aims will be considered in the HRA process. It is unlikely that the WRMP will have alone or in-combination effects on the water environment.
Cambridge Water's Water Resources Management Plan (WRMP) 2024 ³⁹	Published March 2025	The WRMP outlines how Cambridge Water will maintain a sustainable and secure supply of safe drinking water over the plan period.	An HRA⁴⁰ was prepared in support of the WRMP. It concluded that the WRMP will, alone, have LSEs upon the following three European sites: • Ouse Washes SAC, SPA and Ramsar; • Fenland SAC; and, • Eversden & Wimpole Woods SAC.	Yes. The HRA concluded that the plan would have LSEs upon three European sites: Ouse Washes SAC, SPA and Ramsar; Fenland SAC; and Eversden & Wimpole Woods SAC.

³⁷ Affinity Water (2024) Water Resource Management Plan 2024. Available at: <https://affinitywater.uk/engagement/hq.com/wrmp> [Date accessed: 09/10/25]

³⁸ AECOM (2020) Technical Report: 4.12 Habitats Regulations Assessment Revised Draft Water Resources Management Plan 2020-2080. Available at: https://www.affinitywater.co.uk/docs/Water_Resources/Archives/4.12_Habitat_Regulations_Assessment_Final_WRMP19.pdf [Date accessed: 09/10/25]

³⁹ Cambridge Water (2025) Final Water Resources Management Plan 2024. Available at: <https://www.cambridge-water.co.uk/media/zadnmcfe/cam-water-resources-management-plan-2024-final.pdf> [Date accessed: 09/10/25]

⁴⁰ Ricardo (2023) Habitats Regulations Assessment: Draft Water Resources Management Plan 2024. Available at: <https://www.cambridge-water.co.uk/media/twqh2ovj/cambridge-water-draft-wrmp24-hra-issue-3.pdf> [Date accessed: 09/10/25]

Plans and policies	Plan status	Summary of housing/employment key elements of the Local Plan that could cause in combination effects	Summary of HRA findings	Potential in combination LSE
Cambridge Water Drought Plan ⁴¹	Published April 2022	The Drought Plan outlines the intended actions of Cambridge Water before, during and after drought events, to ensure water demand needs and the needs of the environment both continue to be met.	An HRA ⁴² was prepared in support of the Drought Plan. It concluded no adverse impacts on the integrity of any European sites, either alone, or in-combination.	This plan aims to protect the water environment in times of drought. The achievement of these aims will be considered in the HRA process. It is unlikely that the Drought Plan will have alone, or in-combination, effects on the water environment.

⁴¹ Cambridge Water (2022) Cambridge Water drought plan. Available at: <https://www.cambridge-water.co.uk/media/udchgvd1/cambridge-water-final-drought-plan-2022.pdf> [Date accessed: 09/10/25]

⁴² APEM (2021) Habitats Regulations Assessment Screening Report: Cambridge Water's Draft Drought Plan 2022 (September 2021). Available at: <https://www.cambridge-water.co.uk/media/5yljwncu/appendix-f-habitats-regulation-asessment-screening-report-v1.pdf> [Date accessed: 09/10/25]

Appendix B: European Site Conservation Objectives and Threats and Pressures

Barnack Hills & Holes 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:

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 – priority habitat)

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

- Loss of/disconnection from supporting off-site habitat – impact of loss of, or disconnection from, nearby habitats that support or are functionally linked to the site;
- Air pollution – impact of changes to air quality, including atmospheric nitrogen deposition and acidification; and,
- Public access/disturbance.

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

Qualifying features:

S1308. *Barbastella barbastellus*; Barbastelle Bat

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

- Loss of/disconnection from supporting off-site habitat – impact of loss of, or disconnection from, nearby habitats that support or are functionally linked to the site;
- Landscape-altering development – impact of development altering the landscape and causing the loss of/disruption to flight lines to and from the site;

¹ Natural England (2018) European Site Conservation Objectives for Barnack Hills & Holes SAC (UK0030031). Available at: <https://publications.naturalengland.org.uk/publication/5111783597539328> [Date accessed: 02/06/26]

² Natural England (2014) Site Improvement Plan: Barnack Hills & Holes SAC (SIP009). Available at: <https://publications.naturalengland.org.uk/publication/4529218465562624> [Date accessed: 02/06/26]

³ Natural England (2019) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features, Barnack Hills & Holes Special Area of Conservation (SAC) Site Code: UK0030031. Available at: <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0030031.pdf> [Date accessed: 02/06/26]

⁴ Natural England (2018) European Site Conservation Objectives for Eversden and Wimpole Woods SAC (UK0030331). Available at: <https://publications.naturalengland.org.uk/publication/6736081810620416> [Date accessed: 02/06/26]

⁵ Natural England (2015) Site Improvement Plan: Eversden and Wimpole Woods SAC (SIP078). Available at: <https://publications.naturalengland.org.uk/publication/5757354431741952> [Date accessed: 02/06/26]

⁶ Natural England (2018) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features, Eversden and Wimpole Woods Special Area of Conservation (SAC) Site Code: UK0030331. Available at: <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0030331.pdf> [Date accessed: 02/06/26]

Eversden & Wimpole Woods SAC⁴

- Disturbance from human activity – impact of tree management practices and nighttime light pollution;
- Air pollution – impact of changes to air quality, including atmospheric nitrogen deposition and acidification;
- Water pollution/water quality – impact of pollutants entering supporting water habitats (specifically nearby lakes and ponds); and,
- Hydrology/water quantity – impact of inappropriate water levels of supporting water habitats (specifically nearby lakes and ponds).

Fenland SAC (where it is underpinned by Woodwalton Fen SSSI)⁷

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 population of qualifying species; and,
- The distribution of qualifying species within the site.

Qualifying features:

H6410. *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*); Purple moor-grass meadows

H7210. Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae*; Calcium-rich fen dominated by Great Fen-sedge (Saw-sedge) (priority habitat/species)

S1149. *Cobitis taenia*; Spined Loach

S1166. *Triturus cristatus*; Great Crested Newt

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

- Loss of/disconnection from supporting off-site habitat – impact of loss of, or disconnection from, nearby habitats that support or are functionally linked to the site;
- Air pollution – impact of changes to air quality, including atmospheric nitrogen deposition and acidification;
- Water pollution/water quality – impact of high nutrient levels, changes to water chemistry and other changes to water quality; and,
- Hydrology/water quantity – impact of disturbed water regimes (including the source, depth, duration, frequency, magnitude and timing of water supply), disturbed flooding regimes, changes to water levels, changes to water table height and other hydrological changes.

⁷ Natural England (2018) European Site Conservation Objectives for Fenland SAC (UK0014782). Available at: <https://publications.naturalengland.org.uk/publication/6712672527581184> [Date accessed: 03/06/26]

⁸ Natural England (2014) Site Improvement Plan: Fenland SAC (SIP084). Available at: <https://publications.naturalengland.org.uk/publication/6024783481274368> [Date accessed: 03/06/26]

⁹ Natural England (2019) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features Fenland (SAC) Site Code: UK0014782. Available at: <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0014782.pdf> [Date accessed: 03/06/26]

Nene Washes 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 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:

S1149. *Cobitis taenia*; Spined Loach

Threats and Pressures at the European site which may be affected by the Local Plan^{11,12}.

- Loss of/disconnection from supporting off-site habitat – impact of loss of, or disconnection from, nearby habitats that support or are functionally linked to the site;
- Water pollution/water quality – impacts of high nutrient levels (including high levels of phosphorous) and other changes to water quality; and,
- Hydrology/water quantity – impacts of disturbed flow regimes, changes to water quantity and other hydrological changes.

¹⁰ Natural England (2018) European Site Conservation Objectives for Nene Washes SAC (UK0030222). Available at: <https://publications.naturalengland.org.uk/publication/5559224163631104> [Date accessed: 02/06/26]

¹¹ Natural England (2014) Site Improvement Plan: Nene Washes (SIP146). Available at: <https://publications.naturalengland.org.uk/publication/5376938197647360> [Date accessed: 02/06/26]

¹² Natural England (2019) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features, Nene Washes (SAC) Site Code: UK0030222. Available at: <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0030222.pdf> [Date accessed: 02/06/26]

Nene Washes SPA¹³,

Conservation objectives:

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

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

Qualifying features:

A037. *Cygnus columbianus bewickii*; Bewick's Swan (Non-breeding)

A050. *Anas penelope*; Eurasian Wigeon (Non-breeding)

A051. *Anas strepera*; Gadwall (Breeding)

A051. *Anas strepera*; Gadwall (Non-breeding)

A052. *Anas crecca*; Eurasian Teal (Non-breeding)

A054. *Anas acuta*; Northern Pintail (Non-breeding)

A055. *Anas querquedula*; Garganey (Breeding)

A056. *Anas clypeata*; Northern Shoveler (Non-breeding)

A056. *Anas clypeata*; Northern Shoveler (Breeding)

A156a. *Limosa limosa limosa*; Black-tailed Godwit (Breeding)

Threats and Pressures at the European site which may be affected by the Local Plan^{14, 15}

- Disturbance caused by human activity – disturbance of visitors (including those visiting the site to engage in angling, wildfowling, bird watching and skating);
- Landscape-altering development – impact of development altering the landscape and causing the loss of unobstructed lines of sight within feeding or roosting habitat, which can limit the ability of birds to detect predators;
- Loss of/disconnection from supporting off-site habitat – impact of loss of, or disconnection from, nearby habitats that support or are functionally linked to the site;
- Water pollution/water quality – impacts of high nutrient levels (including high levels of phosphorous) and other changes to water quality; and,
- Hydrology/water quantity – impacts of disturbed flow regimes, changes to water supply, changes to water depth, changes to the area of waterbodies, changes to overall water quantity and other hydrological changes.

¹³ Natural England (2019) European Site Conservation Objectives for Nene Washes SPA (UK9008031). Available at: <https://publications.naturalengland.org.uk/publication/4894064390438912> [Date accessed: 02/06/26]

¹⁴ Natural England (2014) Site Improvement Plan: Nene Washes (SIP146). Available at: <https://publications.naturalengland.org.uk/publication/5376938197647360> [Date accessed: 02/06/26]

¹⁵ Natural England (2019) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features, Nene Washes (SPA) Site Code: UK9008031. Available at: <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK9008031.pdf> [Date accessed: 02/06/26]

Ramsar Criterion	Justification for the application of each criterion
2	The site supports an important assemblage of nationally rare breeding birds. In addition, a wide range of raptors occur through the year. The site also supports several nationally scarce plants, and two vulnerable and two rare British Red Data Book invertebrate species have been recorded.
6	Qualifying Species/populations (as identified at designation): Species with peak counts in winter: Tundra Swan, <i>Cygnus columbianus bewickii</i>, Northwest Europe 694 individuals, representing an average of 2.3% of the population (five year peak mean 1998/9- 2002/3) Contemporary data and information on waterbird trends at this site and their regional (sub-national) and national contexts can be found in the annual Wetland Bird Survey report.

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

N/A

Orton Pit SAC¹⁸

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;
- 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:

H3140. Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.; Calcium-rich nutrient-poor lakes, lochs and pools

S1166. *Triturus cristatus*; Great Crested Newt

¹⁶ JNCC (1993) Information Sheet on Ramsar Wetlands (RIS): Nene Washes. Available at: <https://jncc.gov.uk/jncc-assets/RIS/UK11046.pdf> [Date accessed: 03/06/26]

¹⁷ Ibid.

¹⁸ Natural England (2018) European Site Conservation Objectives for Orton Pit SAC (UK0030053). Available at: <https://publications.naturalengland.org.uk/publication/5289941760212992> [Date accessed: 02/06/26]

Orton Pit SAC¹⁸

Threats and Pressures at European site which may be affected by the Local Plan^{19,20}

- Loss of/disconnection from supporting off-site habitat – impact of loss of, or disconnection from, nearby habitats that support or are functionally linked to the site;
- Direct impact from third party – impact of illegal activities including off-roading, vandalism, arson and disturbance from dogs jumping into ponds;
- Water pollution/water quality – impact of acidification; and inappropriate levels of chlorophyll, dissolved oxygen, nitrogen, phosphate and other pollutants; and,
- Hydrology/water quantity – impact of disturbed water regimes, inappropriate water levels, and insufficient water transparency.

Ouse Washes SAC²¹

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:

S1149. *Cobitis taenia*; Spined Loach

Threats and Pressures at European site which may be affected by the Local Plan^{22,23}

- Loss of/disconnection from supporting off-site habitat – impact of loss of, or disconnection from, nearby habitats that support or are functionally linked to the site;
- Water pollution/water quality – impacts of inappropriate levels of nutrients, organic pollutants and other pollutants (particularly pollution of groundwater); and,
- Hydrology/water quantity – impacts of inappropriate water levels and disturbed flow regimes.

¹⁹ Natural England (2014) Site Improvement Plan: Orton Pit SAC (SIP159). Available at: <https://publications.naturalengland.org.uk/publication/5570370673311744> [Date accessed: 02/06/26]

²⁰ Natural England (2018) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features, Orton Pit Special Area of Conservation (SAC) Site Code: UK0030053. Available at: <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0030053.pdf> [Date accessed: 02/06/26]

²¹ Natural England (2018) European Site Conservation Objectives for Ouse Washes SAC (UK0013011). Available at: <https://publications.naturalengland.org.uk/publication/4894882430713856> [Date accessed: 02/06/26]

²² Natural England (2014) Site Improvement Plan: Ouse Washes (SIP160). Available at: <https://publications.naturalengland.org.uk/publication/5354106084392960> [Date accessed: 02/06/26]

²³ Natural England (2015) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features, Ouse Washes (SAC) Site Code: UK0013011. Available at: <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0013011.pdf> [Date accessed: 02/06/26]

Ouse Washes SPA²⁴

Conservation objectives:

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

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

Qualifying features:

A037. *Cygnus columbianus bewickii*; Bewick's Swan (Non-breeding)

A038. *Cygnus cygnus*; Whooper Swan (Non-breeding)

A050. *Anas penelope*; Eurasian Wigeon (Non-breeding)

A051. *Anas strepera*; Gadwall (Breeding)

A052. *Anas crecca*; Eurasian Teal (Non-breeding)

A053. *Anas platyrhynchos*; Mallard (Breeding)

A054. *Anas acuta*; Northern Pintail (Non-breeding)

A055. *Anas querquedula*; Garganey (Breeding)

A056. *Anas clypeata*; Northern Shoveler (Non-breeding)

A056. *Anas clypeata*; Northern Shoveler (Breeding)

A082. *Circus cyaneus*; Hen Harrier (Non-breeding)

A151. *Philomachus pugnax*; Ruff (Breeding)

A156a. *Limosa limosa limosa*; Black-tailed Godwit (Breeding)

Waterbird assemblage

Breeding bird assemblage

Threats and Pressures at European site which may be affected by the Local Plan^{25,26}

- Loss of/disconnection from supporting off-site habitat – impact of loss of, or disconnection from, nearby habitats that support or are functionally linked to the site;
- Disturbance caused by human activity – impact of human activity in and around the site, including angling, wildfowling and walking/dog walking;
- Landscape- and landform-altering development – impact of development altering the landscape/nearby landforms and causing the loss of unobstructed lines of sight within feeding or roosting habitat, which can limit the ability of birds to detect predators;
- Water pollution/water quality – impact of inappropriate levels of nutrients, organic pollutants and other pollutants (particularly pollution of groundwater); and,
- Hydrology/water quantity – impact of disturbed flow regimes, changes to water supply, changes to water area/depth, and other changes to water quantity.

²⁴ Natural England (2019) European Site Conservation Objectives for Ouse Washes SPA (UK9008041). Available at: <https://publications.naturalengland.org.uk/publication/6636062256398336> [Date accessed: 02/06/26]

²⁵ Natural England (2014) Site Improvement Plan: Ouse Washes (SIP160). Available at: <https://publications.naturalengland.org.uk/publication/5354106084392960> [Date accessed: 02/06/26]

²⁶ Natural England (2019) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features, Ouse Washes (SPA) Site Code: UK9008041. Available at: <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK9008041.pdf> [Date accessed: 02/06/26]

Ramsar Criterion	Justification for the application of each criterion
1	
2	
5	
6	

²⁷ JNCC (1976) Information Sheet on Ramsar Wetlands (RIS): Ouse Washes. Available at: <https://jncc.gov.uk/jncc-assets/RIS/UK11051.pdf> [Date accessed: 03/06/26]

Threats and Pressures at European site which may be affected by the Local Plan²⁸:

- Eutrophication – impact of high nutrient levels caused by sewage treatment works and agricultural
- Reservoir/barrage/dam impact: flooding – recent decades have seen an increase in occurrence of spring flooding and winter flood depths. These two factors have had an adverse impact on vegetation and bird features of the site.

Portholme SAC²⁹

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*)

Threats and Pressures at European site which may be affected by the Local Plan^{30,31}

- Disturbance caused by recreation/visitors to the site – impact of unmanaged levels of site visitation and use of the site for recreation;
- Loss of/disconnection from supporting off-site habitat – impact of loss of, or disconnection from, nearby habitats that support or are functionally linked to the site;
- Air pollution – impact of changes to air quality, including atmospheric nitrogen deposition and acidification;
- Water pollution/water quality – impact of high nutrient levels arising from floodwaters from the River Ouse; and,
- Hydrology/water quantity – impact of disturbed water regimes, disturbed flooding regimes, and inappropriate water table levels.

²⁸ Ibid.

²⁹ Natural England (2018) European Site Conservation Objectives for Portholme SAC (UK0030054). Available at: <https://publications.naturalengland.org.uk/publication/4802651548024832> [Date accessed: 02/06/26]

³⁰ Natural England (2014) Site Improvement Plan: Portholme SAC (SIP177). Available at: <https://publications.naturalengland.org.uk/publication/6533964571344896> [Date accessed: 02/06/26]

³¹ Natural England (2019) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features Portholme Special Area of Conservation (SAC) Site Code: UK0030054. Available at: <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0030054.pdf> [Date accessed: 02/06/26]

Rutland Water SPA³²

Conservation objectives:

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

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

Qualifying features:

A005. *Podiceps cristatus*; Great Crested Grebe (Non-breeding)

A036. *Cygnus olor*; Mute Swan (Non-breeding)

A050. *Anas penelope*; Eurasian Wigeon (Non-breeding)

A051. *Anas strepera*; Gadwall (Non-breeding)

A052. *Anas crecca*; Eurasian Teal (Non-breeding)

A056. *Anas clypeata*; Northern Shoveler (Non-breeding)

A061. *Aythya fuligula*; Tufted Duck (Non-breeding)

A067. *Bucephala clangula*; Common Goldeneye (Non-breeding)

A070. *Mergus merganser*; Goosander (Non-breeding)

A125. *Fulica atra*; Common Coot (Non-breeding)

Waterbird assemblage

Threats and Pressures at European site which may be affected by the Local Plan³³

- Public access/disturbance – impacts of recreational activities in and around the SPA, including regular activities such as water sports, fishing, cycling, birdwatching and walking, and infrequent large events held on the banks of the reservoir annually;
- Direct impact from third party – impact of activities such as private firework displays in adjacent properties, hot air balloon flights and private aircraft flights;
- Planning permission – impacts of increasing development around the SPA (including development of windfarms), directly harming waterfowl species as well as resulting in habitat loss and fragmentation;
- Water pollution/water quality – impact of inappropriate nutrient levels (from diffuse sources, such as agriculture, and point sources, such as regulated treated and unregulated untreated sewage discharge into the SPA) and other pollutants; and,
- Hydrology/water quantity – impacts of inappropriate water levels, through human-induced changes to hydraulic conditions, including deliberate water abstraction practices.

Rutland Water Ramsar³⁴

Conservation objectives:

Ramsar sites do not have Conservation Objectives in the same way as SPAs and SACs. Information regarding the designation of Ramsar sites is contained in JNCC Ramsar Information Sheets. Ramsar Criteria are the criteria for identifying Wetlands of International Importance. The relevant criteria and ways in which this site meets the criteria are presented in the table below.

³² Natural England (2023) European Site Conservation Objectives for Rutland Water SPA (UK9008051). Available at: <https://publications.naturalengland.org.uk/publication/4978639963684864> [Date accessed: 02/06/26]

³³ Natural England (2014) Site Improvement Plan: Rutland Water SPA (SIP208). Available at: <https://publications.naturalengland.org.uk/publication/5985520903520256> [Date accessed: 02/06/26]

³⁴ JNCC (1991) Information Sheet on Ramsar Wetlands (RIS): Rutland Water. Available at: <https://jncc.gov.uk/jncc-assets/RIS/UK11062.pdf> [Date accessed: 03/06/26]

Ramsar Criterion	Justification for the application of each criterion
5	
6	

Threats and Pressures at European site which may be affected by the Local Plan³⁵:

N/A

The Wash & Norfolk Coast SAC³⁶

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 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:

H1110. Sandbanks which are slightly covered by sea water all the time; Subtidal sandbanks

H1140. Mudflats and sandflats not covered by seawater at low tide; Intertidal mudflats and sandflats

H1150. Coastal lagoons (priority habitat)

H1160. Large shallow inlets and bays

H1170. Reefs

H1310. *Salicornia* and other annuals colonising mud and sand; Glasswort and other annuals colonising mud and sand

H1330. Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)

H1420. Mediterranean and thermo-Atlantic halophilous scrubs (*Sarcocornetea fruticosi*); Mediterranean

³⁵ Ibid.

³⁶ Natural England (2018) European Site Conservation Objectives for The Wash & North Norfolk Coast SAC (UK0017075). Available at: <https://publications.naturalengland.org.uk/publication/5950176598425600> [Date accessed: 03/06/26]

The Wash & Norfolk Coast SAC³⁶

saltmarsh scrub

S1355. *Lutra lutra*; Otter

S1365. *Phoca vitulina*; Common Seal

Threats and Pressures at European site which may be affected by the Local Plan^{37,38}

- Public access/disturbance – impact of disturbance by visitors and recreational activity (including, but not limited to, boating, low altitude aircraft use, wildlife tours/watching, kiting, motorised vehicle use, biking, walking/dog walking, littering and barbecuing on the beach);
- Coastal squeeze – impact of sea level rise and coastal development (including erection and maintenance of coastal defences), which result in the loss of intertidal and coastal habitats;
- Loss of/disconnection from supporting off-site habitat – impact of loss of, or disconnection from, nearby habitats that support or are functionally linked to the site;
- Air pollution – impact of changes to air quality, including atmospheric nitrogen deposition and acidification;
- Water pollution/water quality – impacts (including increased turbidity) of inappropriate levels of nutrients, dissolved oxygen, toxic chemicals, and other pollutants and contaminants; and,
- Hydrology/water quantity – impacts of inappropriate water levels/depth, changes to water area, changes to water density, and changes to the source, depth, duration, frequency, magnitude and timing of water supply or flow, through human-induced changes to hydraulic conditions.

The Wash SPA³⁹

Conservation objectives:

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

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

Qualifying features:

A037. *Cygnus columbianus bewickii*; Bewick's Swan (Non-breeding)

A040. *Anser brachyrhynchus*; Pink-footed Goose (Non-breeding)

A046a. *Branta bernicla bernicla*; Dark-bellied Brent Goose (Non-breeding)

A048. *Tadorna tadorna*; Common Shelduck (Non-breeding)

A050. *Anas penelope*; Eurasian Wigeon (Non-breeding)

A051. *Anas strepera*; Gadwall (Non-breeding)

A054. *Anas acuta*; Northern Pintail (Non-breeding)

A065. *Melanitta nigra*; Black (Common) Scoter (Non-breeding)

A067. *Bucephala clangula*; Common Goldeneye (Non-breeding)

A130. *Haematopus ostralegus*; Eurasian Oystercatcher (Non-breeding)

³⁷ Natural England (2014) Site Improvement Plan: The Wash and North Norfolk Coast (SIP245). Available at: <https://publications.naturalengland.org.uk/publication/5327498292232192> [Date accessed: 03/06/26]

³⁸ Natural England (2024) The Wash & North Norfolk Coast SAC, Supplementary Advice. Available at: <https://designatedsites.naturalengland.org.uk/ConservationAdvice/SupplementaryAdvice.aspx?SiteCode=UK0017075&SiteName=the+wash+&SiteNameDisplay=The+Wash+and+North+Norfolk+Coast+SAC&countyCode=29&responsiblePerson=&SeaArea=&IFCAArea=&NumMarineSeasonality=2> [Date accessed: 03/06/26]

³⁹ Natural England (2019) European Site Conservation Objectives for The Wash SPA (UK9008021). Available at: <https://publications.naturalengland.org.uk/publication/5747661105790976> [Date accessed: 03/06/26]

The Wash SPA³⁹

- A141. *Pluvialis squatarola*; Grey Plover (Non-breeding)
A143. *Calidris canutus*; Red Knot (Non-breeding)
A144. *Calidris alba*; Sanderling (Non-breeding)
A149. *Calidris alpina alpina*; Dunlin (Non-breeding)
A156. *Limosa limosa islandica*; Black-tailed Godwit (Non-breeding)
A157. *Limosa lapponica*; Bar-tailed Godwit (Non-breeding)
A160. *Numenius arquata*; Eurasian Curlew (Non-breeding)
A162. *Tringa totanus*; Common Redshank (Non-breeding)
A169. *Arenaria interpres*; Ruddy Turnstone (Non-breeding)
A193. *Sterna hirundo*; Common Tern (Breeding)
A195. *Sterna albifrons*; Little Tern (Breeding)

Waterbird assemblage

Breeding bird assemblage

Threats and Pressures at European site which may be affected by the Local Plan^{40,41}

- Public access/disturbance – impact of disturbance by visitors and recreational activity (including, but not limited to, boating, low altitude aircraft use, wildlife tours/watching, kiting, motorised vehicle use, biking, walking/dog walking, littering and barbecuing on the beach);
- Coastal squeeze – impact of sea level rise and coastal development (including erection and maintenance of coastal defences), which result in the loss of intertidal and coastal habitats;
- Landscape-altering development – impact of development altering the landscape and causing the loss of unobstructed lines of sight within feeding or roosting habitat, which can reduce predation detection by birds and fragment habitats;
- Loss of/disconnection from supporting off-site habitat – impact of loss of, or disconnection from, nearby habitats that support or are functionally linked to the site;
- Air pollution – impact of changes to air quality, including atmospheric nitrogen deposition and acidification;
- Water pollution/water quality – impacts (including increased turbidity) of inappropriate levels of nutrients, dissolved oxygen, toxic chemicals, and other pollutants and contaminants; and,
- Hydrology/water quantity – impacts of inappropriate water levels/depth, changes to water area, changes to water density, and changes to the source, depth, duration, frequency, magnitude and timing of water supply or flow, through human-induced changes to hydraulic conditions.

The Wash Ramsar⁴²

Conservation objectives:

Ramsar sites do not have Conservation Objectives in the same way as SPAs and SACs. Information regarding the designation of Ramsar sites is contained in JNCC Ramsar Information Sheets. Ramsar Criteria are the criteria for identifying Wetlands of International Importance. The relevant criteria and ways in which this site meets the criteria are presented in the table below.

⁴⁰ Natural England (2014) Site Improvement Plan: The Wash and North Norfolk Coast (SIP245). Available at: <https://publications.naturalengland.org.uk/publication/5327498292232192> [Date accessed: 03/06/26]

⁴¹ Natural England (2024) The Wash SPA, Supplementary Advice. Available at: <https://designatedsites.naturalengland.org.uk/ConservationAdvice/SupplementaryAdvice.aspx?SiteCode=UK9008021&SiteName=the%20wash%20&SiteNameDisplay=The+Wash+SPA&countyCode=29&responsiblePerson=&SeaArea=&IFCAArea=&NumMarineSeasonality=21> [Date accessed: 03/06/26]

⁴² JNCC (1988) Information Sheet on Ramsar Wetlands (RIS): The Wash. Available at: <https://jncc.gov.uk/jncc-assets/RIS/uk11072.pdf> [Date accessed: 03/06/26]

Ramsar Criterion	Justification for the application of each criterion
1	
3	
5	
6	

Threats and Pressures at European site which may be affected by the Local Plan⁴³:

N/A

Upper Nene Valley Gravel Pits SPA⁴⁴

Conservation objectives:

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

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

Qualifying features:

A021. *Botaurus stellaris*; Great Bittern (Non-breeding)

A051. *Anas strepera*; Gadwall (Non-breeding)

A140. *Pluvialis apricaria*; European Golden Plover (Non-breeding)

Waterbird assemblage

Threats and Pressures at European site which may be affected by the Local Plan^{45,46}

- Public access/disturbance – disturbance from recreation (particularly walkers and dog owners) and outdoor sports and leisure activities;
- Planning permission – impact of increasing built and recreational development within and around the SPA, resulting in habitat loss and fragmentation, and increased disturbance;
- Loss of/disconnection from supporting off-site habitat – impact of loss of, or disconnection from, nearby habitats that support or are functionally linked to the site;
- Landscape-altering development – impact of development altering the landscape and causing the loss of unobstructed lines of sight within feeding or roosting habitat, which can reduce predation detection by birds and fragment habitats;
- Water pollution/water quality – impacts of changes to water quality; and,
- Hydrology/water quantity – impacts of inappropriate water levels/depth, changes to water area, and other changes to water quantity.

Upper Nene Valley Gravel Pits Ramsar⁴⁷

Conservation objectives:

Ramsar sites do not have Conservation Objectives in the same way as SPAs and SACs. Information regarding the designation of Ramsar sites is contained in JNCC Ramsar Information Sheets. Ramsar Criteria are the criteria for identifying Wetlands of International Importance. The relevant criteria and ways in which this site meets the criteria are presented in the table below.

⁴³ Ibid.

⁴⁴ Natural England (2019) European Site Conservation Objectives for Upper Nene Valley Gravel Pits SPA (UK9020296). Available at: <https://publications.naturalengland.org.uk/publication/5495529882517504> [Date accessed: 02/06/26]

⁴⁵ Natural England (2014) Site Improvement Plan: Upper Nene Valley Gravel Pits SPA (SIP254). Available at: <https://publications.naturalengland.org.uk/publication/6732225261338624> [Date accessed: 02/06/26]

⁴⁶ Natural England (2017) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features Upper Nene Valley Gravel Pits Special Protection Area (SPA) Site Code: UK9020296 Available at: <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK9020296.pdf> [Date accessed: 04/06/26]

⁴⁷ JNCC (2011) Information Sheet on Ramsar Wetlands (RIS): Upper Nene Valley Gravel Pits. Available at: <https://jncc.gov.uk/jncc-assets/RIS/UK11083.pdf> [Date accessed: 03/06/26]

Ramsar Criterion	Justification for the application of each criterion
5	
6	

Threats and Pressures at European site which may be affected by the Local Plan⁴⁸:

- Unspecified development: urban use – activities connected with ongoing urban development can cause significant disturbance to wintering birds if unmanaged; and,
- Recreation/tourism disturbance – access by people and dogs both on and off of public rights of way is activities including fishing and water sports. Demand for access and formal/informal recreational uncoordinated manner.

⁴⁸ Ibid.

Ramsar Criterion	Justification for the application of each criterion
1	
2	

Threats and Pressures at European site which may be affected by the Local Plan⁵⁰:

- Eutrophication; and,
- Drainage/land-claim for agriculture.

⁴⁹ JNCC (1995) Information Sheet on Ramsar Wetlands (RIS): Woodwalton Fen. Available at: <https://jncc.gov.uk/jncc-assets/RIS/UK11078.pdf> [Date accessed: 03/06/26]

⁵⁰ Ibid.

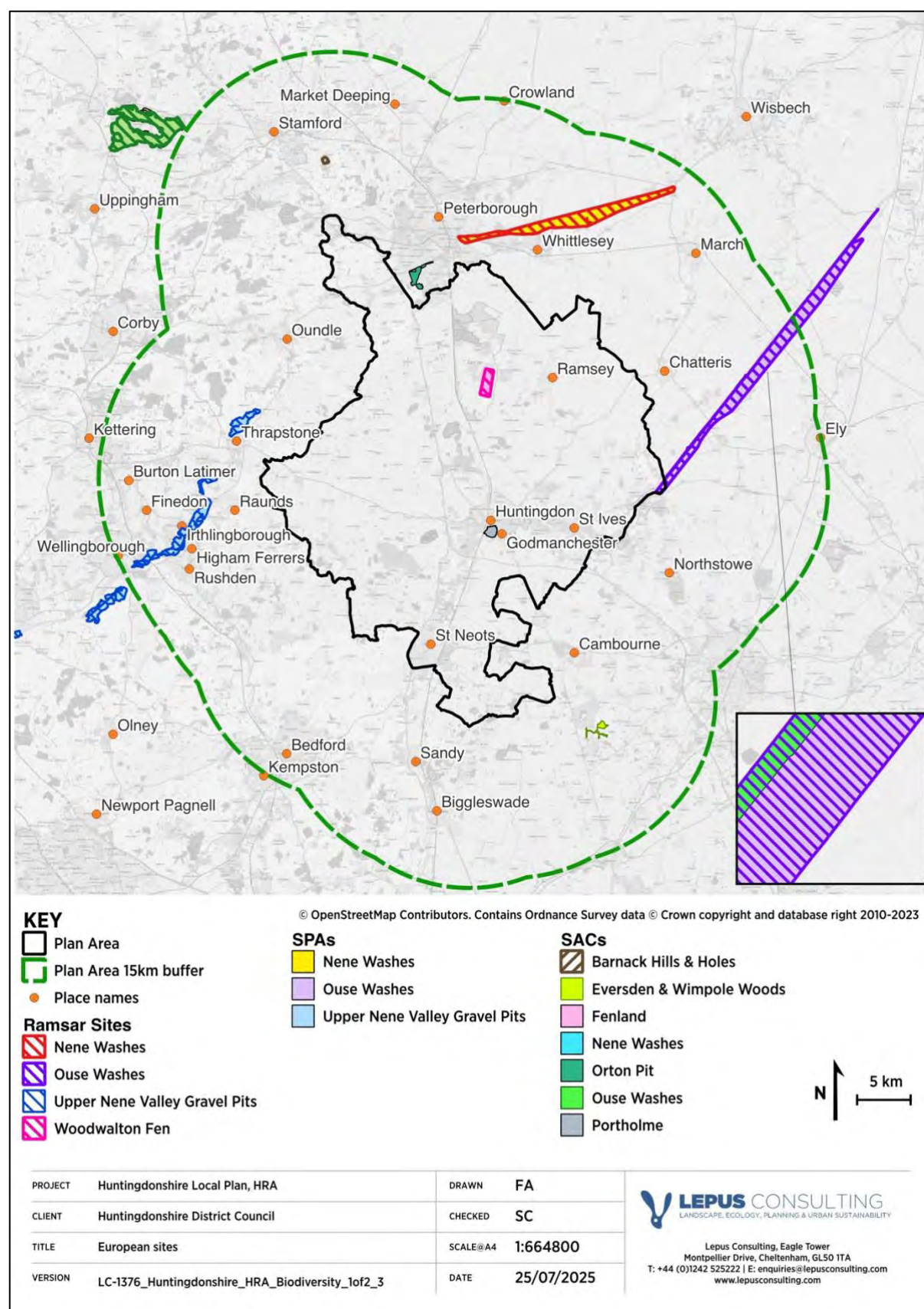


Figure B.1: European sites scoped into the HRA process (1)

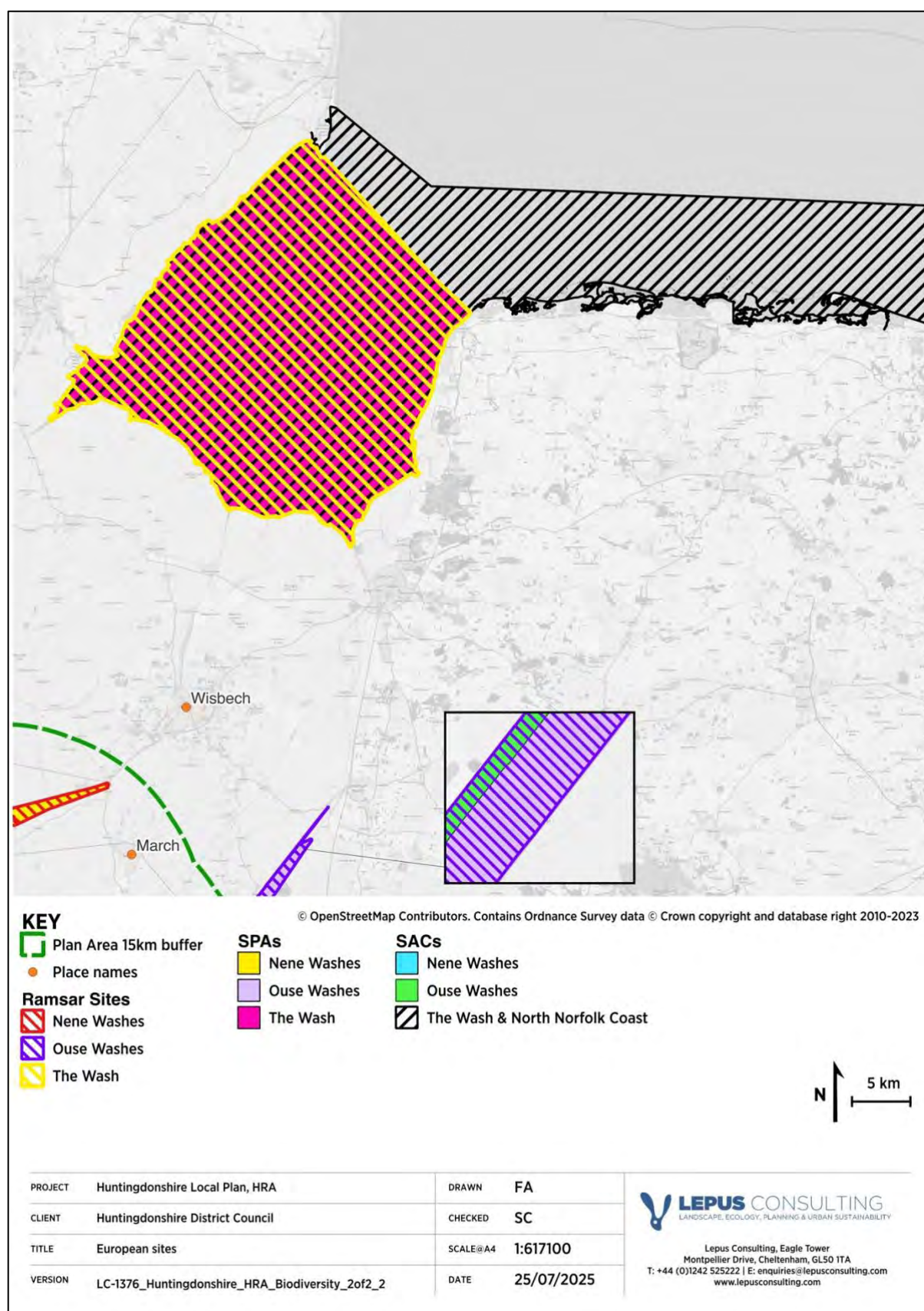


Figure B.2: European sites scoped into the HRA process (2) to illustrate the location of The Wash SPA, The Wash Ramsar and The Wash & North Norfolk Coast SAC.

Appendix C: Policies screening summary to inform test of likely significance

The Huntingdonshire Local Plan (Local Plan) policies and allocations have been screened using the screening categories¹ presented in **Table C.1**.

Table C.1: Screening evaluation categories

Screening evaluation categories	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 in-combination.	Screen Out
L. Policies or proposals which might be likely to have a significant effect in-combination.	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

¹ Based on the now withdrawn DTA HRA Handbook Source: Tyldesley, D., and Chapman, C. (2013) The Habitats Regulations Assessment Handbook edition UK: DTA Publications Limited.

Section A: What is the Local Plan?

Chapter 1

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
n/a	Section A	Section A of the Local Plan is administrative text relating to the Plan and process for consultation.	Category A	Screen out

Section B: Our Strategy for Huntingdonshire to 2046

Chapter 2: Our Vision and Approach to Net Zero

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
n/a	Vision	The vision sets out the strategic priorities for an inclusive, sustainable, and healthy Huntingdonshire achieving net zero while supporting thriving communities and local prosperity. It is high level and does not trigger development or change and would, therefore, not lead to an LSE at any European site, either alone, or in combination.	Category A	Screen out
n/a	Aims and objectives	The aims and objectives help implement the vision for the Local Plan across a range of topics. They are high level and do not trigger development or change and would, therefore, not lead to an LSE at any European site, either alone, or in combination.	Category A	Screen out
n/a	Huntingdonshire net zero carbon aspirations	These aspirations set out how Huntingdonshire aspires to contribute towards achieving the national target of being net zero by 2050. They are high level and do not trigger development or change and would, therefore, not lead to an LSE at any European site, either alone, or in combination.	Category A	Screen out

Chapter 3: How will Huntingdonshire grow and change?

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
Policy LP1	How much development do we expect?	This policy defines the extent of development needed to meet Huntingdonshire's future housing needs over the Plan period. Provision will be made for as follows: - At least 32,000 new homes across a range of tenures, and - About 14,400 additional jobs This policy therefore triggers development and has the potential for LSEs as follows: Air quality: Nene Washes SAC, Nene Washes Ramsar, Ouse Washes SAC, Ouse Washes Ramsar and Portholme SAC. Water quality: Fenland SAC; Nene Washes SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; and Woodwalton Fen Ramsar. Water quantity: Fenland SAC; Nene Washes SPA; Nene Washes Ramsar; Orton Pit SAC; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; Upper Nene Valley Gravel Pits SPA; Upper Nene Valley Gravel Pits Ramsar; and Woodwalton Fen Ramsar. Recreational pressure: Fenland SAC; Nene Washes SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; Upper Nene Valley Gravel Pits SPA; Upper Nene Valley Gravel Pits Ramsar; and Woodwalton Fen Ramsar. Urbanisation effects: Eversden & Wimpole Woods SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SPA; Ouse Washes Ramsar, Upper Nene Valley Gravel Pits SPA and Upper Nene Valley Gravel Pits Ramsar.	Category L	Screen in
Policy LP2	Our strategy for change	This policy sets out the locations for distribution of housing need in Huntingdonshire. This policy therefore supports development and has the potential for LSEs as follows: Air quality: Nene Washes SAC, Nene Washes Ramsar, Ouse Washes SAC, Ouse Washes Ramsar and Portholme SAC. Water quality: Fenland SAC; Nene Washes SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; and Woodwalton Fen Ramsar.	Category L	Screen in

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
		- Water quantity: Fenland SAC; Nene Washes SPA; Nene Washes Ramsar; Orton Pit SAC; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; Upper Nene Valley Gravel Pits SPA; Upper Nene Valley Gravel Pits Ramsar; and Woodwalton Fen Ramsar. - Recreational pressure: Fenland SAC; Nene Washes SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; Upper Nene Valley Gravel Pits SPA; Upper Nene Valley Gravel Pits Ramsar; and Woodwalton Fen Ramsar. - Urbanisation effects: Eversden & Wimpole Woods SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SPA; Ouse Washes Ramsar, Upper Nene Valley Gravel Pits SPA and Upper Nene Valley Gravel Pits Ramsar.		
Policy LP 3	Distribution of growth	This policy sets out the distribution of growth that will help to deliver the strategic approach to secure a sustainable development patterns across the district . This policy therefore supports development and has the potential for LSEs as follows: - Air quality: Nene Washes SAC, Nene Washes Ramsar, Ouse Washes SAC, Ouse Washes Ramsar and Portholme SAC. - Water quality: Fenland SAC; Nene Washes SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; and Woodwalton Fen Ramsar. - Water quantity: Fenland SAC; Nene Washes SPA; Nene Washes Ramsar; Orton Pit SAC; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; Upper Nene Valley Gravel Pits SPA; Upper Nene Valley Gravel Pits Ramsar; and Woodwalton Fen Ramsar. - Recreational pressure: Fenland SAC; Nene Washes SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; Upper Nene Valley Gravel Pits SPA; Upper Nene Valley Gravel Pits Ramsar; and Woodwalton Fen Ramsar. - Urbanisation effects: Eversden & Wimpole Woods SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SPA; Ouse Washes Ramsar, Upper Nene Valley Gravel Pits SPA and Upper Nene Valley Gravel Pits Ramsar.	Category L	Screen in

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
Policy LP 4	Green and Blue Infrastructure Priority Areas	This policy outlines the criteria that all proposals are expected to support green and blue infrastructure, and highlights Priority Areas for their implementation. It does not directly trigger development which could lead to an LSE at any European site, either alone, or in combination.	Category D	Screen out
Policy LP 5	Settlement Hierarchy	This policy sets out the settlement hierarchy for Huntingdonshire. The policy will not 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 LP 6	Market Towns	This policy sets out the Council's approach for development proposals on sites in addition to those allocated in the Local Plan where they are within or adjacent to the designated Market Towns. This policy therefore supports development and has the potential for LSEs as follows: - Air quality: Nene Washes SAC, Nene Washes Ramsar, Ouse Washes SAC, Ouse Washes Ramsar and Portholme SAC. - Water quality: Fenland SAC; Nene Washes SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; and Woodwalton Fen Ramsar. - Water quantity: Fenland SAC; Nene Washes SPA; Nene Washes Ramsar; Orton Pit SAC; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; Upper Nene Valley Gravel Pits SPA; Upper Nene Valley Gravel Pits Ramsar; and Woodwalton Fen Ramsar. - Recreational pressure: Fenland SAC; Nene Washes SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; Upper Nene Valley Gravel Pits SPA; Upper Nene Valley Gravel Pits Ramsar; and Woodwalton Fen Ramsar. - Urbanisation effects: Eversden & Wimpole Woods SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SPA; Ouse Washes Ramsar, Upper Nene Valley Gravel Pits SPA and Upper Nene Valley Gravel Pits Ramsar.	Category L	Screen in
Policy LP 7	Service Centres	This policy sets out the Council's approach for development proposals on sites in addition to those allocated in this plan where they are within or adjacent to the designated Service Centres. This policy therefore supports development and has the potential for LSEs as follows: - Air quality: Nene Washes SAC, Nene Washes Ramsar, Ouse Washes SAC, Ouse Washes Ramsar and Portholme SAC.	Category L	Screen in

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
		- Water quality: Fenland SAC; Nene Washes SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; and Woodwalton Fen Ramsar. - Water quantity: Fenland SAC; Nene Washes SPA; Nene Washes Ramsar; Orton Pit SAC; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; Upper Nene Valley Gravel Pits SPA; Upper Nene Valley Gravel Pits Ramsar; and Woodwalton Fen Ramsar. - Recreational pressure: Fenland SAC; Nene Washes SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; Upper Nene Valley Gravel Pits SPA; Upper Nene Valley Gravel Pits Ramsar; and Woodwalton Fen Ramsar. - Urbanisation effects: Eversden & Wimpole Woods SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SPA; Ouse Washes Ramsar, Upper Nene Valley Gravel Pits SPA and Upper Nene Valley Gravel Pits Ramsar.		
Policy LP 8	Local Service Villages	This policy sets out the Council's approach for development proposals on sites in addition to those allocated in this plan where they are within the designated Local Service Village. This policy therefore supports development and has the potential for LSEs as follows: - Air quality: Nene Washes SAC, Nene Washes Ramsar, Ouse Washes SAC, Ouse Washes Ramsar and Portholme SAC. - Water quality: Fenland SAC; Nene Washes SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; and Woodwalton Fen Ramsar. - Water quantity: Fenland SAC; Nene Washes SPA; Nene Washes Ramsar; Orton Pit SAC; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; Upper Nene Valley Gravel Pits SPA; Upper Nene Valley Gravel Pits Ramsar; and Woodwalton Fen Ramsar. - Recreational pressure: Fenland SAC; Nene Washes SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; Upper Nene Valley Gravel Pits SPA; Upper Nene Valley Gravel Pits Ramsar; and Woodwalton Fen Ramsar.	Category L	Screen in

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
		- Urbanisation effects: Eversden & Wimpole Woods SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SPA; Ouse Washes Ramsar, Upper Nene Valley Gravel Pits SPA and Upper Nene Valley Gravel Pits Ramsar.		
Policy LP 9	Villages	This policy sets out the Council's approach for development proposals on unallocated sites in or adjacent to the designated Villages. This policy therefore supports development and has the potential for LSEs as follows: - Air quality: Nene Washes SAC, Nene Washes Ramsar, Ouse Washes SAC, Ouse Washes Ramsar and Portholme SAC. - Water quality: Fenland SAC; Nene Washes SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; and Woodwalton Fen Ramsar. - Water quantity: Fenland SAC; Nene Washes SPA; Nene Washes Ramsar; Orton Pit SAC; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; Upper Nene Valley Gravel Pits SPA; Upper Nene Valley Gravel Pits Ramsar; and Woodwalton Fen Ramsar. - Recreational pressure: Fenland SAC; Nene Washes SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; Upper Nene Valley Gravel Pits SPA; Upper Nene Valley Gravel Pits Ramsar; and Woodwalton Fen Ramsar. - Urbanisation effects: Eversden & Wimpole Woods SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SPA; Ouse Washes Ramsar, Upper Nene Valley Gravel Pits SPA and Upper Nene Valley Gravel Pits Ramsar.	Category L	Screen in
Policy LP 10	Hamlets and the Countryside	This policy sets out the Council's approach for development proposals on unallocated sites within hamlets and the countryside. This policy therefore supports development and has the potential for LSEs as follows: - Air quality: Nene Washes SAC, Nene Washes Ramsar, Ouse Washes SAC, Ouse Washes Ramsar and Portholme SAC. - Water quality: Fenland SAC; Nene Washes SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC;	Category L	Screen in

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
		The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; and Woodwalton Fen Ramsar. - Water quantity: Fenland SAC; Nene Washes SPA; Nene Washes Ramsar; Orton Pit SAC; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; Upper Nene Valley Gravel Pits SPA; Upper Nene Valley Gravel Pits Ramsar; and Woodwalton Fen Ramsar. - Recreational pressure: Fenland SAC; Nene Washes SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; Upper Nene Valley Gravel Pits SPA; Upper Nene Valley Gravel Pits Ramsar; and Woodwalton Fen Ramsar. - Urbanisation effects: Eversden & Wimpole Woods SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SPA; Ouse Washes Ramsar, Upper Nene Valley Gravel Pits SPA and Upper Nene Valley Gravel Pits Ramsar.		
Policy LP 11	Placemaking for larger scale developments	This policy sets out the placemaking process for development proposals of 50 or more homes, 2,500m ² of floorspace (for all other uses) or where the number of residential units or floorspace is not given, on a site area of 2 hectares or more. It does not directly trigger development or change and would, therefore, not lead to an LSE at any European site, either alone, or in combination.	Category F	Screen out
Policy LP 12	How will infrastructure be provided?	This policy sets out a set of high-level criteria which development must meet to provide for the necessary on-site and, where appropriate, off-site infrastructure and facilities. It does not directly trigger development or change and would, therefore, not lead to an LSE at any European site, either alone, or in combination.	Category B	Screen out
Policy LP 13	Securing Infrastructure Provision	This policy sets out the delivery of development, detailing conditions and planning obligations. It does not directly trigger development or change and would, therefore, not lead to an LSE at any European site, either alone, or in combination.	Category F	Screen out
Policy LP 14	Supporting and enabling strategic infrastructure	This policy seeks to ensure that development and infrastructure are planned in a coordinated way, recognising infrastructure as an enabler of sustainable growth rather than a constraint. It does not directly trigger development or change and would, therefore, not lead to an LSE at any European site, either alone, or in combination.	Category F	Screen out
Policy LP 15	Facilitating Transport, Travel and Connectivity	This policy sets out criteria for development which generates additional movements to and from a building or site, including strategic transport improvements, assessment and mitigation of travel	Category F	Screen out

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
		requirements, and digital connectivity. It does not directly trigger development or change that could lead to an LSE at any European site, either alone or in combination.		
Policy LP 16	Approach to renewable energy schemes	This policy sets out the Council's approach to renewable and low carbon energy (in the form of solar PV and wind energy), including those that are led by the community, to achieve reductions in carbon emissions. This policy therefore has the potential for urbanisation effects upon the following European sites and areas of associated FLL: LSEs as follows: - Nene Washes SPA; - Nene Washes Ramsar; - Ouse Washes SPA; - Ouse Washes Ramsar; - Upper Nene Valley Gravel Pits SPA; - Upper Nene Valley Gravel Pits Ramsar; and - Eversden & Wimpole Woods SAC.	Category L	Screen in
Policy LP 17	Heath and well-being	This policy sets out criteria for major scale development involving residential or employment uses in the context of creating healthy, inclusive, accessible, safe places that support healthy lifestyles. It does not directly trigger development which could lead to an LSE at any European site, either alone, or in combination.	Category F	Screen out
Policy LP 18	Providing affordable homes	This policy sets out requirements for affordable housing provision within development proposals. It does not trigger development or change that could lead to an LSE at any European site, either alone, or in combination.	Category F	Screen out
n/a	Heritage Strategy	This strategy seeks to conserve and enhance Huntingdonshire's historic environment by protecting designated and non-designated heritage assets and requiring appropriate assessments where proposals have the potential to affect heritage assets. It does not directly trigger development or activities that could lead to an LSE at any European site, either alone or in combination.	Category A	Screen out
Policy LP 19	Green and blue infrastructure	This policy outlines the criteria that all proposals are expected to support green and blue infrastructure. It does not directly trigger development which could lead to an LSE at any European site, either alone, or in combination.	Category D	Screen out
Policy LP 20	Supporting carbon capture through nature	This policy sets out sustainability framework involving incorporating tree planting, soft landscaping, green roofs, green spaces, and sustainable drainage within a proposal to support carbon sequestration. This policy is in favour of protecting the natural environment, and will have no LSEs on European sites alone, or in combination.	Category D	Screen out

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
Policy LP 21	Managing flood risk	This policy sets out the criteria for addressing all forms of flood risk in proposals within the Local Plan. It is a plan wide environmental protection policy and does not directly trigger development which could lead to an LSE at any European site, either alone or in combination.	Category D	Screen out
Policy LP 22	Managing Waste Water	This policy sets out the Council's approach to ensure waste water is managed and maintained appropriately throughout the plan period and lifetime of development to support sustainable development within the district. It is a plan wide environmental protection policy and does not directly trigger development which could lead to an LSE at any European site, either alone or in combination.	Category D	Screen out
Policy LP 23	Managing Surface Water	This policy sets out criteria for new developments to manage surface water flooding through design. It does not directly trigger development which could lead to an LSE at any European site, either alone or in combination. This policy contains specific provisions relating to the protection of water quality at European sites (Orton Pits SAC, Fens SAC, Woodwalton Fens SAC, Portholme SAC and the Ouse Washes SPA, SAC and Ramsar). It therefore provides bespoke topic specific mitigation and will be screened into the HRA process for consideration as mitigation through an Appropriate Assessment.	Category M	Screen in
Policy LP 24	Water Efficiency	This policy sets out requirements for new development to demonstrate that it is designed to utilise no more than 90 litres per person per day of mains supplied/ potable water. It is a plan wide environmental protection policy and will not trigger development or other change which could lead to an LSE on any European site, either alone or in combination.	Category D	Screen out

Section C: Our Development Management Policies

Chapter 5: How will we create well designed places?

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
Policy LP 25	Design context and character	This policy requires proposals for development to respond positively to its context, drawing inspiration from the key characteristics of its surroundings. It does not, therefore, lead to development or change that could lead to an LSE at any European site, either alone, or in combination.	Category F	Screen out

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
Policy LP 26	Creating high quality places and spaces	This policy sets out requirements for new developments and advertisements to incorporate key placemaking principles. It does not, therefore, lead to development or change that could lead to an LSE at any European site, either alone, or in combination.	Category F	Screen out
Policy LP 27	Ensuring amenity for new buildings and neighbourhoods	This policy ensures that the physical environment created by new development protects ensures amenity for new buildings and neighbours. It does not, therefore, lead to development or change that could lead to an LSE at any European site, either alone, or in combination.	Category F	Screen out
Policy LP 28	Minimising embodied and operation carbon in new buildings	This policy sets out requirements for new development to take opportunities to reduce total embodied carbon content. Modern Methods of Construction could also be utilised. It does not, therefore, lead to development or change that could lead to an LSE at any European site, either alone, or in combination.	Category F	Screen out
Policy LP 29	Making existing buildings more energy efficient	This policy sets out requirements for new developments and redevelopments to consider opportunities to improve building energy efficiency. It does not, therefore, lead to development or change that could lead to an LSE at any European site, either alone, or in combination.	Category F	Screen out
Policy LP 30	Supporting active and sustainable travel	This policy sets out requirements for new development to contribute to an enhanced transport network that supports an increasing proportion of journeys being undertaken by active and sustainable travel modes. It is unlikely to have a significant effect on European sites either alone, or in combination.	Category F	Screen out
Policy LP 31	Parking Provisin and Vehicle Movement	This policy sets out requirements for appropriate provisioning for on-site servicing, movement, and parking of vehicles including commercial, service and emergency vehicles and incorporates appropriate parking for cycles. It does not lead to development or change that could lead to an LSE at any European site, either alone, or in combination.	Category F	Screen out
Policy LP 32	Providing electric vehicle charging points	This policy sets out requirements for new developments to make provision for electric vehicle charging infrastructure. It does not, therefore, lead to development or change that could lead to an LSE at any European site, either alone, or in combination.	Category F	Screen out
Policy LP 33	Preventing and reducing air pollution	This policy ensures proposals will be accompanied by an Air Quality Assessment and low emissions strategy in the case of significant adverse air quality effects. This policy is in favour of protecting the natural environment, and will have no LSEs on European sites alone, or in combination.	Category D	Screen out
Policy LP 34	Preventing and reducing ground contamination	This policy sets out criteria for investigation, risk assessment, and remediation in the context of a contaminated site or land due to previous uses. This policy is in favour of protecting the natural environment, and will have no LSEs on European sites alone, or in combination.	Category D	Screen out

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
	and groundwater pollution			

Chapter 6: How will we support a strong local economy?

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
Policy LP 35	Protecting and enhancing established employment areas	This policy seeks to protect and enhance the viability, range, suitability, availability, and location of established employment areas. This policy supports employment development within these areas and therefore has the potential to trigger development with the potential for LSEs as follows: - Air quality: Nene Washes SAC, Nene Washes Ramsar, Ouse Washes SAC, Ouse Washes Ramsar and Portholme SAC. - Water quality: Fenland SAC; Nene Washes SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; and Woodwalton Fen Ramsar. - Water quantity: Fenland SAC; Nene Washes SPA; Nene Washes Ramsar; Orton Pit SAC; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; Upper Nene Valley Gravel Pits SPA; Upper Nene Valley Gravel Pits Ramsar; and Woodwalton Fen Ramsar. - Urbanisation effects: Eversden & Wimpole Woods SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SPA; Ouse Washes Ramsar, Upper Nene Valley Gravel Pits SPA and Upper Nene Valley Gravel Pits Ramsar.	Category L	Screen in
Policy LP 36	Expansion and diversification of rural businesses	This policy outlines criteria for sustainable development relating to rural businesses / farm diversification. This policy supports employment development within these areas and therefore has the potential to trigger development with the potential for LSEs as follows: - Air quality: Nene Washes SAC, Nene Washes Ramsar, Ouse Washes SAC, Ouse Washes Ramsar and Portholme SAC. - Water quality: Fenland SAC; Nene Washes SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC;	Category L	Screen in

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
		The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; and Woodwalton Fen Ramsar. - Water quantity: Fenland SAC; Nene Washes SPA; Nene Washes Ramsar; Orton Pit SAC; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; Upper Nene Valley Gravel Pits SPA; Upper Nene Valley Gravel Pits Ramsar; and Woodwalton Fen Ramsar. - Urbanisation effects: Eversden & Wimpole Woods SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SPA; Ouse Washes Ramsar, Upper Nene Valley Gravel Pits SPA and Upper Nene Valley Gravel Pits Ramsar.		
Policy LP 37	Shaping businesses in the countryside	This policy sets out the framework for new industry-specific business proposals in the countryside, which may only be supported when there are no suitable sites available on allocated employment sites. This policy supports employment development within these areas and therefore has the potential to trigger development with the potential for LSEs as follows: - Air quality: Nene Washes SAC, Nene Washes Ramsar, Ouse Washes SAC, Ouse Washes Ramsar and Portholme SAC. - Water quality: Fenland SAC; Nene Washes SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; and Woodwalton Fen Ramsar. - Water quantity: Fenland SAC; Nene Washes SPA; Nene Washes Ramsar; Orton Pit SAC; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; Upper Nene Valley Gravel Pits SPA; Upper Nene Valley Gravel Pits Ramsar; and Woodwalton Fen Ramsar. - Urbanisation effects: Eversden & Wimpole Woods SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SPA; Ouse Washes Ramsar, Upper Nene Valley Gravel Pits SPA and Upper Nene Valley Gravel Pits Ramsar.	Category L	Screen in
Policy LP 38	Enabling key clusters and innovation-led growth	This policy outlines criteria for new strategic business clusters for advanced manufacturing, research and development, life sciences, digital tech, clean energy, creative industries, and agri-tech. This policy supports employment development under these criteria and therefore has the potential to trigger development with the potential for LSEs as follows: - Air quality: Nene Washes SAC, Nene Washes Ramsar, Ouse Washes SAC, Ouse Washes Ramsar and Portholme SAC.	Category L	Screen in

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
		- Water quality: Fenland SAC; Nene Washes SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; and Woodwalton Fen Ramsar. - Water quantity: Fenland SAC; Nene Washes SPA; Nene Washes Ramsar; Orton Pit SAC; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; Upper Nene Valley Gravel Pits SPA; Upper Nene Valley Gravel Pits Ramsar; and Woodwalton Fen Ramsar. - Urbanisation effects: Eversden & Wimpole Woods SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SPA; Ouse Washes Ramsar, Upper Nene Valley Gravel Pits SPA and Upper Nene Valley Gravel Pits Ramsar.		
Policy LP 39	Enabling logistics and distribution	This policy addresses the need for strategic logistics and distribution. It identifies sites where logistics and distribution will be supported. This policy supports development under these criteria and therefore has the potential to trigger development with the potential for LSEs as follows: - Air quality: Nene Washes SAC, Nene Washes Ramsar, Ouse Washes SAC, Ouse Washes Ramsar and Portholme SAC. - Water quality: Fenland SAC; Nene Washes SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; and Woodwalton Fen Ramsar. - Water quantity: Fenland SAC; Nene Washes SPA; Nene Washes Ramsar; Orton Pit SAC; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; Upper Nene Valley Gravel Pits SPA; Upper Nene Valley Gravel Pits Ramsar; and Woodwalton Fen Ramsar. - Urbanisation effects: Eversden & Wimpole Woods SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SPA; Ouse Washes Ramsar, Upper Nene Valley Gravel Pits SPA and Upper Nene Valley Gravel Pits Ramsar.	Category L	Screen in
Policy LP 40	Helping tourism and recreation in the countryside	This policy supports small-scale, sustainable tourism, sport, or leisure development where it is well-related to settlements. This policy supports development subject to a set of criteria and therefore has the potential to trigger development with the potential for LSEs as follows: - Air quality: Nene Washes SAC, Nene Washes Ramsar, Ouse Washes SAC, Ouse Washes Ramsar and Portholme SAC.	Category L	Screen in

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
		- Water quality: Fenland SAC; Nene Washes SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; and Woodwalton Fen Ramsar. - Water quantity: Fenland SAC; Nene Washes SPA; Nene Washes Ramsar; Orton Pit SAC; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; Upper Nene Valley Gravel Pits SPA; Upper Nene Valley Gravel Pits Ramsar; and Woodwalton Fen Ramsar. - Urbanisation effects: Eversden & Wimpole Woods SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SPA; Ouse Washes Ramsar, Upper Nene Valley Gravel Pits SPA and Upper Nene Valley Gravel Pits Ramsar.		
Policy LP 41	Defining our retail hierarchy	This policy sets out the retail hierarchy for Huntingdonshire. It supports development in these areas and therefore has the potential to trigger development with the potential for LSEs as follows: - Air quality: Nene Washes SAC, Nene Washes Ramsar, Ouse Washes SAC, Ouse Washes Ramsar and Portholme SAC. - Water quality: Fenland SAC; Nene Washes SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; and Woodwalton Fen Ramsar. - Water quantity: Fenland SAC; Nene Washes SPA; Nene Washes Ramsar; Orton Pit SAC; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; Upper Nene Valley Gravel Pits SPA; Upper Nene Valley Gravel Pits Ramsar; and Woodwalton Fen Ramsar. - Urbanisation effects: Eversden & Wimpole Woods SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SPA; Ouse Washes Ramsar, Upper Nene Valley Gravel Pits SPA and Upper Nene Valley Gravel Pits Ramsar.	Category D	Screen out
Policy LP 42	Promoting town centre vitality	This policy identifies Town Centre a Primary Shopping Areas. It supports development in these areas and therefore has the potential to trigger development with the potential for LSEs as follows: - Air quality: Nene Washes SAC, Nene Washes Ramsar, Ouse Washes SAC, Ouse Washes Ramsar and Portholme SAC. - Water quality: Fenland SAC; Nene Washes SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC;	Category L	Screen in

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
		The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; and Woodwalton Fen Ramsar. - Water quantity: Fenland SAC; Nene Washes SPA; Nene Washes Ramsar; Orton Pit SAC; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; Upper Nene Valley Gravel Pits SPA; Upper Nene Valley Gravel Pits Ramsar; and Woodwalton Fen Ramsar. - Urbanisation effects: Eversden & Wimpole Woods SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SPA; Ouse Washes Ramsar, Upper Nene Valley Gravel Pits SPA and Upper Nene Valley Gravel Pits Ramsar.		
Policy LP 43	Supporting Local Centres	This policy identifies sets criteria for local services and facilities. It supports development in these areas subject to these criteria and therefore has the potential to trigger development with the potential for LSEs as follows: - Air quality: Nene Washes SAC, Nene Washes Ramsar, Ouse Washes SAC, Ouse Washes Ramsar and Portholme SAC. - Water quality: Fenland SAC; Nene Washes SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; and Woodwalton Fen Ramsar. - Water quantity: Fenland SAC; Nene Washes SPA; Nene Washes Ramsar; Orton Pit SAC; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; Upper Nene Valley Gravel Pits SPA; Upper Nene Valley Gravel Pits Ramsar; and Woodwalton Fen Ramsar. - Urbanisation effects: Eversden & Wimpole Woods SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SPA; Ouse Washes Ramsar, Upper Nene Valley Gravel Pits SPA and Upper Nene Valley Gravel Pits Ramsar.	Category L	Screen in
Policy LP 44	Services and facilities	This policy will guide development of services and facilities outside designated areas known as Town Centres and Local Centres. It supports development in these areas subject to these criteria and therefore has the potential to trigger development with the potential for LSEs as follows: - Air quality: Nene Washes SAC, Nene Washes Ramsar, Ouse Washes SAC, Ouse Washes Ramsar and Portholme SAC. - Water quality: Fenland SAC; Nene Washes SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC;	Category L	Screen in

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
		The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; and Woodwalton Fen Ramsar. - Water quantity: Fenland SAC; Nene Washes SPA; Nene Washes Ramsar; Orton Pit SAC; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; Upper Nene Valley Gravel Pits SPA; Upper Nene Valley Gravel Pits Ramsar; and Woodwalton Fen Ramsar. - Urbanisation effects: Eversden & Wimpole Woods SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SPA; Ouse Washes Ramsar, Upper Nene Valley Gravel Pits SPA and Upper Nene Valley Gravel Pits Ramsar.		

Chapter 7: How will we support homes for all?

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
Policy LP 45	Promoting a mix of housing	This policy requires major housing developments to provide a mix of sizes, types and tenures reflecting identified local needs. It does not trigger development or change that could lead to an LSE at any European site, either alone, or in combination.	Category F	Screen out
Policy LP 46	Ensuring accessible and adaptable homes	This policy sets accessibility and adaptability standards for new homes in line with national building regulations. It does not trigger development or change that could lead to an LSE at any European site, either alone, or in combination.	Category F	Screen out
Policy LP 47	Facilitating self and custom build homes	This policy states support for self or custom build housing, with marketing and design conditions. It does not trigger development or change that could lead to an LSE at any European site, either alone, or in combination.	Category F	Screen out
Policy LP 48	Supporting specialist housing	This policy supports specialist C3 and C2 housing in accessible locations with criteria ensuring integration, access to services, and high design standards. It does not trigger development or change that could lead to an LSE at any European site, either alone, or in combination.	Category F	Screen out
Policy LP 49	Supporting houses in multiple occupation	The policy supports C4 housing in multiple occupation with criteria ensuring sufficient size, safe and functional living conditions, high standards of amenity, and nationally required minimum room standards for HMOs. It does not trigger development or change that could lead to a LSE at any European site, either alone, or in combination.	Category F	Screen out

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
Policy LP 50	Promoting rural exceptions housing	This policy supports small-scale affordable housing development on rural exception sites where a local need is demonstrated. Although the policy includes criteria to ensure that development is appropriately located, proportionate and sustainable, it has the potential to facilitate additional residential development. Therefore, the policy could result in pathways for LSEs at European sites, including through increased recreational pressure, changes in water demand and wastewater generation. The policy is therefore screened in for further assessment.	Category L	Screen in
Policy LP 51	Gypsies, travellers and travelling showpeople	This policy identifies a requirement to provide 127 new pitches over the Plan period. Whilst specific locations for pitches have not been provided, development has the potential for LSEs as follows: - Air quality: Nene Washes SAC, Nene Washes Ramsar, Ouse Washes SAC, Ouse Washes Ramsar and Portholme SAC. - Water quality: Fenland SAC; Nene Washes SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; and Woodwalton Fen Ramsar. - Water quantity: Fenland SAC; Nene Washes SPA; Nene Washes Ramsar; Orton Pit SAC; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; Upper Nene Valley Gravel Pits SPA; Upper Nene Valley Gravel Pits Ramsar; and Woodwalton Fen Ramsar. - Recreational pressure: Fenland SAC; Nene Washes SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; Upper Nene Valley Gravel Pits SPA; Upper Nene Valley Gravel Pits Ramsar; and Woodwalton Fen Ramsar. - Urbanisation effects: Eversden & Wimpole Woods SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SPA; Ouse Washes Ramsar, Upper Nene Valley Gravel Pits SPA and Upper Nene Valley Gravel Pits Ramsar.	Category L	Screen in

Chapter 8: How will we conserve and enhance the environment?

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
Policy LP 52	Protecting our nature and conservation sites	This policy establishes a clear hierarchy of protection for international, national and local nature conservation designations. It is a plan wide environmental protection policy and will not trigger development or change that could lead to an LSE at any European site, either alone, or in combination.	Category D	Screen out
Policy LP 53	Enhancing biodiversity and geodiversity	This policy sets out the council's approach to managing development and the natural environment in response to the decline in biodiversity. It is a plan wide environmental protection policy and will not trigger development or change that could lead to an LSE at any European site, either alone, or in combination.	Category D	Screen out
Policy LP 54	Protecting our trees, orchards, woodlands, hedges and hedgerows	This policy seeks to conserve and enhance trees and hedgerows, requiring surveys, assessments, and mitigation. Loss is only permitted in exceptional circumstances and must be mitigated or compensated. It is a plan wide environmental protection policy and will not trigger development or change that could lead to an LSE at any European site, either alone, or in combination.	Category D	Screen out
Policy LP 55	Protecting our Open Spaces, Outdoor Sport and Recreational Facilities	This policy identifies open and greenspaces and protects them from development. It will not trigger development or change that could lead to an LSE at any European site, either alone, or in combination.	Category F	Screen out
Policy LP 56	Heritage assets and their settings	This policy protects designated and non-designated heritage assets and their settings. It requires assessment of impacts, justification of harm, and enhancement of local character, and focuses on cultural heritage rather than biodiversity. It is a plan wide environmental protection policy and will not trigger development or change that could lead to an LSE at any European site, either alone, or in combination.	Category D	Screen out
Policy LP 57	Water-related development	This policy sets strict criteria for water-based development ensuring protection of water quality, biodiversity, flood risk and navigation safety. Whilst specific locations for water development have not been provided, development has the potential for LSEs as follows: - Air quality: Nene Washes SAC, Nene Washes Ramsar, Ouse Washes SAC, Ouse Washes Ramsar and Portholme SAC. - Water quality: Fenland SAC; Nene Washes SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC;	Category L	Screen in

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
		The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; and Woodwalton Fen Ramsar. - Water quantity: Fenland SAC; Nene Washes SPA; Nene Washes Ramsar; Orton Pit SAC; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; The Wash & North Norfolk Coast SAC; The Wash SPA; The Wash Ramsar; Upper Nene Valley Gravel Pits SPA; Upper Nene Valley Gravel Pits Ramsar; and Woodwalton Fen Ramsar. - Recreational pressure: Fenland SAC; Nene Washes SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SAC; Ouse Washes SPA; Ouse Washes Ramsar; Portholme SAC; Upper Nene Valley Gravel Pits SPA; Upper Nene Valley Gravel Pits Ramsar; and Woodwalton Fen Ramsar. - Urbanisation effects: Eversden & Wimpole Woods SAC; Nene Washes SPA; Nene Washes Ramsar; Ouse Washes SPA; Ouse Washes Ramsar, Upper Nene Valley Gravel Pits SPA and Upper Nene Valley Gravel Pits Ramsar.		

Section D: Our development sites – see Appendix D.

Appendix D: Screening of Local Plan Proposed Submission Allocations

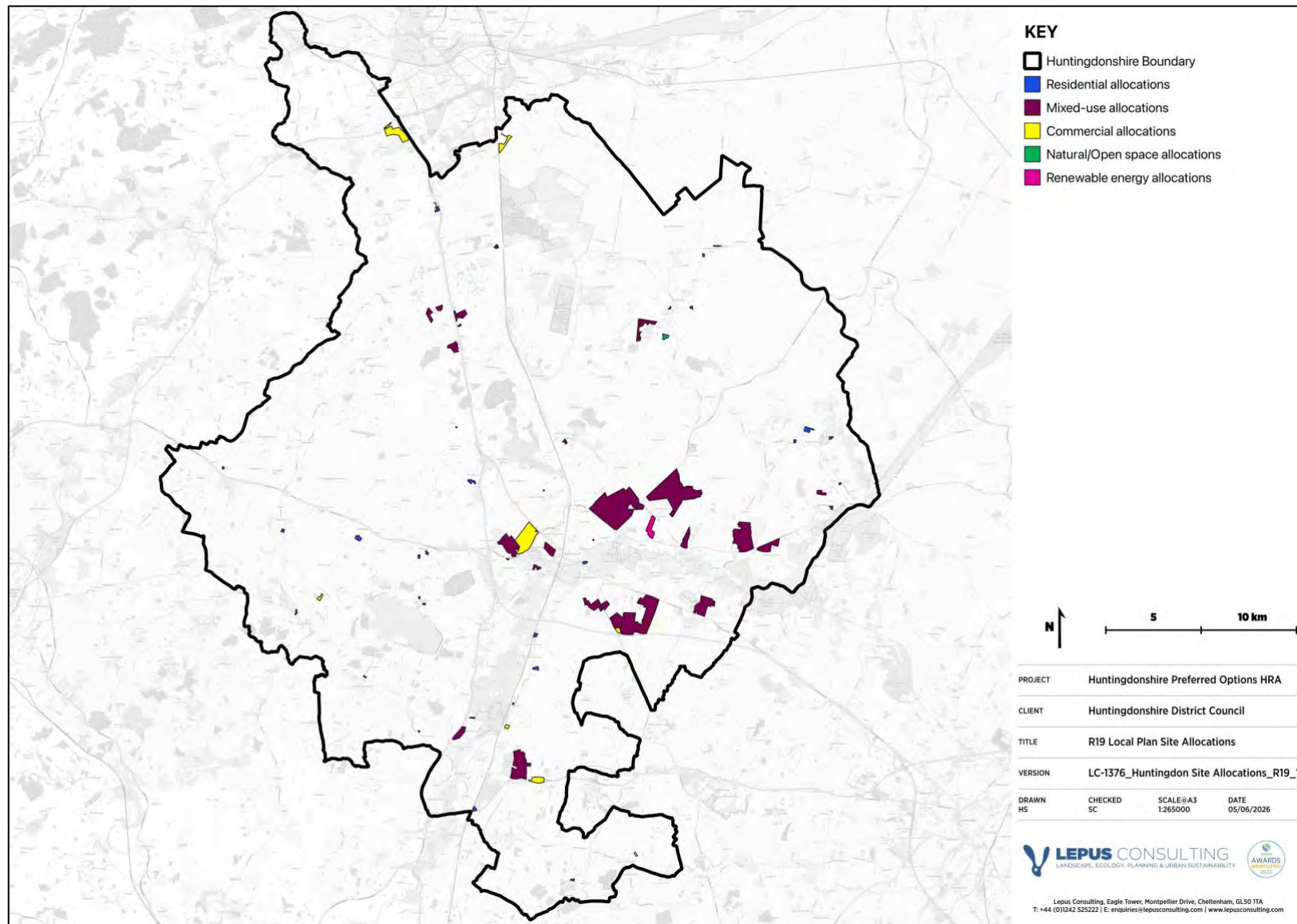


Figure D.1: Local Plan Site Allocations Map

Table Notes:

Air Quality LSEs: All site allocations set out in the Huntingdonshire Local Plan (Local Plan) have the potential to act cumulatively to increase traffic flows on the local and wider road network. An increase in traffic related emissions has the potential to change air quality. Air quality likely significant effects (LSEs) are considered possible at those European sites listed in **Section 3.4** of the Proposed Submission HRA report. Growth at all allocations (listed below) has the potential to contribute towards a change in air quality, in combination with other plans and projects (see **Appendix A**). All allocations below have therefore been screened in under Category L.

Water Quality and Quantity LSEs: All site allocations set out in the Local Plan (including those listed below) have the potential to act in combination with one another 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, an increase in water demand from new development increase demand for water supply which may also affect water sensitive European sites. Taking a precautionary approach, hydrology impacts from the combined effect of all developments together, acting in-combination with other plans and projects (see **Appendix A**), have the potential to result in LSEs at hydrologically connected European sites listed in **Section 3.5** of the Proposed Submission HRA report. Water quality and quantity impacts at all allocations listed below have therefore been screened in under Category L.

Recreational pressure LSEs: A recreational ZOI of 5.9km has been established through visitor surveys for the Upper Nene Valley Gravel Pits SPA and Ramsar site. This ZOI has been applied in the following screening assessment.

Visitor surveys have not been undertaken to define a formal recreational ZOI for any other European site scoped into the HRA process at **Section 3.6** of the main HRA report.

The following screening assessment has therefore taken into consideration the location of each European site in relation to the Plan area, status of public access through PRoW / Open Access etc and visitor facilities (such as promoted routes, car parking, cafes and toilets) when screening recreational impacts at all other European sites set out in **Section 3.6** of the Proposed Submission HRA report.

Urbanisation effects LSEs: Urbanisation effects include impacts such as noise disturbance, lighting effects, cat predation, fly-tipping, wildfire, littering, vandalism and fragmentation of habitat. Impacts can directly affect a European site and also areas of Functionally Linked Land (FLL) outside a designation boundary. A precautionary buffer of 500m has been applied to identify potential urbanisation effects on all European sites. The assessment also takes into consideration urbanisation effects on areas of FLL associated with the Upper Nene Valley Gravel Pits SPA and Ramsar site (10km buffer zone as set out in **Section 3.7** of the main HRA report), Eversden & Wimpole Woods SAC (10km buffer zone as set out in **Section 3.7** of the Proposed Submission HRA report) and areas of FLL associated with the Ouse and Nene Washes SPA and Ramsar (Swan and Goose IRZ FLL).

Table D.1 screens urbanisation and recreational LSEs for each potential allocation as detailed in Section D of the Local Plan

Table D.1: Screening summary for sites allocations

Section D: Our Development Sites

North Huntingdon Growth Corridor

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
Huntingdon 1: Huntingdon Racecourse	72ha of land for mixed use development. This includes: - Continued use of the site for the racecourse, equine support - Rugby Football Club - Complementary conference and events facilities, outdoor recreational and leisure facilities	This allocation is not located within 500m of any European site, or within 10km of Eversden & Wimpole Woods SAC, within 10km of the Upper Nene Valley Gravel Pits SPA and Ramsar or within 500m of any area of FLL associated with either the Nene Washes SPA/Ramsar, Ouse Washes SPA/Ramsar, Portholme SAC, Fenlands SAC or Woodwalton Ramsar. Urbanisation LSEs are therefore unlikely.	include hotel uses and parking associated with all unlikely that development will result in a
North Huntingdon 2: North of A141 between the racecourse and A1307	103.5ha of land for industrial use. Light industrial and storage and distribution uses	This allocation is not located within 500m of any European site, or within 10km of Eversden & Wimpole Woods SAC, within 10km of the Upper Nene Valley Gravel Pits SPA and Ramsar or within 500m of any area of FLL associated with either the Nene Washes SPA/Ramsar, Ouse Washes SPA/Ramsar, Portholme SAC, Fenlands	This site is not allocated for residential development and will therefore not result in recreational LSEs.

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
		SAC or Woodwalton Ramsar. Urbanisation LSEs are therefore unlikely.	
	317.7ha of land for new community and mixed use development - Approx. 4,900 homes - Approx. 8ha for employment - Approx. 6.5ha for a local centre - Land for transport, community, educational, recreational and green infrastructure	This allocation is not located within 500m of any European site, or within 10km of Eversden & Wimpole Woods SAC, within 10km of the Upper Nene Valley Gravel Pits SPA and Ramsar or within 500m of any area of FLL associated with either the Nene Washes SPA/Ramsar, Ouse Washes SPA/Ramsar, Portholme SAC, Fenlands SAC or Woodwalton Ramsar. Urbanisation LSEs are therefore unlikely.	This policy allocates residential dwellings which may increase recreational pressure at the following European sites: - Fenland SAC; - Nene Washes SPA and Ramsar - Ouse; Washes SPA and Ramsar; - Portholme SAC; and - Woodwalton Fen Ramsar This policy is therefore screened into the HRA process in terms of recreational LSEs. This allocation is not located within 5.6km of the Upper Nene Valley SPA or Ramsar and therefore recreational impact at this European site are unlikely.
North Huntingdon 4: Wyton Airfield	254.9ha of land for mixed use development - Approx. 4,000 homes - Approx. 15ha for employment use - Approx. 6.4ha for a local centre	This allocation is not located within 500m of any European site, or within 10km of Eversden & Wimpole Woods SAC, within 10km of the Upper Nene Valley Gravel Pits SPA and Ramsar or within 500m of any area of FLL associated with either the Nene Washes SPA/Ramsar, Ouse Washes SPA/Ramsar, Portholme SAC, Fenlands SAC or Woodwalton Ramsar. Urbanisation LSEs are therefore unlikely.	This policy allocates residential dwellings which may increase recreational pressure at the following European sites: - Fenland SAC; - Nene Washes SPA and Ramsar - Ouse; Washes SPA and Ramsar; - Portholme SAC; and - Woodwalton Fen Ramsar

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
	Land for transport, community, educational, recreational and green infrastructure		This policy is therefore screened into the HRA Upper Nene Valley SPA or Ramsar and therefore recreational impact at this European site are unlikely.

Market Towns

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
Huntingdon 1: Hinchingbrooke Hospital	22ha of land for mixed use development including: - redevelopment of the hospital, including necessary enabling works - reprovision of the ambulance station	European site, or within 10km of Eversden & within 500m of any area of FLL associated with	This site is not allocated for residential development and will therefore not result in recreational LSEs.

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
		SAC or Woodwalton Ramsar. Urbanisation LSEs are therefore unlikely.	
Huntingdon 2: Amber Centre, 36 Mayfield Road, Huntingdon		European site, or within 10km of Eversden & Nene Valley Gravel Pits SPA and Ramsar or Washes SPA/Ramsar, Portholme SAC, Fenlands	This policy allocates residential dwellings which - Fenland SAC; - Ouse; Washes SPA and Ramsar; - Portholme SAC; and recreational impact at this European site are

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
St Neots 1: East of Loves Farm (Tithe Farm)	99.5ha of land for mixed use development - Approx. 1,100 homes - Approx. 3.7ha for employment use - Land for transport, community, green infrastructure	This allocation is not located within 500m of any European site, or within 10km of Eversden & Wimpole Woods SAC, within 10km of the Upper Nene Valley Gravel Pits SPA and Ramsar or within 500m of any area of FLL associated with either the Nene Washes SPA/Ramsar, Ouse Washes SPA/Ramsar, Portholme SAC, Fenlands SAC or Woodwalton Ramsar. Urbanisation LSEs are therefore unlikely.	This policy allocates residential dwellings which may increase recreational pressure at the following European sites: - Fenland SAC; - Nene Washes SPA and Ramsar - Ouse; Washes SPA and Ramsar; - Portholme SAC; and - Woodwalton Fen Ramsar This policy is therefore screened into the HRA process in terms of recreational LSEs. This allocation is not located within 5.6km of the Upper Nene Valley SPA or Ramsar and therefore recreational impact at this European site are unlikely.
St Neots 2: Land South West of Potton Road	3.9ha of land for residential development - Approx. 80 homes	This allocation is not located within 500m of any European site, or within 10km of Eversden & Wimpole Woods SAC, within 10km of the Upper Nene Valley Gravel Pits SPA and Ramsar or within 500m of any area of FLL associated with either the Nene Washes SPA/Ramsar, Ouse Washes SPA/Ramsar, Portholme SAC, Fenlands SAC or Woodwalton Ramsar. Urbanisation LSEs are therefore unlikely.	This policy allocates residential dwellings which may increase recreational pressure at the following European sites: - Fenland SAC; - Nene Washes SPA and Ramsar - Ouse; Washes SPA and Ramsar; - Portholme SAC; and - Woodwalton Fen Ramsar This policy is therefore screened into the HRA process in terms of recreational LSEs. This allocation is not located within 5.6km of the Upper Nene Valley SPA or Ramsar and therefore

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
			recreational impact at this European site are unlikely.
	23.9ha of land for mixed use development - Approx. 350 homes - 12ha for open space and landscaping	This allocation is not located within 500m of any European site, or within 10km of Eversden & Wimpole Woods SAC, within 10km of the Upper Nene Valley Gravel Pits SPA and Ramsar or within 500m of any area of FLL associated with either the Nene Washes SPA/Ramsar, Ouse Washes SPA/Ramsar, Portholme SAC, Fenlands SAC or Woodwalton Ramsar. Urbanisation LSEs are therefore unlikely.	This policy allocates residential dwellings which may increase recreational pressure at the following European sites: - Fenland SAC; - Nene Washes SPA and Ramsar - Ouse; Washes SPA and Ramsar; - Portholme SAC; and - Woodwalton Fen Ramsar This policy is therefore screened into the HRA process in terms of recreational LSEs. This allocation is not located within 5.6km of the Upper Nene Valley SPA or Ramsar and therefore recreational impact at this European site are unlikely.
	0.96ha of land for residential development - Approx. 30 homes	This allocation is not located within 500m of any European site, or within 10km of Eversden & Wimpole Woods SAC, within 10km of the Upper Nene Valley Gravel Pits SPA and Ramsar or within 500m of any area of FLL associated with either the Nene Washes SPA/Ramsar, Ouse Washes SPA/Ramsar, Portholme SAC, Fenlands SAC or Woodwalton Ramsar. Urbanisation LSEs are therefore unlikely.	This policy allocates residential dwellings which may increase recreational pressure at the following European sites: - Fenland SAC; - Nene Washes SPA and Ramsar - Ouse; Washes SPA and Ramsar; - Portholme SAC; and - Woodwalton Fen Ramsar

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
			This policy is therefore screened into the HRA Upper Nene Valley SPA or Ramsar and therefore
Bury 2: Off Cheveril Lane		This allocation is for the protection of open space and therefore there will be no urbanisation LSEs.	This site is not allocated for residential development and will therefore not result in recreational LSEs.
Bury 3; RAF Upwood – Phase 3, Bury		Wimpole Woods SAC, within 10km of the Upper within 500m of any area of FLL associated with	This policy allocates residential dwellings which - Fenland SAC; - Ouse; Washes SPA and Ramsar; - Portholme SAC; and This policy is therefore screened into the HRA

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
Ramsey 1: RAF Upwood - Phase 4		This allocation is not located within 500m of any Nene Valley Gravel Pits SPA and Ramsar or either the Nene Washes SPA/Ramsar, Ouse	This site is not allocated for residential development and will therefore not result in recreational LSEs.
Ramsey 2: North of Hollow Lane		This allocation is not located within 500m of any Nene Valley Gravel Pits SPA and Ramsar or either the Nene Washes SPA/Ramsar, Ouse	may increase recreational pressure at the - Fenland SAC; - Ouse; Washes SPA and Ramsar; - Portholme SAC; and Upper Nene Valley SPA or Ramsar and therefore

Service Centres

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
Brampton 1: Wallis Land, Thrapston Road		Wimpole Woods SAC, within 10km of the Upper within 500m of any area of FLL associated with	This policy allocates residential dwellings which - Fenland SAC; - Ouse; Washes SPA and Ramsar; - Portholme SAC; and This policy is therefore screened into the HRA
Brampton 2: Land off Huntingdon Road		This allocation is for open space and car parking facilities and therefore unlikely to lead to urbanisation LSEs.	residential development it does allocate car on the opposite side of the main railway line from pressure caused by increased parking close to a European site are unlikely.

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
Fenstanton 1: Galley Hill		This allocation is not located within 500m of any Nene Valley Gravel Pits SPA and Ramsar or either the Nene Washes SPA/Ramsar, Ouse	This site is not allocated for residential development and will therefore not result in recreational LSEs.
Godmanchester 1: Former RGE Engineering site and HDC Car Park, The Avenue		Wimpole Woods SAC, within 10km of the Upper within 500m of any area of FLL associated with	may increase recreational pressure at the - Fenland SAC; - Ouse; Washes SPA and Ramsar; - Portholme SAC; and recreational impact at this European site are

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
Godmanchester 2: South of Godmanchester off the A1198	43ha of land for mixed use development - Approx. 550 homes - 6.8ha for natural green space - 0.8ha cemetery extension transport infrastructure	This allocation is not located within 500m of any European site, or within 10km of Eversden & Wimpole Woods SAC, within 10km of the Upper Nene Valley Gravel Pits SPA and Ramsar or within 500m of any area of FLL associated with either the Nene Washes SPA/Ramsar, Ouse Washes SPA/Ramsar, Portholme SAC, Fenlands SAC or Woodwalton Ramsar. Urbanisation LSEs are therefore unlikely.	This policy allocates residential dwellings which - Fenland SAC; - Ouse; Washes SPA and Ramsar; - Portholme SAC; and This policy is therefore screened into the HRA Of particular note is the close proximity of this Upper Nene Valley SPA or Ramsar and therefore
Godmanchester 3: Former A14 Compound, North of A1198 Roundabout	5.2ha of land for commercial, business and industrial use	This allocation is not located within 500m of any European site, or within 10km of Eversden & Wimpole Woods SAC, within 10km of the Upper Nene Valley Gravel Pits SPA and Ramsar or within 500m of any area of FLL associated with either the Nene Washes SPA/Ramsar, Ouse Washes SPA/Ramsar, Portholme SAC, Fenlands SAC or Woodwalton Ramsar. Urbanisation LSEs are therefore unlikely.	This site is not allocated for residential development and will therefore not result in recreational LSEs.

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
Kimbolton 1: Brittens Farm, Station Road		Wimpole Woods SAC, within 10km of the Upper within 500m of any area of FLL associated with	This policy allocates residential dwellings which - Fenland SAC; - Ouse; Washes SPA and Ramsar; - Portholme SAC; and This policy is therefore screened into the HRA
Kimbolton 2: South East of South of Bicton Industrial Estate, Stow Road		European site, or within 10km of Eversden & within 500m of any area of FLL associated with Washes SPA/Ramsar, Portholme SAC, Fenlands SAC or Woodwalton Ramsar. Urbanisation LSEs are therefore unlikely.	This site is not allocated for residential development and will therefore not result in recreational LSEs.

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
Little Paxton 1: North of St James Road, Little Paxton		Wimpole Woods SAC, within 10km of the Upper within 500m of any area of FLL associated with	This policy allocates residential dwellings which may increase recreational pressure at the following European sites: - Fenland SAC; - Nene Washes SPA and Ramsar - Ouse; Washes SPA and Ramsar; - Portholme SAC; and - Woodwalton Fen Ramsar This policy is therefore screened into the HRA process in terms of recreational LSEs. This allocation is not located within 5.6km of the Upper Nene Valley SPA or Ramsar and therefore recreational impact at this European site are unlikely.
Little Paxton 2: West of Great North Road		European site, or within 10km of Eversden & within 500m of any area of FLL associated with Washes SPA/Ramsar, Portholme SAC, Fenlands SAC or Woodwalton Ramsar. Urbanisation LSEs are therefore unlikely.	This policy allocates residential dwellings which may increase recreational pressure at the following European sites: - Fenland SAC; - Nene Washes SPA and Ramsar - Ouse; Washes SPA and Ramsar; - Portholme SAC; and - Woodwalton Fen Ramsar This policy is therefore screened into the HRA process in terms of recreational LSEs. This allocation is not located within 5.6km of the Upper Nene Valley SPA or Ramsar and therefore

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
			recreational impact at this European site are unlikely.
Sawtry 1: West of Glatton Road	12.5ha of land for residential development - Approx. 330 homes - Approx. 2ha of open space to safeguard against flooding	This allocation is not located within 500m of any European site, or within 10km of Eversden & Wimpole Woods SAC, within 10km of the Upper Nene Valley Gravel Pits SPA and Ramsar or within 500m of any area of FLL associated with either the Nene Washes SPA/Ramsar, Ouse Washes SPA/Ramsar, Portholme SAC, Fenlands SAC or Woodwalton Ramsar. Urbanisation LSEs are therefore unlikely.	This policy allocates residential dwellings which may increase recreational pressure at the following European sites: - Fenland SAC; - Nene Washes SPA and Ramsar - Ouse; Washes SPA and Ramsar; - Portholme SAC; and - Woodwalton Fen Ramsar This policy is therefore screened into the HRA process in terms of recreational LSEs. This allocation is not located within 5.6km of the Upper Nene Valley SPA or Ramsar and therefore recreational impact at this European site are unlikely.
Sawtry 2: East of Glatton Road and North of Brookside Industrial estate	6.5ha of land for residential development - Approx. 170 homes - Approx. 1ha of open space to safeguard against flooding	This allocation is not located within 500m of any European site, or within 10km of Eversden & Wimpole Woods SAC, within 10km of the Upper Nene Valley Gravel Pits SPA and Ramsar or within 500m of any area of FLL associated with either the Nene Washes SPA/Ramsar, Ouse	This policy allocates residential dwellings which may increase recreational pressure at the following European sites: - Fenland SAC; - Nene Washes SPA and Ramsar - Ouse; Washes SPA and Ramsar;

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
		Washes SPA/Ramsar, Portholme SAC, Fenlands SAC or Woodwalton Ramsar. Urbanisation LSEs are therefore unlikely.	- Portholme SAC; and - Woodwalton Fen Ramsar This policy is therefore screened into the HRA process in terms of recreational LSEs. This allocation is not located within 5.6km of the Upper Nene Valley SPA or Ramsar and therefore recreational impact at this European site are unlikely.
Sawtry 3: West of Toll Bar Way and Green End Road		This allocation is not located within 500m of any Nene Valley Gravel Pits SPA and Ramsar or either the Nene Washes SPA/Ramsar, Ouse	This policy allocates residential dwellings which may increase recreational pressure at the following European sites: - Fenland SAC; - Nene Washes SPA and Ramsar - Ouse; Washes SPA and Ramsar; - Portholme SAC; and - Woodwalton Fen Ramsar This policy is therefore screened into the HRA process in terms of recreational LSEs. This allocation is not located within 5.6km of the Upper Nene Valley SPA or Ramsar and therefore recreational impact at this European site are unlikely.

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
Sawtry 4: Off Old North Road		This allocation is not located within 500m of any Nene Valley Gravel Pits SPA and Ramsar or either the Nene Washes SPA/Ramsar, Ouse	This site is not allocated for residential development and will therefore not result in recreational LSEs.
Sawtry 5: Land at Little Common Farm		European site, or within 10km of Eversden & within 500m of any area of FLL associated with	This site is not allocated for residential development and will therefore not result in recreational LSEs.
Sawtry 6: North of Black Horse Industrial Estate		This allocation is not located within 500m of any Nene Valley Gravel Pits SPA and Ramsar or either the Nene Washes SPA/Ramsar, Ouse Washes SPA/Ramsar, Portholme SAC, Fenlands	This site is not allocated for residential development and will therefore not result in recreational LSEs.

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
		SAC or Woodwalton Ramsar. Urbanisation LSEs are therefore unlikely.	
Somersham 1: College Farm, West of Parkhall Road	6.3ha of land for residential development - Approx 120 homes	This allocation is not located within 500m of any European site, or within 10km of Eversden & Wimpole Woods SAC, within 10km of the Upper Nene Valley Gravel Pits SPA and Ramsar or within 500m of any area of FLL associated with either the Nene Washes SPA/Ramsar, Ouse Washes SPA/Ramsar, Portholme SAC, Fenlands SAC or Woodwalton Ramsar. Urbanisation LSEs are therefore unlikely.	This policy allocates residential dwellings which may increase recreational pressure at the following European sites: - Fenland SAC; - Nene Washes SPA and Ramsar - Ouse; Washes SPA and Ramsar; - Portholme SAC; and - Woodwalton Fen Ramsar This policy is therefore screened into the HRA process in terms of recreational LSEs. This allocation is not located within 5.6km of the Upper Nene Valley SPA or Ramsar and therefore recreational impact at this European site are unlikely.
Somersham 2: Dews Bus and Coach Depot, Chatteris Road	2.2ha of land for residential development - Approx. 50 homes	This allocation is not located immediately adjacent to Swan and Geese IRA FLL associated with the Ouse Washes SPA and Ramsar and therefore urbanisation effects have been screened into the HRA process.	This policy allocates residential dwellings which may increase recreational pressure at the following European sites: - Fenland SAC; - Nene Washes SPA and Ramsar - Ouse; Washes SPA and Ramsar;

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
			- Portholme SAC; and - Woodwalton Fen Ramsar This policy is therefore screened into the HRA process in terms of recreational LSEs. This allocation is not located within 5.6km of the Upper Nene Valley SPA or Ramsar and therefore recreational impact at this European site are unlikely.
Somersham 3: College Farm, West of Newlands Industrial Estate		This allocation is not located within 500m of any Nene Valley Gravel Pits SPA and Ramsar or either the Nene Washes SPA/Ramsar, Ouse	This policy allocates residential dwellings which may increase recreational pressure at the following European sites: - Fenland SAC; - Nene Washes SPA and Ramsar - Ouse; Washes SPA and Ramsar; - Portholme SAC; and - Woodwalton Fen Ramsar This policy is therefore screened into the HRA process in terms of recreational LSEs. This allocation is not located within 5.6km of the Upper Nene Valley SPA or Ramsar and therefore recreational impact at this European site are unlikely.

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
Yaxley 1: Eagle Business Park, phase 3, Broadway		This allocation is not located within 500m of any Nene Valley Gravel Pits SPA and Ramsar or either the Nene Washes SPA/Ramsar, Ouse Washes SPA/Ramsar, Portholme SAC, Fenlands SAC or Woodwalton Ramsar. Urbanisation LSEs are therefore unlikely.	This site is not allocated for residential development and will therefore not result in recreational LSEs.

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Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
Abbots Ripton 1: Home Farm South	2.83ha of land for mixed use development - Approx. 15 homes - Approx. 0.5ha for commercial	This allocation is not located within 500m of any European site, or within 10km of Eversden & Wimpole Woods SAC, within 10km of the Upper Nene Valley Gravel Pits SPA and Ramsar or within 500m of any area of FLL associated with either the Nene Washes SPA/Ramsar, Ouse Washes SPA/Ramsar, Portholme SAC, Fenlands SAC or Woodwalton Ramsar. Urbanisation LSEs are therefore unlikely.	This policy allocates residential dwellings which may increase recreational pressure at the following European sites: - Fenland SAC; - Nene Washes SPA and Ramsar - Ouse; Washes SPA and Ramsar; - Portholme SAC; and - Woodwalton Fen Ramsar This policy is therefore screened into the HRA process in terms of recreational LSEs. This allocation is not located within 5.6km of the Upper Nene Valley SPA or Ramsar and therefore recreational impact at this European site are unlikely.
Alconbury 1: South of Great North Road	1.4ha of land for residential development - Approx. 30 homes	This allocation is not located within 500m of any European site, or within 10km of Eversden & Wimpole Woods SAC, within 10km of the Upper Nene Valley Gravel Pits SPA and Ramsar or within 500m of any area of FLL associated with either the Nene Washes SPA/Ramsar, Ouse Washes SPA/Ramsar, Portholme SAC, Fenlands SAC or Woodwalton Ramsar. Urbanisation LSEs are therefore unlikely.	This policy allocates residential dwellings which may increase recreational pressure at the following European sites: - Fenland SAC; - Nene Washes SPA and Ramsar - Ouse; Washes SPA and Ramsar; - Portholme SAC; and - Woodwalton Fen Ramsar This policy is therefore screened into the HRA process in terms of recreational LSEs.

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
			This allocation is not located within 5.6km of the Upper Nene Valley SPA or Ramsar and therefore recreational impact at this European site are unlikely.
Alconbury 2: East of Globe Lane	3.5ha of land for residential development - Approx. 60 homes	This allocation is not located within 500m of any European site, or within 10km of Eversden & Wimpole Woods SAC, within 10km of the Upper Nene Valley Gravel Pits SPA and Ramsar or within 500m of any area of FLL associated with either the Nene Washes SPA/Ramsar, Ouse Washes SPA/Ramsar, Portholme SAC, Fenlands SAC or Woodwalton Ramsar. Urbanisation LSEs are therefore unlikely.	This policy allocates residential dwellings which may increase recreational pressure at the following European sites: - Fenland SAC; - Nene Washes SPA and Ramsar - Ouse; Washes SPA and Ramsar; - Portholme SAC; and - Woodwalton Fen Ramsar This policy is therefore screened into the HRA process in terms of recreational LSEs. This allocation is not located within 5.6km of the Upper Nene Valley SPA or Ramsar and therefore recreational impact at this European site are unlikely.
Bluntisham 1: Land off 18 Holliday's Road	2ha of land for residential development - Approx. 35 homes	This allocation is located within 500m of the Swan and Goose IRZ FLL (Ouse Fen Nature Reserve RSPB Reserve and Berry Fen SSSI) associated with the Ouse Washes SPA and Ramsar. This	This policy allocates residential dwellings which may increase recreational pressure at the following European sites: - Fenland SAC; - Nene Washes SPA and Ramsar - Ouse; Washes SPA and Ramsar;

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
		European site, or within 10km of Eversden & Nene Valley Gravel Pits SPA and Ramsar or	- Portholme SAC; and This policy is therefore screened into the HRA
Bluntisham 2: Land to the West of Colne Road		This allocation is not located within 500m of any Nene Valley Gravel Pits SPA and Ramsar or either the Nene Washes SPA/Ramsar, Ouse	may increase recreational pressure at the - Fenland SAC; - Ouse; Washes SPA and Ramsar; - Portholme SAC; and Upper Nene Valley SPA or Ramsar and therefore recreational impact at this European site are unlikely.

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
Great Gransden 1: South of Caxton Road		This allocation is located approximately 6.3km to be susceptible to urbanisation LSEs from within 500m of any area of FLL associated with	This site is not allocated for residential development and will therefore not result in recreational LSEs.
Great Staughton 1: East of B661, The Green		European site, or within 10km of Eversden & within 500m of any area of FLL associated with Washes SPA/Ramsar, Portholme SAC, Fenlands	- Fenland SAC; - Ouse; Washes SPA and Ramsar; - Portholme SAC; and

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
			recreational impact at this European site are unlikely.
Hemmingford Abbots 1: The Lattenburys		This allocation is not located within 500m of any Wimpole Woods SAC, within 10km of the Upper either the Nene Washes SPA/Ramsar, Ouse	may increase recreational pressure at the - Fenland SAC; - Ouse; Washes SPA and Ramsar; - Portholme SAC; and This policy is therefore screened into the HRA Upper Nene Valley SPA or Ramsar and therefore
Houghton and Wyton 1: Ruddles Lane		- Nene Washes SPA; - Nene Washes Ramsar; - Ouse Washes SPA; and - Ouse Washes Ramsar. Urbanisation effects will therefore be screened in.	This site is not allocated for residential development and will therefore not result in recreational LSEs.

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
		The allocation is not located within 10km of Eversden & Wimpole Woods SAC or the Upper Nene Valley Gravel Pit SPA and Ramsar.	
Needingworth 1: Giffords Park, East of B1040	122ha of land for mixed use development - Approx. 1,750 homes - 0.5ha for a care home - 5ha of land for a local centre - 4.6ha commercial and employment use - 3.3ha for a solar farm - 65.5ha of green infrastructure	This allocation is not located within 500m of any European site, or within 10km of Eversden & Wimpole Woods SAC, within 10km of the Upper Nene Valley Gravel Pits SPA and Ramsar or within 500m of any area of FLL associated with either the Nene Washes SPA/Ramsar, Ouse Washes SPA/Ramsar, Portholme SAC, Fenlands SAC or Woodwalton Ramsar. Urbanisation LSEs are therefore unlikely.	This policy allocates residential dwellings which may increase recreational pressure at the following European sites: - Fenland SAC; - Nene Washes SPA and Ramsar - Ouse; Washes SPA and Ramsar; - Portholme SAC; and - Woodwalton Fen Ramsar This policy is therefore screened into the HRA process in terms of recreational LSEs. This allocation is not located within 5.6km of the Upper Nene Valley SPA or Ramsar and therefore recreational impact at this European site are unlikely.
Needingworth 2: South of A1123	35ha of land for mixed use development - Approx. 100 homes - Community retail facilities - Land to safeguard against flooding	This allocation is not located within 500m of any European site, or within 10km of Eversden & Wimpole Woods SAC, within 10km of the Upper Nene Valley Gravel Pits SPA and Ramsar or within 500m of any area of FLL associated with either the Nene Washes SPA/Ramsar, Ouse Washes SPA/Ramsar, Portholme SAC, Fenlands	This policy allocates residential dwellings which may increase recreational pressure at the following European sites: - Fenland SAC; - Nene Washes SPA and Ramsar - Ouse; Washes SPA and Ramsar; - Portholme SAC; and - Woodwalton Fen Ramsar

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
		SAC or Woodwalton Ramsar. Urbanisation LSEs are therefore unlikely.	This policy is therefore screened into the HRA process in terms of recreational LSEs. This allocation is not located within 5.6km of the Upper Nene Valley SPA or Ramsar and therefore recreational impact at this European site are unlikely.
Offord D'Arcy 1: West of Graveley Road		European site, or within 10km of Eversden & Nene Valley Gravel Pits SPA and Ramsar or Washes SPA/Ramsar, Portholme SAC, Fenlands	This policy allocates residential dwellings which may increase recreational pressure at the following European sites: - Fenland SAC; - Nene Washes SPA and Ramsar - Ouse; Washes SPA and Ramsar; - Portholme SAC; and - Woodwalton Fen Ramsar This policy is therefore screened into the HRA process in terms of recreational LSEs. This allocation is not located within 5.6km of the Upper Nene Valley SPA or Ramsar and therefore recreational impact at this European site are unlikely.
		This allocation is not located within 500m of any European site, or within 10km of Eversden &	This policy allocates residential dwellings which may increase recreational pressure at the following European sites: - Fenland SAC; - Nene Washes SPA and Ramsar

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
Offord Cluny 1: West of High Street and North of Dunstall Close		Wimpole Woods SAC, within 10km of the Upper either the Nene Washes SPA/Ramsar, Ouse	- Ouse; Washes SPA and Ramsar; - Portholme SAC; and - Woodwalton Fen Ramsar This policy is therefore screened into the HRA process in terms of recreational LSEs. This allocation is not located within 5.6km of the Upper Nene Valley SPA or Ramsar and therefore recreational impact at this European site are unlikely.
Spaldwick 1: Land east of Stow Road, Spaldwick		European site, or within 10km of Eversden & within 500m of any area of FLL associated with Washes SPA/Ramsar, Portholme SAC, Fenlands SAC or Woodwalton Ramsar. Urbanisation LSEs are therefore unlikely.	This policy allocates residential dwellings which may increase recreational pressure at the following European sites: - Fenland SAC; - Nene Washes SPA and Ramsar - Ouse; Washes SPA and Ramsar; - Portholme SAC; and - Woodwalton Fen Ramsar This policy is therefore screened into the HRA process in terms of recreational LSEs. This allocation is not located within 5.6km of the Upper Nene Valley SPA or Ramsar and therefore recreational impact at this European site are unlikely.

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
Stilton 1: Rear of The Stilton Cheese Inn, 24 North Street		Wimpole Woods SAC, within 10km of the Upper within 500m of any area of FLL associated with	This policy allocates residential dwellings which may increase recreational pressure at the following European sites: - Fenland SAC; - Nene Washes SPA and Ramsar - Ouse; Washes SPA and Ramsar; - Portholme SAC; and - Woodwalton Fen Ramsar This policy is therefore screened into the HRA process in terms of recreational LSEs. This allocation is not located within 5.6km of the Upper Nene Valley SPA or Ramsar and therefore recreational impact at this European site are unlikely.
Stilton 2: Rear of 16 to 58 North Street		European site, or within 10km of Eversden & Nene Valley Gravel Pits SPA and Ramsar or Washes SPA/Ramsar, Portholme SAC, Fenlands SAC or Woodwalton Ramsar. Urbanisation LSEs are therefore unlikely.	This policy allocates residential dwellings which may increase recreational pressure at the following European sites: - Fenland SAC; - Nene Washes SPA and Ramsar - Ouse; Washes SPA and Ramsar; - Portholme SAC; and - Woodwalton Fen Ramsar This policy is therefore screened into the HRA process in terms of recreational LSEs. This allocation is not located within 5.6km of the Upper Nene Valley SPA or Ramsar and therefore

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
			recreational impact at this European site are unlikely.

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Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
Abbotsley 1: North of Wintringham Hall		This allocation is not located within 500m of any Nene Valley Gravel Pits SPA and Ramsar or either the Nene Washes SPA/Ramsar, Ouse	This site is not allocated for residential development and will therefore not result in recreational LSEs.
Bythorn 1: Home Farm, Bythorn		Nene Valley Gravel Pits SPA and Ramsar and and Lapwing populations. This allocation has FLL associated with the Ouse Washes SPA /	may increase recreational pressure at the - Fenland SAC; - Ouse; Washes SPA and Ramsar; - Portholme SAC; and Upper Nene Valley SPA or Ramsar and therefore

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
Catworth 1: Fruit Field, Catworth		Wimpole Woods SAC, within 10km of the Upper within 500m of any area of FLL associated with	This policy allocates residential dwellings which may increase recreational pressure at the following European sites: - Fenland SAC; - Nene Washes SPA and Ramsar - Ouse; Washes SPA and Ramsar; - Portholme SAC; and - Woodwalton Fen Ramsar This policy is therefore screened into the HRA process in terms of recreational LSEs. This allocation is not located within 5.6km of the Upper Nene Valley SPA or Ramsar and therefore recreational impact at this European site are unlikely.
Colne 1: Land at Ramadie, Earith Road, Colne		European site, or within 10km of Eversden & within 500m of any area of FLL associated with Washes SPA/Ramsar, Portholme SAC, Fenlands SAC or Woodwalton Ramsar. Urbanisation LSEs are therefore unlikely.	This policy allocates residential dwellings which may increase recreational pressure at the following European sites: - Fenland SAC; - Nene Washes SPA and Ramsar - Ouse; Washes SPA and Ramsar; - Portholme SAC; and - Woodwalton Fen Ramsar This policy is therefore screened into the HRA process in terms of recreational LSEs. This allocation is not located within 5.6km of the Upper Nene Valley SPA or Ramsar and therefore

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
			recreational impact at this European site are unlikely.
Ellington 1: Old Sheds at Manor Farm, High Street	2ha of land for residential development - Approx. 35 homes	This allocation is not located within 500m of any European site, or within 10km of Eversden & Wimpole Woods SAC, within 10km of the Upper Nene Valley Gravel Pits SPA and Ramsar or within 500m of any area of FLL associated with either the Nene Washes SPA/Ramsar, Ouse Washes SPA/Ramsar, Portholme SAC, Fenlands SAC or Woodwalton Ramsar. Urbanisation LSEs are therefore unlikely.	This policy allocates residential dwellings which may increase recreational pressure at the following European sites: - Fenland SAC; - Nene Washes SPA and Ramsar - Ouse; Washes SPA and Ramsar; - Portholme SAC; and - Woodwalton Fen Ramsar This policy is therefore screened into the HRA process in terms of recreational LSEs. This allocation is not located within 5.6km of the Upper Nene Valley SPA or Ramsar and therefore recreational impact at this European site are unlikely.
Ellington 2: Land west of Grafham Road, Ellington	Proposed additional allocation - 1.87ha - 35 homes	This allocation is not located within 500m of any European site, or within 10km of Eversden & Wimpole Woods SAC, within 10km of the Upper Nene Valley Gravel Pits SPA and Ramsar or within 500m of any area of FLL associated with either the Nene Washes SPA/Ramsar, Ouse	This policy allocates residential dwellings which may increase recreational pressure at the following European sites: - Fenland SAC; - Nene Washes SPA and Ramsar - Ouse; Washes SPA and Ramsar;

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
		Washes SPA/Ramsar, Portholme SAC, Fenlands SAC or Woodwalton Ramsar. Urbanisation LSEs are therefore unlikely.	- Portholme SAC; and - Woodwalton Fen Ramsar This policy is therefore screened into the HRA process in terms of recreational LSEs. This allocation is not located within 5.6km of the Upper Nene Valley SPA or Ramsar and therefore recreational impact at this European site are unlikely.
Grafham 1: Adjacent to 24 Cedar Close		This allocation is not located within 500m of any Nene Valley Gravel Pits SPA and Ramsar or either the Nene Washes SPA/Ramsar, Ouse	This policy allocates residential dwellings which may increase recreational pressure at the following European sites: - Fenland SAC; - Nene Washes SPA and Ramsar - Ouse; Washes SPA and Ramsar; - Portholme SAC; and - Woodwalton Fen Ramsar This policy is therefore screened into the HRA process in terms of recreational LSEs. This allocation is not located within 5.6km of the Upper Nene Valley SPA or Ramsar and therefore recreational impact at this European site are unlikely.

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
Grafham 2: South of Village Farm, Grafham		Wimpole Woods SAC, within 10km of the Upper within 500m of any area of FLL associated with	This policy allocates residential dwellings which may increase recreational pressure at the following European sites: - Fenland SAC; - Nene Washes SPA and Ramsar - Ouse; Washes SPA and Ramsar; - Portholme SAC; and - Woodwalton Fen Ramsar This policy is therefore screened into the HRA process in terms of recreational LSEs. This allocation is not located within 5.6km of the Upper Nene Valley SPA or Ramsar and therefore recreational impact at this European site are unlikely.
Great Paxton 1: West of High Street, Great Paxton		European site, or within 10km of Eversden & within 500m of any area of FLL associated with Washes SPA/Ramsar, Portholme SAC, Fenlands SAC or Woodwalton Ramsar. Urbanisation LSEs are therefore unlikely.	This policy allocates residential dwellings which may increase recreational pressure at the following European sites: - Fenland SAC; - Nene Washes SPA and Ramsar - Ouse; Washes SPA and Ramsar; - Portholme SAC; and - Woodwalton Fen Ramsar This policy is therefore screened into the HRA process in terms of recreational LSEs. This allocation is not located within 5.6km of the Upper Nene Valley SPA or Ramsar and therefore

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
			recreational impact at this European site are unlikely.
Great Paxton 2: North of Harley Industrial Park		This allocation is not located within 500m of any Nene Valley Gravel Pits SPA and Ramsar or either the Nene Washes SPA/Ramsar, Ouse	This site is not allocated for residential development and will therefore not result in recreational LSEs.
Hail Weston 1: Land West of 5 High Street, Hail Weston		European site, or within 10km of Eversden & within 500m of any area of FLL associated with Washes SPA/Ramsar, Portholme SAC, Fenlands	may increase recreational pressure at the - Fenland SAC; - Ouse; Washes SPA and Ramsar; - Portholme SAC; and

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
			recreational impact at this European site are unlikely.
Holme 1: Land North of Station Road		Wimpole Woods SAC, within 10km of the Upper within 500m of any area of FLL associated with	This policy allocates residential dwellings which - Fenland SAC; - Ouse; Washes SPA and Ramsar; - Portholme SAC; and This policy is therefore screened into the HRA
Peterborough Services 1: West of the A1 and South of Peterborough Motorway Services		European site, or within 10km of Eversden & within 500m of any area of FLL associated with either the Nene Washes SPA/Ramsar, Ouse Washes SPA/Ramsar, Portholme SAC, Fenlands	This site is not allocated for residential development and will therefore not result in recreational LSEs.

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
		SAC or Woodwalton Ramsar. Urbanisation LSEs are therefore unlikely.	
Ramsey Forty Foot 1: Ramsey Forty Foot Village Rural Mooring		This allocation is not located within 500m of any Nene Valley Gravel Pits SPA and Ramsar or either the Nene Washes SPA/Ramsar, Ouse	This allocation is for leisure moorings rather than residential moorings and therefore recreational impacts are unlikely.
Ramsey Forty Foot 2: Woodland Farm, Ramsey Forty Foot		European site, or within 10km of Eversden & within 500m of any area of FLL associated with Washes SPA/Ramsar, Portholme SAC, Fenlands	may increase recreational pressure at the - Fenland SAC; - Ouse; Washes SPA and Ramsar; - Portholme SAC; and

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
			recreational impact at this European site are unlikely.
The Stukeleys 1: Land between 76 and 86 Owl End	0.30ha of land for residential development - Approx. 3 homes	This allocation is not located within 500m of any European site, or within 10km of Eversden & Wimpole Woods SAC, within 10km of the Upper Nene Valley Gravel Pits SPA and Ramsar or within 500m of any area of FLL associated with either the Nene Washes SPA/Ramsar, Ouse Washes SPA/Ramsar, Portholme SAC, Fenlands SAC or Woodwalton Ramsar. Urbanisation LSEs are therefore unlikely.	This policy allocates residential dwellings which may increase recreational pressure at the following European sites: - Fenland SAC; - Nene Washes SPA and Ramsar - Ouse; Washes SPA and Ramsar; - Portholme SAC; and - Woodwalton Fen Ramsar This policy is therefore screened into the HRA process in terms of recreational LSEs. This allocation is not located within 5.6km of the Upper Nene Valley SPA or Ramsar and therefore recreational impact at this European site are unlikely.
Upton 1: South West of South Farm	0.39ha of land for residential development - Approx. 7 homes	This allocation is not located within 500m of any European site, or within 10km of Eversden & Wimpole Woods SAC, within 10km of the Upper Nene Valley Gravel Pits SPA and Ramsar or within 500m of any area of FLL associated with either the Nene Washes SPA/Ramsar, Ouse Washes SPA/Ramsar, Portholme SAC, Fenlands	This policy allocates residential dwellings which may increase recreational pressure at the following European sites: - Fenland SAC; - Nene Washes SPA and Ramsar - Ouse; Washes SPA and Ramsar; - Portholme SAC; and

Site Name	Employment land (ha) / Net new homes	Potential for urbanisation or habitat loss / fragmentation LSEs.	Potential for an increase in recreational pressure
		SAC or Woodwalton Ramsar. Urbanisation LSEs are therefore unlikely.	- Woodwalton Fen Ramsar This policy is therefore screened into the HRA process in terms of recreational LSEs. This allocation is not located within 5.6km of the Upper Nene Valley SPA or Ramsar and therefore recreational impact at this European site are unlikely.
Waresley 1: Land between West Lodge and Home Farm		This allocation is located approximately 8.8km to with this SAC may therefore be susceptible to	This policy allocates residential dwellings which may increase recreational pressure at the following European sites: - Eversden and Wimpole Woods SAC; - Fenland SAC; - Ouse; Washes SPA and Ramsar; - Portholme SAC; and Upper Nene Valley SPA or Ramsar and therefore

Appendix E: Baseline Study of Recreational Use and Impact

Baseline Study of Recreational Use and Impact to support the Huntingdonshire Local Plan HRA

Huntingdonshire District Council

January February 2026



LEPUS CONSULTING
LANDSCAPE, ECOLOGY, PLANNING & URBAN SUSTAINABILITY

Baseline Study of Recreational Use and Impact to support the Huntingdonshire Local Plan Habitats Regulations Assessment

LC 1376	Document Control Box
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Front Cover: Boardwalk at RSPB Ouse Washes

About this report & notes for readers

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The conclusions below are based on the best available information, including information that is publicly available. No attempt to verify these secondary data sources has been made and they have been assumed to be accurate as published. This report was prepared in January and February 2026 and is subject to and limited by the information available during this time. This report has been prepared with reasonable

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Client comments can be sent to Lepus using the following address.

Eagle Tower,
Montpellier Drive
Cheltenham
Gloucestershire
GL50 1TA

Telephone: 01242 525222

E-mail: enquiries@lepusconsulting.com
www.lepusconsulting.com

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Acronyms & Abbreviations

ALA	Artificial light at night
BNG	Biodiversity Net Gain
CIEEM	Chartered Institute of Ecology and Environmental Management
EA	Environment Agency
GIS	Geographic Information System
HRA	Habitats Regulations Assessment
JNCC	Joint Nature Conservation Committee
LSE	Likely Significant Effect
LPA	Local Plan Area
NE	Natural England
NNR	National Nature Reserve
NPPF	National Planning Policy Framework
SAC	Special Area of Conservation
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
UK	United Kingdom

1 Introduction

1.1 Background

- 1.1.1 Huntingdonshire District Council (hereafter referred to as ‘the Council’) is preparing a full update to the adopted Local Plan¹ to provide an up-to-date vision and framework to guide decision making on how, where, and when development can come forward in the district for the period up to 2046.
- 1.1.2 The new Huntingdonshire Local Plan, referred to as the ‘Local Plan’ hereafter, will cover the entirety of Huntingdonshire District. This area is referred to as the ‘Plan area’ and is illustrated in **Figure 1.1**. The Plan area includes the district’s five main towns of Huntingdon, Godmanchester, Ramsey, St Neots and St Ives, together with a number of large and small villages and hamlets.
- 1.1.3 The Council has prepared the first complete draft of the Local Plan update, referred to as the Preferred Options Local Plan Consultation at Regulation 18 of the Town and Country Planning (Local Planning) (England) Regulations 2012 (as amended)².
- 1.1.4 The Local Plan update will be supported by a Habitats Regulations Assessment (HRA) as required under the Conservation of Habitats and Species Regulations 2017 (as amended)³.
- 1.1.5 Where a plan is likely to have a significant effect on a European site (either alone, or in combination) 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.
- 1.1.6 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 site⁴:
- A potential SPA (pSPA);
 - A possible/proposed SAC (pSAC);
 - Listed and proposed Ramsar Sites (wetland of international importance); and,

¹ Huntingdonshire District Council (2019) Huntingdonshire’s Local Plan to 2036. Available at: <https://www.huntingdonshire.gov.uk/media/3872/190516-final-adopted-local-plan-to-2036.pdf> [Date accessed: 05/02/26]

² The Town and Country (Local Planning) (England) Regulations 2012 Statutory Instrument 767.

³ Conservation of Habitats and Species Regulations 2017 SI No. 2017/1012, TSO (The Stationery Office), London, as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019.

⁴ Ministry of Housing, Communities and Local Government (2024). National Planning Policy Framework. Para 194.

- In England, sites identified or required as compensation measures for adverse effects on statutory European sites, pSPA, pSAC, and listed or proposed Ramsar sites.

1.2 Purpose of report

1.2.1 Lepus Consulting has been commissioned by Huntingdonshire District Council to assess the existing baseline recreational use and impacts currently taking place upon the qualifying features of designated European Sites which are located within the Plan area. These European Sites include:

- Fenland SAC;
- Ouse Washes SAC,
- Ouse Washes SPA;
- Ouse Washes Ramsar;
- Portholme SAC; and
- Woodwalton Fen Ramsar.

1.2.2 This report aims to provide a baseline assessment, drawing on desk-based research and a walkover survey, to identify current levels of recreational and anti-social impacts upon the qualifying features of these European sites.

1.2.3 These surveys were conducted at a high level, aiming to provide a preliminary understanding of existing recreational use at each site and associated impacts. The findings are intended to help identify patterns of activity and potential areas of concern, and to inform whether further, more detailed surveys, such as visitor counts, are required to inform the HRA process that will be undertaken in support of the Local Plan.

1.2.4 It is noted that due to a combination of sub-optimal seasonality and adverse weather and site conditions full habitat, botanical and bird surveys were not included in the scope of works.

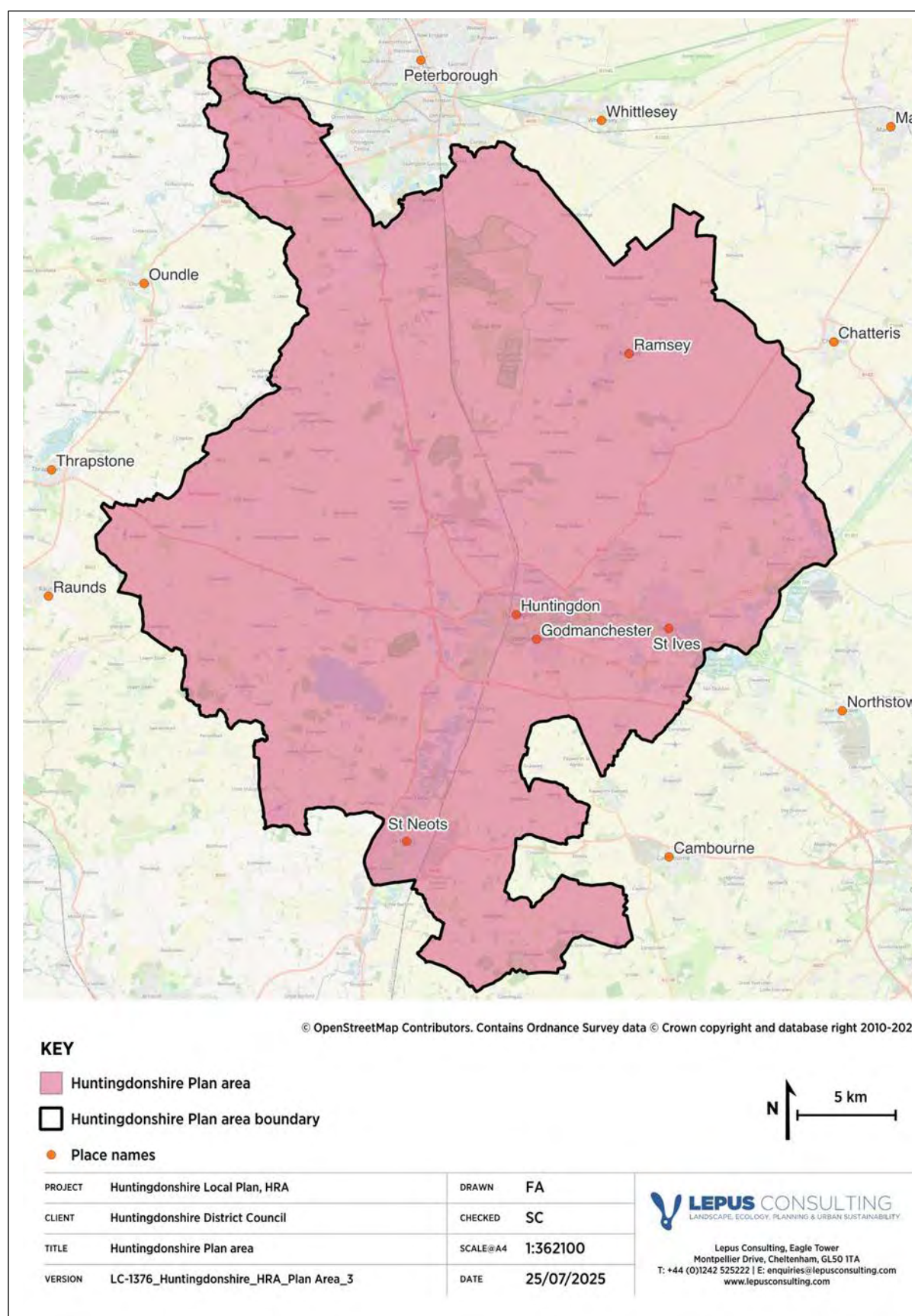
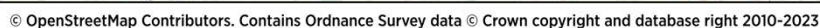


Figure 1.1: Huntingdonshire Plan Area

2 European sites within the Plan area

2.1 Threats and pressures

- 2.1.1 Each European site has its own intrinsic qualities, besides the habitats or species for which it has been designated, that enable the site to support its particular ecosystems. **Appendix A** sets out the conservation objectives for each European site in the Plan area. 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).
- 2.1.2 This report focuses on establishing current public access and disturbance threats at the European sites located within the Plan area. Increased recreational pressure at European sites can result in damage to habitats in a number of ways, including 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; and tree climbing. Urbanisation effects typically occur when development is located close to a European site boundary. Impacts may include noise disturbance, lighting effects, cat predation, fly-tipping, wildfire, littering and vandalism. Sites identified for walkover survey are detailed in **Sections 2.2, 2.3, and 2.4**, and shown in **Figure 2.1**.



8 16 km

Portholme

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LANDSCAPE, ECOLOGY, PLANNING & URBAN SUSTAINABILITY

Lepus Consulting, Eagle Tower
Montpellier Drive, Cheltenham, GL50 1TA
T: +44 (0)1242 525222 | E: enquiries@lepusconsulting.com
www.lepusconsulting.com

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2.2 Ouse Washes SAC, SPA and Ramsar

- 2.2.1 The Ouse Washes comprise one of the most extensive areas of seasonally flooded washland in the UK and are designated as a Special Area of Conservation (SAC), Special Protection Area (SPA) and Ramsar site. The designations encompass two canalised main river channels of the River Great Ouse that run along each side of its length, with an extensive area of wet grassland and field drains in between⁵. The Ouse Washes supports a wide range of wetland habitats, including open water, ditches and wet grassland. The SAC is designated for Spined Loach (*Cobitis taenia*) and the SPA for the large assemblages of breeding and non-breeding waterbirds, including internationally important wintering populations of Swans and wildfowl. The features of the Ramsar include the internationally important bird assemblages, the extensive area of seasonally-flooded washland, relict fenland invertebrates and several nationally scarce plants, such as the Small Water Pepper (*Polygonum minus*). The Ouse Washes SAC, SPA and Ramsar are underpinned by the Ouse Washes SSSI. The SSSI is designated for 21 features of waterfowl, eight of which are in an 'unfavourable - no change' condition. It is also designated for ditches ('unfavourable - recovering' condition), Lowland wet neutral grassland (MG11, MG13) ('unfavourable - no change' condition), and vascular plant assemblage (Condition 'Not Recorded')⁶.
- 2.2.2 The conservation of habitats at the Ouse Washes SPA is noted to be dependent on control of access and recreational activities⁷. The Ouse Washes SPA and Ramsar are sensitive to recreational pressure due to their reliance on open, undisturbed wetland habitats that support large assemblages of breeding and non-breeding waterbirds. Increased recreational use, including walking, dog walking and other informal access, has the potential to cause disturbance leading to behavioural changes and reduced habitat suitability. The qualifying feature of the Ouse Washes SAC (Spined Loach) is not considered sensitive to direct recreational impacts, however indirect impacts from activities such as angling are considered possible.
- 2.2.3 Urbanisation effects are also relevant for the Ouse Washes SPA and Ramsar where parts of the designations lie within close proximity of the Plan area. Potential impact pathways include noise and lighting disturbance, increased human presence, littering and other indirect pressures that could affect bird breeding and nesting habitats.

⁵ Natural England (2019) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features, Ouse Washes (SPA) Site Code: UK9008041. Available at: <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK9008041.pdf> [Date accessed: 05/02/26].

⁶ Natural England. Designated Sites View: Ouse Washes SSSI. Available at: <https://designatedsites.naturalengland.org.uk/SiteFeatureCondition.aspx?SiteCode=S1000503&SiteName=Ouse%20Washes%20SSSI> [Date accessed: 05/02/26]

⁷ Natural England (2019) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features, Ouse Washes (SPA) Site Code: UK9008041. Available at: <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK9008041.pdf> [Date accessed: 05/02/26].

- 2.2.4 The importance of the surrounding landscape to the birds associated with the SPA and Ramsar designations is recognised through the establishment of an area of functionally linked land for Geese and Swan. Functionally linked land (FLL) refers to the role or 'function' that land or sea beyond the boundary of a protected site designation boundary might fulfil in terms of providing a critical ecological role in supporting the populations for which the site was designated or classified⁸. In addition to urbanisation, recreation, water and air quality impacts upon areas of FLL, land use planning also has the potential to cause the fragmentation of connecting habitat (such as water features) between protected sites and other areas of functionally linked land. Fragmentation can lead to the isolation of habitat and an increase in urban edge effects. Habitat loss, including that of FLL, can lead directly to the mortality of protected species for which protected sites are designated, whereby a minimum amount of habitat is required to thrive and survive.

2.3 Portholme SAC

- 2.3.1 Portholme SAC is one of the largest remaining examples of traditionally managed lowland hay meadow in England and is designated for its species-rich grassland habitat, specifically *H6510 Lowland hay meadows* (Annex I habitat, EU Habitats Directive). The site supports characteristic plant communities associated with periodically flooded meadows along the River Ouse. Conservation objectives seek to maintain or restore the extent, distribution, structure and function of the qualifying habitat, including its typical species, and to protect the natural processes, particularly appropriate flooding and management regimes, that sustain its ecological value. Portholme SAC is underpinned by Portholme SSSI. The neutral lowland grassland features is assessed as being in an 'unfavourable - recovering' condition⁹.
- 2.3.2 The grasslands for which Portholme SAC is designated may be impacted by recreational impacts due to its location within the Plan area, the sensitivity of its lowland hay meadow habitat, and the availability of public access. These pressures may include trampling, soil compaction, erosion, disturbance to grazing management, nutrient enrichment from dog fouling and the spread of invasive species, such as trampling by walkers and dog walkers which can damage vegetation and soils. Whilst urbanisation effects, such as noise and light pollution, are unlikely to affect the conservation status of the grasslands, impacts such as fly tipping, anti-social behaviour and littering may have an impact.

⁸ 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.

⁹ Natural England. Designated Sites View: Portholme SSSI. Available at: <https://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=S1002185&SiteName=portholme&countyCode=&responsiblePerson=&unitId=&SeaArea=&IFCAArea=> [Date accessed: 05/02/26]

2.4 Fenland SAC and Woodwalton Ramsar

- 2.4.1 The Fenland SAC, underpinned by Woodwalton SSSI and Woodwalton NNR10, together with the Woodwalton Fen Ramsar site, represents a nationally and internationally important complex of fen, swamp, meadow and aquatic habitats. The Fenland SAC is designated for its meadow and fen habitats, as well as Great Crested Newt (*Triturus cristatus*) and Spined Loach. Woodwalton Ramsar is designated for Fen Violet (*Viola persicifolia*) and Fen Wood-rush (*Luzula pallescens*), as well as numerous wetland invertebrates, aquatic beetles, flies and moths. Fens SAC and Woodwalton Fen Ramsar is underpinned by Woodwalton Fen SSSI. The SSSI is designated for seven features or which five are in an 'unfavourable - no change' condition (ditches, floodplain fen (lowland), lowland moor grassland and rush pasture, Fen Woodrush and vascular plant assemblage), one is 'unrecorded' (Fen Violet) and one is in a 'favourable' condition (wet woodland)¹¹.
- 2.4.2 The conservation of meadow habitats at Fenland SAC are noted to be dependent on recreation/visitor management¹². Fenland SAC and Woodwalton Fen Ramsar are both sensitive to recreational pressure due to the vulnerability of their fen, meadow and wetland habitats and the availability of public access. Recreational activities can result in trampling, erosion, and disturbance to sensitive species. Urbanisation effects are also a concern for both Fenland SAC and Woodwalton Fen Ramsar. Potential impacts may include noise and light disturbance, increased predation pressure from domestic cats, littering, vandalism and changes in surrounding land use. These pathways may affect habitat quality and species populations. Research by Ganguly and Candolin (2023)¹³ highlights the potential for artificial light at night (ALAN) to affect ecologically important invertebrates which are themselves responsible for providing key ecosystem functions, and these invertebrates may be adversely affected by illumination.

¹⁰ Natural England (2018) European Site Conservation Objectives for Fenland SAC (UK0014782). Available at: <https://publications.naturalengland.org.uk/publication/6712672527581184> [Date accessed: 05/02/26].

¹¹ Natural England. Designated Sites View: Woodwalton Fen SSSI. Available at: <https://designatedsites.naturalengland.org.uk/SiteDetail.aspx?SiteCode=S1001698&SiteName=woodwalton%20fen&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=> [Date accessed: 05/02/26]

¹² Natural England (2019) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features Fenland (SAC) Site Code: UK0014782. Available at: <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0014782.pdf> [Date accessed: 05/02/26].

¹³ Ganguly, A., Candolin, U. (2023) 'Impact of light pollution on aquatic invertebrates: Behavioural responses and ecological consequences', Behavioural Ecology and Sociobiology, 77(104), <https://doi.org/10.1007/s00265-023-03381-z>

3 Methodology

3.1 Site Visit

3.1.1 Site visits were undertaken on the 27th and 28th of January 2026 by professionally qualified ecologists Joseph Marcus (BSc, MSc, Qualifying member of CIEEM) and Benjamin Bayliss (BSc, MSc, Qualifying member of CIEEM). The primary objectives of the site walkovers were to:

- Identify and record current management arrangements at each site;
- Evaluate current levels of recreational impact within the sites;
- Evaluate movements off public rights of way, permissive and promoted routes;
- Evaluate effectiveness and clarity of current signage; and,
- Identify recreational and urbanisation pressures, and anti-social behaviour at each site.

3.1.2 Within each designated site, PRoWs and promoted routes were used to walk a representative route around the site. Car parks and informal (unofficial) parking locations were also visited and recorded. Desire lines off the promoted routes were identified and mapped. Where access to land was restricted by ownership or adverse terrain, sites were reviewed from accessible site boundaries and vantage points along the road network.

3.1.3 Where public access and disturbance threats and pressures were observed these were recorded through the use of target notes and a photographic record was made. The following signs of recreational impact were recorded:

- Erosion of rights of way and promoted routes through footpath / track widening and braiding of paths to avoid muddy areas;
- Informal paths (made by walkers, horse riders or cyclists);
- Compaction and erosion of soil around tree roots;
- Den building;
- Litter and evidence of fly-tipping;
- Evidence of mountain biking (e.g. earthworks for ramps and berms);
- Fire damage from BBQs or fire pits;
- Eutrophication signs;
- Damage caused by unofficial car parking; and
- Signage and existing recreational management.

3.1.4 The quality, frequency and complexity of access signage and information was observed throughout the sites. Current management arrangements on site were also recorded, such as fencing and information boards.

3.2 Limitations

- 3.2.1 It is acknowledged that this assessment is subject to limitations. The site walkovers were only undertaken over two days in January 2026, offering a limited temporal representation of site conditions. It is noted that recreational impacts may differ at other times of the year depending on holiday periods and weather conditions. It should be noted that access to each site was restricted to the PRow network and areas of open access land. However, given the purpose of the survey was to explore the potential for likely significant public access and disturbance effects upon the designated features to help inform the baseline study, so access in this manner was considered appropriate. The timing of the survey allowed a number of recreational threats and pressures to be seen on site clearly, which may not have been visible at other times of the year. This is because impacts caused by footpath users leaving promoted routes are often more visible in muddy conditions. Such conditions are also considered optimal to highlight evidence of damage from car parking in designated and non-designated areas.
- 3.2.2 The surveys included casual observations of visitor patronage, however did not include a comprehensive survey of visitor numbers. Whilst evidence of direct damage on the European sites and underpinning SSSIs was noted, it is acknowledged that there were limitations associated with the methodology due to the season in which the surveys were undertaken which was outside the optimal botanical survey period. As such the survey did not comprise a detailed habitat survey of qualifying habitats. It is also noted that flooding at some of the sites limited the extent of the survey. Additionally, whilst causal observations were taken of bird species and number present where relevant, no new bird survey data has been obtained or commissioned. At the time of the site visits, there was extensive flooding of the Ouse Washes, which limited the ability to assess unofficial use of its central area.

4 Results and observations

4.1 Ouse Washes SAC, SPA and Ramsar

4.1.1 The Ouse Washes is large linear site approximately 330ha in area and 30km in length with multiple landowners, including areas managed by the Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire, the Royal Society for the Protection of Birds (RSPB), and the Wildfowl & Wetlands Trust. A number of towns and villages surround the site. Of note is the town of Earith in the south, as this is the only town local to the Ouse Washes which is located within the Huntingdonshire Plan area. Much of the site is surrounded by open agricultural fields. Due to the linear nature and size of this site, multiple locations along its length were visited on 27th January as it was not possible to walk the entirety of the designation within the allocated time. The locations visited are shown in **Figure 4.1**.

4.1.2 Two canalised rivers, the River Delph and the New Bedford River, run within the designated site boundary, along the eastern and western sides of the site. A central area of fields is located between these two rivers. This central area is prone to flooding and utilised by the bird species for which the SPA and Ramsar are designated, and is hereafter referred to as 'washlands'. Public access and recreational use to these washlands is limited, with most of the PRow's being located along the boundaries of the designated site, running along the banks of the River Delph and the New Bedford River. These river banks are raised along much of the length of the designated sites.



Figure 4.1: Overview of transect survey route at the Ouse Washes

- 4.1.3 The southern extent of the site, at Earith, provides formalised public access (as shown in **Figure 4.2**) in the form of two car parks: a small car park at Earith Sluice on the River Delph, which can accommodate approximately five vehicles, and a second car park to the east at the Earith Bridge Picnic Area, which can accommodate approximately 20 vehicles. Litter bins were present only at the Earith Bridge Picnic Area.
- 4.1.4 PRoWs are located on the raised banks of both river channels enclosing the Ouse Washes, with one well signposted PRoW running along the eastern boundary of the site adjacent to the River Delph. This route is clearly signed, with kissing gates at access points, and showed a significant level of use, including footprints and dog fouling. This footpath is separated from the Ouse Washes by a hedgerow and tree line, providing a physical and visual buffer that reduces potential disturbance from recreational users to birds using the central section.
- 4.1.5 Sections of the A1123 are similarly screened from the Ouse Washes by hedgerow, scrub, and trees; however, this screening is not however continuous along the full length of the road where it borders the site, leaving some areas more exposed. The bridge at the Earith Sluice and the Earith Bridge, crossing the River Delph and the New Bedford River respectively, provides no screening. Along the B1381, which runs parallel to the New Bedford River on the eastern side of the site, only a low scrub barrier is present, offering minimal protection from disturbance.
- 4.1.6 A further PRoW along the eastern side of the site, beginning at the Earith Bridge Picnic Area, appears to have been historically well used. Although access is currently blocked, there was evidence of continued informal use at the time of the survey. Whilst no formal access exists onto the washlands, vehicular gates for land management purposes are present, with signs of limited unofficial recreational access beyond these points. Litter was rare but not entirely absent within this area.



Figure 4.2: Overview of Ouse Washes location 1, including the transect route walked and target note locations

- 4.1.7 The second location visited, as illustrated in **Figure 4.3**, is located to the west of the town of Mepal, adjacent to the A142 bridge crossing the Ouse Washes and the River Delph and New Bedford River. Access in this area is provided via Mepal Long Highway to the south and Engine Bank to the north. On the southern side of the A-road, there is no official parking provision. 'No Parking' signage was present, and a gated dirt track was blocked by a gate preventing access to a large open area that may otherwise be suitable for vehicle parking. Environment Agency (EA) management activity was observed in this location, including the presence of a heavy machinery vehicle and an EA vehicle stationed along the track. A fishing club operates locally, and the gated area may serve either club or EA management purposes. Unofficial roadside parking was possible along Mepal Long Highway, though no evidence of extensive use was observed.
- 4.1.8 Similar conditions were present north of the A142 along Engine Bank, where an access road to an open area suitable for parking was also gated. There was evidence of some informal parking recorded at this location. The A142 crosses the River Delph, the New Bedford River, and passes directly over the Ouse Washes, with no screening along its length. While this is the only road in the area subject to heavy use, disturbance from the A142 is therefore largely localised to the immediate vicinity of the bridge. Observations suggest that bird populations in this location appear to be acclimatised to the presence and activity of the A-road. Notable birds including Black-tailed Godwit (*Limosa limosa*), Common Redshank (*Tringa totanus*), Eurasian Curlew (*Numenius arquata*) and Wigeon (*Anas Penelope*) were observed in this area. There is no screening vegetation between Engine Bank or Mepal Long Highway and the Ouse Washes, however the raised embankment of the River Delph blocks the line of sight and may reduce the potential for bird disturbance. In addition, these roads were observed to experience extremely low traffic levels during the site visit.
- 4.1.9 A PRoW runs along the bank between Engine Bank and Mepal Long Highway, and the River Delph, overlooking the Ouse Washes. There are no buffering features (such as hedgerows and trees) between the footpath and the designated site, resulting in unobstructed views across the Washes. The route is clearly marked as a PRoW, with wooden steps and handrails leading onto it. Evidence of frequent use was observed along much of the route, including footpath erosion, dog fouling, and some littering. No litter or dog waste bins were present along this section of the PRoW. There is no pedestrian crossing point allowing access onto the washlands of the Washes at this location. Flooding across these fields at the time of the site visit prevented assessment of any potential unofficial recreational use within the centre of the designated site.

- 4.1.10 The third location visited was situated south of the Mepal site and east of the town of Sutton, along The Causeway (**Figure 4.3**). Parking is available at The Pilot Inn on the eastern bank of the New Bedford River for patrons, while informal parking was observed along the roadside over Gault Bridge, where the road passes through the designated site. A pedestrian boardwalk, incorporating lighting, runs alongside the road at this location and is elevated to account for frequent flooding, as indicated by numerous permanent flood warning signs. An information board is present adjacent to Gault Bridge, alongside PRow signage, directing users to a PRow on the opposite side of the New Bedford River. A kissing gate also provides access to a PRow running along the bank of the New Bedford River on the washlands side of the watercourse. Flooding of the Ouse Washes at the time of the site visit prevented assessment of any unofficial access or recreational activity beyond the PRow, however there were no obstructions or fencing in place to prevent access to the washlands. No litter or dog waste bins were present along this route, though low levels of dog waste were observed. Use by dog walkers was evident, and a quad bike was observed using the path, although this was likely part of site management activities. Instances of fly-tipping were recorded at site access points along the roadside. Along the River Delph on the western side of the site, access opportunities to the washlands of the Ouse Washes are absent; however, the presence of unofficial dog waste and litter bins suggests relatively high recreational use by walkers and dog walkers in this area.

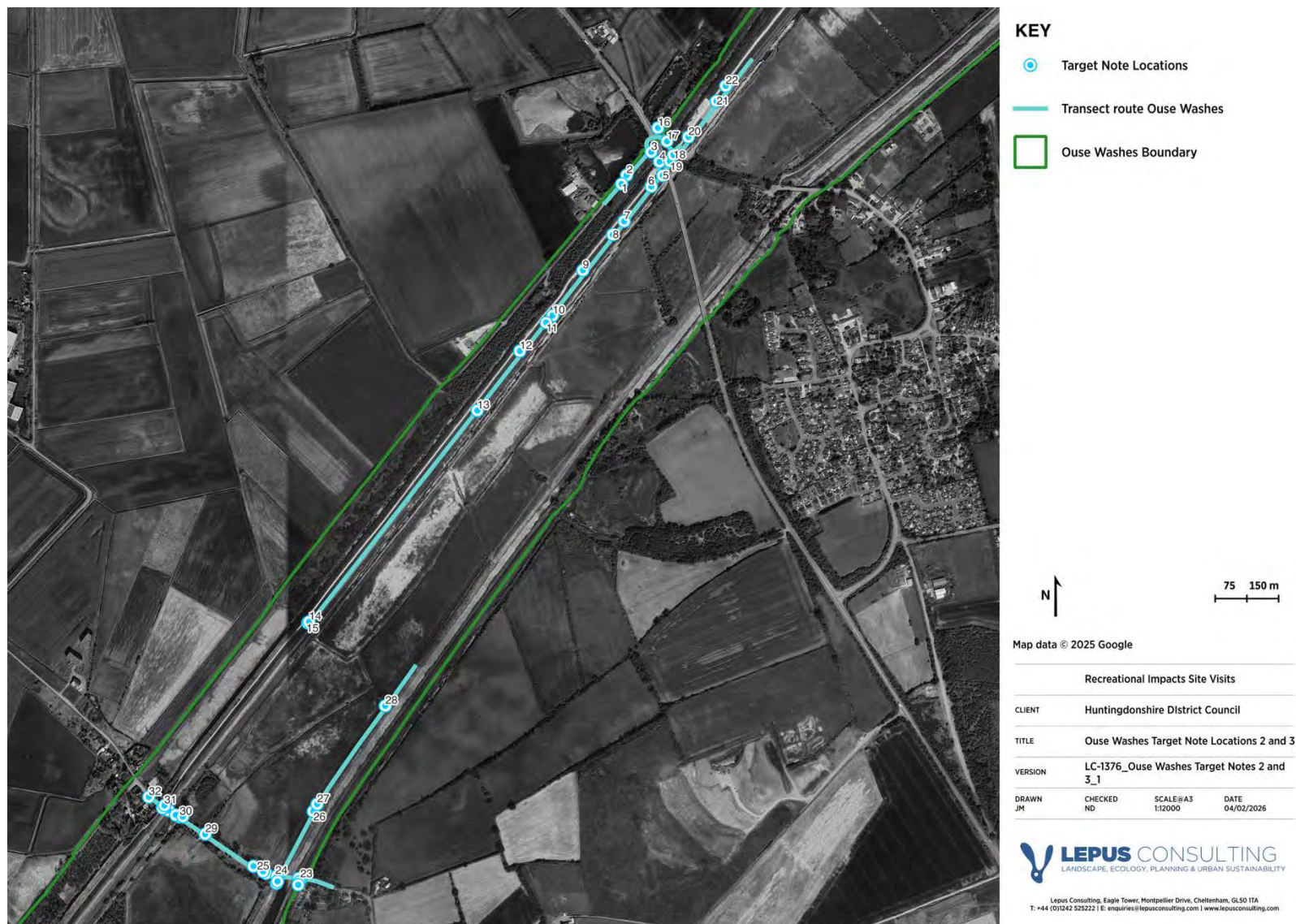


Figure 4.3: Overview of Ouse Washes locations 2 and 3, including the transect route walked and target note locations

- 4.1.11 The final location visited along the Ouse Washes was the RSPB Ouse Washes Reserve, as shown in **Figure 4.4**. The visitor centre provides a car park with capacity for approximately 12 vehicles, with additional informal parking available along the access road. Extensive signage is present, providing information on the importance and history of the site, as well as wayfinding for routes and bird hide locations. The site is well managed, with hard-surfaced paths, boardwalks, and handrails provided along steps and inclines. Paths showed evidence of regular use but were in good condition and well maintained. There is no access from this side of the River Delph onto the washlands of the Ouse Washes, and flooding across the Washes prevented assessment of any potential unofficial recreational activity. Three bird hides are promoted at this location, each of which was accessible, well maintained, and in good condition at the time of the survey. Additional interpretive information boards were present within the hides to support birdwatching and visitor understanding. Residential properties are located adjacent to the reserve, with The Ship Inn situated at the end of the access road. A dog walker with their dog off-lead was observed using the footpath leading to one of the three hides within the reserve. No litter was observed at this location, and litter bins were provided.



Figure 4.4: Overview of Ouse Washes location 4, including the transect route walked and target note locations

4.2 Portholme SAC

- 4.2.1 Portholme SAC is a large, 90ha open field of floodplain hay meadow bordered on two sides by the River Great Ouse and mostly owned by the London Angling Society, with a small 4 acre portion in the south west owned by The Thomas Miller Charity¹⁴. Huntingdon is located to the north of Portholme SAC, with Godmanchester to the east and agricultural fields to the south. Site visits to Portholme SAC took place on 28th January, and the transect route followed is shown in **Figure 4.5**. The entirety of the site is open access, with three PRoWs, including the Ouse Valley Way, forming a triangle across the site with further unofficial routes leading across the centre of the site. The central area of the site was inundated at the time of the survey which meant it was not possible to follow the PRoW across the site, and made it difficult to see evidence of recreational impacts in that area.
- 4.2.2 Access to the site is provided via three main access points. The primary access point is located on the eastern side of the site from Godmanchester. Two car parks serve this access: Post Street Car Park, which provides 29 marked parking spaces, including two disabled bays, with free parking available for up to 23 hours, and a smaller car park adjacent to Queen Elizabeth School and Colman Creative Academy on Post Street, which can accommodate approximately 15 vehicles and includes a public toilet. Both car parks provide access to Queen's Walk, a paved public footpath that runs along the River Great Ouse and includes benches, numerous litter and dog waste bins, and areas of open green recreational space and play provision. Queen's Walk is well signed and includes portage points along the River Great Ouse, with clear directional signage leading users towards a pedestrian crossing over Godmanchester Lock. Beyond this point, access to Portholme SAC is facilitated via a kissing gate.
- 4.2.3 A second access point is located to the north of the SAC, off Mill Common in Huntingdon. An unofficial car park is present at this location and was observed to be in heavy use during the site visit, with capacity for approximately 15 vehicles. Footpath signage directs users towards the PRoW network across Portholme SAC, and access is provided via a bridge crossing the River Great Ouse, followed by a kissing gate and with information signage provided at the site entrance.
- 4.2.4 The third access point is located to the west of the SAC and is accessible on foot only, linking Portholme to the Ouse Valley Way walking route. This access point was flooded at the time of the site survey, and was therefore not fully assessed past the kissing gate onto the SAC itself. This path also connects to a PRoW running north adjacent to the SAC, however, due to the flooded access, this footpath was not walked.

¹⁴ <https://www.brampton-cambs-pc.gov.uk/uploads/portholme-meadows-summary.pdf>

- 4.2.5 Information boards outlining the importance and history of the Portholme SAC are present at each of the main access points. Outside of these formal access locations, no additional recreation site management measures were evident across Portholme. A network of PRowWs and informal routes was present across the site; however, evidence of path erosion was minimal and largely confined to the perimeter of the site. Signs of path use displayed in the form of minor trampled vegetation but little to no erosion was evident. This is likely attributed to the open access nature of the site which allows multiple routes to be taken and therefore no specific paths becoming significantly eroded. In addition, seasonal flooding and inundation of the central areas of Portholme SAC appeared to limit recreational access across much of the site interior. Numerous dog walkers were observed during the site visit, with dogs frequently off lead and ranging across the site. No evidence of littering or dog fouling was however recorded during the survey. It is worth noting that this walkover was undertaken in the winter season, while anecdotal evidence suggests that recreational pressures are highest during the summer. Moreover, no botanical surveys were undertaken and the full extent of qualifying features associated with the SAC was not accessible due to flooding in parts of the site.

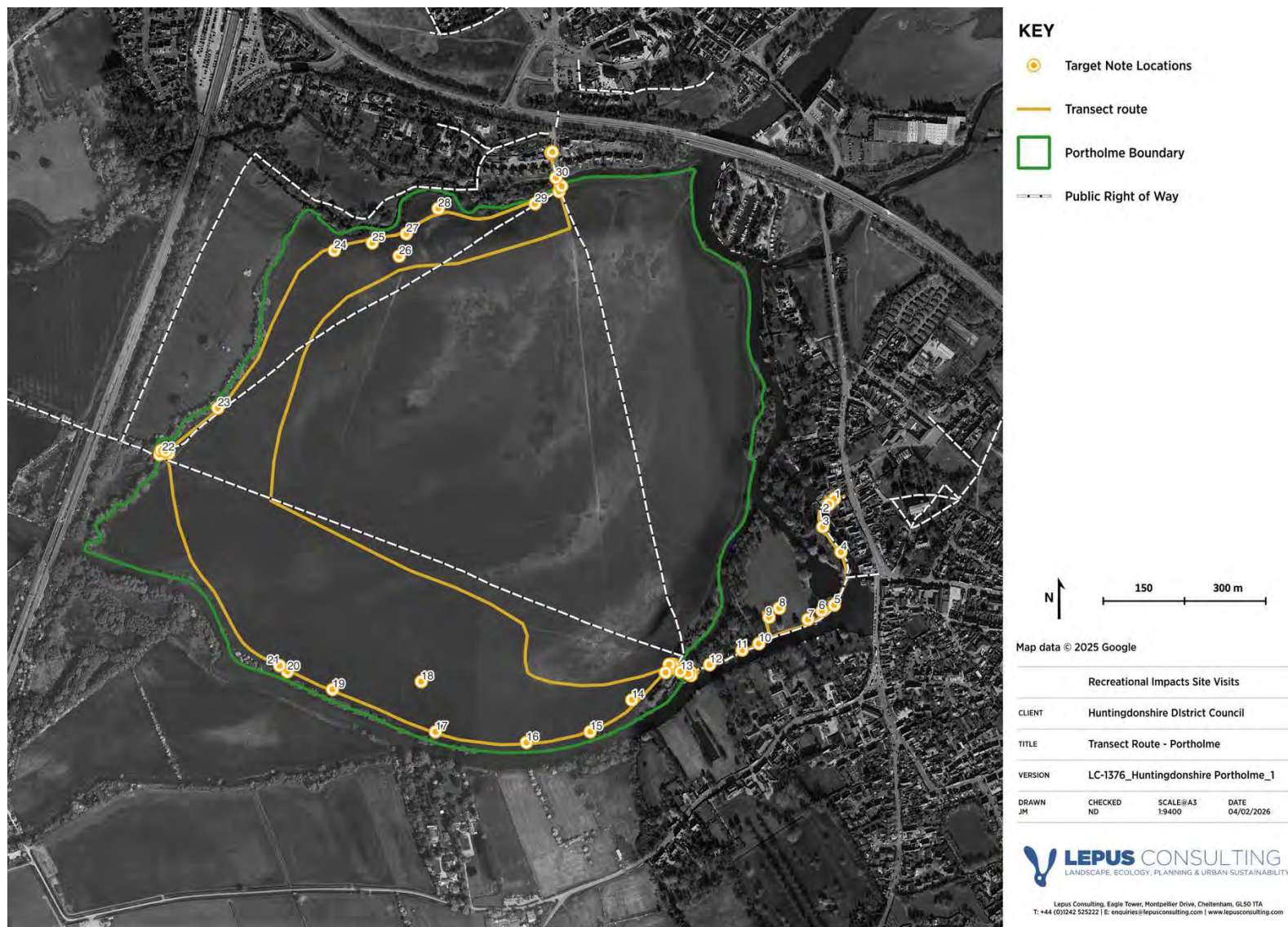


Figure 4.5: Overview of Portholme, including the transect route walked and target note locations

4.3 Fenland SAC and Woodwalton Fen Ramsar

- 4.3.1 Woodwalton Fen is a large, 209ha site managed by Natural England and owned by the Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire¹⁵. The site was visited on 28th January, and the transect route walked is displayed in **Figure 4.6**. There are no official PRow across the site due to private ownership, however there is public access on promoted and managed routes.
- 4.3.2 Parking provision at the site is limited, with no formal car park present. However, informal parking was observed along a track off Chapel Road, which appeared capable of accommodating approximately 20 vehicles. Access to the site is provided via a bridge crossing the Great Raveley Drain. Extensive signage is present at the main entrance, including site information and clear notices prohibiting access for dogs, bicycles, and unauthorised vehicle within the site.
- 4.3.3 Upon entering Woodwalton Fen, additional information boards are provided, outlining the site's importance, history, and management. This information is located outside a fenced compound housing machinery, equipment and vehicles. A network of promoted routes is clearly advertised across the site, directing visitors around the fen and towards a number of bird hides. Paths are well defined through a combination of mown routeways and signage requesting that visitors remain on designated mown paths. Evidence of path erosion was limited to absent, being present only at bottlenecks and path crossroads, and waymarkers associated with the promoted routes were frequent throughout the site. Numerous bridge crossings facilitate movement across drainage channels within the fen. In places, paths were physically blocked to restrict access to sensitive areas. As these were established and maintained routes, this is likely to reflect an active management intervention to alter visitor access patterns and prevent excessive use of particular pathways, thereby reducing potential disturbance and erosion within sensitive areas of the site. No evidence of informal or unofficial route creation was observed.
- 4.3.4 Visitor infrastructure within the site was well maintained. The bird hides were in good condition and accessed via boardwalks, with clear signage promoting their locations. However, one hide was closed at the time of the visit due to an unsafe bridge providing access; this was clearly signposted and accompanied by barriers preventing entry. No visitors were observed on site during the visit. A single instance of litter was recorded, located in the vicinity of the Rothschild Bungalow in the central area of the site. No evidence of dog fouling was recorded, consistent with signage at the entrance to the site prohibiting dogs from entering the site.

¹⁵ <https://www.greatfen.org.uk/woodwalton-fen>



Figure 4.6: Overview of Woodwalton Fen, including the transect route walked and target note locations

5 Conclusions

5.1 Summary of findings

- 5.1.1 The qualifying features of the Ouse Washes SPA and Ramsar, large areas of open, undisturbed wetland to support internationally important assemblages of breeding and non-breeding waterbirds, are highly sensitive to recreational pressure. The SAC qualifying feature (Spined Loach) may also be affected by indirect effects from activities such as angling. Despite this, recreational pressure at the Ouse Washes was generally low and largely constrained to PRowWs, with very limited evidence of access into the washlands that support the SPA and Ramsar bird assemblages. The linear nature of the site means that most recreational use occurs along riverbanks and site boundaries, where PRowWs, roads and access points are located, rather than within the core washland itself. Hedgerows, tree lines, embankments and topography provide visual and physical screening between recreational routes and the washlands, reducing the potential for disturbance to birds. However, this screening is not continuous, and there are localised sections where views across the Washes are unobstructed and disturbance from the presence of people and dogs could occur. Flooding at the time of survey limited assessment of unofficial access onto the Washes, though this flooding is likely to act as a natural deterrent for much of the year. Facilitation of angling activity is present in parts of the site, although none was observed during the visit. Overall, while recreational use is evident and locally concentrated, its effects appear spatially limited, with the majority of the Washes remaining relatively undisturbed.
- 5.1.2 The qualifying lowland hay meadow habitat at Portholme SAC is sensitive to recreational pressure due to the vulnerability of its species-rich grassland and the presence of public access. While Portholme comprises open access land and is crossed by a network of PRowWs, there was little evidence of existing recreational impacts at the time of the site visit. Recreational use appeared to be dispersed across the site, with minimal path erosion and only limited signs of vegetation trampling, largely confined to the site margins. Seasonal flooding and inundation of the central areas of the meadow further restricted access and likely reduced pressure on the most sensitive habitats. Although dog walking was common and dogs were observed off lead, observations of dog fouling was infrequent and no evidence of littering was recorded. Whilst recreational activity at Portholme SAC was evident, it did not appear to be resulting in significant adverse effects on the qualifying hay meadow habitat at the time of survey.

- 5.1.3 The fen, meadow and wetland habitats that underpin the Fenland SAC and Woodwalton Ramsar are sensitive to recreational pressure as visitor access can lead to trampling, erosion and disturbance of qualifying features such as fen and meadow habitats, Great Crested Newt, Spined Loach, Fen Violet, Fen Wood-rush and diverse wetland invertebrates. Evidence of recreational pressure at Woodwalton Fen was limited at the time of the site visit. There is no formal public access in the form of open access land or PRow, however, visitor access is permitted via a clearly defined network of promoted routes managed by Natural England. Risks from recreational pressure appear to be effectively managed through visitor infrastructure, clear signage, restrictions on dogs and bicycles, and active measures to control movement, such as mown paths, boardwalks, route closures and physical barriers to sensitive areas. Paths were well maintained with little to no evidence of erosion, no unofficial trails were observed, and only one instance of littering was seen. As such, there appeared to be no indication of adverse effects on the qualifying features at the time of survey.

5.2 Next Steps

- 5.2.1 This report provides a baseline review of existing recreational use at European sites within the Plan area which have the potential to be sensitive to recreational pressure and urbanisation effects. The findings outlined in **Sections 4.1, 4.2 and 4.3**, and summarised in **Section 5.1**, will be used to inform the HRA which will be undertaken in support of the Local Plan as it develops, alongside ongoing discussions with Huntingdonshire District Council and Natural England.

Appendix A: European Site Conservation Objectives and Threats and Pressures

Ouse Washes 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 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:

S1149. *Cobitis taenia*; Spined Loach

Threats and Pressures at European site which may be affected by the Local Plan^{17,18}

- Loss of/disconnection from supporting off-site habitat – impact of loss of, or disconnection from, nearby habitats that support or are functionally linked to the site;
- Water pollution/water quality – impacts of inappropriate levels of nutrients, organic pollutants and other pollutants (particularly pollution of groundwater); and,
- Hydrology/water quantity – impacts of inappropriate water levels and disturbed flow regimes.

¹⁶ Natural England (2018) European Site Conservation Objectives for Ouse Washes SAC (UK0013011). Available at: <https://publications.naturalengland.org.uk/publication/4894882430713856> [Date accessed: 04/02/26]

¹⁷ Natural England (2014) Site Improvement Plan: Ouse Washes (SIP160). Available at: <https://publications.naturalengland.org.uk/publication/5354106084392960> [Date accessed: 04/02/26]

¹⁸ Natural England (2015) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features, Ouse Washes (SAC) Site Code: UK0013011. Available at: <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0013011.pdf> [Date accessed: 04/02/26]

Ouse Washes SPA¹⁹

Conservation objectives:

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

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

Qualifying features:

A037. *Cygnus columbianus bewickii*; Bewick's Swan (Non-breeding)

A038. *Cygnus cygnus*; Whooper Swan (Non-breeding)

A050. *Anas penelope*; Eurasian Wigeon (Non-breeding)

A051. *Anas strepera*; Gadwall (Breeding)

A052. *Anas crecca*; Eurasian Teal (Non-breeding)

A053. *Anas platyrhynchos*; Mallard (Breeding)

A054. *Anas acuta*; Northern Pintail (Non-breeding)

A055. *Anas querquedula*; Garganey (Breeding)

A056. *Anas clypeata*; Northern Shoveler (Non-breeding)

A056. *Anas clypeata*; Northern Shoveler (Breeding)

A082. *Circus cyaneus*; Hen Harrier (Non-breeding)

A151. *Philomachus pugnax*; Ruff (Breeding)

A156a. *Limosa limosa limosa*; Black-tailed Godwit (Breeding)

Waterbird assemblage

Breeding bird assemblage

Threats and Pressures at European site which may be affected by the Local Plan^{20,21}

- Loss of/disconnection from supporting off-site habitat – impact of loss of, or disconnection from, nearby habitats that support or are functionally linked to the site;
- Disturbance caused by human activity – impact of human activity in and around the site, including angling, wildfowling and walking/dog walking;
- Landscape- and landform-altering development – impact of development altering the landscape/nearby landforms and causing the loss of unobstructed lines of sight within feeding or roosting habitat, which can limit the ability of birds to detect predators;
- Water pollution/water quality – impact of inappropriate levels of nutrients, organic pollutants and other pollutants (particularly pollution of groundwater); and,
- Hydrology/water quantity – impact of disturbed flow regimes, changes to water supply, changes to water area/depth, and other changes to water quantity.

¹⁹ Natural England (2019) European Site Conservation Objectives for Ouse Washes SPA (UK9008041). Available at: <https://publications.naturalengland.org.uk/publication/6636062256398336> [Date accessed: 04/02/26]

²⁰ Natural England (2014) Site Improvement Plan: Ouse Washes (SIP160). Available at: <https://publications.naturalengland.org.uk/publication/5354106084392960> [Date accessed: 04/02/26]

²¹ Natural England (2019) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features, Ouse Washes (SPA) Site Code: UK9008041. Available at: <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK9008041.pdf> [Date accessed: 04/02/26]

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Ramsar Criterion	Justification for the application of each criterion
1	
2	
5	
6	

²² JNCC (1976) Information Sheet on Ramsar Wetlands (RIS): Ouse Washes. Available at: <https://jncc.gov.uk/jncc-assets/RIS/UK11051.pdf> [Date accessed: 04/02/26]

Ramsar Criterion	Justification for the application of each criterion
	Contemporary data and information on waterbird trends at this site and their regional (sub-national) and national contexts can be found in the annual Wetland Bird Survey report.

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

- Eutrophication – impact of high nutrient levels caused by sewage treatment works and agricultural runoff; and,
- Reservoir/barrage/dam impact: flooding – recent decades have seen an increase in occurrence of and bird features of the site.

Portholme SAC²⁴

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*)

Threats and Pressures at European site which may be affected by the Local Plan^{25,26}

- Disturbance caused by recreation/visitors to the site – impact of unmanaged levels of site visitation and use of the site for recreation;
- Loss of/disconnection from supporting off-site habitat – impact of loss of, or disconnection from, nearby habitats that support or are functionally linked to the site;
- Air pollution – impact of changes to air quality, including atmospheric nitrogen deposition and acidification;
- Water pollution/water quality – impact of high nutrient levels arising from floodwaters from the River Ouse; and,
- Hydrology/water quantity – impact of disturbed water regimes, disturbed flooding regimes, and inappropriate water table levels.

²³ Ibid.

²⁴ Natural England (2018) European Site Conservation Objectives for Portholme SAC (UK0030054). Available at: <https://publications.naturalengland.org.uk/publication/4802651548024832> [Date accessed: 04/02/26]

²⁵ Natural England (2014) Site Improvement Plan: Portholme SAC (SIP177). Available at: <https://publications.naturalengland.org.uk/publication/6533964571344896> [Date accessed: 04/02/26]

²⁶ Natural England (2019) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features Portholme Special Area of Conservation (SAC) Site Code: UK0030054. Available at: <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0030054.pdf> [Date accessed: 04/02/26]

Fenland SAC (where it is underpinned by Woodwalton Fen SSSI)²⁷

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 population of qualifying species; and,
- The distribution of qualifying species within the site.

Qualifying features:

H6410. *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*); Purple moor-grass meadows

H7210. Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae*; Calcium-rich fen dominated by Great Fen-sedge (Saw-sedge) (priority habitat/species)

S1149. *Cobitis taenia*; Spined Loach

S1166. *Triturus cristatus*; Great Crested Newt

Threats and Pressures at European site which may be affected by the Local Plan^{28,29}

- Loss of/disconnection from supporting off-site habitat – impact of loss of, or disconnection from, nearby habitats that support or are functionally linked to the site;
- Air pollution – impact of changes to air quality, including atmospheric nitrogen deposition and acidification;
- Water pollution/water quality – impact of high nutrient levels, changes to water chemistry and other changes to water quality; and,
- Hydrology/water quantity – impact of disturbed water regimes (including the source, depth, duration, frequency, magnitude and timing of water supply), disturbed flooding regimes, changes to water levels, changes to water table height and other hydrological changes.

²⁷ Natural England (2018) European Site Conservation Objectives for Fenland SAC (UK0014782). Available at: <https://publications.naturalengland.org.uk/publication/6712672527581184> [Date accessed: 04/02/26]

²⁸ Natural England (2014) Site Improvement Plan: Fenland SAC (SIP084). Available at: <https://publications.naturalengland.org.uk/publication/6024783481274368> [Date accessed: 04/02/26]

²⁹ Natural England (2019) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features Fenland (SAC) Site Code: UK0014782. Available at: <https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK0014782.pdf> [Date accessed: 04/02/26]

Ramsar Criterion	Justification for the application of each criterion
1	The site is within an area that is one of the remaining parts of East Anglia which has not been
2	

Threats and Pressures at European site which may be affected by the Local Plan³¹:

- Eutrophication; and,
- Drainage/land-claim for agriculture.

³⁰ JNCC (1995) Information Sheet on Ramsar Wetlands (RIS): Woodwalton Fen. Available at: <https://jncc.gov.uk/jncc-assets/RIS/UK11078.pdf>
[Date accessed: 04/02/26]

³¹ Ibid.

Appendix B: Ouse Washes location 1 - target note photos



1a: Footpath erosion up to fenced entrance to washlands



1b: Evidence of dog walking - Paw prints



2a: Earith Bridge Picnic Area car park



2b: Earith Bridge Picnic Area car park



2c: Faded information board at Earith Bridge Picnic Area





3a: Unofficial parking off A1123



3b: Memorial area off A1123



3c: Entrance to public footpath from A1123



4: Public footpath running adjacent to River Delph



5: Gates to private farmland from public footpath



Appendix C: Ouse Washes location 2 and 3 - target note photos



1: Mepal Long Highway running parallel to the River Delph



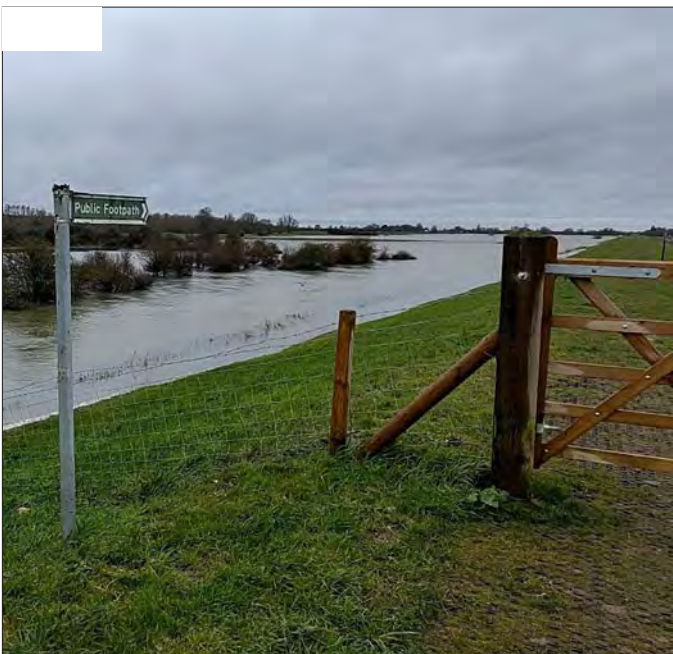
2: Fish Farm opposite the Ouse Washes



3: No Parking signage near the PRow



4: Visitor infrastructure for ease of access to PRow, and gated access to track running parallel



5: Signage and gating of the PRow





6: Dog fouling along the PRow



7: Flooding of the washlands



8: Large flocks of birds over the Ouse Washes



9: EA vehicle parked along the track parallel to the River Delph



10: Littering along the PRow





11: Aggregations of waterbirds within the washlands



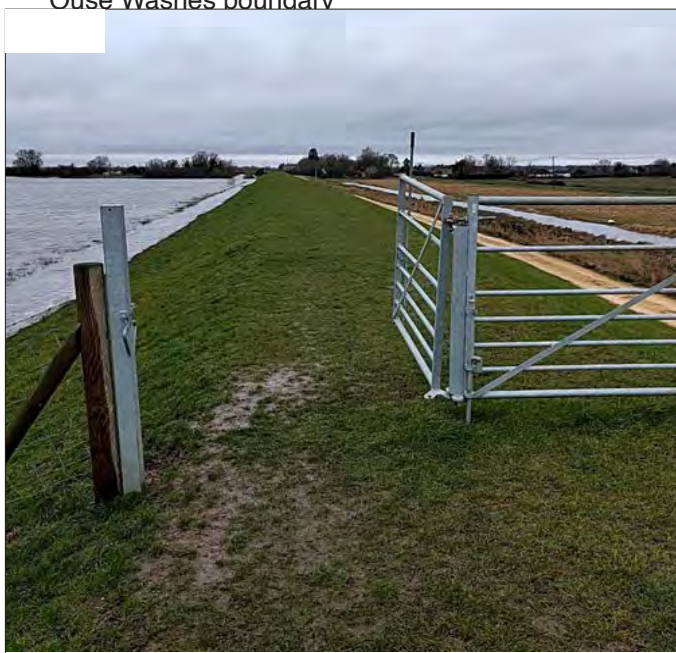
12: EA heavy machinery parked on the track parallel to the River Delph



13: Agricultural and livestock land adjacent to the Ouse Washes boundary



14: An abandoned dog lead along the PRoW



15: An open access gate across a section of the PRoW





16: Engine Bank road running parallel to the River Delph



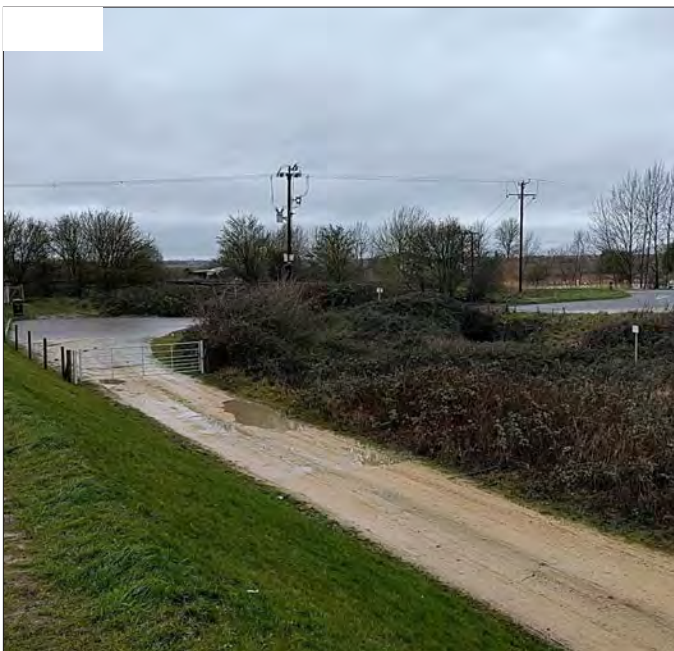
17: Warning signage for anglers



18: Information signage at entrance to the PRoW



19: Visitor infrastructure for ease of access to the PRoW



20: Track running parallel to the River Delph, blocked by a closed gate





16: Mutiple aggregations of waterbird species on the washlands of the Ouse Washes



17: Unofficial path around perimeter of Portholme



23a



21: Information signage at the road crossing the Washes

23b



22a: The Anchor pub, car park and track adjacent to the New Bedford River



22b: Footpath signage at entrance to PRoW along the bank of the New Bedford River



23d: Information board at entrance to PRoW along the bank of the New Bedford River





24a: Footpath signage to PRow north along the New Bedford River, with access via kissing gate



24b: Fly-tipping at the entrance to the PRow



25: Gateway to PRow south along the New Bedford River



26: Path erosion and littering in the area leading to the PRow





25a: Unofficial parking roadside near entrance to



25b: Flooded road access and pedestrian walkway



25c: Pedestrian raised walkway and lighting



26: Quad bike presence likely related to management



27: Dog fouling along the PRoW





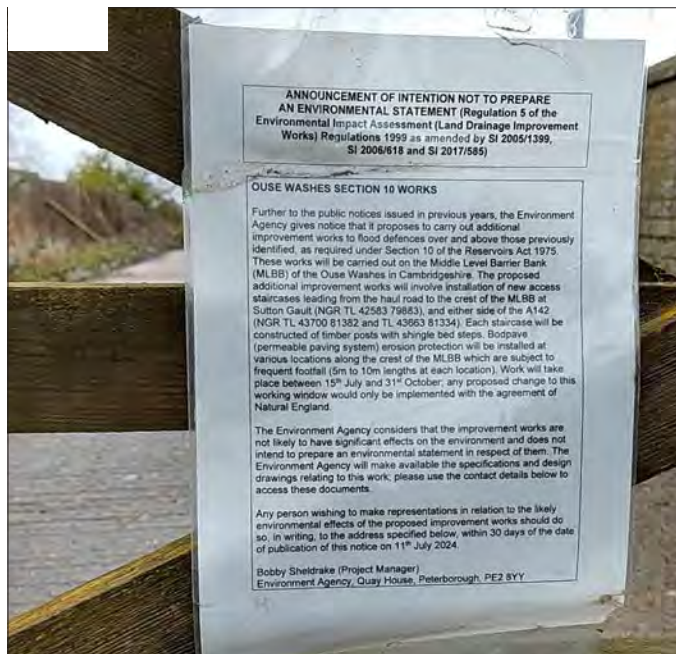
28: Signage of land ownership and shooting on the following area of the Washes



29: Dog walker utilising raised pedestrian walkway



30: Access onto the washland



31: Information to the public regarding EA works



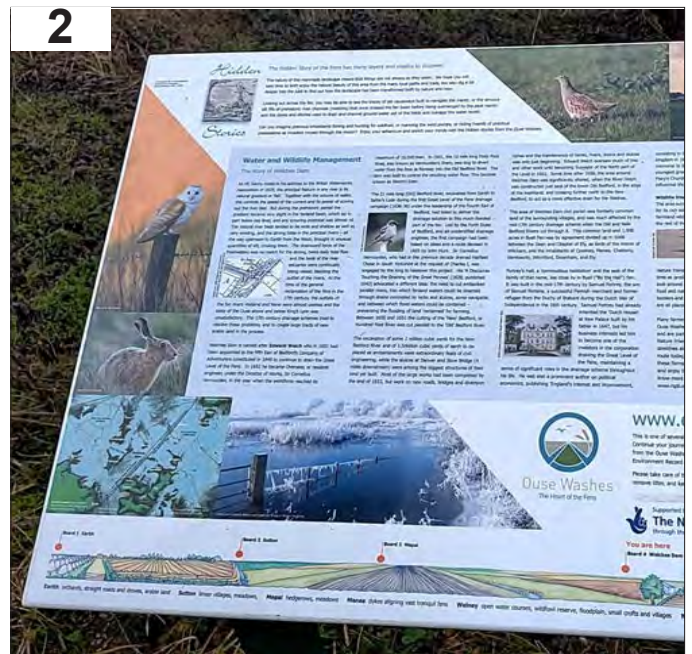
32: Dog litter bin along roadside



Appendix D: Ouse Washes location 4 - target note photos



1: RSPB Ouse Washes car park and toilets



2: Information board at RSPB Ouse Washes car park



3: Information board at RSPB Ouse Washes visitor center



4: RSPB Ouse Washes visitor center



5: Private residences and signage directing to bird hides





6: Public footpath and signage to bird hides



7a: Welch's Dam Hide at RSPB Ouse Washes



7b: Information boards inside Welch's Dam Hide



8: Path leading to Welch's Dam Hide



9: Whooper Swans on farmland adjacent to Ouse Washes



Appendix E: Portholme - target note photos



1: Post Street Car Park



2: Lock and information boards off Queen's Walk



3: Queen's Walk Play Area



4: Litter bins and benches along Queen's Walk



5: Bridge and sluice over Great River Ouse





6: Godmanchester Angling Society sign



7: Litter bins and benches along Queen's Walk



8: Play area on Godmanchester Recreation Ground



9: Tree guard, litter bin, and picnic bench



10: Bridge and no swimming sign





11: Unofficial path off Queen's Walk



12: Bench and unofficial path of Queen's Walk



13a: Lock and bridge over Great River Ouse



13b: CCTV and no swimming signage on Queen's Walk



13c: Portage point on Queens Walk and Great River





13d: Entrance to Portholme from Queen's Walk



13e: Information signage at entrance to Portholme



13f: Information signage at entrance to Portholme



14: Evidence of livestock grazing on Portholme



15: Unofficial path around perimeter of Portholme





16: Wildfowl on land adjacent to Great River Ouse



17: Unofficial path around perimeter of Portholme



18: Off-lead dogs on Portholme Meadow



19: Dog walker on Portholme Meadow



20: Unofficial path





21: Erosion and exposure of bare ground



22a: Flooded entrance to Portholme



22b: Footpath signage at entrance to Portholme



22c: Information board at entrance to Portholme



22d: Paths across Portholme from entrance





23: Evidence of dog fouling



24: Cormorants (*Phalacrocorax carbo*) roosting in trees



25: Gateway to private farmland



26: Evidence of footfall away from official paths



5: Unofficial paths around perimeter of Portholme





28: Mute Swans on Portholme Meadow



29: Exposed A1307 bridge over the River Great Ouse



30a: Footpath erosion at entrance to Portholme Meadow



30b: Information board at entrance to Portholme



30c: Unofficial parking area off Mill Common road



Appendix F: Woodwalton Fen - target note photos



1a: Unofficial parking along a rack adjacent to the site



1b: Bridge onto the site and information signage



1c: Information board at entrance to Woodwalton Fen



1d: Signage prohibiting access to unauthorised vehicles



1e: Blocked vehicular access along a private track adjacent to the site





1a: Unofficial parking along a rack adjacent to the site



1b: Bridge onto the site and information signage



1c: Information board at entrance to Woodwalton Fen



1d: Signage prohibiting access to unauthorised vehicles



1e: Blocked vehicular access along a private track adjacent to the site





2: Information boards at the site entrance



3a: Visitor information signage



3b: Path erosion from mangement vehicle access



3c: Path erosion from management vehicle access



3d: Mown and managed promoted routes around site





4: Blocked access to vulnerable areas of the site



5: Mown and managed promoted routes across the site



6a: Bridges facilitating visitor movement across the site



6b: Bridges facilitating visitor movement across the site



3d: Blocked access to sensitive areas of the site





7: Flooded managed route around site



8a: Bridge facilitating visitor movement around site



8b: Blocked access to sensitive areas of site



9: Flooded managed route around site



10: Light vehicular erosion of managed route around site





11: Promoted route waymarker



12: Management of site spreading soil layer over bridge



13a: Visitor infrastructure on site



14a: Signage informing visitors of unsafe bridge



14b: Birdwatching hide overlooking a lake





15: Boardwalk and signage leading to a hide



16: Raised birdwatching hide overlooking a lake



17a: Bridge facilitating visitor movement across the site



17b: Managed route through wooded area of the site



18: Light flooding of managed route





19: Managed promoted route across site



20: Blocked access to sensitive area of site



21: Management of watercourses and ditches on site



22a: Blocked access to sensitive area of site



22b: Signage informing visitors of restricted access





23: Management of watercourses on site



24: Management practices on site



15: Light path erosion and management tracks



26a: The Rothschild Bungalow



26b: Visitor infrastructure memorial bench

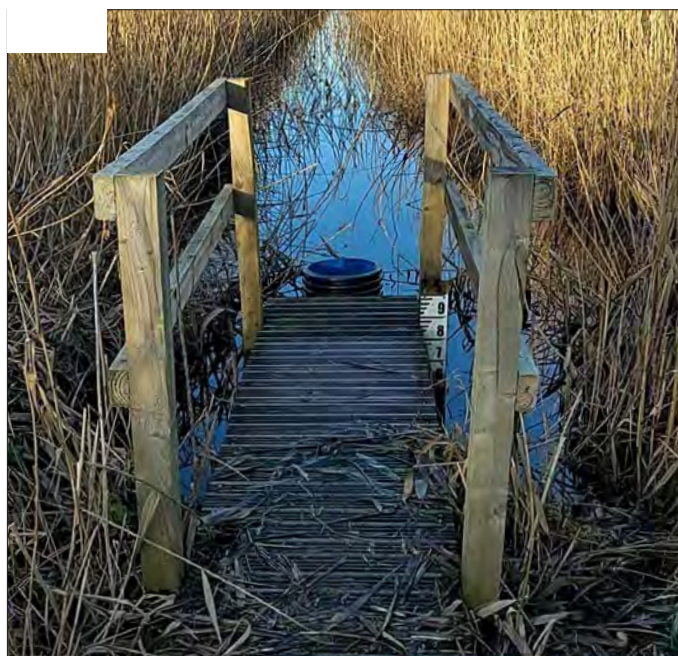




31: Signage informing visitors of restricted access



32: Birdwatching hide overlooking the fen



33: Management and monitoring practices on site



34: Management of routes, signage and visitor infrastructure



35: Inundation of managed route across site



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



© Lepus Consulting Ltd

Eagle Tower

Montpellier Drive

Cheltenham

GL50 1TA

T: 01242 525222

E: enquiries@lepusconsulting.com

www.lepusconsulting.com

CHELTENHAM



Lepus Consulting
1 Bath Street
Cheltenham
Gloucestershire GL50 1YE

t: 01242 525222
w: www.lepusconsulting.com
e: enquiries@lepusconsulting.com

Appendix F: Natural England Regulation 18 Consultation Comments and Responses

No.	Natural England comment	Incorporation into Reg 19
Comments on Regulation 18 HRA screening report – received 16 th December 2025		
1	Nene Washes SAC and Ramsar is sensitive to air quality impacts due to potential impacts on aquatic plants (SAC supporting habitat for Spined loach and Ramsar wetland plant assemblage feature).	The Regulation 19 HRA has been updated to reflect Natural England's advice regarding the sensitivity of the Nene Washes SAC and Ramsar to air quality impacts. The air quality Appropriate Assessment was expanded to consider both the qualifying habitat supporting the Spined loach and the Ramsar wetland plant assemblage. A review of APIS and Natural England's supplementary advice was undertaken to identify the relevant critical levels and critical loads for atmospheric pollutants. Detailed air quality modelling, including nitrogen oxides (NO _x), ammonia (NH ₃) and nitrogen deposition, was completed to assess potential effects on qualifying habitats. The Appropriate Assessment concludes that pollutant concentrations and nitrogen deposition resulting from implementation of the Regulation 19 Local Plan would not result in adverse effects on the integrity of the Nene Washes SAC or Ramsar, either alone or in-combination with other plans and projects.
2	Ouse Washes SAC and Ramsar is sensitive to air quality impacts due to potential impacts on aquatic plants (SAC supporting habitat for Spined loach and Ramsar wetland plant assemblage feature).	The Regulation 19 HRA has been updated to reflect Natural England's advice regarding the sensitivity of the Ouse Washes SAC and Ramsar to air quality impacts. The air quality Appropriate Assessment was expanded to consider the qualifying habitats supporting Spined loach, Bullhead and Otter, together with the Ramsar wetland plant assemblage. A review of APIS and Natural England's supplementary advice was undertaken to identify the relevant critical levels and critical loads for atmospheric pollutants. Additional traffic data were incorporated into the air quality modelling to assess affected road links, and detailed modelling of nitrogen oxides (NO _x), ammonia (NH ₃) and nitrogen deposition was undertaken. The Appropriate Assessment concludes that pollutant concentrations and nitrogen deposition resulting from implementation of the Regulation 19 Local Plan would not result in adverse effects on the integrity of the Ouse Washes SAC or Ramsar, either alone or in-combination with other plans and projects.
3	Water Framework Directive (WFD) targets are not the same as those required by protected sites features (SAC and Ramsar), which are more stringent. Throughout the report WFD terminology is interchanged with HRA terminology. The WFD 'no deterioration' target does not satisfy the Habitat Regulations.	The Regulation 19 HRA has been updated to distinguish clearly between Water Framework Directive (WFD) objectives and the requirements of the Habitats Regulations. The Appropriate Assessment no longer relies solely on WFD objectives and instead assesses potential effects against the site-specific water quality standards and conservation objectives agreed with Natural England for each European site. The Water Cycle Study was updated to compare modelled baseline, future and Technically Achievable Limit (TAL) scenarios against these Natural

No.	Natural England comment	Incorporation into Reg 19
Comments on Regulation 18 HRA screening report – received 16 th December 2025		
		England standards, including ammonia, biochemical oxygen demand (BOD), dissolved oxygen (DO), nitrate and total phosphorus where applicable. The Appropriate Assessment therefore considers whether implementation of the Local Plan could adversely affect the integrity of European sites in accordance with the Habitats Regulations, rather than relying on WFD 'no deterioration' objectives alone.
4	This section states that ' <i>NE consider that 'good' ecological status under the WFD is an appropriate standard for functionally linked watercourse</i> ' – we advise that this is incorrect when assessing the potential for impacts to protected sites, as it will depend on the water quality target of the protected site feature affected.	The Regulation 19 HRA has been updated to remove reliance on Water Framework Directive (WFD) ecological status as the primary assessment criterion for functionally linked watercourses. Instead, the Appropriate Assessment considers the site-specific conservation objectives and water quality standards agreed with Natural England for the relevant European sites. The water quality assessment has been informed by updated Water Cycle Study modelling, which compares the baseline, future and Technically Achievable Limit (TAL) scenarios against the Natural England water quality standards for each designated site. This ensures that the assessment is based on the requirements of the Habitats Regulations rather than WFD ecological status alone.
5	WFD and HRA requirements are again being conflated.	The Regulation 19 HRA has been revised to clearly distinguish between Water Framework Directive (WFD) objectives and the requirements of the Habitats Regulations. The Appropriate Assessment has been updated to assess potential effects against the site-specific conservation objectives and water quality standards agreed with Natural England, rather than relying on WFD ecological status or 'no deterioration' objectives. This approach is reflected throughout the water quality assessment and is supported by the updated Water Cycle Study modelling.
6	Nene Washes SAC is very vulnerable to changes in water level so must be scoped in.	The Regulation 19 HRA has been updated to scope Nene Washes SAC into the Appropriate Assessment for water quantity. The assessment considers the potential effects of Local Plan growth on water resources and hydrological conditions, drawing on the latest Water Cycle Study, water resources evidence and Natural England's advice. The Appropriate Assessment concludes that, with the embedded policy safeguards and wider regulatory framework governing water abstraction and water resource management, implementation of the Local Plan will not result in adverse effects on the integrity of Nene Washes SAC, either alone or in-combination with other plans and projects.

No.	Natural England comment	Incorporation into Reg 19
Comments on Regulation 18 HRA screening report – received 16 th December 2025		
7	This section on Orton Pit SAC needs to be clear about any hydrological link between abstraction that is linked to growth and the designated site, as it is not clear from the way this is written. We also advise that if there are potential LSEs on water quantity, this may also lead to LSEs on water quality, so further consideration of this point is required.	The Regulation 19 HRA has been updated to clarify the hydrological relationship between Orton Pit SAC and the Local Plan area. The Water Cycle Study and supporting hydrological evidence were reviewed to confirm whether a hydrological pathway exists between Local Plan growth and the designated site. The assessment concluded that there is no hydrological connectivity between the Plan area and Orton Pit SAC through the identified abstraction and wastewater pathways. Accordingly, both water quantity and associated water quality pathways were considered and discounted, and the Regulation 19 HRA concludes that implementation of the Local Plan would not result in adverse effects on the integrity of Orton Pit SAC.
8	We advise that the Ouse Washes SAC is scoped in for recreational impacts, specifically angling.	The Regulation 19 HRA has been updated to scope Ouse Washes SAC into the Appropriate Assessment for recreational impacts. The assessment considers the potential for recreational activities, including angling, to result in indirect effects on the qualifying features of the SAC through habitat disturbance and degradation, recognising the reliance of supporting habitats on undisturbed riverbed sediments. The Appropriate Assessment concludes that, taking account of the location and nature of recreational activity, the characteristics of the qualifying features and the mitigation measures embedded within the Local Plan, implementation of the Local Plan will not result in adverse effects on the integrity of the Ouse Washes SAC, either alone or in-combination with other plans and projects.
9	Need to include FLL for the Ouse and Nene Washes' bird features in relation to recreational impacts and urbanisation effects.	The Regulation 19 HRA has been updated to incorporate Functionally Linked Land (FLL) associated with the Ouse Washes SPA/Ramsar and Nene Washes SPA/Ramsar, using the mapping provided by Natural England. The recreational disturbance and urbanisation Appropriate Assessments have been revised to consider the potential effects of Local Plan growth on supporting habitats used by the qualifying bird features beyond the designated site boundaries. The assessment concludes that, taking account of the identified Functionally Linked Land, the characteristics of the qualifying features and the mitigation measures embedded within the Local Plan, implementation of the Local Plan will not result in adverse effects on the integrity of the Ouse Washes SPA/Ramsar or Nene Washes SPA/Ramsar, either alone or in-combination with other plans and projects.

No.	Natural England comment	Incorporation into Reg 19
Comments on Regulation 18 HRA screening report – received 16 th December 2025		
10	Updates required in relation to the above comments.	Please see comments above.
11	We have not reviewed each of the mentioned HRAs, but advise that if a plan has scoped out water pollution impacts due to distance from a hydrologically linked wetland receptor, this should not be relied upon and should be re-evaluated during your authority's in-combination assessment.	The Regulation 19 HRA has been updated to ensure that potential water quality impacts have been considered through the in-combination assessment, rather than relying solely on conclusions reached within other HRAs. A review of relevant plans and projects was undertaken to identify potential pathways for cumulative effects, including those associated with wastewater discharges and nutrient enrichment. The water quality Appropriate Assessment has been informed by updated Water Cycle Study modelling, which considers baseline, future and Technically Achievable Limit (TAL) scenarios against the site-specific water quality standards agreed with Natural England. This ensures that potential in-combination effects on hydrologically connected European sites have been appropriately considered in accordance with the Habitats Regulations.
12	The Appropriate Assessment (AA) should use the water quality targets etc. specified in the Supplementary Advice on Conservation Objectives (available via Designated Sites View – search for the relevant site, then select 'Conservation Advice' on the search results page) as these are, in some cases, more stringent than the Water Framework Directive targets. This may be due to the specifically designated habitats and species, and/or the slow/non-flowing nature of water on some protected sites. Nutrients and pollutants are not easily washed through the system as happens in rivers, but can instead build up over time. The volume of water also needs considering in conjunction with this. The Ouse Washes SAC is already in unfavourable condition due to water quality, and the HRA AA should take	The Regulation 19 HRA has been updated to ensure that the Appropriate Assessment considers the site-specific water quality targets identified within Natural England's Supplementary Advice on Conservation Objectives, rather than relying solely on Water Framework Directive (WFD) objectives. The water quality assessment has been informed by updated Water Cycle Study modelling, which compares baseline, future and Technically Achievable Limit (TAL) scenarios against the Natural England standards for relevant determinant's, including ammonia, biochemical oxygen demand (BOD), dissolved oxygen, nitrate and total phosphorus. The assessment also considers the existing condition of European sites, including the unfavourable condition of the Ouse Washes SAC in relation to water quality. The Appropriate Assessment concludes that, with the implementation of wastewater infrastructure improvements, including TAL upgrades where required, alongside policy safeguards and the wider regulatory framework, implementation of the Local Plan would not result in adverse effects on the integrity of the Ouse Washes SAC, either alone or in-combination with other plans and projects. The Regulation 19 HRA has also been updated to consider the two proposed allocations identified by Natural England as falling within the updated Impact Risk Zone (IRZ) for Eversden and Wimpole Woods SAC. The updated IRZ information

No.	Natural England comment	Incorporation into Reg 19
Comments on Regulation 18 HRA screening report – received 16 th December 2025		
	this into account. Further comment on this is provided in relation to the Integrated Water Management Study. As noted in the Ecological Constraints Assessment section above, two proposed allocations will fall within the updated Impact Risk Zone for Eversden and Wimpole Woods SAC and should therefore be included in an updated HRA.	was reviewed alongside aerial photography and site information to consider the potential for functionally linked habitats associated with the SAC, including woodland, hedgerows, watercourses and other habitats that may support commuting, foraging or roosting Barbastelle bats. The assessment identified that Great Gransden 1: South of Caxton Road comprises an arable field with no adjacent woodland blocks, while Waresley 1: Land between the West Lodge and Home Farm includes woodland and connectivity to wider woodland habitats. These considerations have been incorporated into the Regulation 19 HRA screening and Appropriate Assessment process, with mitigation measures and policy safeguards applied where necessary.

-

Appendix G: Air Quality Modelling for Ecology Assessment

Report

Huntingdonshire Local Plan HRA

Air Quality Modelling for Ecology Assessment

For Huntingdonshire District Council

8 July 2026

Document Control

Project Title:	Huntingdonshire Local Plan HRA
Project Number:	17782A-10
Client:	Huntingdonshire District Council
Principal Contact:	Natalie Elworthy
Document Title:	Air Quality Modelling for Ecology Assessment
Document Number:	17782A-10-R01-02-F
Prepared By:	Imogen Heard
Reviewed By:	Ben Marner

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01	03/07/2026	
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Registered Office: 3rd Floor St Augustine's Court, 1 St. Augustine's Place, Bristol, BS1 4UD Tel: +44(0)117 974 1086

First Floor, 3 – 7 Herbal Hill, London, EC1R 5EJ Tel: +44(0)20 3873 4780

First Floor, Patten House, Moulders Lane, Warrington, WA1 2BA Tel: +44(0)1925 937 195

Nile House, Nile St, Brighton and Hove, Brighton, BN1 1HW Tel: +44(0)20 3873 4780

1 Aire St, Leeds, LS1 4PR Tel: +44(0)20 3873 4780

Avenue du Port, 86c Box 204, 1000 Bruxelles Tel: +44(0)20 3873 4780

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1 Introduction

- 1.1 This report has been prepared by Air Quality Consultants Ltd | Part of Logika Group (AQC). It describes the air quality modelling methodology and results to inform the Habitats Regulations Assessment (HRA) of the Huntingdonshire District Council Local Plan.
- 1.2 The Local Plan will lead to changes in traffic flows on roads which pass within 200 m of designated nature conservation sites. Road traffic can emit nitrogen oxides (NO_x) and ammonia (NH₃), and some sensitive vegetation may be affected by elevated concentrations of these pollutants. Furthermore, the deposition of both NO_x and NH₃ can alter the nutrient and acidity balance of some ecosystems, causing changes to their composition and health. This assessment has quantified the changes to NO_x and NH₃ concentrations that would be caused by the new Local Plan, as well as the changes to nitrogen and acid deposition fluxes. It has considered the following designated sites:
- Nene Washes Special Area of Conservation (SAC) and Ramsar site;
 - Ouse Washes SAC and Ramsar site; and
 - Portholme SAC.
- 1.3 The locations of these sites are shown in Figure 1.

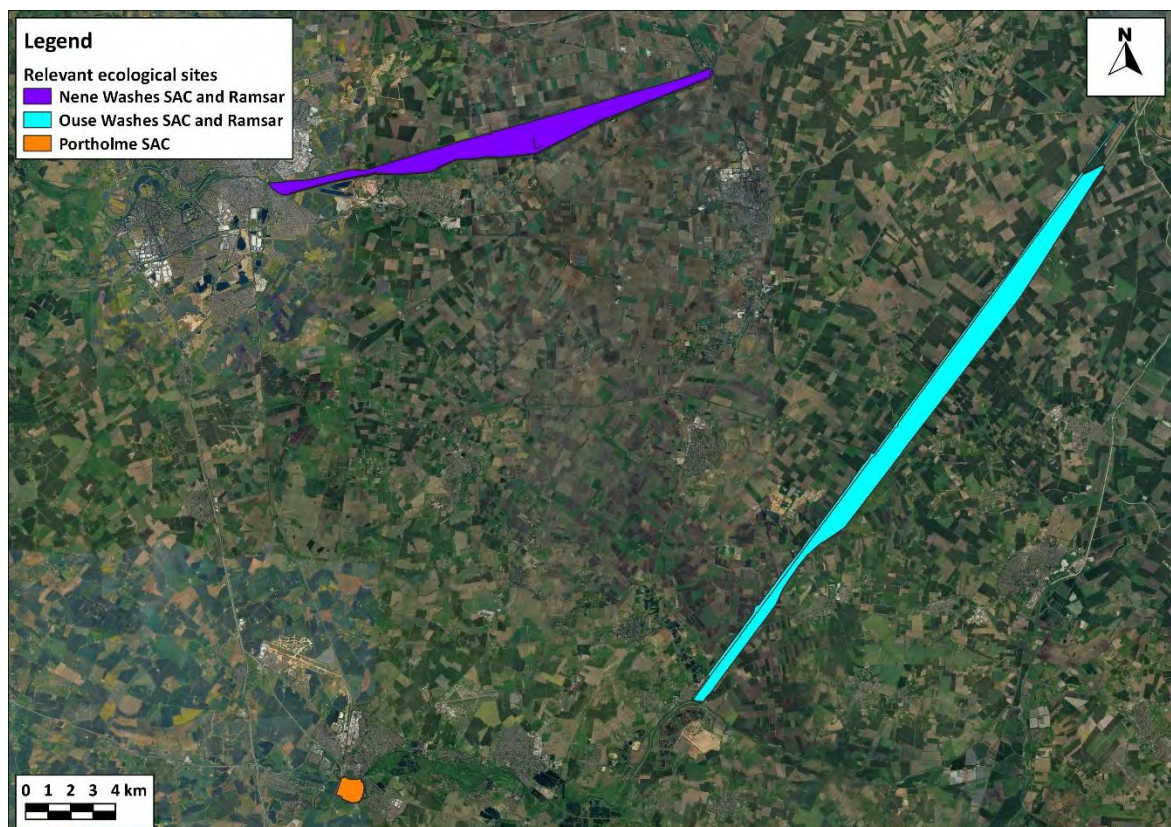


Figure 1: Designated Sites Included in this Assessment

Imagery ©2026.

- 1.4 This report describes the scope of the air quality assessment, the modelling methodology, and the modelled results. It compares the results with screening thresholds which can be used to discount the potential for significant effects. However, it does not seek to interpret the results any further than this

or reach a conclusion regarding the overall significance of effects; that assessment, including the policy against which the assessment is made, is provided separately by Lepus Consulting Ltd.

- 1.5 The professional experience of the consultants involved in the air quality assessment is summarised in Appendix A1.

2 Assessment Criteria

Policy Context

- 2.1 Protection of nature conservation sites is provided by an array of different policies. Different policy protection is usually provided to sites designated at European¹, national², and local levels³. Instead of considering each relevant policy individually, this current report applies criteria which are frequently used to screen out the potential for significant effects regardless of the specific policies protecting a site.

Critical Levels and Critical Loads

- 2.2 European Union (EU) Directive 2008/50/EC (The European Parliament and the Council of the European Union, 2008) sets a limit value for annual mean concentrations of nitrogen oxides and for annual and winter mean concentrations of sulphur dioxide⁴. The same values have been set as domestic objectives within the Air Quality (England) Regulations (2000) and the Air Quality (England) (Amendment) Regulations (2002). The limit values and objectives only apply a) more than 20 km from an agglomeration (about 250,000 people), and b) more than 5 km from Part A industrial sources, motorways and built-up areas of more than 5,000 people.
- 2.3 Critical levels (CLEs) and critical loads (CLOs) are the ambient concentrations and deposition fluxes below which significant harmful effects to sensitive ecosystems are unlikely to occur. Some of the CLEs are set at the same concentrations as the objectives but do not have the same spatial constraints on where they apply. The CLEs relevant to this assessment are set out in Table 1. The same values apply to all three sites.
- 2.4 The CLE for annual mean NO_x concentrations is set at the same concentration irrespective of the habitats features of interest. There are two CLEs for NH₃, with the lower value (1 µg/m³) applying only where lichens or bryophytes are present or form a key part of the ecosystem integrity. This reflects the fact that lichens and bryophytes are not connected directly to soil nutrients and can therefore be particularly susceptible to changes in atmospheric nitrogen. Lepus Consulting has advised which NH₃ CLE applies in which location. A short-term (24-hour mean) CLE for NO_x has also been set, however guidance from the Institute of Air Quality Management (IAQM) (Holman et al, 2020) recommends that: "...only the annual mean NO_x concentration is used in assessments unless specifically required by a regulator; for instance, as part of an industrial permit application where high, short term peaks in emissions, and consequent ambient concentrations, may occur". Thus the 24-hour mean CLE is not relevant to the current assessment, which is concerned with annual average effects from increased road traffic.
- 2.5 The CLOs are specific to different habitat types. The Air Pollution Information System (APIS) (2026) sets out the CLOs which might apply across the entirety of nationally and internationally-designated sites. This information has been used, alongside discussions with Lepus Consulting to define which CLOs are relevant to the locations of interest to this study.

¹ European sites make up the Natura 2000 network and include Special Protection Areas (SPAs), Special Areas of Conservation (SACs), and Ramsar Sites.

² Sites of national-level importance are principally designated as Sites of Special Scientific Interest (SSSIs).

³ Local nature sites are usually taken to include those designated locally as well as national nature reserves and ancient woodland.

⁴ Sulphur dioxide is no longer emitted in significant quantities from road transport and does not, therefore, require assessing here.

- 2.6 The CLoS for nitrogen deposition are published as ranges. This is because other factors influence how sensitive a habitat may be to additional nitrogen; for example how a site is managed can affect its sensitivity to nitrogen deposition. However, this should not be taken to suggest that the lower-bound value is indicative of potential effects in the study area.
- 2.7 Acid deposition is assessed against the “CLmaxN” value published on APIS (2026). This is the level above which additional deposition will cause acidification.
- 2.8 The CLoS used in this assessment are provided in Table 2. The same values apply to all three sites.

Table 1: Vegetation and Ecosystem CLeS ^a

Pollutant	Time Period	CLe
Nitrogen Oxides (expressed as NO ₂)	Annual Mean ^{a,b}	30 µg/m ³
NH ₃	Annual Mean	3 µg/m ³

^a The CLeS are defined by the World Health Organisation (WHO, 2000).

^b Away from major sources (see Paragraph 2.2), this CLe is set as an objective (Defra, 2007) and a limit value (The European Parliament and the Council of the European Union, 2008).

Table 2: Vegetation and Ecosystem CLoS

Site	Nutrient Nitrogen (kgN/ha/yr)	Acid Deposition 'N _{max} ' (keq/ha/yr)
Nene Washes SAC and Ramsar	10	4.856
Ouse Washes SAC and Ramsar	10	4.856
Portholme SAC	10	4.856

Screening Thresholds for Predicted Concentrations and Deposition Fluxes

- 2.9 The Environment Agency has published criteria which allow impacts from industrial developments requiring environmental permits to be screened out as insignificant (Environment Agency, 2025). Exceeding these criteria does not mean that there is a significant effect, it simply means that further consideration is required of the potential changes to air quality or deposition. With respect to annual average impacts from most industrial sources, no further assessment is required whenever the change caused by the proposed development (termed by the Environment Agency the Process Contribution, or 'PC') is less than 1% of the relevant CLe or CLo. Furthermore, there is no need to for further assessment if detailed dispersion modelling has shown that the CLe or CLo is not exceeded (i.e. the Predicted Environmental Concentration, or 'PEC' is less than 100% of the CLe or CLo).
- 2.10 Natural England's guidance on advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations (Natural England, 2018) recommends the use of the Environment Agency criteria described above for changes to traffic caused by all types of plans or projects affecting European sites. It explains:

“1% of critical load/level are considered by Natural England's air quality specialists ... to be suitably precautionary, as any emissions below this level are ... considered to be imperceptible”. It goes on:

"There can therefore be a high degree of confidence in [the use of these criteria] to screen for risks of an effect".

- 2.11 For European sites, Natural England (2018) explains that the 1% criterion should be applied to plans and projects both alone and in-combination. As with the Environment Agency guidance, exceeding 1% of the CLe or CLo does not mean that there will be a significant effect, it is simply a trigger for when further assessment is needed.
- 2.12 The CLe and CLo are defined as the "*deposition/concentration ... below which adverse effects on receptors ... do not occur according to present scientific knowledge*" (APIS, 2026). There is therefore no reasonable scientific doubt regarding the absence of a significant effect wherever the CLe and CLo are not exceeded, even where the PC exceeds the 1% criterion.
- 2.13 The CLo were recently subject to a detailed review and revision (Bobbink et al., 2022). Prior to that revision, Natural England (2018) referred to earlier work (NECR210, 2016) that there may be adverse effects below the (previously published) CLo. Natural England has not revised its guidance following the CLo revision and therefore, for European sites where there is a restore objective in place, an Appropriate Assessment is required wherever the PC is >1% of the CLe or CLo even when the total concentration or deposition is below the CLe or CLo. Natural England has confirmed that the potential for adverse effects may still be discounted on the basis that the total concentration or deposition is less than the current CLe or CLo, but procedurally, this should happen at the Appropriate Assessment rather than screening stage of HRA. This modelling report simply considers whether adverse effects can be ruled out solely on the basis of the air quality predictions and has therefore applied the following tests. The potential for a significant effect can be discounted wherever:
- The change (PC), both alone and in-combination, is less than 1% of the relevant CLe or CLo; **OR**
 - The total concentration or deposition (PEC) is less than the relevant CLe or CLo.

3 Methodology

- 3.1 The assessment has been carried out following current best practice, drawing on the professional expertise of the consultants involved (Appendix A1). Care has also been taken to ensure consistency with guidance issued by the IAQM (Holman et al, 2020) and the Chartered Institute of Ecology and Environmental Management (CIEEM) (CIEEM, 2021).

Consultation

- 3.2 Lepus Consulting prepared a HRA Scoping Report in August 2025 (Lepus Consulting, 2025a) and a Screening Report in October 2025 (Lepus Consulting, 2025b). These concluded that Portholme SAC should be screened into the HRA process due to the potential for air quality impacts from changes in traffic using strategic roads within 200 m of the site.
- 3.3 Natural England responded in December 2025 (Natural England, 2025) with the following feedback:
- "Nene Washes SAC and Ramsar is sensitive to air quality impacts due to potential impacts on aquatic plants (SAC supporting habitat for Spined loach and Ramsar wetland plant assemblage feature).*
- Ouse Washes SAC and Ramsar is sensitive to air quality impacts due to potential impacts on aquatic plants (SAC supporting habitat for Spined loach and Ramsar wetland plant assemblage feature)."*
- 3.4 Impacts on the abovementioned sites have thus been included in this assessment.

In-Combination Projects

- 3.5 Impacts on European sites need to be considered in combination with other relevant projects or plans. Natural England (2018) recommends a pragmatic approach to defining the projects to be included in an in-combination assessment, relying on professional judgement and ensuring that the assessment remains focused on the project seeking permission. The in-combination projects considered here include committed developments from the existing Local Plan which will be carried forward into the new Local Plan with growth associated with the areas outside Huntingdonshire informed by a mixture of National Trip End Model and adopted local plans.

Assessment Scenarios

- 3.6 NO_x and NH₃ concentrations, and nitrogen and acid deposition fluxes, have been predicted for the following scenarios:
- A) base year 2023;
- B) 2046 without any increase in traffic from 2023 (including future-year emissions factors and future-year background concentrations and fluxes but base-year traffic within the dispersion model). This scenario is termed '2046 Zero Growth';
- C) 2046 without the Local Plan but with the forecast background increase in traffic from 2023 and in-combination projects (also including future-year emissions factors and background concentrations and fluxes). This scenario is termed '2046 Base'; and
- D) 2046 with the Local Plan (including proposed mitigation measures) and background traffic growth (also including future-year emissions factors and background concentrations and fluxes). This scenario is termed '2046 With Local Plan'.

- 3.7 The three 2046 scenarios have been compared to derive the impacts of the Local Plan alone and in-combination with other projects and plans:
- the difference between scenarios C and D represents the change (i.e. the PC) caused by the Local Plan alone; and
 - the difference between scenarios B and D represents the PC caused by the Local Plan in-combination.
- 3.8 It should be noted that the growth in traffic predicted between 2023 and 2046 is not all caused by projects and plans as relevant to the HRA, and so this approach will over-predict the in-combination changes. This makes the assessment worst-case.

Monitoring

- 3.9 Information on existing NO_x and nitrogen dioxide concentrations has been obtained by collating the results of monitoring carried out by the Huntingdonshire and Fenland District Councils. This has focused on roadside monitoring which is carried out to assess impacts on human health. The measurements have been used here to verify the air quality model as described in Appendix A2.
- 3.10 Information on existing background NH₃ concentrations has been obtained by collating results of monitoring carried out on behalf of Defra as part of the National Ammonia Monitoring Network (NAMN) (Defra, 2026b). This consists of 95 sites across the UK, four of which are close to the study area. Annual mean results for the baseline year of 2023 are summarised in Table 3 and the monitoring locations are shown in Figure 2. All of the measured concentrations are below the CLe of 3 µg/m³.

Table 3: Summary of Annual Mean NH₃ Monitoring in 2023 (µg/m³)

Site	Annual Mean
Stoke Ferry	2.3
Woodwalton Fen	1.2
Monks Wood	1.5
Chippenham Fen	1.3

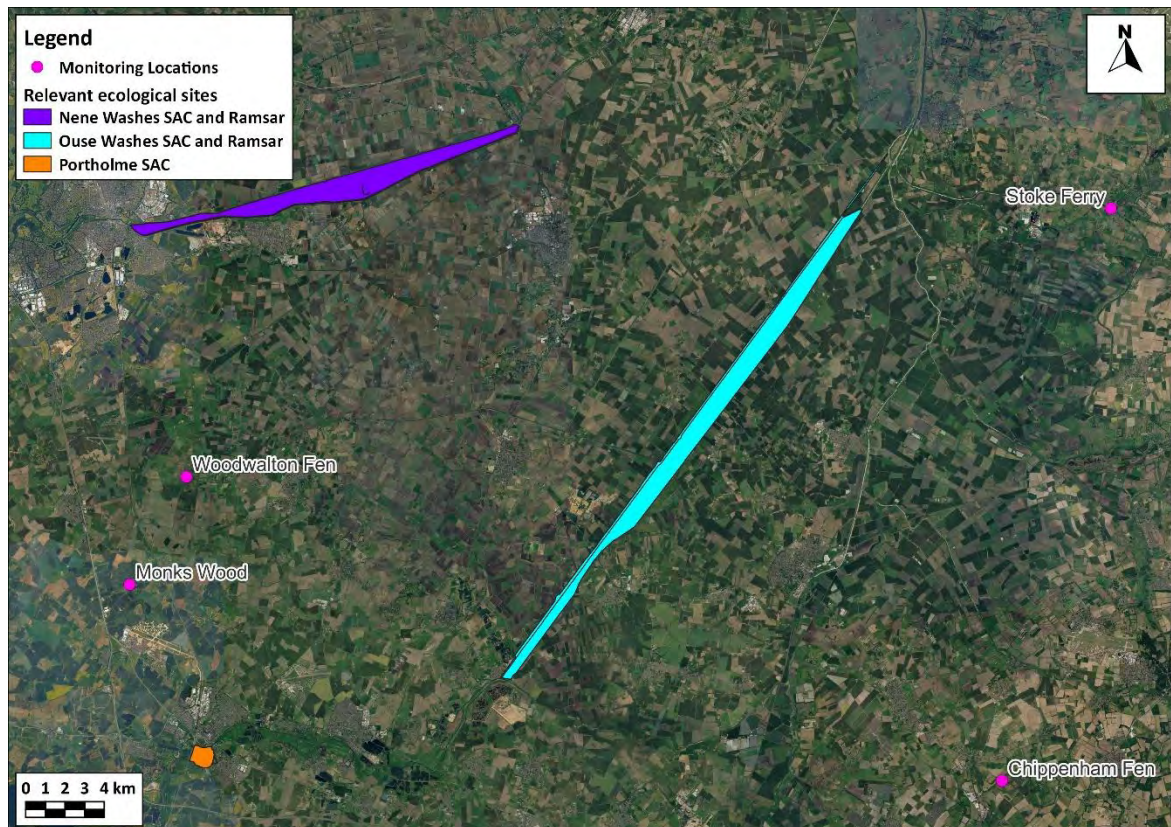


Figure 2: Monitoring Locations

Imagery ©2026.

Modelling Methodology

Background Concentrations and Fluxes

- 3.11 Background concentrations of NO_x and NH₃, and nitrogen and acid nitrogen deposition fluxes, have been taken from APIS (2026). The concentrations and deposition fluxes represent 1 km x 1 km averages. APIS currently presents three-year mean values centred on the calendar year of 2023 and these have been taken to represent conditions in 2023. The APIS data take account of the measurements shown in Table 3 and therefore are similar to the measured concentrations.
- 3.12 Concentrations of NH₃ and deposition fluxes have been adjusted to represent the future using the rate of change predicted for this area using the Business-as-Usual assumptions of the JNCC's Nitrogen Futures project (JNCC, 2020)⁵. Nitrogen Futures only predicted changes to 2030, so the rate of change predicted by JNCC between 2023 and 2030 has been used to predict concentrations and deposition in 2046 (i.e. only 7 years of change have been accounted for). Given the UK's national and international commitments to reduce emissions, as well as evidence from monitoring across the UK showing significant recent improvements in background concentrations of both NO_x and NH₃, this approach is most likely to over-predict in 2046 and therefore provide a conservative assessment. Concentrations of NO_x in 2046 have been predicted by multiplying the 2023 concentration taken

⁵ A linear rate of change has been assumed between 2017 and the 2030 Business as Usual scenario, with the APIS 2023 data scaled based on the location-specific predicted changes. Acid nitrogen deposition has been calculated from the predicted nitrogen deposition.

from APIS by the relative change to concentrations (between 2023 and 2040⁶) for each location predicted in Defra's latest (2021-based) national NO_x maps published for Local Air Quality Management (Defra, 2026a). Background concentrations of nitrogen dioxide (NO₂) are only needed to inform the conversion of NO_x to NO₂. These have been taken directly from Defra's maps for each relevant year.

Influence of Local Road Traffic

- 3.13 Concentrations have been predicted using the ADMS-Roads dispersion model, with emissions of NO_x derived using Defra's Emissions Factors Toolkit (EFT) (v14.1) (Defra, 2026a), and emissions of NH₃ derived using AQC's Calculator for Road Emissions of Ammonia (CREAM) (v2A) (AQC, 2025). Traffic flows have been derived from Huntingdonshire District Council's strategic traffic model. The model results for NO_x and nitrogen dioxide have been verified against local measurements. Details of the model inputs and the model verification are provided in Appendix A2. Deposition fluxes have been calculated from the predicted concentrations of nitrogen dioxide and NH₃. Details of the method for calculating deposition are provided in Appendix A2.

Receptors

- 3.14 Impacts have been predicted at receptors arranged along transects running perpendicular to affected roads. The transects begin at the closest part of the designated site to the road⁷. Within designated sites, receptors have been placed at the following distances from the roads: 2 m, 3 m, 5 m, 9 m, 17 m, 33 m, 65 m, 129 m and 200 m⁸. Where the designated site is set back more than 2 m from the road, an additional receptor has been placed at the point closest to the road. These roadside transects are shown in Figure 3 to Figure 8. Additional receptors have been placed at various points in and around each SAC, using source-oriented grids at the same distances as the transects, and underlying Cartesian grids with spacing of 100 m. These additional receptors have been used to generate isopleths.
- 3.15 All receptors have been modelled at a height of 0 m.

⁶ The furthest year for which predictions can currently be reliably made.

⁷ Following guidance from the IAQM (Holman et al, 2020), impacts have not been predicted within 2 m of roads.

⁸ These distances are used because they broadly reflect the expected rate at which concentrations of NO_x and ammonia reduce with distance from roads. This provides an efficient way to more precisely show the predicted changes.

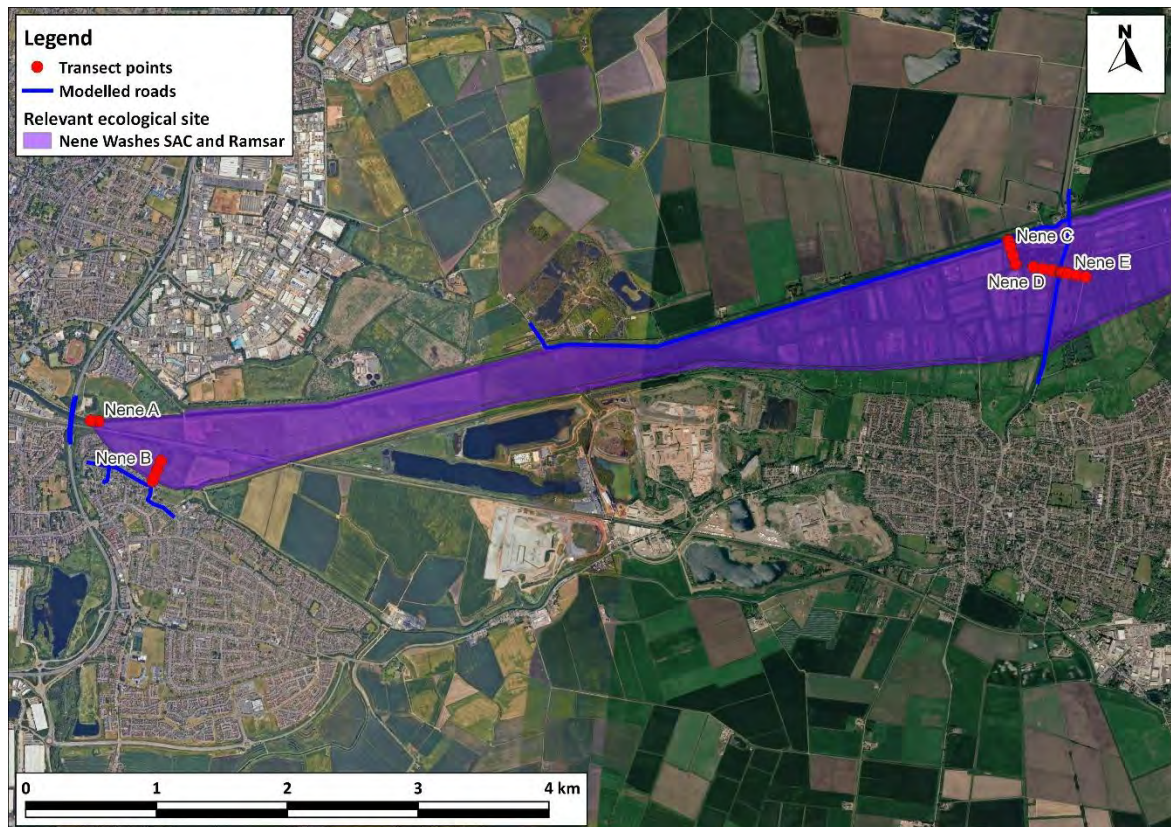


Figure 3: Receptor Transect Locations – Nene Washes (south)

Imagery ©2026 Airbus, Landsat / Copernicus, Maxar Technologies.

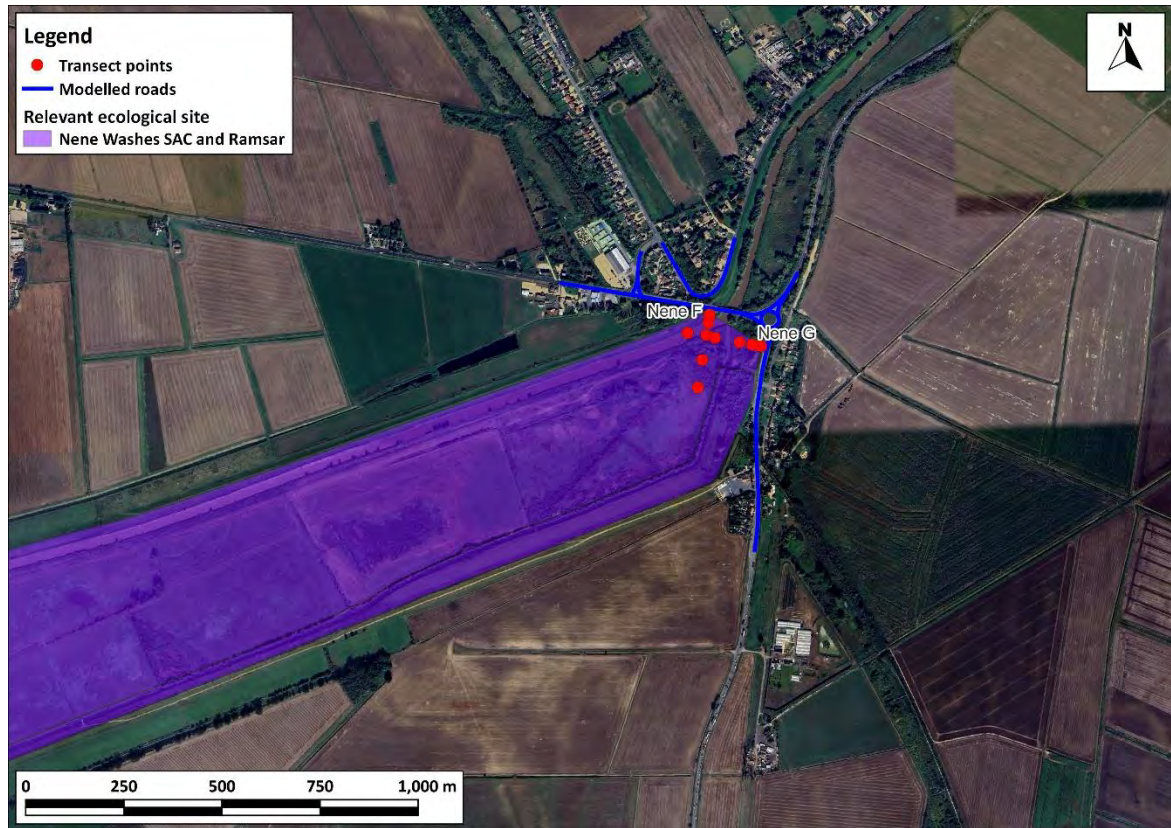


Figure 4: Receptor Transect Locations – Nene Washes (north)

Imagery ©2026 Airbus, Landsat / Copernicus, Maxar Technologies.

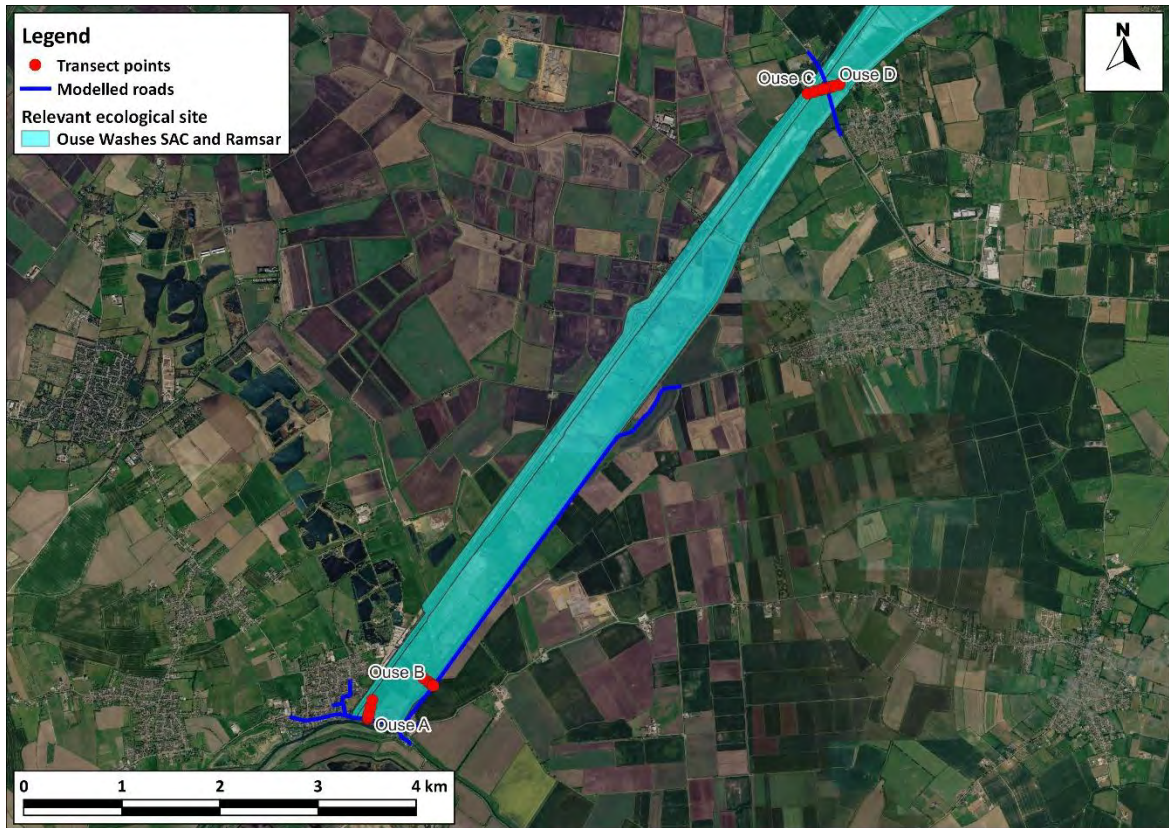


Figure 5: Receptor Transect Locations – Ouse Washes (south)

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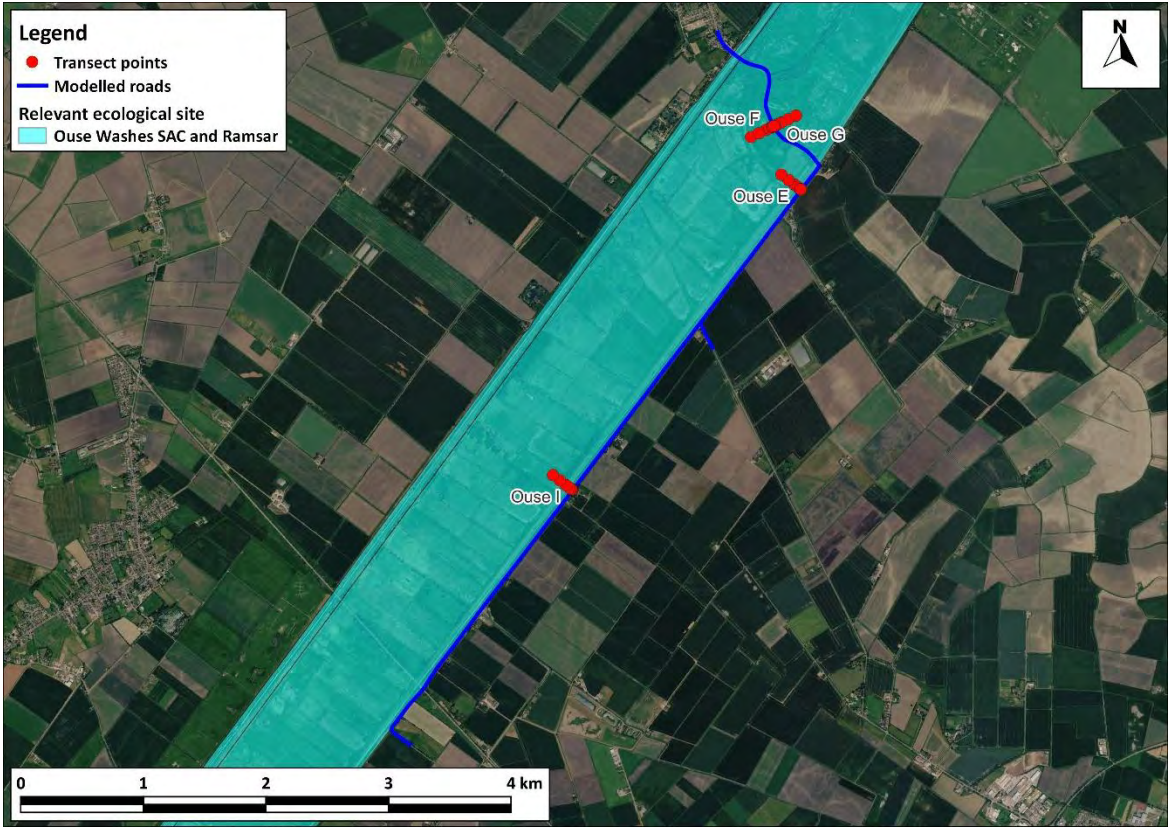


Figure 6: Receptor Transect Locations – Ouse Washes (mid)

Imagery ©2026 Airbus, Landsat / Copernicus, Maxar Technologies.



Figure 7: Receptor Transect Locations – Ouse Washes (north)

Imagery ©2026 Airbus, Landsat / Copernicus, Maxar Technologies.

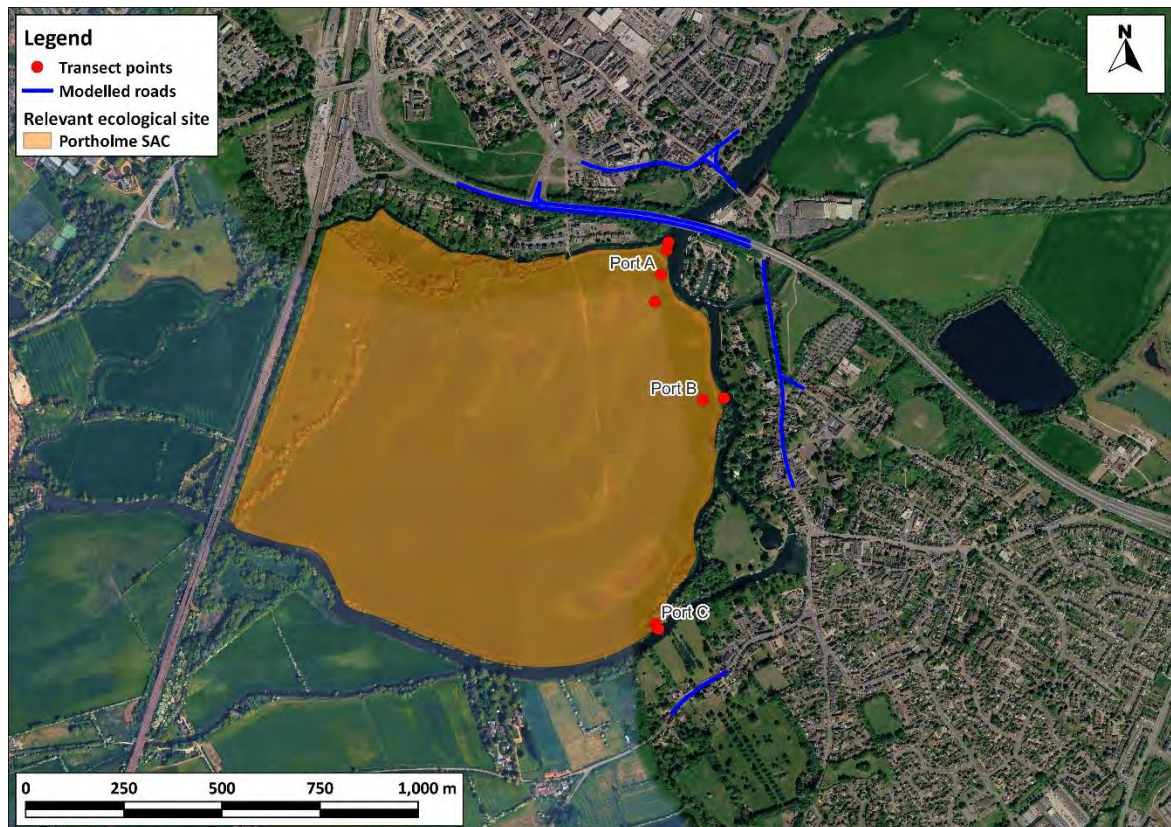


Figure 8: Receptor Transect Locations – Portholme SAC

Imagery ©2026 Airbus, Landsat / Copernicus, Maxar Technologies.

Uncertainty

- 3.16 There are many components that contribute to the uncertainty of modelling predictions. The road traffic emissions dispersion model used in this assessment is dependent upon the traffic data that have been input, which will have inherent uncertainties associated with them. There are then additional uncertainties, as models are required to simplify real-world conditions into a series of algorithms.
- 3.17 An important stage in the process of modelling road traffic emissions of is model verification, which involves comparing the model output with measured concentrations (see Appendix A2). Because the model has been verified and adjusted, there can be reasonable confidence in the prediction of base year (2023) concentrations. Development of the CREAM model, which has been used in this assessment, included verifying the emissions model, combined with the ADMS-Roads dispersion model, against measurements from the densest roadside NH₃ monitoring network in Europe (AQC, 2025). The modelling has thus been verified as far as is possible.
- 3.18 Predicting pollutant concentrations in a future year will always be subject to greater uncertainty. For obvious reasons, the model cannot be verified in the future, and it is necessary to rely on a series of projections as to what will happen to traffic volumes, background pollutant concentrations and vehicle emissions.
- 3.19 Forecasts of future-year concentrations are usually based on measurements made during a recent year. They then take account of projected changes over time to factors such as the composition of the vehicle fleet and the uptake of other new technologies, as well as population increases etc. In early 2020, activity in the UK was disrupted by the COVID-19 pandemic. As a result, concentrations of

traffic-related air pollutants fell appreciably (Defra Air Quality Expert Group, 2020). At the same time, concentrations of NH_3 seemed to increase, which is likely relate to disruption of agricultural and land management activities across Europe. A reduction in NO_x and concurrent increase in NH_3 may have disrupted the formation of ammonium nitrate, which is another important component of nitrogen deposition. Data used in this assessment are based on post-pandemic years and are therefore considered to be representative of the future.

Assumptions

- 3.20 It is necessary to make a number of assumptions when carrying out an air quality assessment. In order to account for some of the uncertainty in the approach, as described above, assumptions made have generally sought to reflect a realistic worst-case scenario. A key assumption made in carrying out this assessment is the assumption that the Monks Wood meteorological monitoring station appropriately represents conditions in the study area (this is discussed further in Appendix A2).

4 Dispersion Model Results

Results Along Transects

- 4.1 Table 4 to Table 7 set out the concentrations and deposition fluxes along the transects, as well as the changes relative to the CLe and CLo. As explained in Paragraph 3.14, the transects begin at the edge of the designated site closest to the road (for example Transect A at Nene Washes, shown at the top of Table 4, represents a part of the designated site which is 140 m from the A1139). Where a negative number is shown in one of the two right-hand columns, this shows that an improvement is predicted. This can happen even when the total AADT flow increases, if there is a large reduction in forecast Heavy Duty Vehicles. By way of example, the section of the A1139 alongside Transect A at Nene Washes is predicted to carry more Light Duty Vehicles, but fewer Heavy Duty Vehicles as a result of the Local Plan.
- 4.2 In other parts of England, Natural England has sometimes requested that the degree of 'retardation' to ongoing reductions in nitrogen deposition should also be calculated. This calculation is provided in Appendix A3.

NO_x

Table 4: Model Results for Annual Mean NO_x

Transect	Distance from Road Edge (m)	Total NOx Concentration (µg/m³)					Change as % of CLe	
		CLe	A) 2023 Base	B) 2046 Zero Growth	C) 2046 Base	D) 2046 With Local Plan	Alone (D C)	In Combination (D B)
Nene Washes SAC and Ramsar								
A	140	30	38.1	15.2	16.3	16.2	-0.53	3.35
	200		31.6	14.7	15.5	15.4	-0.36	2.28
B	33		19.6	13.7	13.8	13.8	-0.03	0.22
	65		19.4	13.7	13.8	13.8	-0.04	0.23
	129		19.4	13.7	13.8	13.8	-0.04	0.25
	200		19.5	13.7	13.8	13.8	-0.04	0.27
C	2		44.3	15.1	16.2	16.0	-0.66	2.77
	3		42.7	15.1	16.0	15.8	-0.62	2.61
	5		40.3	14.9	15.8	15.6	-0.56	2.36
	9		37.1	14.7	15.5	15.3	-0.48	2.03
	17		33.6	14.5	15.1	15.0	-0.39	1.67
	33		30.3	14.3	14.8	14.7	-0.30	1.32
	65		27.3	14.1	14.5	14.4	-0.22	1.00
	129		24.7	14.0	14.3	14.2	-0.16	0.74

	200		23.4	13.9	14.1	14.1	-0.12	0.62
D	2		52.3	15.7	17.0	16.9	-0.38	4.17
	3		49.9	15.5	16.8	16.7	-0.35	3.87
	5		46.4	15.3	16.4	16.3	-0.31	3.44
	9		42.1	15.0	16.0	15.9	-0.27	2.89
	17		37.2	14.7	15.5	15.4	-0.21	2.27
	33		32.5	14.4	15.0	14.9	-0.17	1.68
	65		28.4	14.2	14.6	14.5	-0.13	1.18
	129		25.2	14.0	14.3	14.3	-0.12	0.83
	200		23.9	13.9	14.2	14.1	-0.11	0.69
E	2		59.9	16.0	17.7	17.5	-0.45	4.95
	3		57.2	15.9	17.4	17.3	-0.42	4.62
	5		53.2	15.6	17.0	16.9	-0.38	4.14
	9		47.9	15.3	16.5	16.4	-0.32	3.50
	17		41.8	15.0	15.9	15.8	-0.26	2.77
	33		35.8	14.6	15.3	15.2	-0.20	2.07
	65		30.6	14.3	14.8	14.7	-0.15	1.45
	129		26.1	14.1	14.4	14.3	-0.11	0.95
	200		23.7	13.9	14.2	14.1	-0.08	0.69
F	12		59.6	8.3	9.6	9.4	-0.40	3.64
	17		55.2	8.1	9.2	9.1	-0.37	3.27
	33		46.4	7.5	8.4	8.3	-0.32	2.51
	65		38.4	7.0	7.6	7.6	-0.28	1.84
	129		31.7	6.6	7.1	7.0	-0.25	1.26
	200		27.8	6.4	6.7	6.7	-0.23	0.91
G	9		94.3	13.2	14.1	13.6	-1.71	1.27
	17		81.7	11.9	12.7	12.3	-1.40	1.56
	33		68.5	10.4	11.3	11.0	-1.06	1.91
	65		54.4	8.8	9.7	9.5	-0.70	2.23
	129		40.4	7.2	7.8	7.7	-0.33	1.88
	200		34.9	6.8	7.3	7.3	-0.22	1.72
Ouse Washes SAC and Ramsar								
A	2	30	23.5	6.2	6.6	6.6	0.24	1.28

	3		22.6	6.2	6.5	6.6	0.23	1.20
	5		21.3	6.1	6.4	6.4	0.21	1.09
	9		19.5	6.0	6.2	6.3	0.18	0.93
	17		17.4	5.9	6.1	6.1	0.14	0.75
	33		15.4	5.8	5.9	5.9	0.10	0.57
	65		13.6	5.6	5.7	5.8	0.07	0.40
	129		12.0	5.6	5.6	5.6	0.04	0.27
	200		11.1	5.5	5.6	5.6	0.03	0.20
B	2		24.7	6.3	6.3	6.3	0.04	0.15
	3		23.6	6.2	6.2	6.3	0.04	0.15
	5		21.8	6.1	6.1	6.2	0.04	0.14
	9		19.7	6.0	6.0	6.0	0.03	0.13
	17		17.3	5.9	5.9	5.9	0.02	0.12
	33		15.1	5.7	5.8	5.8	0.02	0.11
	65		13.2	5.6	5.6	5.6	0.02	0.10
	129		11.7	5.5	5.6	5.6	0.01	0.09
C	2		25.6	6.4	6.9	6.9	0.04	1.85
	3		24.4	6.3	6.8	6.8	0.04	1.73
	5		22.8	6.2	6.7	6.7	0.03	1.55
	9		20.6	6.1	6.5	6.5	0.03	1.31
	17		18.1	5.9	6.2	6.2	0.02	1.04
	33		15.6	5.8	6.0	6.0	0.02	0.76
	65		13.4	5.6	5.8	5.8	0.01	0.52
	129		11.5	5.5	5.6	5.6	0.01	0.33
D	2		29.7	6.6	7.2	7.3	0.05	2.23
	3		28.5	6.5	7.1	7.2	0.04	2.10
	5		26.5	6.4	7.0	7.0	0.04	1.90
	9		23.8	6.2	6.7	6.7	0.03	1.62
	17		20.5	6.1	6.4	6.4	0.03	1.28
	33		17.4	5.9	6.1	6.2	0.02	0.94
	65		14.6	5.7	5.9	5.9	0.01	0.65

	129		12.3	5.6	5.7	5.7	0.01	0.41
E	2		29.2	5.7	5.6	5.6	0.05	-0.37
	3		27.5	5.6	5.5	5.5	0.05	-0.34
	5		25.1	5.5	5.4	5.4	0.04	-0.30
	9		22.2	5.3	5.2	5.3	0.04	-0.25
	17		19.0	5.1	5.1	5.1	0.03	-0.19
	33		16.1	5.0	4.9	4.9	0.02	-0.14
	65		13.7	4.8	4.8	4.8	0.02	-0.10
	129		11.9	4.7	4.7	4.7	0.01	-0.08
	200		11.1	4.7	4.7	4.7	0.01	-0.06
F	2		22.6	5.4	5.3	5.3	0.04	-0.26
	3		21.7	5.3	5.2	5.3	0.04	-0.24
	5		20.3	5.2	5.2	5.2	0.03	-0.22
	9		18.5	5.1	5.1	5.1	0.03	-0.19
	17		16.4	5.0	5.0	5.0	0.02	-0.16
	33		14.3	4.9	4.9	4.9	0.02	-0.12
	65		12.5	4.8	4.8	4.8	0.01	-0.09
	129		10.9	4.7	4.7	4.7	0.01	-0.06
	200		10.0	4.6	4.6	4.6	0.01	-0.05
G	2		26.6	5.6	5.5	5.5	0.05	-0.32
	3		25.5	5.5	5.4	5.4	0.04	-0.30
	5		23.8	5.4	5.3	5.3	0.04	-0.27
	9		21.5	5.3	5.2	5.2	0.03	-0.24
	17		18.8	5.1	5.1	5.1	0.03	-0.19
	33		16.1	5.0	4.9	5.0	0.02	-0.15
	65		13.9	4.9	4.8	4.8	0.02	-0.11
	129		12.1	4.8	4.7	4.7	0.01	-0.08
	200		11.1	4.7	4.7	4.7	0.01	-0.06
H	75		9.8	4.8	4.9	4.9	0.0003	0.25
	117		8.9	4.7	4.8	4.8	0.0003	0.16
I	2		9.6	4.6	4.6	4.6	0.004	0.061
	3		9.4	4.6	4.6	4.6	0.003	0.055
	5		9.2	4.6	4.6	4.6	0.003	0.048

	9		8.8	4.6	4.6	4.6	0.003	0.038
	17		8.5	4.6	4.6	4.6	0.002	0.028
	33		8.1	4.5	4.5	4.5	0.002	0.019
	65		7.9	4.5	4.5	4.5	0.001	0.011
	129		7.6	4.5	4.5	4.5	0.001	0.006
	200		7.5	4.5	4.5	4.5	0.001	0.003
Portholme SAC								
A	44	30	45.8	10.2	11.0	11.1	0.25	2.96
	65		40.9	9.9	10.6	10.6	0.23	2.50
	129		32.7	9.3	9.8	9.9	0.19	1.75
	200		27.8	9.0	9.4	9.4	0.16	1.33
B	146		21.5	8.6	8.8	8.9	0.33	0.91
	200		20.7	8.6	8.7	8.8	0.23	0.78
C	185		16.5	8.3	8.4	8.4	0.11	0.42
	200		16.5	8.3	8.4	8.4	0.11	0.41

Ammonia

Table 5: Model Results for Annual Mean NH₃

Transect	Distance from Road Edge (m)	Total NH ₃ Concentration (µg/m ³)					Change as % of CLe	
		CLe	A) 2023 Base	B) 2046 Zero Growth	C) 2046 Base	D) 2046 With Local Plan	Alone (D C)	In Combination (D B)
Nene Washes SAC and Ramsar								
A	140	3	1.93	1.88	1.94	1.94	-0.05	1.94
	200		1.86	1.83	1.86	1.86	-0.02	0.94
B	33		1.81	1.80	1.80	1.80	0.00	0.03
	65		1.81	1.79	1.79	1.79	0.00	0.03
	129		1.80	1.79	1.79	1.79	0.00	0.02
	200		1.80	1.79	1.79	1.79	0.00	0.02
C	2		2.30	2.18	2.42	2.39	-1.24	6.78
	3		2.26	2.15	2.37	2.34	-1.14	6.22
	5		2.20	2.10	2.29	2.26	-0.97	5.32
	9		2.11	2.03	2.17	2.15	-0.75	4.14

	17		2.01	1.95	2.06	2.04	-0.52	2.86
	33		1.93	1.89	1.95	1.94	-0.31	1.72
	65		1.87	1.84	1.87	1.86	-0.15	0.86
	129		1.83	1.81	1.82	1.82	-0.06	0.36
	200		1.82	1.80	1.81	1.81	-0.03	0.21
D	2		2.37	2.27	2.59	2.56	-0.79	9.68
	3		2.31	2.22	2.50	2.48	-0.70	8.66
	5		2.23	2.15	2.38	2.36	-0.57	7.18
	9		2.13	2.06	2.23	2.22	-0.42	5.38
	17		2.02	1.96	2.07	2.07	-0.26	3.50
	33		1.93	1.88	1.95	1.94	-0.14	1.93
	65		1.86	1.83	1.86	1.86	-0.07	0.90
	129		1.83	1.81	1.82	1.82	-0.03	0.37
	200		1.82	1.80	1.81	1.81	-0.03	0.24
E	2		2.57	2.41	2.82	2.79	-1.04	12.64
	3		2.50	2.36	2.73	2.70	-0.95	11.50
	5		2.40	2.27	2.59	2.57	-0.81	9.84
	9		2.27	2.16	2.41	2.39	-0.62	7.62
	17		2.12	2.04	2.21	2.20	-0.42	5.20
	33		2.00	1.94	2.04	2.03	-0.25	3.09
	65		1.90	1.87	1.92	1.91	-0.12	1.57
	129		1.84	1.82	1.84	1.84	-0.05	0.66
	200		1.82	1.81	1.82	1.82	-0.03	0.34
F	12		2.81	2.67	2.93	2.92	-0.35	8.28
	17		2.69	2.58	2.80	2.79	-0.29	6.97
	33		2.46	2.40	2.54	2.53	-0.19	4.42
	65		2.27	2.26	2.33	2.33	-0.10	2.37
	129		2.14	2.16	2.20	2.20	-0.05	1.04
	200		2.09	2.13	2.15	2.15	-0.03	0.56
G	9		3.25	3.02	3.17	3.16	-0.32	4.88
	17		2.96	2.78	2.92	2.91	-0.24	4.23
	33		2.69	2.57	2.68	2.68	-0.17	3.66
	65		2.46	2.39	2.48	2.48	-0.12	3.13

	129		2.28	2.26	2.34	2.33	-0.10	2.37
	200		2.23	2.24	2.31	2.30	-0.10	2.18
Ouse Washes SAC and Ramsar								
A	2	3	2.79	2.64	2.87	2.95	2.57	10.13
	3		2.72	2.59	2.80	2.87	2.37	9.35
	5		2.61	2.51	2.69	2.75	2.06	8.11
	9		2.47	2.40	2.54	2.59	1.63	6.43
	17		2.30	2.27	2.37	2.40	1.14	4.51
	33		2.15	2.15	2.21	2.23	0.69	2.73
	65		2.03	2.06	2.09	2.10	0.35	1.40
	129		1.96	2.01	2.02	2.03	0.15	0.61
	200		1.93	1.99	2.00	2.00	0.09	0.34
B	2	3	2.62	2.54	2.55	2.56	0.26	0.56
	3		2.55	2.49	2.49	2.50	0.24	0.51
	5		2.44	2.40	2.40	2.41	0.20	0.45
	9		2.31	2.29	2.30	2.30	0.15	0.36
	17		2.18	2.18	2.19	2.19	0.11	0.28
	33		2.06	2.09	2.09	2.10	0.07	0.21
	65		1.98	2.03	2.03	2.03	0.05	0.16
	129		1.94	2.00	2.00	2.00	0.03	0.12
	200		1.92	1.98	1.99	1.99	0.03	0.10
C	2	3	2.73	2.68	3.05	3.06	0.28	12.69
	3		2.66	2.62	2.96	2.97	0.26	11.61
	5		2.55	2.53	2.82	2.82	0.22	9.96
	9		2.41	2.40	2.63	2.64	0.17	7.77
	17		2.26	2.27	2.42	2.43	0.12	5.32
	33		2.11	2.14	2.23	2.23	0.07	3.10
	65		2.01	2.05	2.10	2.10	0.03	1.50
	129		1.94	2.00	2.02	2.02	0.01	0.58
	200		1.92	1.98	1.99	1.99	0.01	0.28
D	2	3	3.03	2.90	3.39	3.41	0.37	16.74
	3		2.95	2.84	3.29	3.30	0.34	15.57
	5		2.82	2.73	3.13	3.14	0.30	13.59

	9		2.63	2.57	2.89	2.90	0.24	10.86
	17		2.42	2.40	2.62	2.63	0.17	7.66
	33		2.22	2.23	2.36	2.37	0.10	4.64
	65		2.07	2.10	2.17	2.17	0.05	2.38
	129		1.97	2.02	2.05	2.05	0.02	1.01
E	2		3.01	2.88	2.80	2.81	0.34	-2.39
	3		2.91	2.79	2.72	2.73	0.31	-2.13
	5		2.76	2.67	2.61	2.61	0.26	-1.77
	9		2.58	2.51	2.47	2.48	0.19	-1.32
	17		2.39	2.36	2.33	2.33	0.13	-0.87
	33		2.23	2.23	2.22	2.22	0.07	-0.50
	65		2.11	2.15	2.14	2.14	0.04	-0.25
	129		2.05	2.10	2.10	2.10	0.02	-0.11
	200		2.03	2.09	2.09	2.09	0.01	-0.07
F	2		2.73	2.66	2.60	2.61	0.25	-1.75
	3		2.67	2.61	2.56	2.57	0.23	-1.61
	5		2.58	2.54	2.49	2.50	0.20	-1.39
	9		2.46	2.44	2.40	2.41	0.16	-1.09
	17		2.32	2.32	2.30	2.30	0.11	-0.76
	33		2.19	2.22	2.20	2.20	0.06	-0.45
	65		2.10	2.14	2.13	2.13	0.03	-0.22
	129		2.04	2.09	2.09	2.09	0.01	-0.09
	200		2.02	2.08	2.08	2.08	0.01	-0.05
G	2		3.00	2.87	2.79	2.80	0.34	-2.37
	3		2.93	2.82	2.74	2.75	0.32	-2.21
	5		2.82	2.73	2.66	2.67	0.28	-1.94
	9		2.66	2.59	2.54	2.55	0.22	-1.55
	17		2.47	2.44	2.40	2.41	0.16	-1.11
	33		2.30	2.30	2.27	2.28	0.10	-0.69
	65		2.16	2.19	2.18	2.18	0.05	-0.37
	129		2.08	2.12	2.12	2.12	0.03	-0.17
	200		2.05	2.10	2.09	2.09	0.01	-0.10
H	75		1.95	2.01	2.03	2.03	0.006	0.66

	117		1.92	1.99	2.00	2.00	0.003	0.30
I	2		2.11	2.15	2.16	2.16	0.019	0.44
	3		2.10	2.14	2.15	2.15	0.017	0.39
	5		2.08	2.13	2.14	2.14	0.014	0.32
	9		2.06	2.11	2.12	2.12	0.010	0.23
	17		2.04	2.09	2.10	2.10	0.007	0.15
	33		2.02	2.08	2.08	2.08	0.004	0.08
	65		2.01	2.07	2.07	2.07	0.002	0.04
	129		2.00	2.07	2.07	2.07	0.001	0.01
	200		2.00	2.06	2.07	2.07	0.001	0.01
Portholme SAC								
A	44	3	2.07	1.98	2.05	2.05	0.20	2.55
	65		1.99	1.92	1.97	1.97	0.15	1.76
	129		1.88	1.85	1.87	1.88	0.09	0.78
	200		1.85	1.83	1.84	1.84	0.06	0.42
B	146		1.82	1.81	1.82	1.82	0.14	0.31
	200		1.82	1.81	1.81	1.82	0.08	0.20
C	185		1.81	1.80	1.80	1.80	0.02	0.09
	200		1.81	1.80	1.80	1.80	0.02	0.08

Nitrogen Deposition

Table 6: Model Results for Nitrogen Deposition

Transect	Distance from Road Edge (m)	Total Nitrogen Deposition (kgN/ha/yr)					Change as % of CLo	
		CLo	A) 2023 Base	B) 2046 Zero Growth	C) 2046 Base	D) 2046 With Local Plan	Alone (D C)	In Combination (D B)
Nene Washes SAC and Ramsar								
A	140	10	16.4	14.4	14.8	14.8	-0.18	3.72
	200		15.7	14.1	14.4	14.3	-0.12	1.93
B	33		14.6	13.9	13.9	13.9	-0.02	0.09
	65		14.6	13.9	13.9	13.9	-0.02	0.08
	129		14.6	13.9	13.9	13.9	0.00	0.09
	200		14.6	13.9	13.9	13.9	-0.02	0.10

C	2		18.7	16.0	17.3	17.1	-2.06	11.15
	3		18.4	15.8	17.0	16.8	-1.90	10.22
	5		17.9	15.5	16.6	16.4	-1.63	8.78
	9		17.3	15.2	16.0	15.9	-1.28	6.87
	17		16.6	14.8	15.3	15.2	-0.90	4.81
	33		15.9	14.4	14.8	14.7	-0.54	2.95
	65		15.4	14.1	14.3	14.3	-0.28	1.55
	129		15.0	14.0	14.1	14.0	-0.12	0.72
	200		14.9	13.9	14.0	14.0	-0.06	0.45
D	2		19.5	16.5	18.2	18.1	-1.30	15.94
	3		19.1	16.2	17.8	17.7	-1.15	14.29
	5		18.4	15.8	17.1	17.0	-0.96	11.90
	9		17.7	15.3	16.3	16.2	-0.71	8.98
	17		16.8	14.8	15.5	15.4	-0.45	5.91
	33		16.0	14.4	14.8	14.7	-0.26	3.35
	65		15.4	14.1	14.3	14.3	-0.13	1.64
	129		15.1	14.0	14.1	14.0	-0.08	0.75
	200		14.9	13.9	14.0	14.0	-0.05	0.51
E	2		20.9	17.3	19.5	19.3	-1.73	20.68
	3		20.4	16.9	19.0	18.8	-1.56	18.86
	5		19.7	16.5	18.3	18.1	-1.34	16.16
	9		18.7	15.9	17.3	17.2	-1.04	12.57
	17		17.6	15.3	16.2	16.1	-0.71	8.66
	33		16.6	14.7	15.3	15.2	-0.43	5.23
	65		15.8	14.3	14.6	14.6	-0.22	2.73
	129		15.2	14.0	14.2	14.2	-0.11	1.21
	200		14.9	14.0	14.0	14.0	-0.07	0.66
F	12		22.5	18.2	19.6	19.6	-0.63	13.67
	17		21.7	17.7	18.9	18.9	-0.53	11.55
	33		20.0	16.7	17.5	17.5	-0.35	7.42
	65		18.5	16.0	16.4	16.4	-0.22	4.10
	129		17.5	15.4	15.6	15.6	-0.14	1.90
	200		17.0	15.3	15.4	15.4	-0.11	1.06

G	9		26.3	20.3	21.2	21.1	-0.86	7.86
	17		24.3	19.0	19.8	19.7	-0.66	6.90
	33		22.3	17.8	18.5	18.4	-0.49	6.10
	65		20.4	16.8	17.3	17.3	-0.33	5.35
	129		18.7	16.0	16.4	16.4	-0.23	4.10
	200		18.2	15.8	16.2	16.2	-0.19	3.77
Ouse Washes SAC and Ramsar								
A	2	10	20.1	17.8	19.0	19.4	4.06	16.05
	3		19.7	17.5	18.6	19.0	3.74	14.82
	5		19.0	17.1	18.1	18.4	3.25	12.87
	9		18.1	16.5	17.3	17.5	2.58	10.21
	17		17.1	15.8	16.4	16.6	1.81	7.19
	33		16.2	15.2	15.5	15.6	1.11	4.39
	65		15.5	14.7	14.9	15.0	0.57	2.26
	129		15.0	14.5	14.5	14.6	0.25	1.00
	200		14.8	14.4	14.4	14.4	0.13	0.57
B	2		19.3	17.3	17.3	17.4	0.41	0.90
	3		18.8	17.0	17.0	17.1	0.38	0.83
	5		18.2	16.5	16.6	16.6	0.33	0.72
	9		17.3	15.9	16.0	16.0	0.24	0.58
	17		16.5	15.4	15.4	15.4	0.18	0.46
	33		15.7	14.9	14.9	14.9	0.11	0.35
	65		15.2	14.6	14.6	14.6	0.09	0.27
	129		14.8	14.4	14.4	14.4	0.05	0.20
	200		14.7	14.3	14.3	14.3	0.04	0.18
C	2		19.9	18.0	20.0	20.0	0.44	20.17
	3		19.5	17.7	19.5	19.5	0.40	18.45
	5		18.8	17.2	18.7	18.8	0.36	15.85
	9		17.9	16.5	17.8	17.8	0.28	12.40
	17		16.9	15.8	16.7	16.7	0.18	8.51
	33		16.0	15.2	15.7	15.7	0.11	5.00
	65		15.3	14.7	14.9	14.9	0.05	2.46
	129		14.9	14.4	14.5	14.5	0.02	0.98

	200		14.7	14.3	14.4	14.4	0.01	0.50
D	2		21.7	19.2	21.8	21.8	0.59	26.57
	3		21.2	18.8	21.2	21.3	0.53	24.70
	5		20.4	18.2	20.4	20.4	0.48	21.60
	9		19.3	17.4	19.1	19.2	0.39	17.27
	17		18.0	16.5	17.7	17.7	0.26	12.20
	33		16.7	15.6	16.3	16.4	0.17	7.43
	65		15.7	14.9	15.3	15.3	0.08	3.85
	129		15.1	14.5	14.7	14.7	0.04	1.66
E	2		21.9	19.2	18.8	18.8	0.55	-3.79
	3		21.3	18.7	18.3	18.4	0.48	-3.41
	5		20.4	18.1	17.8	17.8	0.41	-2.83
	9		19.2	17.3	17.0	17.1	0.30	-2.12
	17		18.0	16.5	16.3	16.3	0.21	-1.40
	33		17.0	15.8	15.7	15.7	0.11	-0.81
	65		16.3	15.3	15.3	15.3	0.06	-0.40
	129		15.8	15.1	15.1	15.1	0.03	-0.21
	200		15.7	15.0	15.0	15.0	0.02	-0.13
F	2		20.1	18.0	17.7	17.8	0.41	-2.78
	3		19.7	17.8	17.5	17.5	0.38	-2.55
	5		19.1	17.4	17.1	17.2	0.31	-2.21
	9		18.4	16.9	16.7	16.7	0.25	-1.75
	17		17.5	16.3	16.1	16.1	0.17	-1.21
	33		16.7	15.7	15.6	15.6	0.10	-0.73
	65		16.1	15.3	15.2	15.2	0.05	-0.38
	129		15.7	15.0	15.0	15.0	0.02	-0.16
	200		15.5	15.0	15.0	15.0	0.03	-0.07
G	2		21.7	19.2	18.7	18.8	0.55	-3.76
	3		21.3	18.9	18.5	18.5	0.51	-3.50
	5		20.6	18.4	18.0	18.1	0.45	-3.08
	9		19.6	17.7	17.4	17.4	0.36	-2.46
	17		18.5	16.9	16.7	16.7	0.26	-1.76
	33		17.4	16.1	16.0	16.0	0.17	-1.10

	65		16.5	15.5	15.5	15.5	0.10	-0.59
	129		16.0	15.2	15.2	15.2	0.04	-0.28
	200		15.7	15.1	15.0	15.0	0.02	-0.18
H	75		15.8	15.3	15.4	15.4	0.009	1.08
	117		15.6	15.1	15.2	15.2	0.004	0.51
I	2		16.0	15.3	15.4	15.4	0.030	0.70
	3		15.9	15.3	15.3	15.3	0.026	0.62
	5		15.8	15.2	15.2	15.3	0.022	0.51
	9		15.6	15.1	15.1	15.2	0.016	0.37
	17		15.5	15.0	15.0	15.0	0.010	0.23
	33	15.4	15.0	15.0	15.0	0.006	0.13	
	65	15.3	14.9	14.9	14.9	0.003	0.07	
	129	15.3	14.9	14.9	14.9	0.001	0.02	
	200	15.3	14.9	14.9	14.9	0.001	0.01	
Portholme SAC								
A	44	10	17.6	14.6	15.0	15.1	0.36	4.60
	65		16.9	14.3	14.6	14.6	0.29	3.28
	129		15.9	13.9	14.0	14.1	0.18	1.59
	200		15.4	13.7	13.8	13.8	0.12	0.93
B	146		14.9	13.6	13.7	13.7	0.28	0.67
	200		14.8	13.6	13.6	13.7	0.17	0.47
C	185		14.5	13.6	13.6	13.6	0.05	0.22
	200		14.5	13.6	13.6	13.6	0.05	0.21

Acid Deposition

Table 7: Model Results for Acid Deposition

Transect	Distance from Road Edge (m)	Total Acid Deposition (keq/ha/yr)					Change as % of CLo	
		CLo	A) 2023 Base	B) 2046 Zero Growth	C) 2046 Base	D) 2046 With Local Plan	Alone (D C)	In Combination (D B)
Nene Washes SAC and Ramsar								
A	140	4.856	1.17	1.03	1.06	1.06	-0.03	0.55
	200		1.12	1.01	1.02	1.02	-0.02	0.28

B	33		1.04	0.99	0.99	0.99	0.00	0.01
	65		1.04	0.99	0.99	0.99	0.00	0.01
	129		1.04	0.99	0.99	0.99	0.00	0.01
	200		1.04	0.99	0.99	0.99	0.00	0.01
C	2		1.34	1.14	1.24	1.22	-0.30	1.64
	3		1.31	1.13	1.22	1.20	-0.28	1.50
	5		1.28	1.11	1.18	1.17	-0.24	1.29
	9		1.23	1.08	1.14	1.13	-0.19	1.01
	17		1.18	1.05	1.10	1.09	-0.13	0.71
	33		1.14	1.03	1.05	1.05	-0.08	0.43
	65		1.10	1.01	1.02	1.02	-0.04	0.23
	129		1.07	1.00	1.00	1.00	-0.02	0.11
	200		1.06	0.99	1.00	1.00	-0.01	0.07
D	2		1.39	1.18	1.30	1.29	-0.19	2.34
	3		1.36	1.16	1.27	1.26	-0.17	2.10
	5		1.32	1.13	1.22	1.22	-0.14	1.75
	9		1.26	1.10	1.16	1.16	-0.10	1.32
	17		1.20	1.06	1.10	1.10	-0.07	0.87
	33		1.15	1.03	1.05	1.05	-0.04	0.49
	65		1.10	1.01	1.02	1.02	-0.02	0.24
	129		1.08	1.00	1.00	1.00	-0.01	0.11
	200		1.07	1.00	1.00	1.00	-0.01	0.08
E	2		1.49	1.23	1.39	1.38	-0.25	3.04
	3		1.46	1.21	1.36	1.35	-0.23	2.77
	5		1.41	1.18	1.30	1.29	-0.20	2.38
	9		1.34	1.14	1.23	1.23	-0.15	1.85
	17		1.26	1.09	1.16	1.15	-0.10	1.27
	33		1.19	1.05	1.09	1.09	-0.06	0.77
	65		1.13	1.02	1.04	1.04	-0.03	0.40
	129		1.09	1.00	1.01	1.01	-0.02	0.18
	200		1.07	1.00	1.00	1.00	-0.01	0.10
F	12		1.61	1.30	1.40	1.40	-0.09	2.0
	17		1.55	1.27	1.35	1.35	-0.08	1.7

	33		1.43	1.20	1.25	1.25	-0.05	1.1
	65		1.32	1.14	1.17	1.17	-0.03	0.6
	129		1.25	1.10	1.12	1.12	-0.02	0.3
	200		1.21	1.09	1.10	1.10	-0.02	0.2
G	9		1.88	1.45	1.52	1.51	-0.13	1.2
	17		1.74	1.36	1.41	1.41	-0.10	1.0
	33		1.59	1.27	1.32	1.32	-0.07	0.9
	65		1.46	1.20	1.24	1.24	-0.05	0.8
	129		1.34	1.14	1.17	1.17	-0.03	0.6
	200		1.30	1.13	1.16	1.16	-0.03	0.6
Ouse Washes SAC and Ramsar								
A	2	4.856	1.43	1.27	1.36	1.39	0.60	2.4
	3		1.40	1.25	1.33	1.36	0.55	2.2
	5		1.36	1.22	1.29	1.31	0.48	1.9
	9		1.29	1.18	1.23	1.25	0.38	1.5
	17		1.22	1.13	1.17	1.18	0.27	1.1
	33		1.16	1.09	1.11	1.12	0.16	0.6
	65		1.10	1.05	1.06	1.07	0.08	0.3
	129		1.07	1.03	1.04	1.04	0.04	0.1
	200		1.06	1.03	1.03	1.03	0.02	0.1
B	2		1.38	1.23	1.24	1.24	0.06	0.1
	3		1.35	1.21	1.22	1.22	0.06	0.1
	5		1.30	1.18	1.18	1.18	0.05	0.1
	9		1.24	1.14	1.14	1.14	0.04	0.1
	17		1.18	1.10	1.10	1.10	0.03	0.1
	33		1.12	1.06	1.07	1.07	0.02	0.1
	65		1.09	1.04	1.04	1.04	0.01	0.0
	129		1.06	1.03	1.03	1.03	0.01	0.0
	200		1.05	1.02	1.02	1.02	0.01	0.0
C	2		1.42	1.29	1.43	1.43	0.06	3.0
	3		1.39	1.26	1.39	1.39	0.06	2.7
	5		1.34	1.23	1.34	1.34	0.05	2.3
	9		1.28	1.18	1.27	1.27	0.04	1.8

	17		1.21	1.13	1.19	1.19	0.03	1.3
	33		1.15	1.08	1.12	1.12	0.02	0.7
	65		1.09	1.05	1.07	1.07	0.01	0.4
	129		1.06	1.03	1.04	1.04	0.00	0.1
	200		1.05	1.02	1.03	1.03	0.00	0.1
D	2		1.55	1.37	1.56	1.56	0.09	3.9
	3		1.52	1.34	1.52	1.52	0.08	3.6
	5		1.46	1.30	1.45	1.46	0.07	3.2
	9		1.38	1.25	1.37	1.37	0.06	2.5
	17		1.28	1.18	1.26	1.27	0.04	1.8
	33		1.19	1.12	1.17	1.17	0.03	1.1
	65		1.12	1.07	1.09	1.09	0.01	0.6
	129		1.08	1.04	1.05	1.05	0.01	0.2
E	2		1.57	1.37	1.34	1.34	0.081	-0.56
	3		1.52	1.34	1.31	1.31	0.070	-0.50
	5		1.46	1.29	1.27	1.27	0.061	-0.42
	9		1.37	1.23	1.22	1.22	0.044	-0.31
	17		1.29	1.18	1.16	1.17	0.031	-0.21
	33		1.22	1.13	1.12	1.12	0.017	-0.12
	65		1.16	1.10	1.09	1.09	0.008	-0.06
	129		1.13	1.08	1.08	1.08	0.004	-0.03
	200		1.12	1.07	1.07	1.07	0.002	-0.02
F	2		1.43	1.29	1.27	1.27	0.060	-0.41
	3		1.41	1.27	1.25	1.25	0.055	-0.37
	5		1.37	1.24	1.22	1.23	0.046	-0.32
	9		1.31	1.20	1.19	1.19	0.036	-0.26
	17		1.25	1.16	1.15	1.15	0.025	-0.18
	33		1.19	1.12	1.12	1.12	0.015	-0.11
	65		1.15	1.09	1.09	1.09	0.007	-0.06
	129		1.12	1.07	1.07	1.07	0.003	-0.02
	200		1.11	1.07	1.07	1.07	0.004	-0.01
G	2		1.55	1.37	1.34	1.34	0.081	-0.55
	3		1.52	1.35	1.32	1.32	0.075	-0.51

	5		1.47	1.31	1.29	1.29	0.066	-0.45
	9		1.40	1.26	1.24	1.25	0.053	-0.36
	17		1.32	1.21	1.19	1.19	0.039	-0.26
	33		1.24	1.15	1.14	1.14	0.025	-0.16
	65		1.18	1.11	1.11	1.11	0.014	-0.09
	129		1.14	1.09	1.08	1.08	0.006	-0.04
	200		1.12	1.08	1.07	1.07	0.003	-0.03
H	75		1.13	1.09	1.10	1.10	0.001	0.2
	117		1.12	1.08	1.08	1.08	0.001	0.1
I	2		1.14	1.09	1.10	1.10	0.0044	0.102
	3		1.13	1.09	1.10	1.10	0.0039	0.091
	5		1.13	1.09	1.09	1.09	0.0032	0.075
	9		1.12	1.08	1.08	1.08	0.0024	0.055
	17		1.11	1.07	1.07	1.07	0.0015	0.034
	33	1.10	1.07	1.07	1.07	0.0009	0.019	
	65	1.09	1.06	1.07	1.07	0.0005	0.011	
	129	1.09	1.06	1.06	1.06	0.0002	0.003	
	200	1.09	1.06	1.06	1.06	0.0001	0.002	
Portholme SAC								
A	44	4.856	1.26	1.04	1.07	1.08	0.05	0.68
	65		1.21	1.02	1.04	1.04	0.04	0.48
	129		1.14	0.99	1.00	1.00	0.03	0.23
	200		1.10	0.98	0.99	0.99	0.02	0.14
B	146		1.07	0.97	0.98	0.98	0.04	0.10
	200		1.06	0.97	0.97	0.98	0.03	0.07
C	185		1.03	0.97	0.97	0.97	0.01	0.03
	200		1.03	0.97	0.97	0.97	0.01	0.03

Summary

- 4.3 Table 8 summarises the air quality predictions at the worst-case location within each designated site. As explained in Paragraph 2.13, the potential for significant adverse effects can be ruled out wherever the PC is less than 1% of the CLe/CLo or the PEC is less than the relevant CLe/CLo. For HRAs, the test against the PEC may also need to be described within an appropriate assessment, but Table 8 nevertheless summarises which impacts can ultimately be disregarded solely on the basis of the air quality predictions.

Table 8: Summary of Air Quality Predictions

Pollutant	CLe/ CLo	PC Alone <1% of CLe/CLo	PC In Combination <1% of CLe/CLo	PEC < CLe/CLo	Screens Out
Nene Washes SAC and Ramsar					
Annual Mean NOx	30	Y	N	Y	Y
Annual Mean NH ₃	3	Y	N	N	N
N Dep short vegetation	10	Y	N	N	N
Acid Deposition to short vegetation	4.856	Y	N	Y	Y
Ouse Washes SAC and Ramsar					
NOx	30	Y	N	Y	Y
NH ₃	3	N	N	N	N
N Dep to short vegetation	10	N	N	N	N
Acid Deposition to short vegetation	4.856	Y	N	Y	Y
Portholme SAC					
NOx	30	Y	N	Y	Y
NH ₃	3	Y	N	Y	Y
N Dep to short vegetation	10	Y	N	N	N
Acid Deposition to short vegetation	4.856	Y	Y	Y	Y

4.4 On the basis of the observations in Table 8, it is possible to discount all impacts except:

- Nene Washes SAC and Ramsar - NH₃ concentrations and nitrogen deposition to short vegetation;
- Ouse Washes SAC and Ramsar - NH₃ concentrations and nitrogen deposition to short vegetation;
and
- Portholme SAC – nitrogen deposition to short vegetation.

4.5 For these sites/pollutants, further assessment is needed.

5 Isopleths

- 5.1 As the assessment has been unable to classify all of the impacts as insignificant (as shown in Table 8), isopleths have been plotted to show the areas over which the 1% of CLe/CLo screening criterion is exceeded. These are presented in Figure 9 to Figure 27, below. Isopleths are shown wherever the 1% criterion is exceeded within a habitat, even where the potential for a significant effect has already been discounted on the basis that the total does not exceed the CLe or CLo. Isopleths are not shown if the 1% criterion is not exceeded. It should be reiterated that exceeding the 1% criterion does not mean that there will be a significant effect. It simply means that impacts cannot be screened out at this stage. However, the potential for significant effects can be discounted to all areas outside the lines shown in Figure 9 to Figure 27.
- 5.2 It should be noted that these plots are intended to show impacts within the designated sites; outside of the designated sites, the isopleths will be less accurate. Furthermore, they provide only a very high-level summary of the predictions. More detailed contours have also been provided to Lepus Consulting Ltd. to inform the HRA.

NO_x

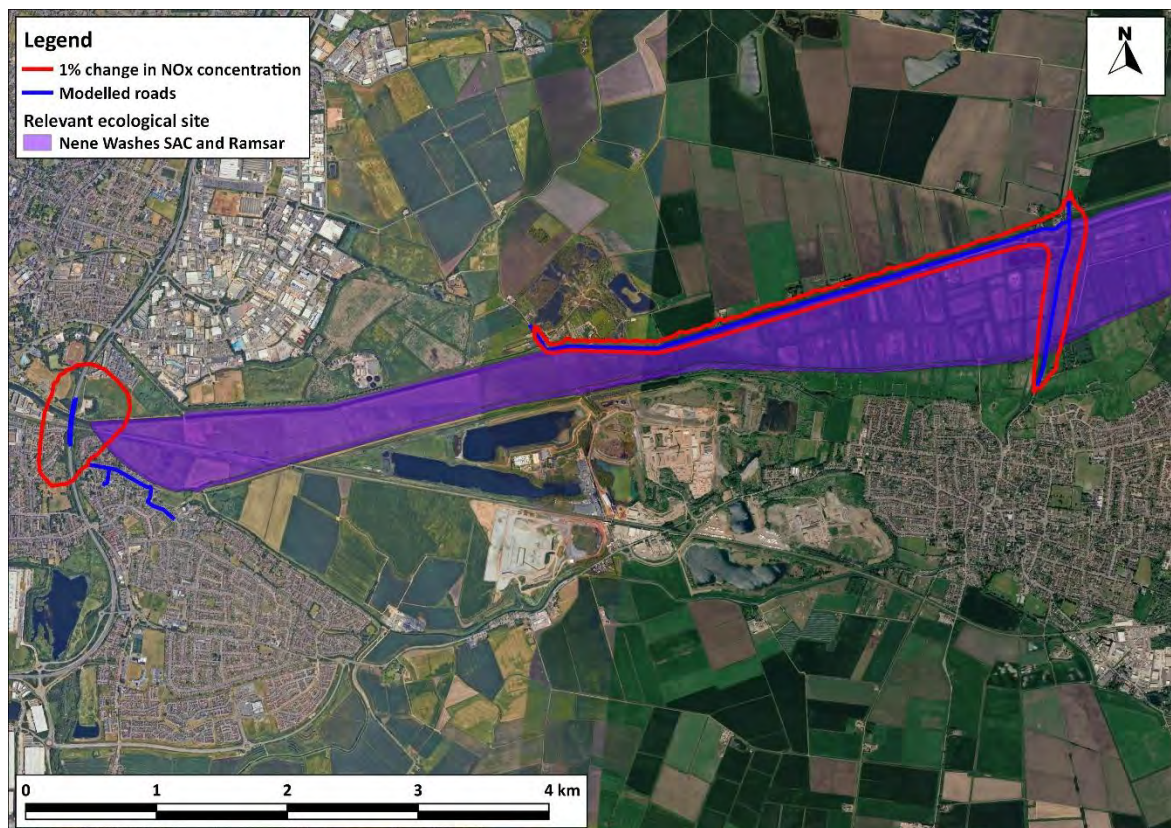


Figure 9: Areas Exceeding 1% of CLe In-Combination in Nene Washes (south)

Imagery ©2026 Airbus, Landsat / Copernicus, Maxar Technologies.

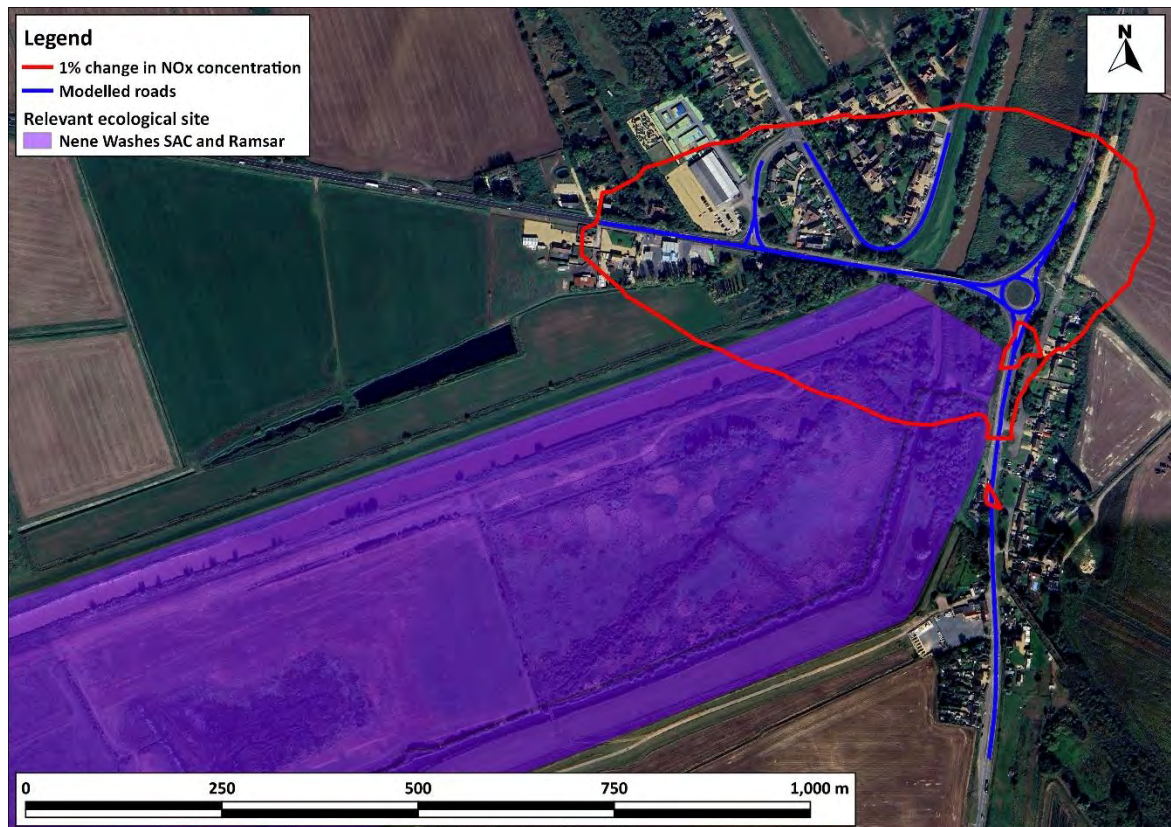


Figure 10: Areas Exceeding 1% of CLe In-Combination in Nene Washes (north)

Imagery ©2026 Airbus, Landsat / Copernicus, Maxar Technologies.

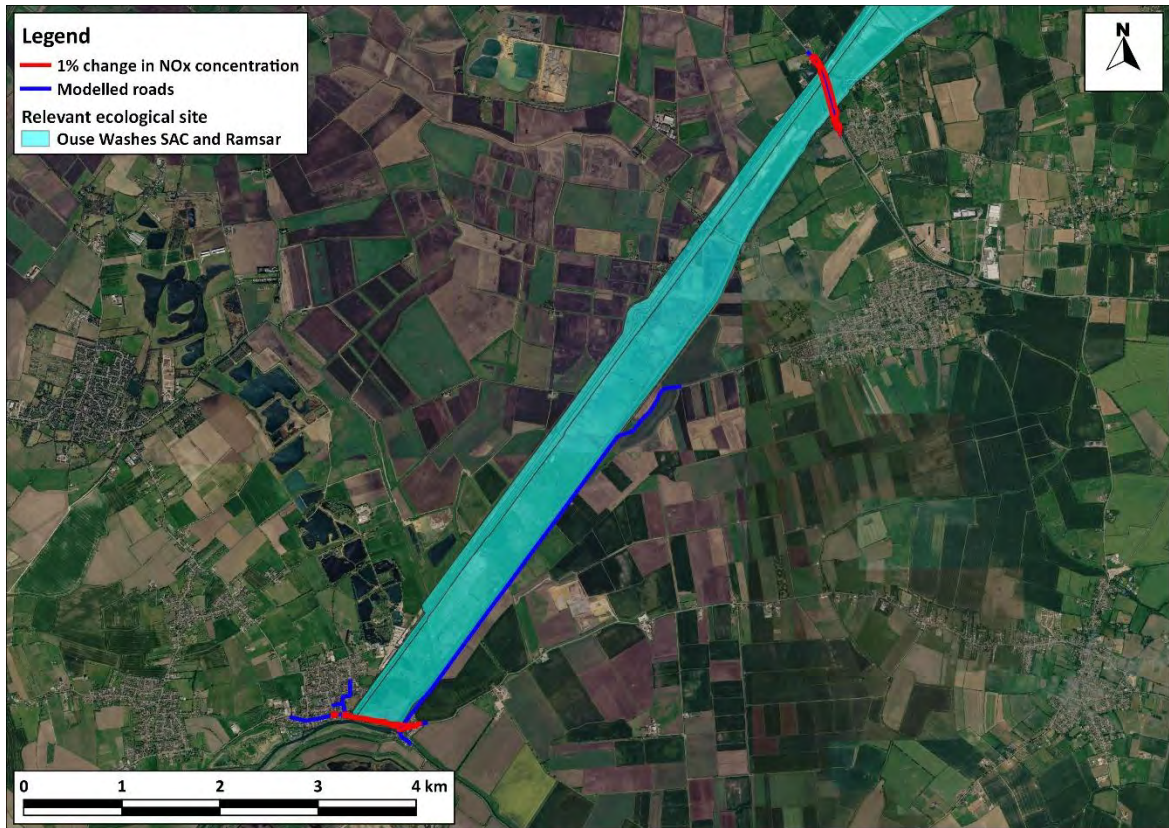


Figure 11: Areas Exceeding 1% of CLe In-Combination in Ouse Washes (south)

Imagery ©2026 Airbus, Landsat / Copernicus, Maxar Technologies.

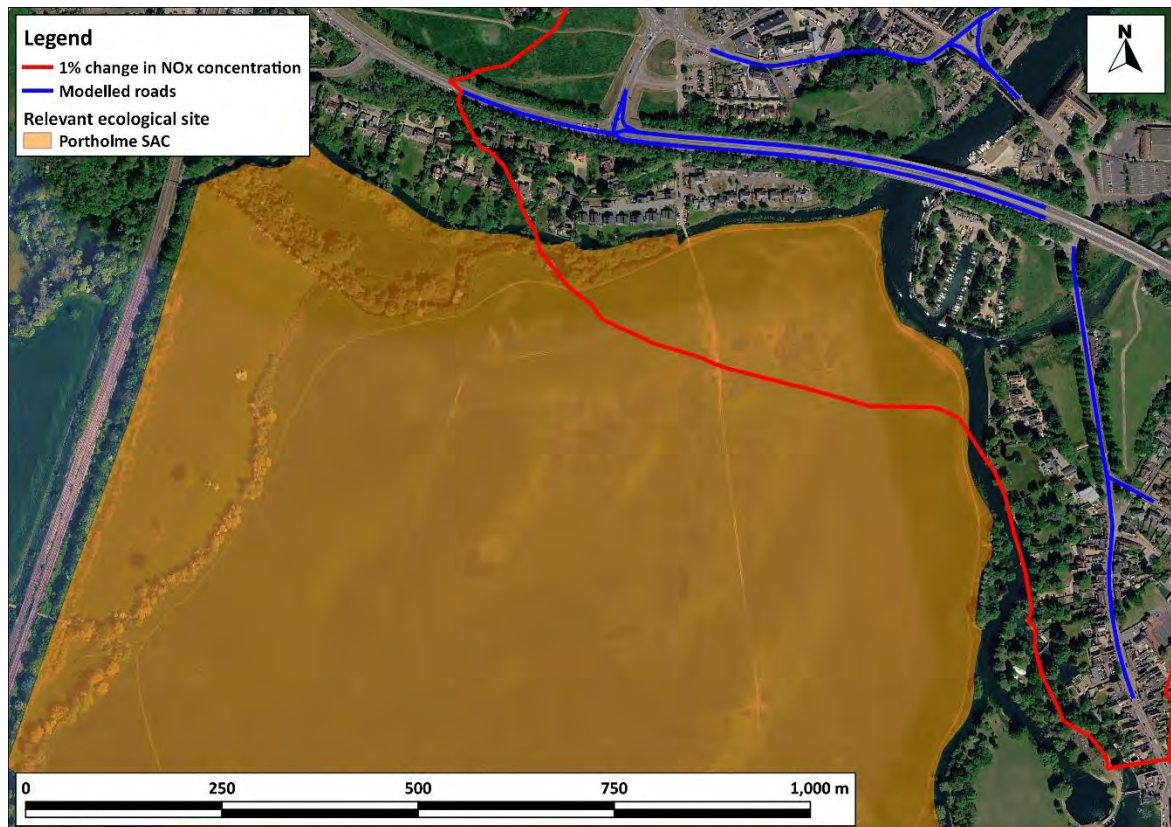


Figure 12: Areas Exceeding 1% of CLe In-Combination in Portholme SAC

Imagery ©2026 Airbus, Landsat / Copernicus, Maxar Technologies.

Ammonia

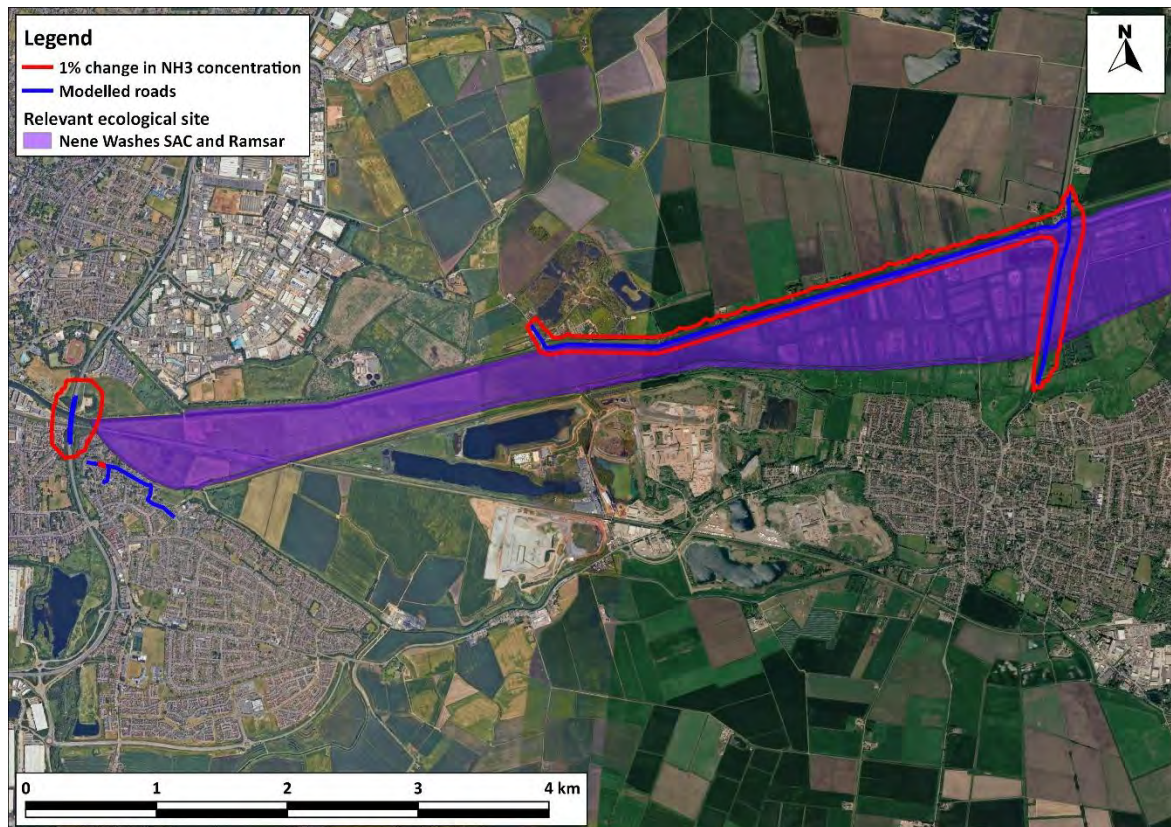


Figure 13: Areas Exceeding 1% of CLe In-Combination in Nene Washes (south)

Imagery ©2026 Airbus, Landsat / Copernicus, Maxar Technologies.

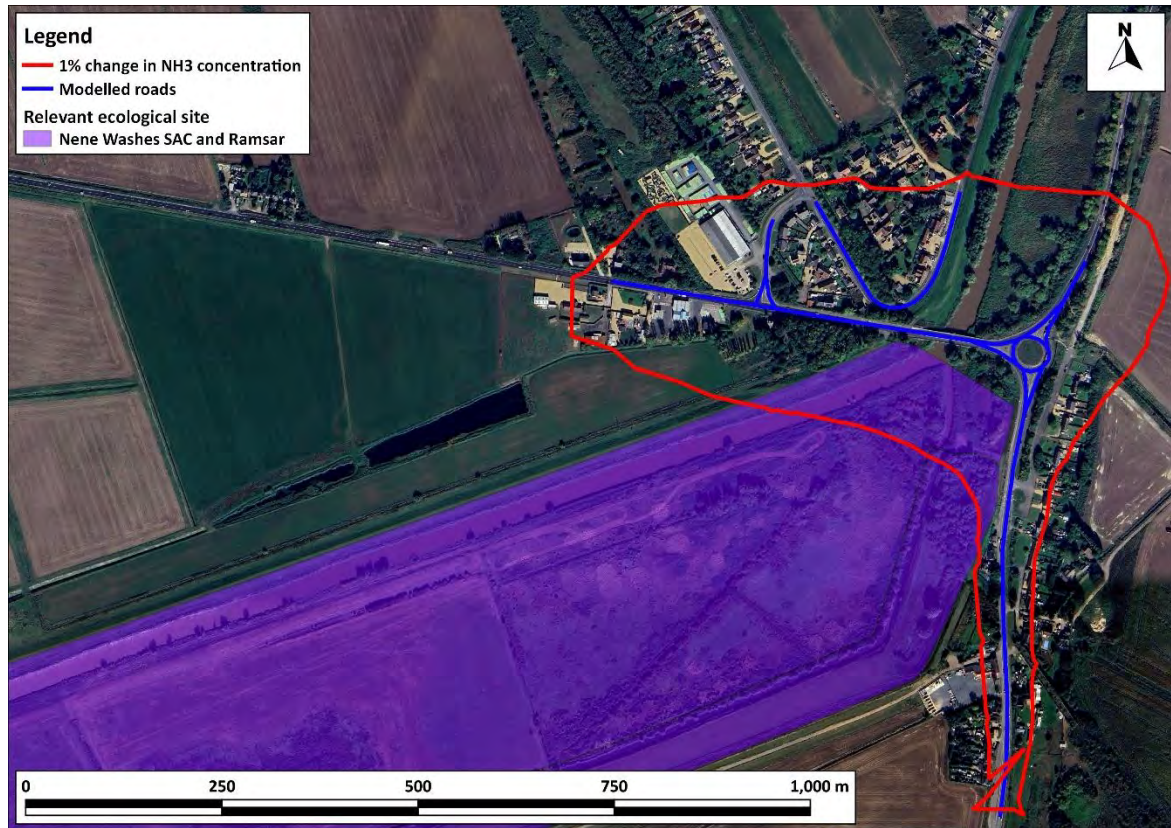


Figure 14: Areas Exceeding 1% of CLe In-Combination in Nene Washes (north)

Imagery ©2026 Airbus, Landsat / Copernicus, Maxar Technologies.

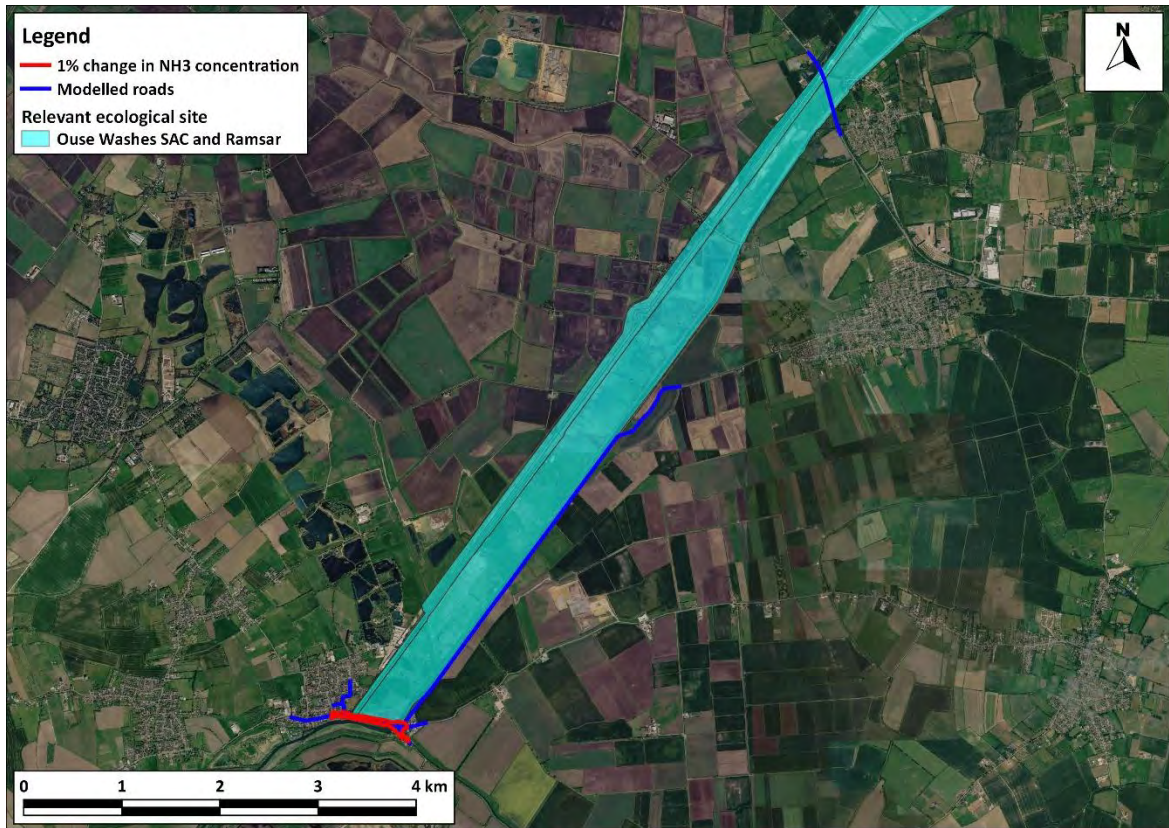


Figure 15: Areas Exceeding 1% of CLe Alone in Ouse Washes (south)

Imagery ©2026 Airbus, Landsat / Copernicus, Maxar Technologies.

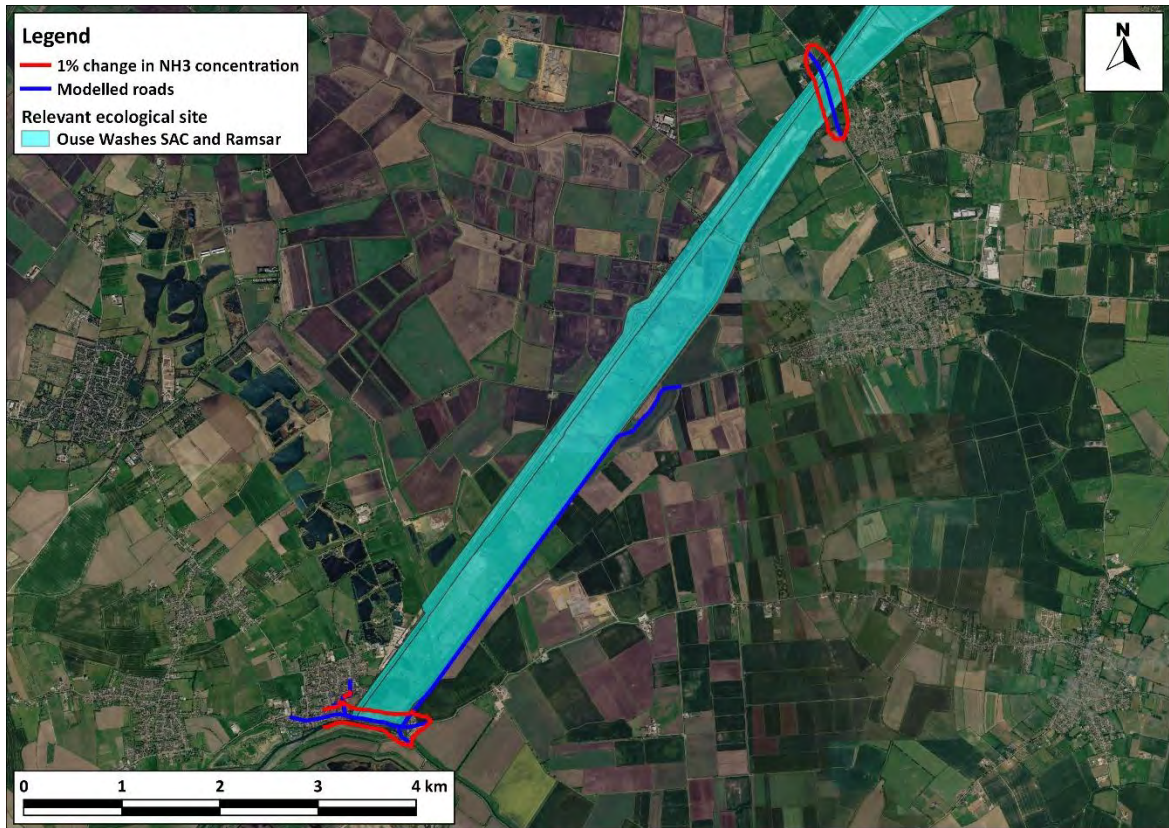


Figure 16: Areas Exceeding 1% of CLe In-Combination in Ouse Washes (south)

Imagery ©2026 Airbus, Landsat / Copernicus, Maxar Technologies.

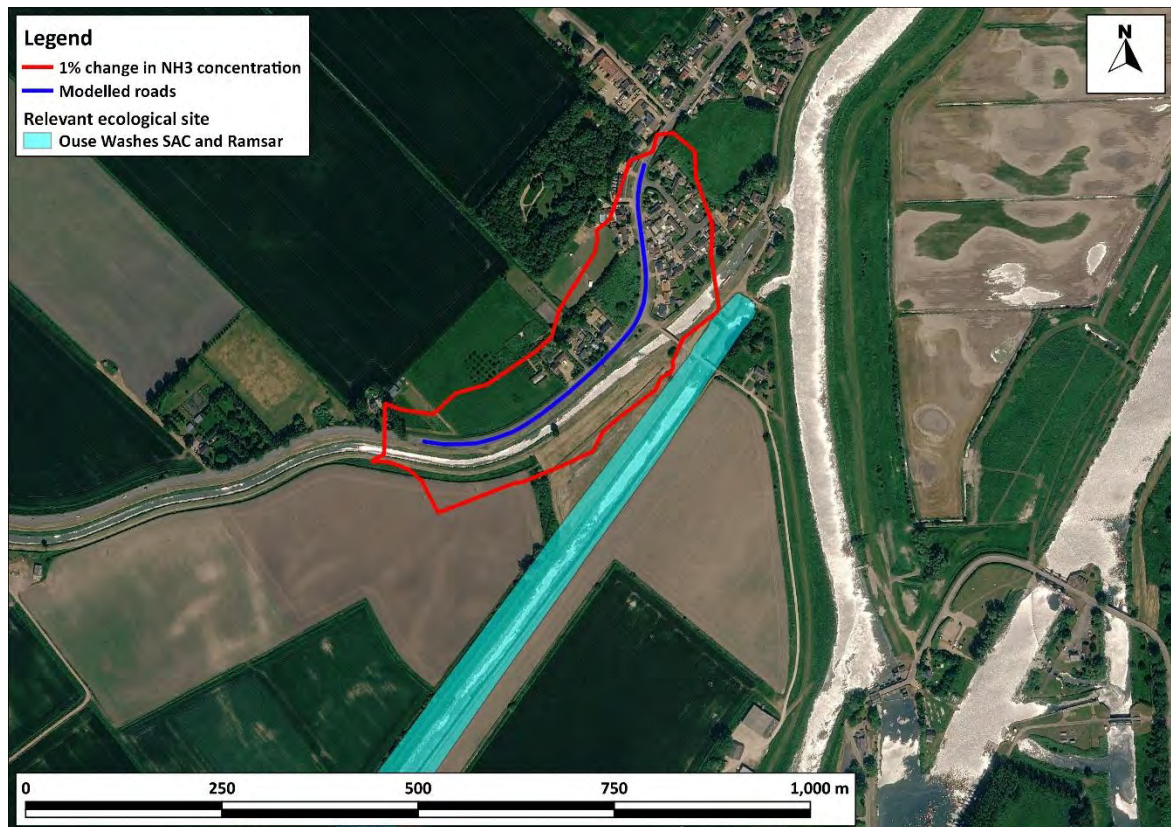


Figure 17: Areas Exceeding 1% of CLe In-Combination in Ouse Washes (north)

Imagery ©2026 Airbus, Landsat / Copernicus, Maxar Technologies.



Figure 18: Areas Exceeding 1% of CLe In-Combination in Portholme SAC

Imagery ©2026 Airbus, Landsat / Copernicus, Maxar Technologies.

Nitrogen Deposition

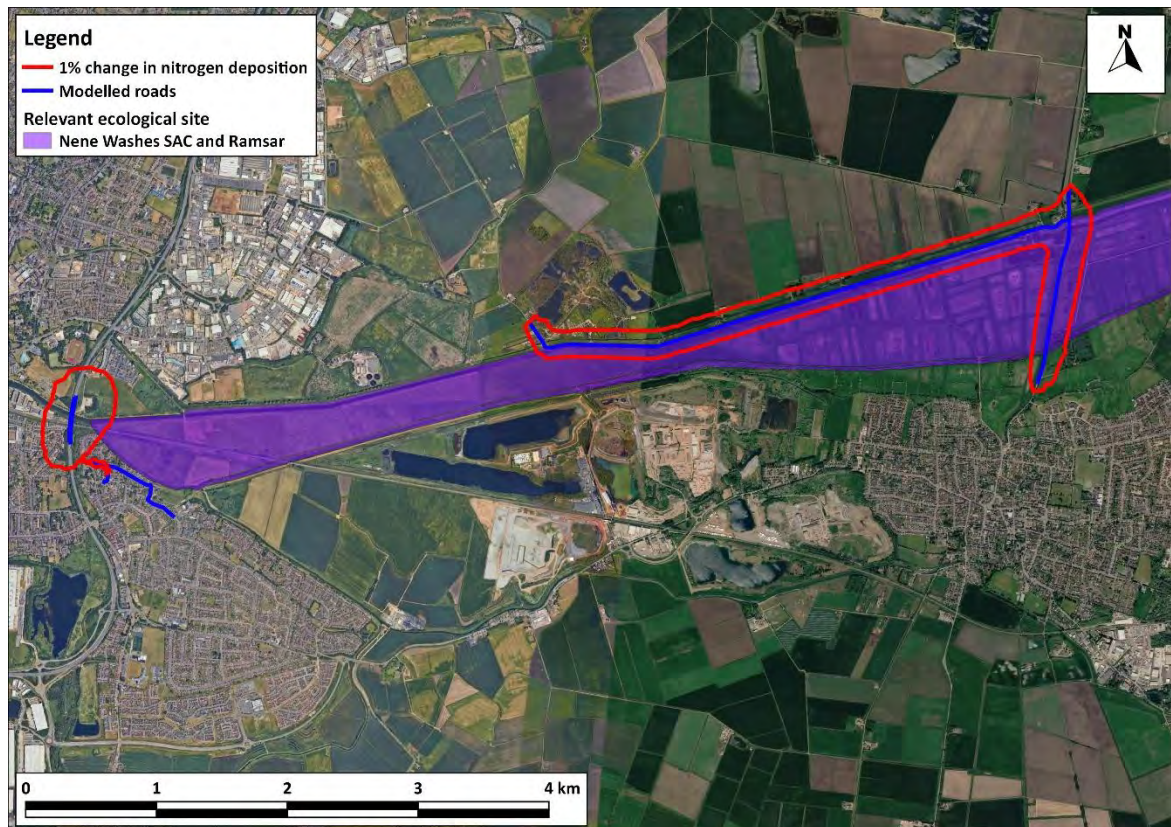


Figure 19: Areas Exceeding 1% of CLo In-Combination in Nene Washes (south)

Imagery ©2026 Airbus, Landsat / Copernicus, Maxar Technologies.

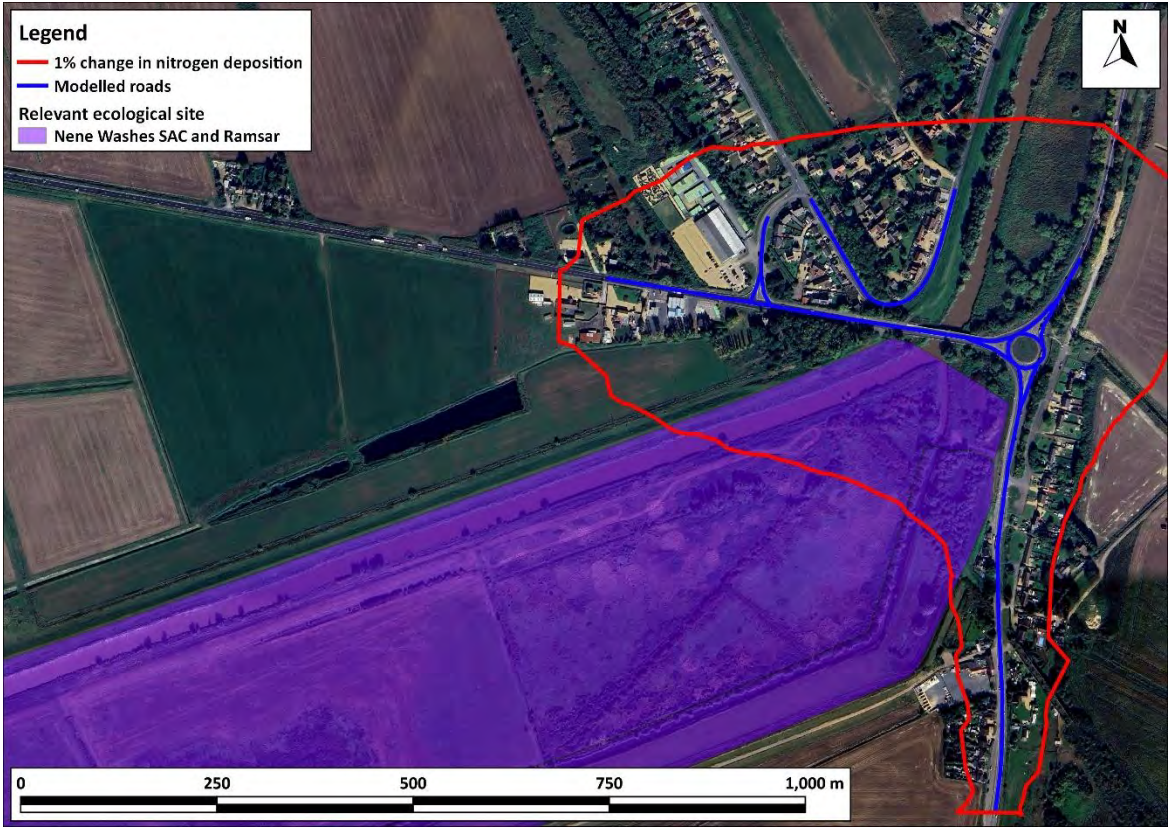


Figure 20: Areas Exceeding 1% of CLe In-Combination in Nene Washes (north)

Imagery ©2026 Airbus, Landsat / Copernicus, Maxar Technologies.



Figure 21: Areas Exceeding 1% of CLo Alone in Ouse Washes (south)

Imagery ©2026 Airbus, Landsat / Copernicus, Maxar Technologies.

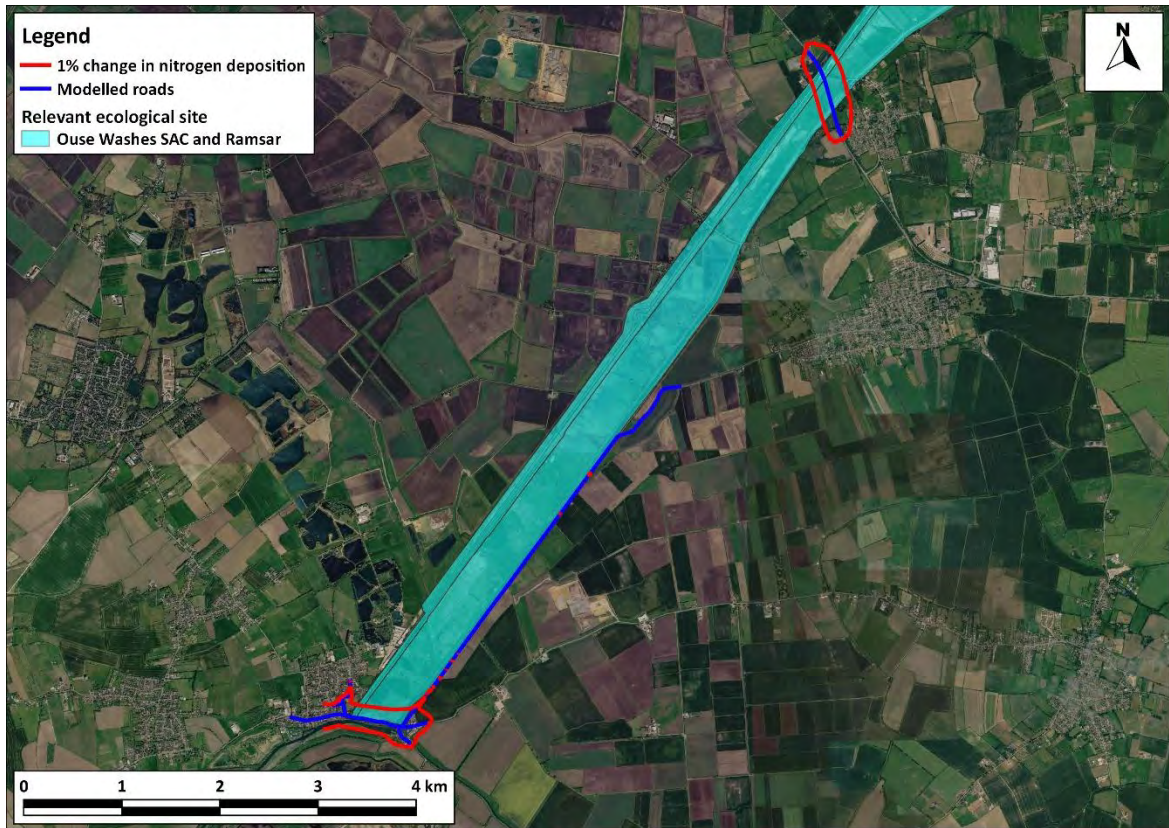


Figure 22: Areas Exceeding 1% of CLo In-Combination in Ouse Washes (south)

Imagery ©2026 Airbus, Landsat / Copernicus, Maxar Technologies.

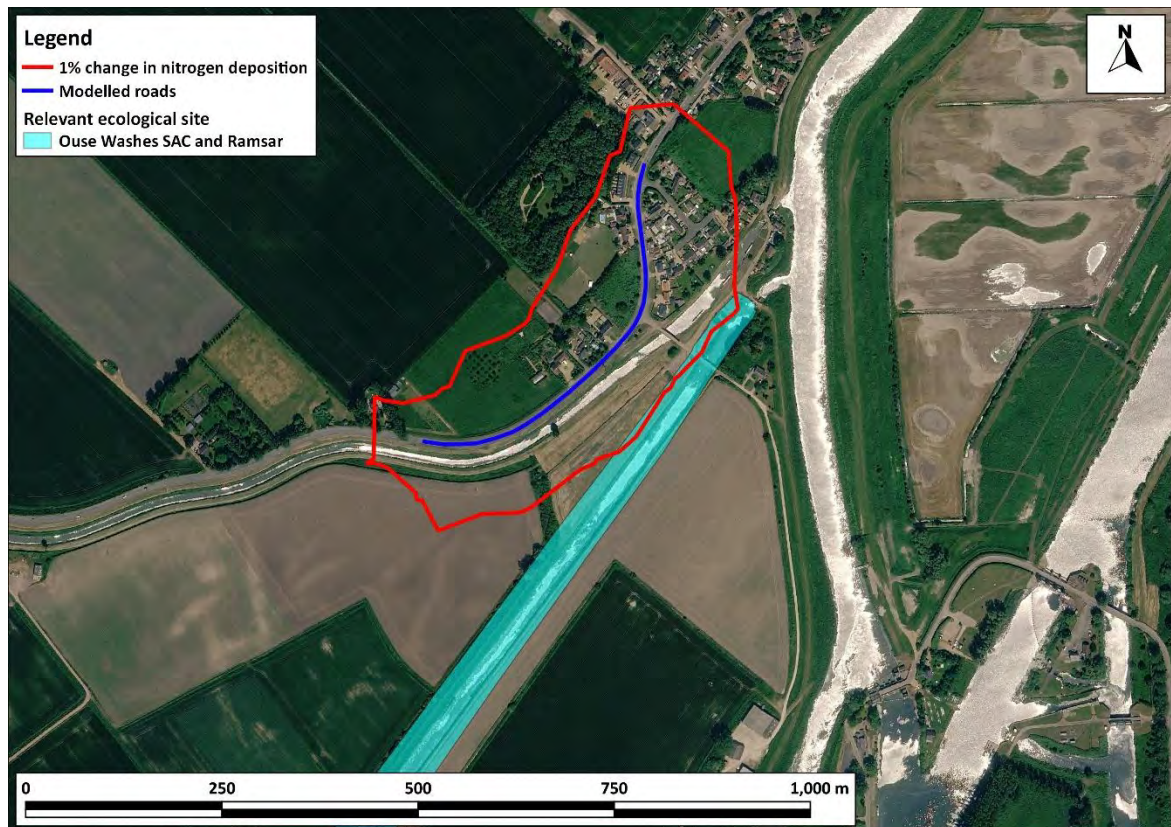


Figure 23: Areas Exceeding 1% of CLo In-Combination in Ouse Washes (north)

Imagery ©2026 Airbus, Landsat / Copernicus, Maxar Technologies.

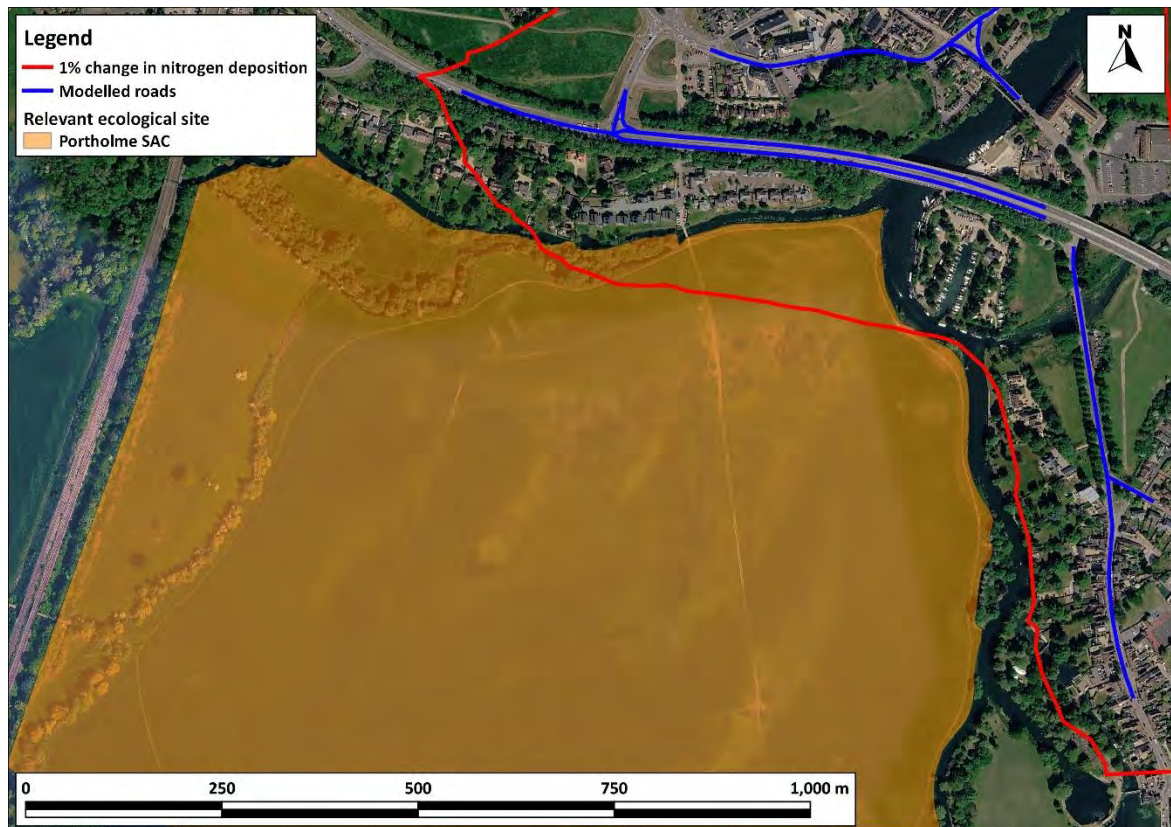


Figure 24: Areas Exceeding 1% of CLo In-Combination in Portholme SAC

Imagery ©2026 Airbus, Landsat / Copernicus, Maxar Technologies.

Acid Deposition

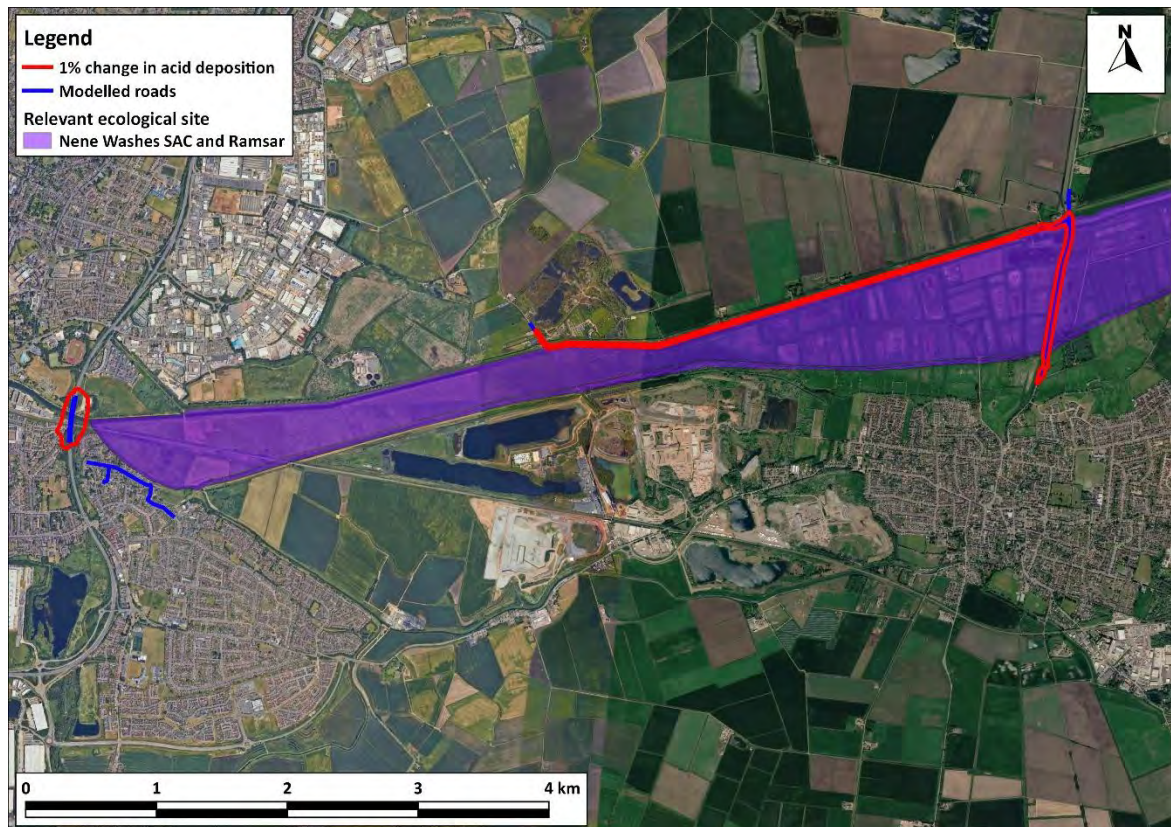


Figure 25: Areas Exceeding 1% of CLo In-Combination in Nene Washes (south)

Imagery ©2026 Airbus, Landsat / Copernicus, Maxar Technologies.

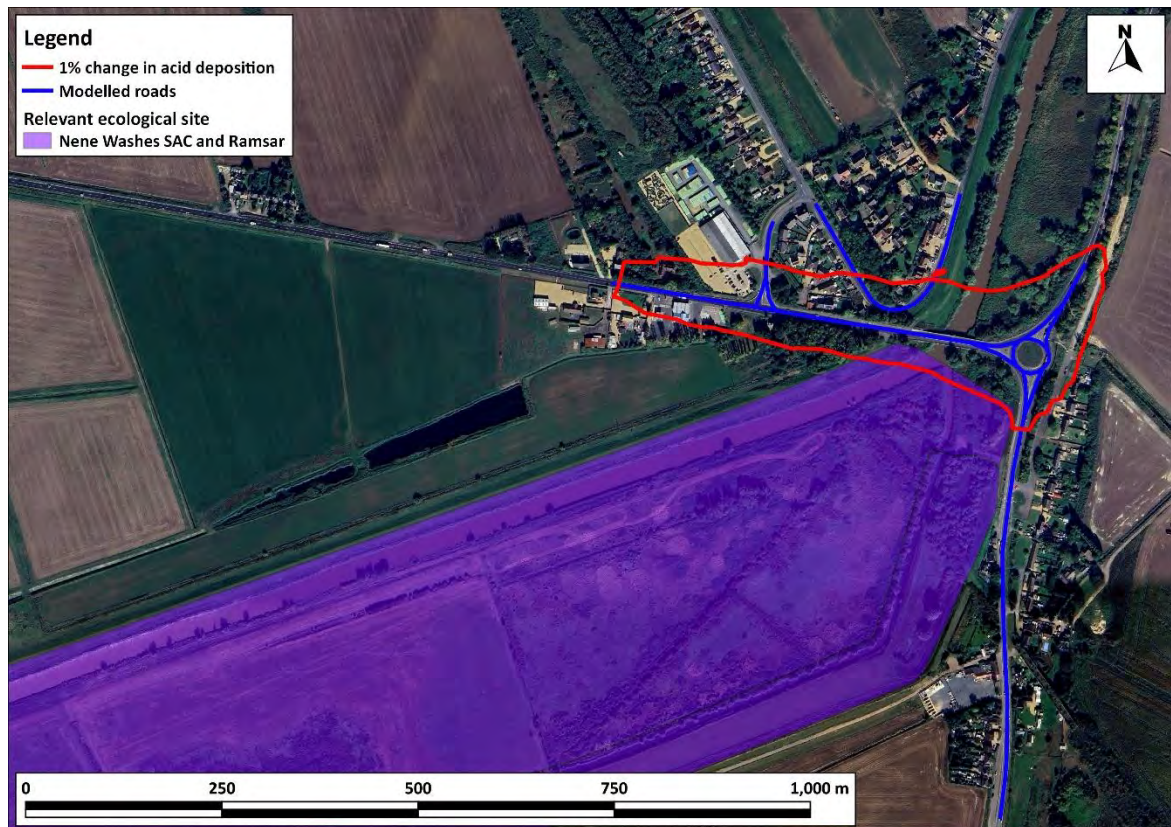


Figure 26: Areas Exceeding 1% of CLo In-Combination in Nene Washes (north)

Imagery ©2026 Airbus, Landsat / Copernicus, Maxar Technologies.

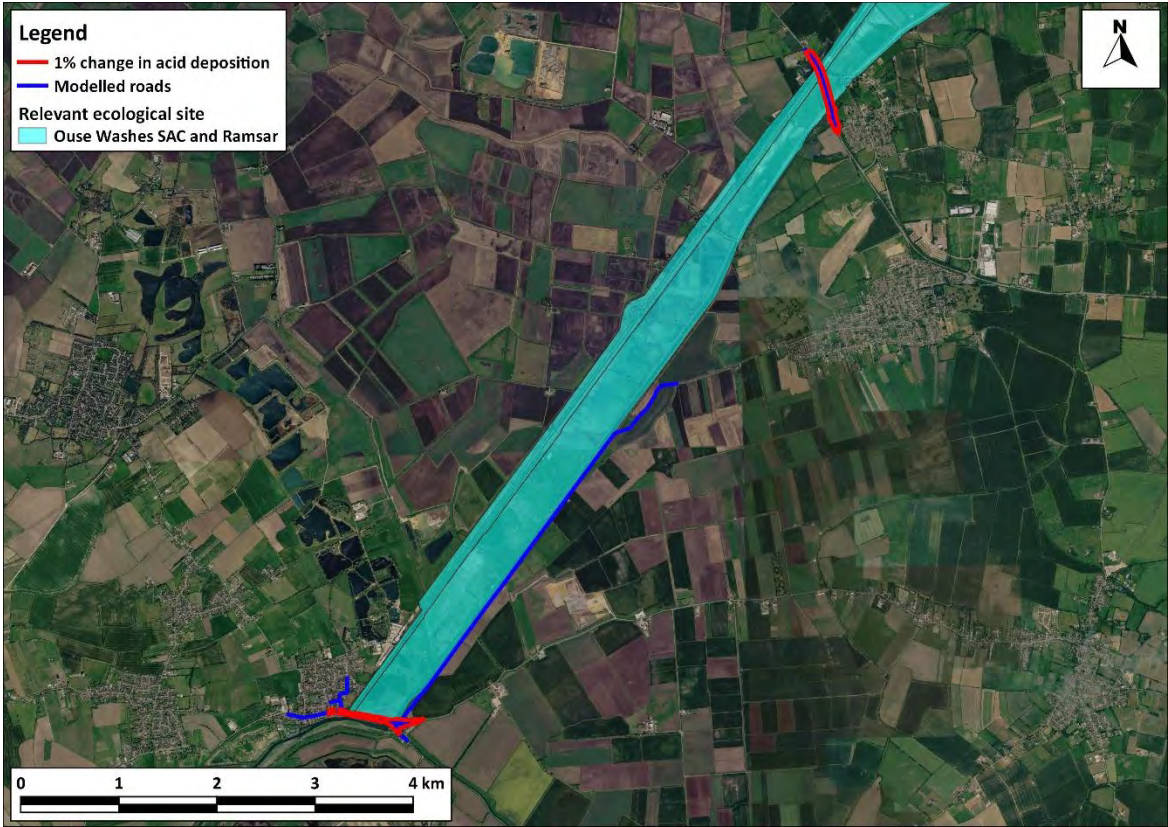


Figure 27: Areas Exceeding 1% of CLo In-Combination in Ouse Washes (south)

Imagery ©2026 Airbus, Landsat / Copernicus, Maxar Technologies.

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7 Glossary

AADT	Annual Average Daily Traffic
ADMS-Roads	Atmospheric Dispersion Modelling System model for Roads
APIS	Air Pollution Information System
AQC	Air Quality Consultants
CLe	Critical Level - 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
CLo	Critical Load – 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
CREAM	Calculator for Road Emissions of AMmonia
Defra	Department for Environment, Food and Rural Affairs
DfT	Department for Transport
EFT	Emissions Factors Toolkit
EU	European Union
Exceedance	A period of time when the concentration of a pollutant is greater than the appropriate air quality objective. This applies to specified locations with relevant exposure
HDV	Heavy Duty Vehicles (> 3.5 tonnes)
IAQM	Institute of Air Quality Management
JNCC	Joint Nature Conservation Committee
kph	Kilometres Per hour
LAQM	Local Air Quality Management
LDV	Light Duty Vehicles (<3.5 tonnes)
µg/m ³	Microgrammes per cubic metre
NAMN	National Ammonia Monitoring Network
NO	Nitric oxide
NO ₂	Nitrogen dioxide
NO _x	Nitrogen oxides (taken to be NO ₂ + NO)
Objectives	A nationally defined set of health-based concentrations for nine pollutants, seven of which are incorporated in Regulations, setting out the extent to which the standards

should be achieved by a defined date. There are also vegetation-based objectives for sulphur dioxide and nitrogen oxides

PC	Process Contribution
PEC	Predicted Environmental Concentration
SAC	Special Area of Conservation
WHO	World Health Organisation

8 Appendices

A1 Professional Experience

Dr Ben Marner, BSc (Hons) PhD CSci MEnvSc MIAQM

Dr Marner is the Director of Air Quality Modelling and Assessment at AQC and has more than 20 years' relevant experience. He has been responsible for air quality and greenhouse gas assessments of road schemes, rail schemes, airports, power stations, waste incinerators, commercial developments and residential developments in the UK and abroad. He has acted as expert witness at public inquiries, where he has presented evidence on health-related air quality impacts, the impacts of air quality on sensitive ecosystems, and greenhouse gas impacts. He has developed a range of widely-used air quality models and contributed to the development of best practice. Dr Marner has provided support and advice to foreign governments, Highways England, Transport Scotland, Transport for London, Greater London Authority, the Joint Nature Conservation Committee, the Environment Agency, and numerous local authorities. He is a Member of the Institute of Air Quality Management and a Chartered Scientist. He currently advises the UK Government on air quality as part of its Air Quality Expert Group (AQEG), where his specific area of expertise relates to air quality assessment in the development control process, and has separately provided advice on air quality issues to Defra's Chief Scientific Adviser, the UK Chief Medical Officer, and the UK Chief Planner.

Dr Imogen Heard, BSc (Hons) MSc PhD

Dr Heard is an Associate of AQC with over 12 years' experience in the field of air quality. She has been involved in numerous development projects including road schemes, energy from waste facilities, urban extensions and energy centres. These have included the use of ADMS-5 and ADMS-Roads dispersion models to study the impacts of a variety of pollutants, including nitrogen dioxide, PM₁₀ and PM_{2.5}, and the preparation of air quality assessment reports and air quality chapters for Environmental Statements. She also has experience in undertaking construction dust risk assessments, Air Quality Neutral assessments and human health risk assessments, as well as in preparing local authority reports. Prior to joining AQC she worked as a scientist in the Atmospheric Dispersion and Air Quality area at the UK Met Office for four years, modelling the dispersion of a range of pollutants over varying spatial and temporal scales.

A2 Modelling Methodology

Model Inputs

- A2.1 Predictions have been carried out using the ADMS-Roads dispersion model (v5.1). The model requires the user to provide various input data, including emissions from each section of road and the road characteristics (including road width). Vehicle emissions have been calculated based on vehicle flow, composition and speed data using the EFT (Version 14.1) published by Defra (Defra, 2026a). Model input parameters are summarised in Table A2-1 and, where considered necessary, discussed further below.

Table A2-1: Summary of Model Inputs

Model Parameter	Value Used
Terrain Effects Modelled?	No
Variable Surface Roughness File Used?	Yes – 12km x 12km Cartesian grid at 50m resolution
Urban Canopy Flow Used?	No
Advanced Street Canyons Modelled?	No
Noise Barriers Modelled?	No
Meteorological Monitoring Site	Monks Wood
Meteorological Data Year	2023
Dispersion Site Surface Roughness Length (m)	N/A (variable surface roughness file used)
Dispersion Site Minimum MO Length (m)	1
Met Site Surface Roughness Length (m)	0.3
Met Site Minimum MO Length (m)	1
Gradients?	No

- A2.2 AADT flows, diurnal flow profiles, speeds, and vehicle fleet composition data have been provided by Huntingdonshire District Council. Traffic speeds have been estimated based on professional judgement, taking account of the road layout, speed limits and the proximity to a junction. The traffic data used in this assessment are summarised in Table A2-2. Diurnal and monthly flow profiles for the traffic have been derived from the national profiles published by DfT (DfT, 2025).

Table A2-2: Summary of Traffic Data used in the Assessment

Road Link	2023		2046 Base		2046 With Local Plan	
	AADT	%HDV	AADT	%HDV	AADT	%HDV
0	10,678	3.6	12,195	3.2	13,155	3.1
1	1,325	4.6	1,517	4.6	1,527	4.5
2	1,325	4.6	1,517	4.6	1,527	4.5
3	13,216	5.3	18,301	4.4	18,805	3.9

4	14,001	7.1	22,086	5.7	22,426	5.3
6	9,428	4.5	9,646	4.0	9,778	4.0
7						
8	1,325	4.6	1,517	4.6	1,527	4.5
9						
10	10,729	0.0	14,121	0.0	18,213	0.0
11						
12	4,414	1.4	9,044	1.0	9,719	0.9
13						
14	10,910	1.7	14,642	1.7	14,586	1.6
15						
16	12,812	1.2	18,799	1.3	19,257	1.3
17						
18	1,933	0.1	2,208	1.3	2,326	1.4
19						
20	1,949	0.6	2,208	1.3	2,330	1.4
21						
22	10,841	1.8	10,250	2.8	12,595	2.3
23						
24	10,910	1.7	14,642	1.7	14,586	1.6
25						
26	9,300	0.0	12,635	0.0	16,684	0.0
27						
28	12,542	3.7	16,637	4.1	18,621	3.0
29						
30	1,420	4.6	2,794	3.7	3,013	2.9
31						
32	22,669	4.9	38,136	5.6	38,725	4.5
33						
34	477	1.3	515	1.2	512	1.2
35	8,675	3.2	13,662	5.4	13,792	3.7
36	21,046	10.3	31,729	9.6	31,744	9.1

38	12,695	8.0	19,282	8.4	19,245	7.8
40	18,003	12.3	22,773	9.8	22,903	9.0
41						
42	19,018	11.1	29,425	10.1	29,448	9.5
43						
44	14,522	11.5	16,844	11.4	16,915	10.6
45						
46	4,171	6.2	6,245	6.0	6,200	5.4
47						
48	6,383	4.0	7,698	4.2	7,653	3.9
49						
50	3,342	3.6	4,101	3.5	4,074	3.4
51						
52	19,726	11.7	22,820	9.8	22,973	8.6
53						
54	20,515	11.5	23,285	9.7	23,436	8.5
55						
56	29,456	11.4	36,094	10.5	36,269	9.6
57						
58	7,383	19.0	11,838	15.2	11,969	14.8
59						
60	5,048	0.6	5,638	0.8	5,614	0.8
61						
62	14,038	0.3	16,833	0.4	17,692	0.4
63						
64	10,729	0.0	14,121	0.0	18,213	0.0
65						
66	12,812	1.2	18,799	1.3	19,257	1.3
67						
68	5,365	0.0	7,061	0.0	9,106	0.0
69	12,542	3.7	16,637	4.1	18,621	3.0

70	1,949	0.6	2,208	1.3	2,330	1.4
72	10,678	3.6	12,195	3.2	13,155	3.1
73						
74	9,428	4.5	9,646	4.0	9,778	4.0
75						
76	9,428	4.5	9,646	4.0	9,778	4.0
77						
78	12,542	3.7	16,637	4.1	18,621	3.0
79						
80	12,542	3.7	16,637	4.1	18,621	3.0
81						
82	12,542	3.7	16,637	4.1	18,621	3.0
83						
84	12,542	3.7	16,637	4.1	18,621	3.0
85						
86	9,428	4.5	9,646	4.0	9,778	4.0
87						
88	9,428	4.5	9,646	4.0	9,778	4.0
89						
90	9,428	4.5	9,646	4.0	9,778	4.0
91						
92	9,428	4.5	9,646	4.0	9,778	4.0
93						
94	9,428	4.5	9,646	4.0	9,778	4.0
95						
96	9,428	4.5	9,646	4.0	9,778	4.0
97						
98	9,428	4.5	9,646	4.0	9,778	4.0
99						
100	9,428	4.5	9,646	4.0	9,778	4.0
101	9,428	4.5	9,646	4.0	9,778	4.0
102	9,428	4.5	9,646	4.0	9,778	4.0

104	14,001	7.1	22,086	5.7	22,426	5.3
106	1,325	4.6	1,517	4.6	1,527	4.5
107						
108	1,325	4.6	1,517	4.6	1,527	4.5
109						
110	1,325	4.6	1,517	4.6	1,527	4.5
111						
112	13,003	4.4	11,405	5.5	11,579	5.4
113						
114	13,003	4.4	11,405	5.5	11,579	5.4
115						
116	13,003	4.4	11,405	5.5	11,579	5.4
117						
118	13,003	4.4	11,405	5.5	11,579	5.4
119						
120	13,003	4.4	11,405	5.5	11,579	5.4
121						
122	10,263	11.5	11,643	9.7	11,718	8.5
123						
124	24,391	9.4	35,835	9.0	35,831	8.5
125						
126	7,273	2.9	10,880	5.9	10,789	3.8
127						
128	8,675	3.2	13,662	5.4	13,792	3.7
129						
130	8,675	1.5	13,662	2.3	13,792	1.7
131						
132	7,273	2.9	10,880	5.9	10,789	3.8
133						
134	7,273	2.9	10,880	5.9	10,789	3.8
135	7,273	2.9	10,880	5.9	10,789	3.8

136	7,273	2.9	10,880	5.9	10,789	3.8
137	7,273	2.9	10,880	5.9	10,789	3.8
138	7,273	2.9	10,880	5.9	10,789	3.8
139	7,273	2.9	10,880	5.9	10,789	3.8
140	7,273	2.9	10,880	5.9	10,789	3.8
141	5,048	0.4	5,638	0.4	5,614	0.4
142	477	1.3	515	1.2	512	1.2
143	477	1.3	515	1.2	512	1.2

A2.3 Figure A2-1 to Figure A2-6 show the road network included within the model, along with the speed at which each link was modelled.



Figure A2-1: Modelled Road Network & Speed – Nene Washes (south)

Imagery ©2026 Airbus, Landsat / Copernicus, Maxar Technologies.

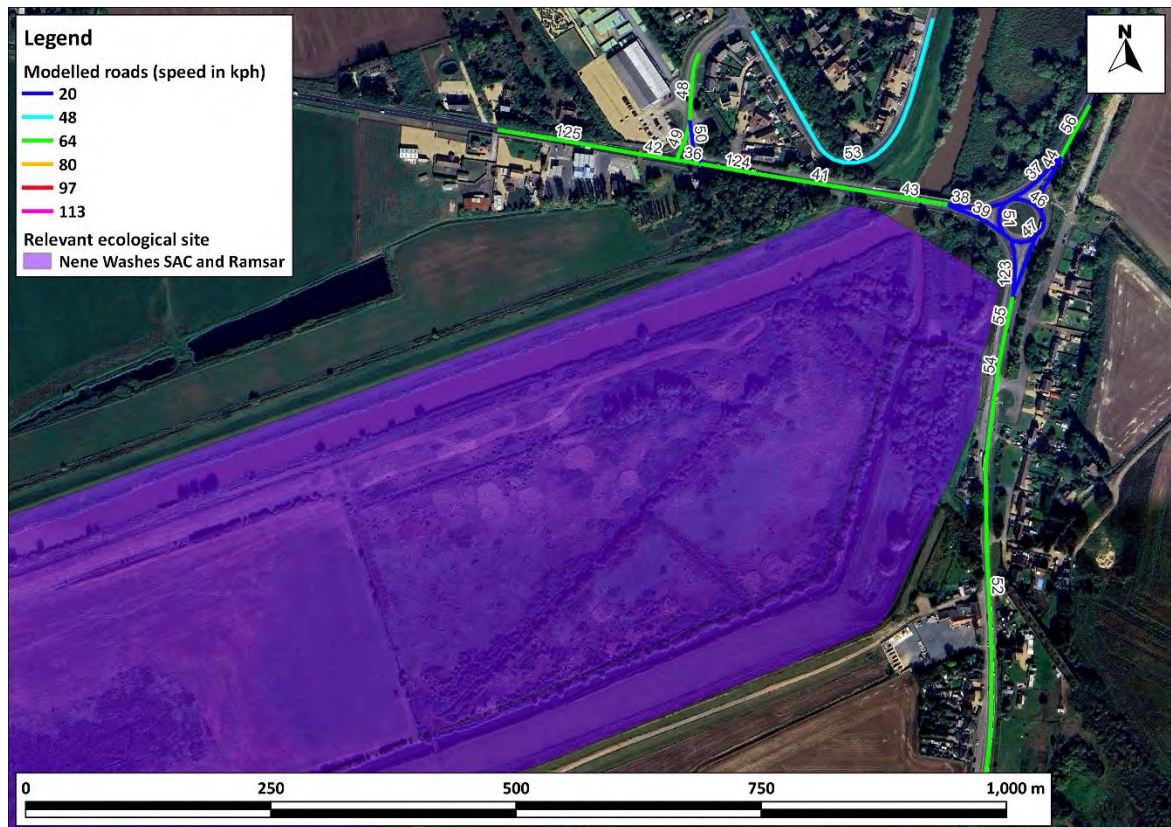


Figure A2-2: Modelled Road Network & Speed – Nene Washes (north)

Imagery ©2026 Airbus, Landsat / Copernicus, Maxar Technologies.



Figure A2-3: Modelled Road Network & Speed – Ouse Washes (south)

Imagery ©2026 Airbus, Landsat / Copernicus, Maxar Technologies.

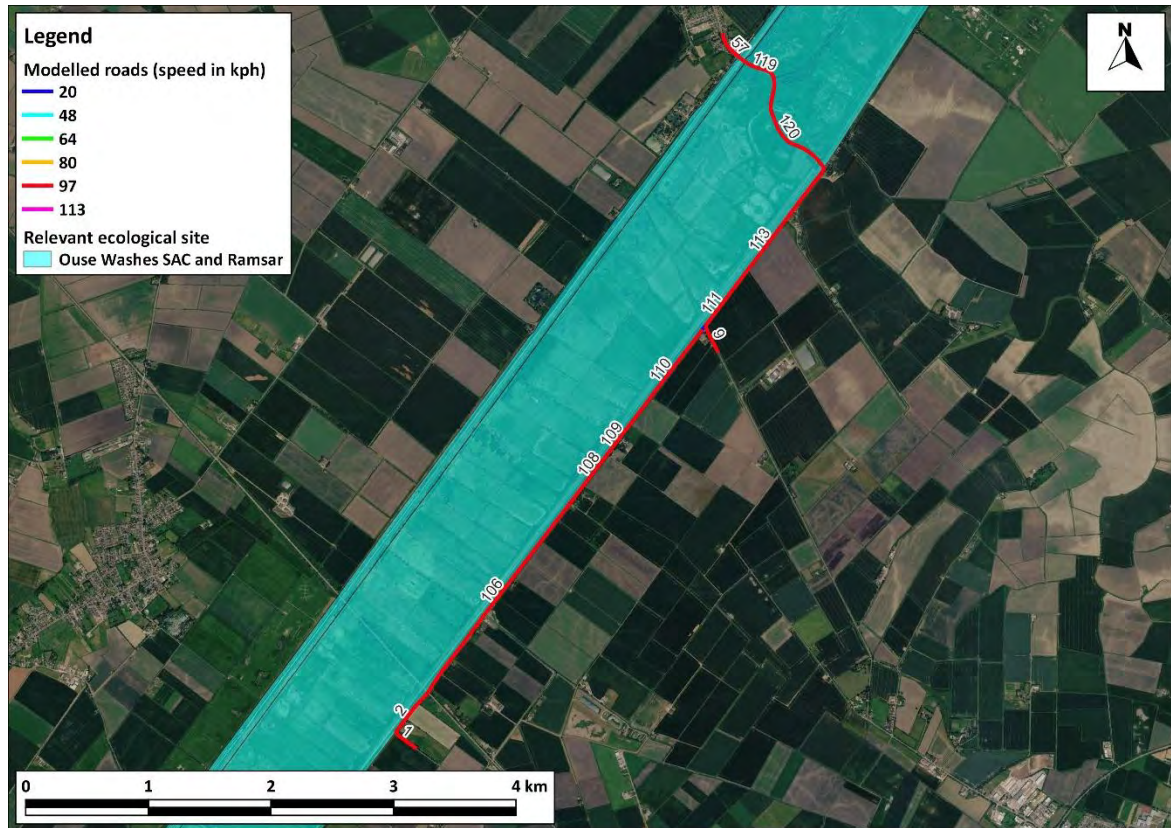


Figure A2-4: Modelled Road Network & Speed – Ouse Washes (mid)

Imagery ©2026 Airbus, Landsat / Copernicus, Maxar Technologies.



Figure A2-5: Modelled Road Network & Speed – Ouse Washes (north)

Imagery ©2026 Airbus, Landsat / Copernicus, Maxar Technologies.

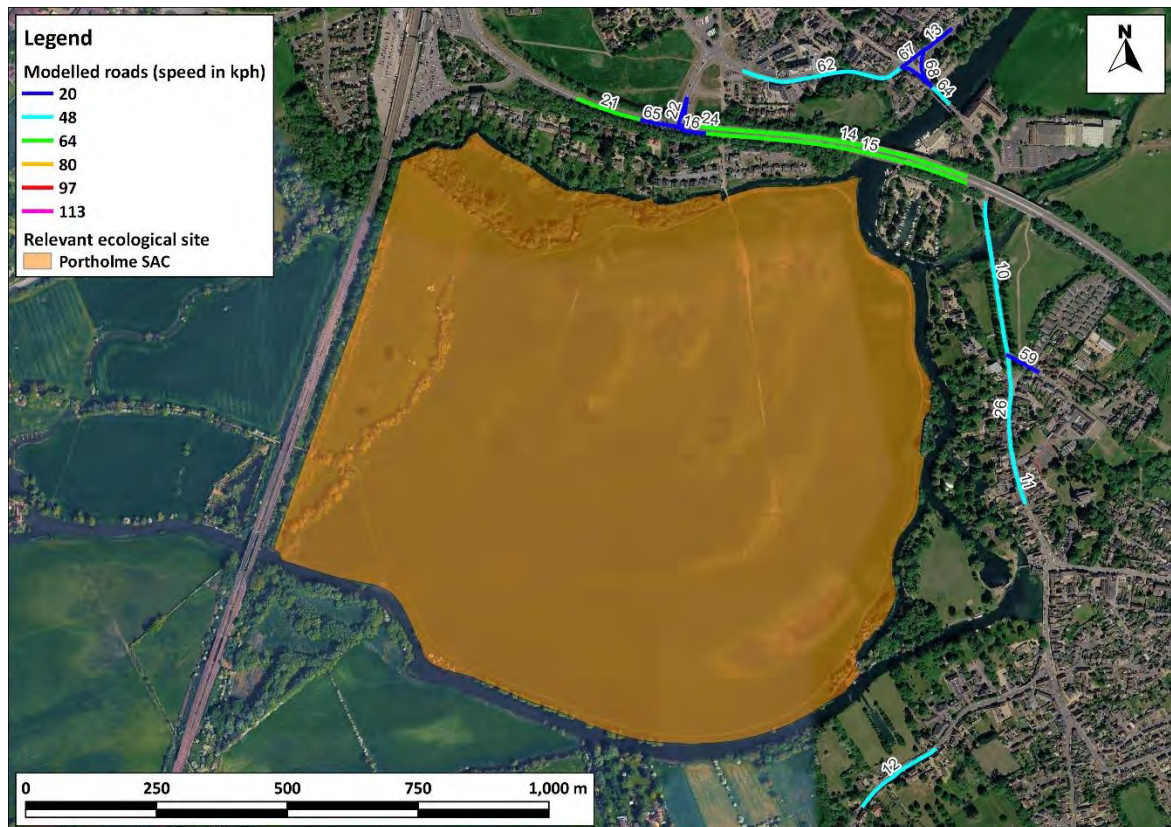


Figure A2-6: Modelled Road Network & Speed – Portholme SAC

Imagery ©2026 Airbus, Landsat / Copernicus, Maxar Technologies.

- A2.4 Hourly sequential meteorological data in sectors of 10 degrees from Monks Wood for 2023 have been used in the model. The Monks Wood meteorological monitoring station is located at C.E.H. Monks Wood, approximately 7 km to the northwest of Huntingdon. It is the nearest monitoring station representative of meteorological conditions at the designated sites. Both the designated sites and the Monks Wood meteorological monitoring station will be influenced by the effects of inland meteorology over flat-lying topography. A wind rose for the site for 2023 is provided in Figure A2-7. The station is operated by the UK Met Office. Raw data were provided by the Met Office and processed by AQC for use in ADMS.

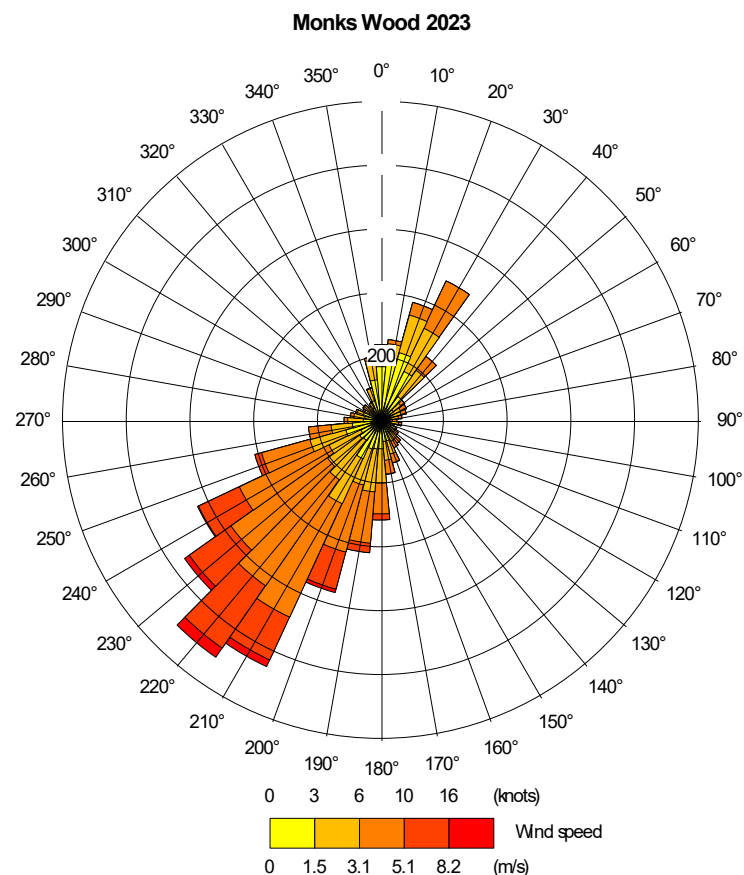


Figure A2-7: Wind Rose

Model Verification

A2.5 Evidence collected over many years has shown that, in most urban areas, dispersion modelling relying upon Defra's EFT has tended to systematically under-predict roadside nitrogen dioxide concentrations. To account for this, it is necessary to adjust the model against local measurements. The model has been run to predict annual mean nitrogen dioxide concentrations during 2023 at the S9 (Fenland District), Earith 1 (Huntingdonshire District), and PFH (Huntingdonshire District) monitoring sites. These sites have been selected because traffic data were available for the adjacent roads. Concentrations have been modelled at the heights of the monitors. The designated sites considered in this assessment are spread out from one another, but there is one monitoring site close to each designated site. For this reason, a separate adjustment factor has been calculated using each monitoring site, for application to roads within 200 m of the nearest designated habitat.

Nitrogen Dioxide

A2.6 Most nitrogen dioxide (NO_2) is produced in the atmosphere by reaction of nitric oxide (NO) with ozone. It is therefore most appropriate to verify the model in terms of primary pollutant emissions of nitrogen oxides ($\text{NO}_x = \text{NO} + \text{NO}_2$). The model output of road- NO_x (i.e. the component of total NO_x coming from road traffic) has been compared with the 'measured' road- NO_x . Measured road- NO_x has been calculated from the measured NO_2 concentration and the predicted background NO_2 concentration using the NO_x from NO_2 calculator (Version 9.1) available on the Defra LAQM Support website (Defra, 2026a).

- A2.7 An adjustment factor has been determined as the ratio of the 'measured' road contribution and the model derived road contribution. This factor has then been applied to the modelled road-NO_x concentration for each receptor to provide adjusted modelled road-NO_x concentrations. The total nitrogen dioxide concentrations have then been determined by combining the adjusted modelled road-NO_x concentrations with the predicted background NO₂ concentration within the NO_x to NO₂ calculator (Defra, 2026a).

Nene Washes SAC and Ramsar Site

- A2.8 The background annual mean nitrogen dioxide concentration used in the model verification was 6.84 µg/m³, having been derived from the national maps provided by Defra for Local Air Quality Management (Defra, 2026a).
- A2.9 AADT flows, and the proportions of HDVs, for the road adjacent to the monitoring site, have been taken to be the same as those on link 125 in Table A2-2. The road and verification site are shown in Figure A2-8.



Figure A2-8: Modelled Road Network & Speed - Nene Washes Verification

Imagery ©2026 Airbus, Landsat / Copernicus, Maxar Technologies.

- A2.10 The data used to calculate the adjustment factor are provided below:
- Measured NO₂ : 16.8 µg/m³
 - Background NO₂ : 6.84 µg/m³
 - 'Measured' road-NO_x (using NO_x from NO₂ calculator): 21.5 µg/m³
 - Modelled road-NO_x = 8.37 µg/m³

- Road-NO_x adjustment factor: $21.5/8.37 = 2.562^9$

A2.11 The factor implies that the unadjusted model is under-predicting the road-NO_x contribution. This is a common experience with this and most other road traffic emissions dispersion models.

Ouse Washes SAC and Ramsar Site

A2.12 The road network and verification site are shown in Figure A2-9.

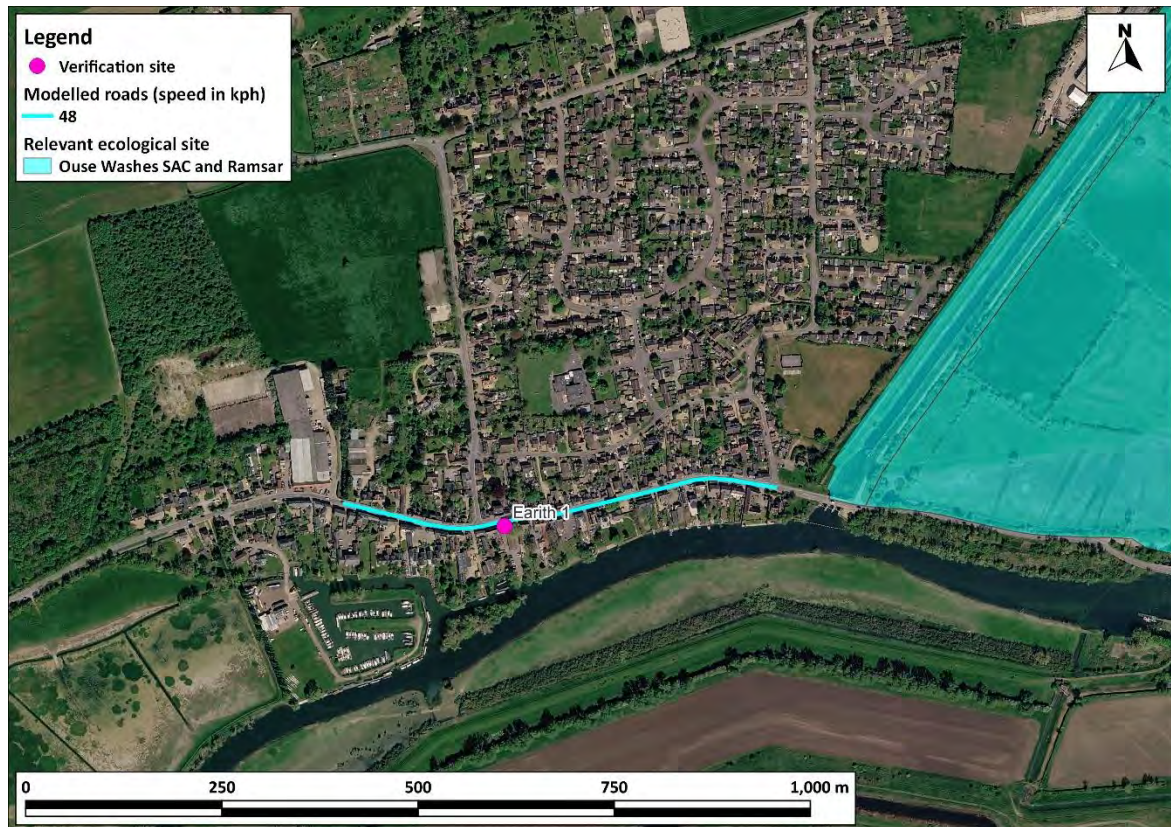


Figure A2-9: Modelled Road Network & Speed - Ouse Washes Verification

Imagery ©2026 Airbus, Landsat / Copernicus, Maxar Technologies.

A2.13 The data used to calculate the adjustment factor are provided below:

- Measured NO₂ : 10.2 µg/m³
- Background NO₂ : 6.72 µg/m³
- 'Measured' road-NO_x (using NO_x from NO₂ calculator): 7.14 µg/m³
- Modelled road-NO_x = 7.64 µg/m³
- Road-NO_x adjustment factor: $7.14/7.64 = 0.934^{10}$

A2.14 As the factor is less than one, no adjustment has been applied to the model. This will provide a worst-case assessment.

⁹ Based on un-rounded values.

¹⁰ Based on un-rounded values.

Portholme SAC

A2.15 The road network and verification site are shown in Figure A2-10.



Figure A2-10: Modelled Road Network & Speed – Portholme SAC Verification

Imagery ©2026 Airbus, Landsat / Copernicus, Maxar Technologies.

A2.16 The data used to calculate the adjustment factor are provided below:

- Measured NO₂ : 25.0 µg/m³
- Background NO₂ : 10.3 µg/m³
- 'Measured' road-NO_x (using NO_x from NO₂ calculator): 33.9 µg/m³
- Modelled road-NO_x = 8.54 µg/m³
- Road-NO_x adjustment factor: $33.9/8.54 = \mathbf{3.970}^{11}$

A2.17 The factor implies that the unadjusted model is under-predicting the road-NO_x contribution. Experience elsewhere has shown that this type of modelling is much more likely to under-predict road-NO_x alongside slow-flowing 'urban' roads (such as Castle Moat Road, which runs alongside monitor PFH) than beside more open roads (such as the A1307, which runs past the SAC). An adjustment factor of 3.970 has been applied to emissions from all the roads around Portholme SAC, and this is expected to have over-predicted the impacts, making the assessment worst-case.

¹¹ Based on un-rounded values.

NH₃

- A2.18 Development of the CREAM emissions models (AQC, 2020; 2025) included verification of concentrations predicted using the ADMS-Roads dispersion model and measured traffic data against ambient measurements from the most detailed network of roadside monitoring sites which has ever been run in the UK. No further adjustment to the model predictions is considered appropriate.

Post-processing

- A2.19 The model predicts road-NO_x concentrations at each receptor location. These concentrations have been adjusted using the adjustment factor set out above, which, along with the background NO₂, has been processed through the NO_x to NO₂ calculator available on the Defra LAQM Support website (Defra, 2026a). The traffic mix within the calculator has been set to "All non-urban UK traffic" for Nene Washes SAC and Ramsar site and Ouse Washes SAC and Ramsar site, and to "All UK traffic" for Portholme SAC, which are considered suitable for the study areas. The calculator predicts the component of NO₂ based on the adjusted road-NO_x and the background NO₂.

Deposition Rates

- A2.20 Deposition of NO₂ has not been included within the dispersion model because this is calculated from NO_x outside of the model. Instead, deposition has been calculated from the predicted ambient concentrations using the deposition velocities set out in Table A2-3. Deposition velocities refer to a height above ground, typically 1 or 2 m, although in practice the precise height makes little difference and here they have been applied to concentrations predicted at a height of 0 m above ground. The velocities are applied simply by multiplying a concentration (µg/m³) by the velocity (m/s) to predict a deposition flux (µg/m²/s) and then scaling by time and area to represent kg/ha/yr of the nitrogen component of the molecule. The deposition velocity for NH₃ has been included within the dispersion model to allow for the calculation of depletion. NH₃ deposits much more rapidly than NO₂, meaning that while it is important to include depletion for NH₃, it is relatively trivial for NO₂.

Table A2-3: Deposition Velocities Used in This Assessment

Pollutant	Deposition Velocity (m/s)	Reference
Nitrogen Dioxide	0.0015 m/s (Grassland); 0.003 m/s (Forest)	AQTAG06 (AQTAG, 2011)
NH ₃	0.02 m/s (Grassland); 0.03 m/s (Forest)	AQTAG06 (AQTAG, 2011)

- A2.21 Wet deposition of the emitted pollutants close to the emission source will be restricted to wash-out, or below cloud scavenging. For this to occur, rain droplets must come into contact with the gas molecules before they hit the ground. Falling raindrops displace the air around them, effectively pushing gasses away. AQTAG06 guidance (AQTAG, 2011) is that the wet deposition of sulphur dioxide, nitrogen dioxide and NH₃ is not significant within a short range. It has thus not been included.
- A2.22 Deposition may have an acidifying effect through the release of acid protons during chemical transformation in the soil or biota. Thus, even alkaline gases such as NH₃ can have an acidifying effect. The acidity CLOs are expressed as equivalents ('eq'), referring to the molar equivalent of potential acidity. This is calculated from the mass (in g) of the deposited element, taking account of both its atomic mass and its valency. For example, the acidifying potential (in eq) of both ammonium (NH₄⁺) and nitrate (NO₃⁻) is 1/14 times the deposited mass in grammes (with 14 being the atomic mass of nitrogen), while for sulphate (SO₄²⁻) it is 2/32 (with 32 being the atomic mass of sulphur). The species

included in the calculation of acid deposition, and their calculated acidifying potentials, are set out in Table A2-4.

Table A2-4: Species Included in Acid Deposition Calculations

Pollutant	Calculation (kg deposition to keq)
N (from deposited NO ₂ , NH ₃)	0.071

A3 Retardation

- A3.1 Nitrogen deposition in the future will be less than in 2023. This is because of natural turnover of the vehicle fleet as well the response to policies to reduce emissions from many sectors across Europe. Natural England sometimes requests that the degree of 'retardation' to ongoing reductions in nitrogen deposition should be calculated, and that this should be done assuming a linear trajectory (in this case between 2023 and 2046) which also continues at the same rate afterwards¹². This calculation has focused on the transect within each site with the highest PC in-combination with other projects and plans.
- A3.2 As explained in Paragraph 3.12, background deposition has been assumed to change between 2023 and 2046 based on JNCC's Nitrogen Futures Business-as-Usual modelling, but only allowing 7 years of change because Nitrogen Futures did not make predictions beyond 2030. The total reductions to 2046 are therefore highly likely to have been under-predicted, which makes the 'retardation' calculation particularly worst-case.
- A3.3 The first step of the 'retardation' calculation is to show the magnitude of improvement which is forecast between 2023 Base and the 2046 Zero Growth scenario, and between 2023 Base and the 2046 With Local Plan scenario. These improvements are shown in Table A3-1, expressed both as the 23-year total and as the change per year. For example, deposition at 2 m from the road along Transect E in the Nene Washes SAC and Ramsar site is expected to be 3.7 kgN/ha/yr lower in 2046 than in 2023 if there is no increase in traffic over this 23-year period. With the Local Plan and all other traffic growth, deposition will be 1.6 kgN/ha/yr lower than in 2023.

Table A3-1: Reduction in Nitrogen Deposition between 2023 and 2046 the Worst-case Transect in Each Designated Site, in kgN/ha/yr^a

Dist from Road (m)	Change from 2023 Base to '2046 Zero Growth'		Change from 2023 to '2046 With Local Plan'	
	over 23 years	per year	over 23 years	per year
Nene Washes SAC and Ramsar (Transect E)				
2	-3.7	-0.16	-1.6	-0.07
3	-3.5	-0.15	-1.6	-0.07
5	-3.2	-0.14	-1.6	-0.07
9	-2.8	-0.12	-1.6	-0.07
17	-2.4	-0.10	-1.5	-0.06
33	-1.9	-0.08	-1.4	-0.06
65	-1.5	-0.06	-1.2	-0.05
129	-1.2	-0.05	-1.0	-0.05

¹² In practice, the first of these assumptions is invalid and the second one is also unlikely to be true, however this is the only robust basis to provide this calculation which is sometimes required by Natural England.

200	-1.0	-0.04	-0.9	-0.04
2	-2.5	-0.11	0.1	0.005
3	-2.4	-0.10	0.1	0.003
5	-2.2	-0.09	0.0	0.000
9	-1.8	-0.08	-0.1	-0.005
17	-1.5	-0.06	-0.2	-0.010
33	-1.1	-0.05	-0.3	-0.015
65	-0.8	-0.03	-0.4	-0.017
129	-0.5	-0.02	-0.4	-0.016
200	-2.4	-0.11	-1.6	-0.070
Portholme SAC (Transect A)				
44	-3.1	-0.13	-2.6	-0.11
65	-2.7	-0.12	-2.3	-0.10
129	-2.0	-0.09	-1.9	-0.08
200	-1.7	-0.07	-1.6	-0.07

^a The majority of values are shown as negatives since they are reductions over time.

A3.4 The next step is to divide the PC by the 'per year' improvements to the 2046 Zero Growth scenario. These results are shown in Table A3-2. At Transect E in the Nene Washes SAC and Ramsar site, the Local Plan alone will retard the improvements by between 0.17 and 1.09 years, while the Local Plan in-combination, will retard the improvements by between 1.5 and 13 years. At Transect D in the Ouse Washes SAC and Ramsar site, the Local Plan alone will retard the improvements by between 0.15 and 0.53 years, while the Local Plan in-combination, will retard the improvements by between 7.2 and 24 years. At Transect A in the Portholme SAC, the Local Plan alone will retard the improvements by between 0.16 and 0.27 years, while the Local Plan in-combination, will retard the improvements by between 1.3 and 3.5 years.

A3.5 It should be stressed that this calculation is highly precautionary. While this is the only approach to using JNCC's forecasts with which Natural England currently agrees, it assumes that the UK will break a raft of long-standing legal commitments to reduce emissions and environmental impacts in the future. In addition to this, regarding the years after 2046, which are invoked by the concept of a 'delay' while these years have not been modelled, it is reasonable to expect a significant volume of electric vehicles in the fleet by this time, which have no local emissions of NO_x or NH₃. This means that the years of delay statistics are likely to have been significantly overpredicted.

Table A3-2: Years Delay to Reductions in Nitrogen Deposition at the Worst-case Transect in Each Designated Site, in kgN/ha/yr

Dist from Road (m)	Local Plan Alone		Local Plan In Combination	
	PC (kgN/ha/yr)	Years Delay ^a	PC (kgN/ha/yr)	Years Delay ^a
Nene Washes SAC and Ramsar (Transect E)				
2	-0.17	1.09	2.07	13.0
3	-0.16	1.03	1.89	12.5
5	-0.13	0.96	1.62	11.6
9	-0.10	0.85	1.26	10.3
17	-0.07	0.69	0.87	8.5
33	-0.04	0.51	0.52	6.3
65	-0.02	0.34	0.27	4.2
129	-0.01	0.22	0.12	2.4
200	-0.01	0.17	0.07	1.5
Ouse Washes SAC and Ramsar (Transect D)				
2	0.059	0.53	2.66	24.0
3	0.053	0.51	2.47	23.7
5	0.048	0.51	2.16	23.0
9	0.039	0.49	1.73	21.7
17	0.026	0.42	1.22	19.3
33	0.017	0.37	0.74	15.8
65	0.008	0.24	0.38	11.4
129	0.004	0.15	0.17	7.2
Portholme SAC (Transect A)				
44	0.036	0.27	0.46	3.5
65	0.029	0.25	0.33	2.8
129	0.018	0.20	0.16	1.8
200	0.012	0.16	0.09	1.3

^a i.e. the PC divided by the 'per year' reductions to the Future Zero Growth scenario.



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© Lepus Consulting Ltd

Eagle Tower

Montpellier Drive

Cheltenham

GL50 1TA

T: 01242 525222

E: enquiries@lepusconsulting.com

www.lepusconsulting.com

CHEL TENHAM



Lepus Consulting
1 Bath Street
Cheltenham
Gloucestershire GL50 1YE

t: 01242 525222
w: www.lepusconsulting.com
e: enquiries@lepusconsulting.com