Milton Keynes City Plan
Habitats Regulations Assessment

Regulation 19 Consultation

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LEPUS CONSULTING
LANDSCAPE, ECOLOGY, PLANNING & URBAN SUSTAINABILITY

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Acronyms & Abbreviations

AA	Appropriate Assessment
AADT	Annual Average Daily Traffic
ALS	Abstraction License Strategy
APIS	Air Pollution Information System
BTO	British Trust for Ornithology
CAMS	Catchment Abstraction Strategy
CIEEM	Chartered Institute of Ecology and Environmental Management
DEFRA	Department for Environment, Food & Rural Affairs
DTA	David Tyldesley and Associates
EA	Environment Agency
FLL	Functionally Linked Land
GIS	Geographic Information System
HoF	Hands off Flow
HRA	Habitats Regulations Assessment
IAQM	Institute of Air Quality Management
IRZ	Impact Risk Zone
IWMS	Integrated Water Management Strategy
JNCC	Joint Nature Conservation Committee
LPA	Local Planning Authority
LSE	Likely Significant Effect
MHCLG	Ministry of Housing, Communities & Local Government
MKCC	Milton Keynes City Council
MKCP	Milton Keynes City Plan
NE	Natural England
NNR	National Nature Reserve
NOx	Nitrous 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
PRoW	Public Right of Way
RBMP	River Basin Management Plan
SAC	Special Area of Conservation
SIP	Site Improvement Plan
SPA	Special Protection Area

SSSI	Site of Special Scientific Interest
SWMC	Surface Water Management Catchment
SWMP	Surface Water Management Plan
UK	United Kingdom
WeBS	Wetland Bird Survey
WFA	Whole Feature Assessment
WFD	Water Framework Directive
WRC	Water Recycling Centers
WRMP	Water Resource Management Plan
WRZ	Water Resource Zone
WFA	Whole Feature Assessments
ZoI	Zone of Influence

Executive summary

E1. Lepus Consulting has been appointed, on behalf of Milton Keynes City Council (MKCC), to undertake a Habitats Regulations Assessment (HRA) of the Milton Keynes City Plan (MKCP) 2050. This HRA report has been undertaken in compliance with the Habitats Regulations 2017 (as amended)[1].

E2. HRA is undertaken in a number of stages. The first stage of the process is the screening stage (Stage 1), which aims to identify whether there are any aspects of a plan which may lead to a Likely Significant Effect (LSEs) at a European site, either alone or in-combination with other plans or projects. Stage 2 of the process, known as the Appropriate Assessment (AA), is undertaken where screening concludes LSEs. Where an AA concludes adverse impacts on site integrity cannot be mitigated, the next stage in the process is the consideration of alternative solutions (Stage 3). Where no alternative solutions are available it is next necessary to proceed to Stage 4 of the process, where consideration is given to imperative reasons of overriding public interest and securing compensatory measures.

E3. This report provides the outputs of the screening stage (Stage 1 of the HRA process) and the AA (Stage 2 of the HRA process).

E4. The MKCP is not directly connected with, or necessary to, the management of any European site. Consideration was, therefore, given to potential links or causal connections between the effects of the MKCP and European sites to identify LSEs. This exercise was undertaken through the collation of information for European sites likely to be affected by the MKCP through application of a 'source-pathway-receptor' model. The screening process concluded that, in-combination with other plans and projects, the MKCP had the potential for the following LSEs upon European sites:

- **Urbanisation impacts upon areas of FLL** – Upper Nene Valley Gravel Pits SPA and Upper Nene Valley Gravel Pits Ramsar.

E5. The MKCP was therefore screened into the HRA process, and an AA was undertaken.

E6. The AA focused on an assessment of development impacts upon areas of FLL within the Plan area for Lapwing and Golden Plover which may be associated with the Upper Nene Valley Gravel Pits SPA and Upper Nene Valley Gravel Pits Ramsar. Taking into consideration the mitigation provisions required through Policy CEA10, the AA concluded that there would be no adverse impacts on the integrity of either the Upper Nene Valley Gravel Pits SPA and Upper Nene Valley Gravel Pits Ramsar as a result of the MKCP, either alone or in-combination.

E7. MKCC, as the Competent Authority, has responsibility to make the Integrity Test, which can be undertaken in light of the conclusions set out in this report. MKCC must 'have regard' to Natural England's representations under the provisions of Habitats

[1] The Conservation of Habitats and Species Regulations 2017 SI No. 2017/1012, TSO (The Stationery Office), London. Available at: https://www.legislation.gov.uk/uksi/2017/1012/contents [Date accessed: 01/07/25] as amended by The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. Available at: https://www.legislation.gov.uk/ukdsi/2019/9780111176573. [Date accessed: 01/07/25]

Regulations prior to making a final decision as to whether they will ‘adopt’ the conclusions set out within this report as their own

1 Introduction

1.1 A new Local Plan for Milton Keynes

1.1.1 Milton Keynes City Council (MKCC) is preparing a new local plan, known as the Milton Keynes City Plan 2050 (MKCP), to replace the current adopted Local Plan for Milton Keynes (Plan:MK)[2]. The MKCP will assist in delivering the vision set out in the Milton Keynes Strategy for 2050 and guide decision making for how, where and when development can come forward in the city for the period up to 2050.

1.1.2 The MKCP will cover the entirety of the city council area, which is hereafter referred to as the 'Plan area' and is illustrated in **Figure 1.1**. The Plan area includes the main city area; the suburbs of Wolverton, Newport Pagnell, Bletchley and Woburn Sands; and more rural areas to the north, including Olney.

1.2 Purpose of report

1.2.1 Lepus Consulting has been commissioned by MKCC to carry out a Habitats Regulations Assessment (HRA) to support the preparation of the proposed submission draft of the MKCP[3]. The proposed submission draft is also known as the Regulation 19 version of the plan because Regulation 19 of the Local Plan Regulations 2012[4] requires that local plans are subject to particular stages of consultation.

1.3 Habitats Regulations Assessment

1.3.1 The application of HRA to land use plans is a requirement of the Conservation of Habitats and Species Regulations 2017 (as amended)[5]. HRA applies to plans and projects, including all Local Development Documents in England and Wales.

1.3.2 Where a plan is likely to have a significant effect on a European site (either alone, or 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 AA of the implications for the site in view of that site's conservation objectives. These tests are referred to collectively as a Habitats Regulations Assessment (HRA).

1.3.3 The Habitats Regulations provide a definition of a European site at Regulation 8. These sites include Special Areas of Conservation (SACs), Sites of Community Importance, Special Protection Areas (SPAs) 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 European sites[6]:

- A potential SPA (pSPA);

[2] Milton Keynes City Council (2019) Plan:MK 2016-2031 Adopted March 2019. Available at: https://www.milton-keynes.gov.uk/sites/default/files/2022-05/PlanMK%20Adoption%20Version%20%28March%202019%29.pdf [Date accessed: 16/07/25]

[3] Draft Milton Keynes City Plan 2025 v2.

[4] The Town and Country (Local Planning) (England) Regulations 2012 Statutory Instrument 767.

[5] The Conservation of Habitats and Species Regulations 2017 SI No. 2017/1012, TSO (The Stationery Office), London. Available at: https://www.legislation.gov.uk/uksi/2017/1012/contents [Date accessed: 01/07/25].

[6] Ministry of Housing, Communities and Government (December 2024) National Planning Policy Framework.

- A possible/proposed SAC (pSAC);
- Listed and proposed Ramsar Sites (wetlands of international importance); and,
- In England, sites identified or required as compensation measures for adverse effects on statutory European sites, pSPAs, pSACs and listed or proposed Ramsar sites.

1.3.4 This HRA screening report has been prepared using the following guidance:

- Planning Practice Guidance: Appropriate Assessment[7]; and,
- The Habitat Regulations Assessment Handbook - David Tyldesley and Associates (referred to hereafter as the DTA Handbook), 2013 (in particular Part F: 'Practical Guidance for the Assessment of Plans under the Regulations')[8].

1.4 Previous HRA work

1.4.1 Plan:MK was adopted by MKCC in March 2019 and sets out a development strategy and planning policies. It was supported by an HRA[9] which considered the potential for LSEs upon the Upper Nene Valley Gravel Pits SPA and the Upper Nene Valley Gravel Pits Ramsar site. The Plan:MK HRA report determined that there would be no LSEs upon any European site either alone, or in-combination, due to Plan:MK. Therefore, no further assessment was undertaken.

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

[8] Tyldesley, D., and Chapman, C. (2013) The Habitats Regulations Assessment Handbook (June) (2024) edition UK: DTA Publications Limited.

[9] AECOM (2017) Milton Keynes Local Plan (Plan:MK) Habitats Regulations Assessment. Available at: https://www.milton-keynes.gov.uk/sites/default/files/2022-01/Habitats%20Regulations%20Assessment%20of%20Milton%20Keynes%20Local%20Plan%20FINAL%20MKSUB007.pdf [Date accessed: 16/07/25]

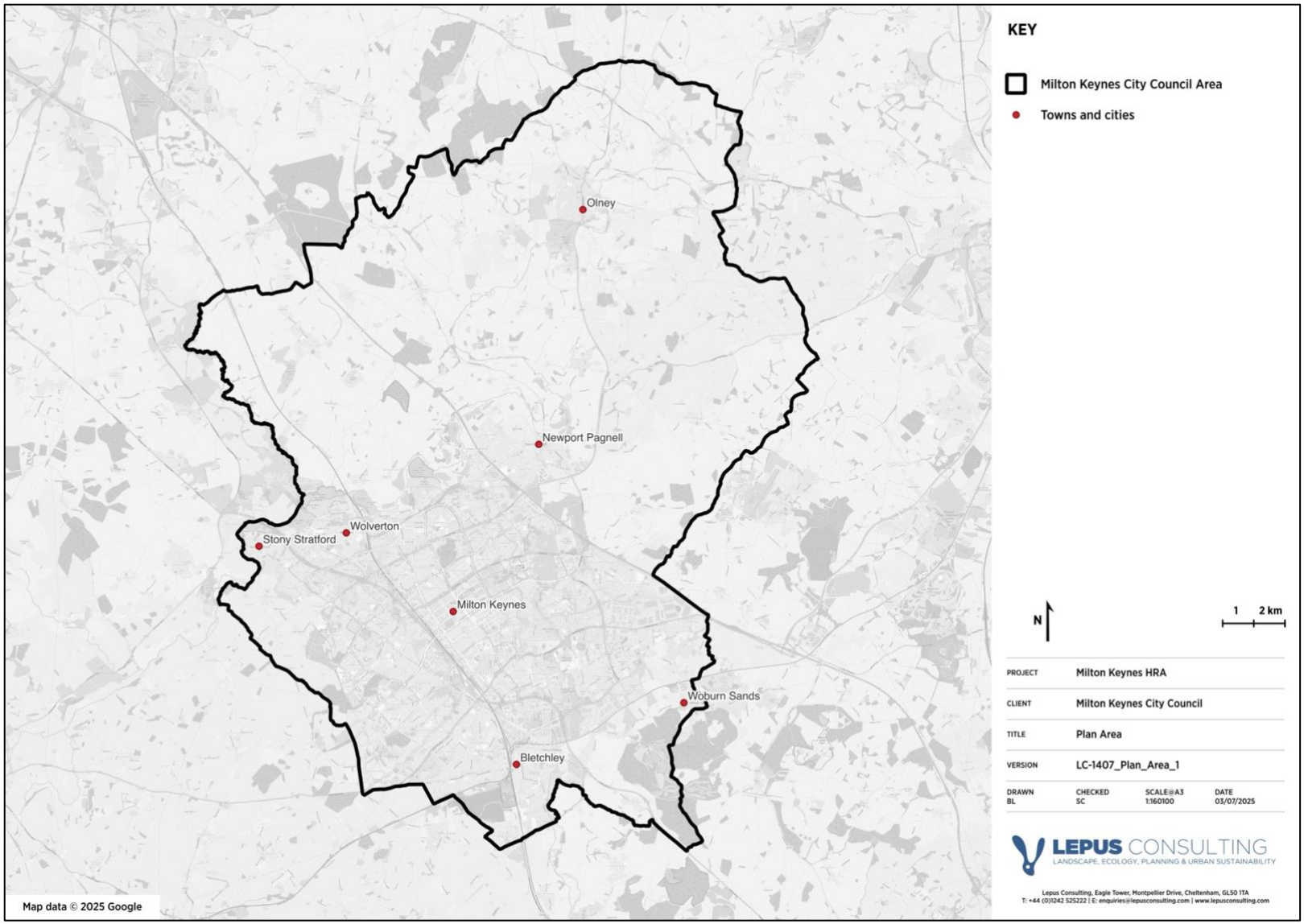

Figure 1.1: *MKCC Plan Area*

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, as outlined in the DTA Handbook, is illustrated in **Figure 2.1.**

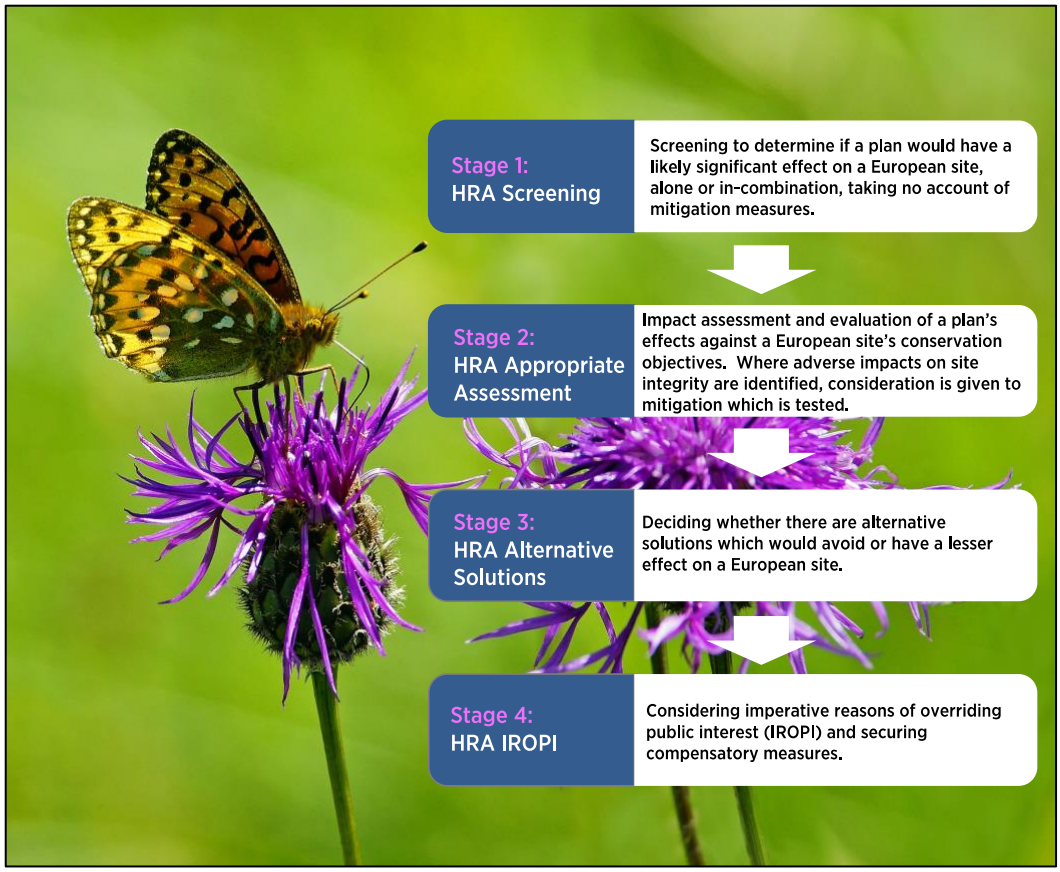

Figure 2.1: *Stages in the Habitats Regulations Assessment process*[10]

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 a local plan which may lead to an LSE at a European site, either alone, or in-combination with other plans or projects.

[10] Tyldesley, D., and Chapman, C. (2013) The Habitats Regulations Assessment Handbook (December) (2019) edition UK: DTA Publications Limited.

2.2.2 Where elements of the MKCP 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 HRA process. Where LSEs are identified, these elements of the MKCP are screened in for further consideration in an AA. The screening process uses a number of evaluation codes to summarise whether 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 and reasoning categories from Part F of the DTA Handbook*[11]

Screening evaluation and reasoning categories from Chapter F of the Habitats Regulations Assessment Handbook (DTA Publications, 2013):	Screen in / Screen out
A. General statements of policy / general aspirations.	Screen Out
B. Policies listing general criteria for testing the acceptability / sustainability of proposals.	Screen Out
C. Proposal referred to but not proposed by the Plan.	Screen Out
D. General plan-wide environmental protection / designated site safeguarding / threshold policies.	Screen Out
E. Policies or proposals that steer change in such a way as to protect European sites from adverse effects.	Screen Out
F. Policies or proposals that cannot lead to development or other change.	Screen Out
G. Policies or proposals that could not have any conceivable or adverse effect on a site.	Screen Out
H. Policies or proposals the (actual or theoretical) effects of which cannot undermine the conservation objectives (either alone or in-combination with other aspects of this or other plans or projects).	Screen Out
I. Policies or proposals with a Likely Significant Effect on a site alone.	Screen In
J. Policies or proposals unlikely to have a significant effect alone.	Screen Out
K. Policies or proposals unlikely to have a significant effect either alone or 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

[11] Tyldesley, D., and Chapman, C. (2013) The Habitats Regulations Assessment Handbook (December) (2019) edition UK: DTA Publications Limited. Available at: http://www.dtapublications.co.uk/ [Date accessed: 01/07/25]

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-323/17[12]) 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 MKCP on European sites, the HRA screening process takes 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 MKCP alone, it is next necessary to consider whether the effects of the MKCP in-combination with other plans and projects would result in an LSE on any European site. It may be that the MKCP 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 MKCP include those that have similar impact pathways. These include those plans and projects that have the potential to increase development in the HRA study area (see **Appendix A**). In addition, other plans and projects with the potential to increase traffic across the study area and which may act in-combination with the MKCP, such as the Milton Keynes transport, waste and mineral plans, will also be taken into consideration. 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), which may increase development-related pressures at European sites, are considered.

- Bedford Borough Council;
- Buckinghamshire Council;
- Central Bedfordshire Council;
- North Northamptonshire Council; and,
- West Northamptonshire Council.

2.2.6 The approach taken to the consideration of in-combination effects will be compliant with the Wealden Judgement[13], 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 objectives[14].

[12] 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].

[13] 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: 01/07/25].

[14] MHLG and DLHC (2024) Planning Practice Guidance. Available at: https://www.gov.uk/government/collections/planning-practice-guidance. [Date accessed: 01/07/25].

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 this 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 MKCP, 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 An AA presents information regarding all aspects of a local plan and ways in which it could impact a European site, either alone, or in-combination with other plans and projects. 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.

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 of September 2004 'Waddenzee' ruling[15]:

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.

[15] EUR-Lex (2004) Case C-127/02. Available at: https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:62002CJ0127:EN:PDF. [Date accessed: 01/07/25].

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 MKCP. This is informally known as scoping and provides an understanding of potential impact pathways from the MKCP and connections to European sites and their vulnerabilities. This information will be used to inform the screening assessment of all components of the MKCP (**Chapter 4**).

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 qualifying, mobile species when located outside a designated site boundary. 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"*[16].

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, 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**.

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

3.3.2 Supplementary Advice on Conservation Objectives prepared by Natural England (NE) often provides more recent information on threats and pressures upon European sites than SIPs and has, therefore, also been reviewed. A number of threats and pressures are unlikely to be exacerbated by the Local Plan and have not been considered.

3.3.3 Sites of Special Scientific Interest (SSSIs) are protected areas in the United Kingdom designated for conservation. SSSIs are the building blocks of site-based nature conservation in the UK. An SSSI will be designated based on the characteristics of its fauna, flora, geology and/or geomorphology. 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.

3.3.4 NE conducts Whole Feature Assessments (WFA) which measure the condition of each notified feature across the whole of the SSSI. The conservation status of each notified feature highlights any areas which are particularly vulnerable to threats/pressures. Conservation status is defined as below.

- Favourable;
- Unfavourable – recovering;
- Unfavourable – no change; or,
- Unfavourable – declining.

3.3.5 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 a European designation.

3.3.6 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*"[17]. The location of IRZs has been taken into consideration in this assessment, as they provide a useful guide as to the location of Functionally Linked Land (FLL) and likely vulnerabilities to development proposed within the MKCP.

3.3.7 Based on HRA work undertaken for the adopted Local Plan:MK, and HRAs of local plans in the surrounding area, the following potential impact pathways are considered to be within the scope of influence of the MKCP.

- **Air pollution:** Land use planning has the potential to increase atmospheric emissions of pollutants to the air. These can result in adverse effects at European sites, such as eutrophication (nitrogen), acidification (nitrogen and sulphur) and direct toxicity (ozone, ammonia and nitrogen oxides)[18].

[17] Natural England (2019) Natural England's Impact Risk Zones for Sites of Special Scientific Interest User Guidance. Available at: https://magic.defra.gov.uk/Metadata_for_magic/SSSI IRZ User Guidance MAGIC.pdf [Date accessed: 08/05/25]

[18] APIS. APIENs Home. Available at: https://www.apis.ac.uk/APIENs. [Date Accessed: 01/07/25]

- **Water resources and water levels:** Urban 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. Changes in water quality also has the potential to affect land or watercourses outside a designated site boundary, known as FLL.

- **Recreational pressure:** New housing development has the potential to increase recreational pressure upon European sites which are accessible to the public.

- **Urbanisation effects:** Urban development has the potential to result in disturbing activities (such as noise, lighting, cat predation and visual disturbance). Disturbance effects may impact upon European sites themselves, and their qualifying features, when outside a designated site boundary.

3.3.8 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"*[19]. 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 are 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 Natural England 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.

[19] 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: 01/0725]

3.4.4 NE has developed a standard methodology for the assessment of traffic-related air quality impacts under the Habitats Regulations, which is relevant to the HRA of land use plans that may result in a change in traffic flows[20]. In addition, the Institute of Air Quality Management (IAQM) [21] and the Chartered Institute of Ecology and Environmental Management (CIEEM)[22] have also prepared advice on the assessment of air quality impacts at designated sites. This guidance sets thresholds for the screening of air quality LSEs at the HRA screening stage (Stage 1 of the HRA process) and methodologies for further AA (Stage 2 of the HRA process) of air quality impacts where relevant.

3.4.5 NE's guidance (in the form of the questions below) has been applied to determine potential air quality impact pathways to European sites:

- Does the MKCP give rise to emissions which are likely to reach a European site?
- Are the qualifying features of sites within 200m of a road sensitive to air pollution?
- Could the sensitive qualifying features of the site be exposed to emissions?
- Application of screening thresholds (alone and then, if necessary, in-combination).

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

3.4.6 The MKCP will trigger housing and employment development and, therefore, increase traffic-related emissions. Air quality impacts have been shown to typically affect European sites within 10km of a Plan boundary[23]. This 10km distance threshold can be a useful guide to identify the broad areas that may be impacted by air quality. However, it is noted that consideration should also be given to larger residential or commercial allocations and their wider potential for air quality impacts, in the context of the local and regional road network, including key commuting areas set out below (**paragraph 3.4.7**).

3.4.7 Data obtained from the Office for National Statistics (ONS) highlights the most common destinations for journeys to work undertaken by car or van arising from, and finishing in, the Plan area[24]. The two most common commuting destinations/origins are Central Bedfordshire and Buckinghamshire. Other common commuting destinations/origins include the neighbouring areas of West Northamptonshire, Bedford and Luton.

3.4.8 In addition, European sites beyond 10km of the Plan area but within the key commuting areas (**paragraph 3.4.7**) 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 road links which provide a clear route linking residential and employment areas within the Plan area.

[20] 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: 01/07/25]

[21] 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: 01/07/25]

[22] 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: 01/07/25]

[23] Chapman, C., and Kite, B. (2021) Guidance on Decision-making Thresholds for Air Pollution. Available at: https://hub.jncc.gov.uk/assets/6cce4f2e-e481-4ec2-b369-2b4026c88447. [Date Accessed: 09/05/25].

[24] ONS (2011) Location of usual residence and place of work by method of travel to work (2001 specification). Travel by car or van only. Available at: https://www.nomisweb.co.uk/census/2011/WU03UK/chart/1132462281 [Date Accessed: 01/07/25].

3.4.9 Taking this information into consideration, a 10km buffer from the Plan area is considered precautionary, as it encompasses both the key commuting areas (**paragraph 3.4.7**) and strategic road links that connect to the Plan area.

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

3.4.10 It is widely accepted that air quality impacts are greatest within 200m of a road source, decreasing with distance[25,26,27]. 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.

3.4.11 There are two European sites located partially within 10km of the Plan area: Upper Nene Valley Gravel Pits SPA and Upper Nene Valley Gravel Pits Ramsar. These designated sites are comprised of a number of components along the River Nene. These designations lie 5.9km to the north of the Plan area at their closest point. Other components of these SPA and Ramsar designations extend beyond 10km of the Plan area along the River Nene corridor in a north easterly direction. The component of the SPA that is located within 10km of the Plan area (and the core commuting area – see **paragraph 3.4.7**) is located within 200m of the A45 and the A428, as shown in **Figure 3.1**.

[25] 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. Available at: http://www.semmms.info/wp-content/uploads/2016/06/Design-Manual-for-Roads-and-Bridges-Volume-11-Section-3-Part-1.-PDF-981Kb.pdf. [Date Accessed: 01/07/25].

[26] Natural England (2018) Natural England's approach to advising competent authorities on the assessment of road traffic emissions under the Habitats Regulations (NEA001). Available at: http://publications.naturalengland.org.uk/publication/4720542048845824. [Date Accessed: 01/07/25].

[27] Bignal, K., Ashmore, M. & Power, S. (2004) The ecological effects of diffuse air pollution from road transport. English Nature Research Report No.580, Peterborough. Available at: https://publications.naturalengland.org.uk/publication/133002. [Date Accessed: 01/07/25].

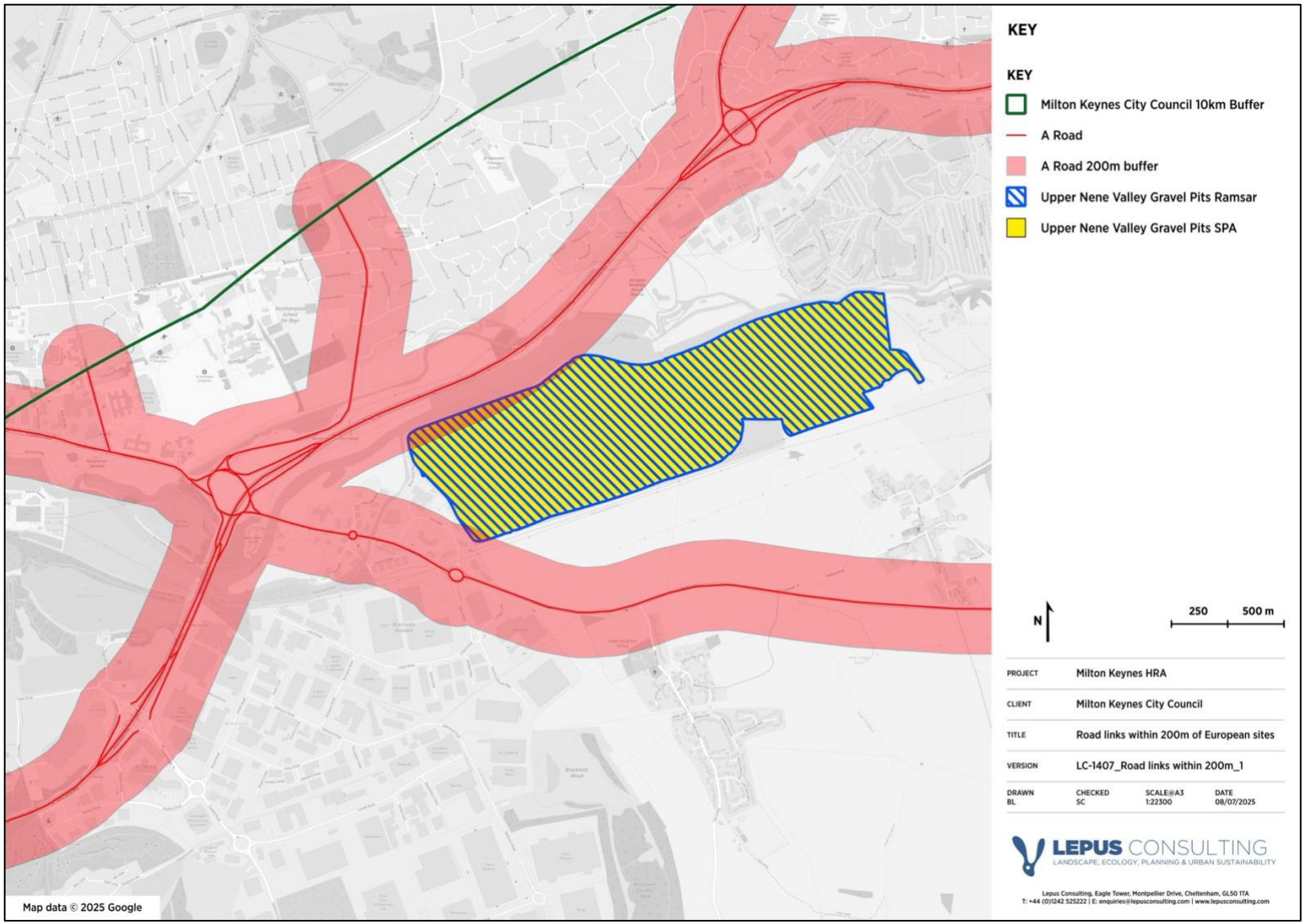

Figure 3.1: *Road links within 200m of the components of Upper Nene Valley Gravel Pits SPA and Upper Nene Valley Gravel Pits Ramsar that are within 10km of the Plan area*

3.4.12 In an attempt to manage the negative consequences of atmospheric pollution at designated sites, 'critical loads' and 'critical levels' have been established for ecosystems across Europe. Each European site hosts a variety of habitats and species with different sensitivities to different levels of air pollution. The critical loads of pollutants are defined as a *"…quantitative estimate of exposure to one or more pollutants below which significant harmful effects on specified sensitive elements of the environment do not occur according to present knowledge"*[28]. Critical levels are defined as "*concentrations of pollutants in the atmosphere above which direct adverse effects on receptors, such as human beings, plants, ecosystems or materials, may occur according to present knowledge*"[29].

3.4.13 Air quality is not identified as a threat at the Upper Nene Valley Gravel Pits SPA within Natural England's SIP[30]. Natural England's Conservation Advice[31] for the SPA indicates that the target for air quality at the SPA is to *"maintain concentrations and deposition of air pollutants to at or below the site relevant Critical Load or Level values given for this feature of the site on the Air Pollution Information System."*

3.4.14 The Upper Nene Valley Gravel Pits SPA is designated for the following qualifying species:

- Great bittern (*Botaurus stellaris*);
- Gadwall (*Anas strepera*);
- European golden plover (*Pluvialis apricaria*); and,
- Waterbird assemblage (see **Appendix B** for species which comprise the waterbird assemblage).

3.4.15 The Upper Nene Valley Gravel Pits Ramsar is notified under Criterion 5 due to its importance for waterbirds and under Criterion 6 due to populations of Mute Swan (*Cygnus olor*) (see **Appendix B**).

3.4.16 An increase in traffic related air pollutants may result in changes to the chemical status of supporting habitat for these qualifying birds. This may include a change in habitat substrate, acceleration or damage to plant growth, and an alteration in vegetation structure and composition[32]. For a deterioration in air quality to have an LSE upon the qualifying birds (**Appendix B**), the deterioration would need to affect the quality and availability of nesting, feeding or roosting supporting habitats to such an extent that the qualifying bird species are no longer able to use the SPA or Ramsar for nesting and feeding.

3.4.17 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.

[28] Coordination Centre for Effects (CCE). Critical load and level definitions. Available at: https://www.umweltbundesamt.de/en/Coordination_Centre_for_Effects [Date Accessed: 02/07/25].

[29] Ibid.

[30] Natural England (2014) Site Improvement Plan Upper Nene Valley Gravel Pits SPA.

[31] 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.

[32] Ibid.

3.4.18 Nitrogen oxides (NOx) are produced from road traffic during the combustion process, partly from nitrogen compounds in the fuel, but mostly by direct combination of atmospheric oxygen and nitrogen in flames[33]. Road transport emissions of NOx in 2018 were the largest contributor to UK total emissions of NOx, with most emissions related to diesel vehicles[34]. The introduction of catalytic converters has seen an overall reduction in emissions since 1990. NOx has the potential to impact habitats through direct toxicity and through contribution to nitrogen deposition. The critical level for all vegetation types from the direct toxic effects of NOx has been set at 30 µg/m^3. APIS notes that none of the features of the SPA are sensitive to the effects of NOx.

3.4.19 Ammonia originates from both natural and anthropogenic sources, with the main man-made source being agriculture. Other man-made sources of ammonia include industrial processes and vehicular emissions (from catalyst-equipped petrol vehicles, and selective catalytic reduction on light and heavy goods diesel-fueled vehicles). As with NOx, elevated levels of ammonia can be directly toxic to plants and can also enrich a system with nitrogen causing eutrophication and acidification effects on habitats. APIS notes that none of the features of the SPA are sensitive to the effects of ammonia.

3.4.20 The Air Pollution Information System (APIS) describes nitrogen deposition as "*the input of reactive nitrogen from the atmosphere to the biosphere both as gases, dry deposition and in precipitation as wet deposition*"[35]. Anthropogenic sources of enhanced reactive nitrogen deposition come from emissions of oxidised nitrogen (NOx), fossil fuel combustion and reduced nitrogen from agricultural sources.

3.4.21 Nitrogen is a major growth nutrient for plants. An increase in nitrogen can be toxic to plants and can lead to eutrophication which can cause species loss and changes in the structure and function of ecosystems. Nitrogen can also cause acidification of soils, the effects of which are discussed in more detail below (**paragraph 3.4.23**). Traffic-related inputs of NOx and ammonia have an impact on the rates of nitrogen deposition. Nitrogen deposition rates are habitat specific, as different habitats have different tolerances to different levels. Supporting habitat at the SPA within 200m of the A45 and the A428 comprises coastal and floodplain grazing marsh. This habitat type has a nitrogen deposition critical load range of 10 – 20 kgN/ha/yr). APIS indicates that the following qualifying species may be sensitive to the effects of nitrogen deposition on floodplain and grazing marsh broad habitat types:

- Eurasian Bittern (*Botaurus stellaris*) – qualifying individual species;
- European Golden Plover (*Pluvialis apricaria*) – qualifying individual species;
- Great-crested Grebe (*Podiceps cristatus*) – waterbird assemblage;
- Northern Shoveler (*Anas clypeata*) – part of the waterbird assemblage; and,
- Wigeon (*Anas Penelope*) – part of the waterbird assemblage.

[33] APIS Available at: https://www.apis.ac.uk/search-habitat-impacts

[34] National Atmospheric Emissions Inventory. Available at: https://naei.energysecurity.gov.uk/

[35] APIS Available at: https://www.apis.ac.uk/search-habitat-impacts

3.4.22 A review of mid-year 2021 (2020-2022) data on nitrogen depositions levels for the 1km grid square which is located within 200m of the A45 and the A428 indicates that the upper critical load range of 20 kgN/ha/yr is not being exceeded (current levels of deposition at 15kgN/ha/yr to short vegetation)[36]. Current trends indicate that nitrogen deposition levels have been falling at this grid square from 19.4 kgN/ha/yr in 2003 to 14.98 kgN/ha/yr in 2021.

3.4.23 Acidification comprises the deposition of pollutants to soils ,which changes soil pH level, causing acidification. The contribution of SO_2 to acid deposition has reduced since the 1980s, with controls on transboundary emissions, so that the main contribution to acidification is from sources of oxidised and reduced nitrogen. The effect of acid deposition is indirect and related to the lowering of soil pH leading to reduced fertility and nutrient deficiencies, the release of toxic metals and changes in microbial transformations[37]. As with nitrogen deposition, acid deposition rates are habitat specific. APIS notes that there is no expected negative impact on the qualifying species of the SPA due to impacts on the species' broad habitat from acidification.

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

3.4.24 Whilst the floodplain coastal grazing marsh within 200m of the A45 and the A428 may be sensitive to changes in nitrogen deposition, the qualifying bird species of the SPA are only indirectly affected by a change in air quality. The change in air quality would need to be very large to result in the floodplain coastal grazing marsh being made unsuitable for the qualifying birds of the SPA and Ramsar in terms of nesting, feeding and roosting requirements. In addition, only a marginal area of the SPA is located within 200m of both the A45 and A428, as illustrated in **Figure 3.1**. Given the downward trends and current levels of nitrogen deposition at the SPA are below the upper critical load, LSEs from air quality upon the qualifying bird species are considered unlikely.

3.5 Water quality and water quantity

3.5.1 Urban development coming forward through the MKCP 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.

[36] APIS – Air Pollution Information System. Available at: https://www.apis.ac.uk/ [Date accessed: 17/07/25]

[37] The APIS. Acid Deposition. Available at: http://www.apis.ac.uk/overview/pollutants/acid-deposition [Date accessed: 02/07/25].

3.5.2 The Water Framework Directive (WFD) provides an indication of the health of the water environment and whether a water body is at 'good' status or potential. Surface water bodies can be classed as 'high', 'good', 'moderate', 'poor' or 'bad' status. This is determined through an assessment of a range of elements relating to the biology and chemical quality of surface waters, and quantitative and chemical quality of groundwater. To achieve 'good' ecological status or potential, 'good' chemical status or 'good' groundwater status, every element assessed must be at 'good' status or better. If one element is below its threshold for 'good' status, then the status for the whole water body is classed below 'good'.

3.5.3 The WFD sets out areas which require special protection. These include areas designated for "*the protection of habitats or species where the maintenance or improvement of the status of water is an important factor in their protection including relevant Natura 2000 sites designated under Directive 92/43/EEC (the Habitats Directive) and Directive 79/409/EEC (the Birds Directive)*"[38].

3.5.4 The River Great Ouse runs through the Plan area in a west to northeast direction, flowing to the north of the Milton Keynes city area. This river is fed by a number of tributaries including the River Ouzel, the Weald Brook, Broughton Brook and Loughton Brook to the south of the Plan area; the Tathall Brook to the north; and Chicheley Brook to the east. The Grand Union Canal runs north-south along the River Ouzel valley.

3.5.5 The Plan area lies within the Anglian River Basin District (RBD). RBDs are sub-divided into surface water management catchments (SWMCs)[39]. The Plan area is located within the Ouse Upper and Bedford SWMC (see **Figure 3.2**).

3.5.6 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 RBMP.

3.5.7 Catchment Abstraction Management Strategies (CAMS) are six-year strategies developed by the 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).

[38] Official Journal of the European Communities (2000) Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy. Available at: https://eur-lex.europa.eu/resource.html?uri=cellar:5c835afb-2ec6-4577-bdf8-756d3d694eeb.0004.02/DOC_1&format=PDF [Date Accessed: 09/07/25]

[39] DEFRA. River basin districts, England. Available at: https://environment.data.gov.uk/catchment-planning/ [Date Accessed: 12/07/25]

3.5.8 The Plan area is located within the Ouse Upper and Bedford ALS catchment. The Ouse Upper and Bedford ALS outlines the available water resources in the catchment area, alongside how these water resources are being used and the intention regarding management of further water resource abstraction. The Ouse Upper and Bedford ALS lists Ouse Washes SPA, Ouse Washes SAC and Ouse Washes Ramsar designations as European sites vulnerable to the impacts of poor/unsustainable water abstraction practices as, whilst they are located outside the ALS area, they are dependent on the water that flows down the River Great Ouse to these designations. The Wash and North Norfolk Coast SAC, The Wash SPA and The Wash Ramsar are also downstream of the ALS area. Although these European sites are outside the ALS area, they are also dependent on water that flows down the River Great Ouse. Therefore, they too are identified as vulnerable to hydrological impacts.

3.5.9 The water service provider for the Plan area is Anglian Water. 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 Central WRZ, as supplied by Anglian Water (see **Figure 3.3**). This WRZ has no internal water sources and imports its water from Ruthamford North and Ruthamford South (which cover very small portions of the study area)[40]. 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. As Ruthamford Central is supplied via transfer from these zones, Milton Keynes' water supply is vulnerable to the same climate-related risks[41]. The Environment Agency (EA) has designated the whole of the Anglian Water region as under serious water stress.

3.5.10 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. The WRMP articulates 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. A summary of the Anglian Water and Affinity Water WRMP is provided in **Appendix A**.

3.5.11 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 Plan covers the period from 2022 - 2027. This sets out a series of actions to address droughts, including actions to reduce customer demand for water and identification of catchments where drought orders and permits may be required.

[40] JBA Consulting (2024). Milton Keynes Integrated Water Management Study Phase 1. Final Report. Available at: https://www.milton-keynes.gov.uk/sites/default/files/2024-07/Integrated%20Water%20Management%20Study%20Part%201_0.pdf [Date accessed: 17/07/25]

[41] Ibid.

3.5.12 The Anglian Water and Affinity Water WRMP were subject to HRA which included a full AA. The Anglian Water HRA[42] concluded that the WRMP would have no adverse impacts upon the site integrity of the Ouse Washes SPA, Ouse Washes SAC, Ouse Washes Ramsar, The Wash and North Norfolk Coast SAC, The Wash SPA or The Wash Ramsar, either alone or in-combination, following identification of a range of mitigation measures set out in the WRMP HRA. The Affinity Water WRMP HRA[43] set out a series of mitigation measures and concluded that provided these measures were included in the WRMP it would not result in an adverse effect on any European sites. These WRMPs are based on population projections and forecasts to 2050, which includes Milton Keynes. It can, therefore, be concluded that the MKCP will not result in an adverse effect on any European sites from increased water demand, either alone or in combination with all other new plans and projects that would be served by the public water supply. Water quantity impacts can, therefore, be scoped out of the HRA process.

3.5.13 Anglian Water are the primary sewerage undertaker for the whole of Milton Keynes. Sewerage Undertakers have a duty under Section 94 of the Water Industry Act 1991 to provide sewerage and treat wastewater arising from new domestic development[44]. Environmental permits are used alongside water quality limits as a means of controlling the pollutant load discharged from a water recycling centre to a receiving watercourse. There are 18 Water Recycling Centres (WRCs) within, or serving communities in, Milton Keynes. Of these, six are expected to serve committed growth within the period of the adopted Plan:MK[45].

3.5.14 A Phase 1 Integrated Water Management Strategy (IWMS) for Milton Keynes has been prepared in support of the MKCP preparation process[46]. This included a water quality sensitivity analysis using the EA's modelling. The sensitivity modelling outputs indicated that the Plan area is less sensitive to increases in effluent flow when compared to standards set out in the WFD. A Phase 2 IWMS[47] provided a more detailed assessment of the MKCP in regard to water quality. This included water quality modelling which made the following conclusions:

- No change in WFD class is predicted at the eight WRCs which will server new growth from the MKCP.
- Five of the eight WRCs serving growth areas over the Plan period are predicted to experience a significant deterioration in relation to Ammonia. At most of these WRCs, the significant deterioration downstream is generally a short distance before returning to moderate deterioration. However, the significant deterioration

[42] 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: 17/07/25]

[43] 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: 17/07/25]

[44] Water Industry Act – 1991. Available at: https://www.legislation.gov.uk/ukpga/1991/56/section/94. [Date accessed: 01/07/25]

[45] JBA Consulting (2024). Milton Keynes Integrated Water Management Study Phase 1. Final Report. Available at: https://www.milton-keynes.gov.uk/sites/default/files/2024-07/Integrated%20Water%20Management%20Study%20Part%201_0.pdf [Date accessed: 17/07/25]

[46] JBA Consulting (2024). Milton Keynes Integrated Water Management Study Phase 1. Final Report. Available at: https://www.milton-keynes.gov.uk/sites/default/files/2024-07/Integrated%20Water%20Management%20Study%20Part%201_0.pdf [Date accessed: 17/07/25]

[47] JBA Consulting (2025). Milton Keynes Integrated Water Management Study Phase 2. Draft Report. [Date accessed: 18/09/25]

downstream of Cotton Valley remains significant towards Bedford where it becomes moderate. Deterioration can be prevented downstream of all five of these WRCs through improvements in treatment processes.

- Growth during the Plan period would not prevent Good Ecological Status being met in the future.

3.5.15 Given the findings of the Phase 2 IWMS, it can be concluded that there is unlikely to be a significant effect upon European sites that are hydrologically linked to the Plan area.

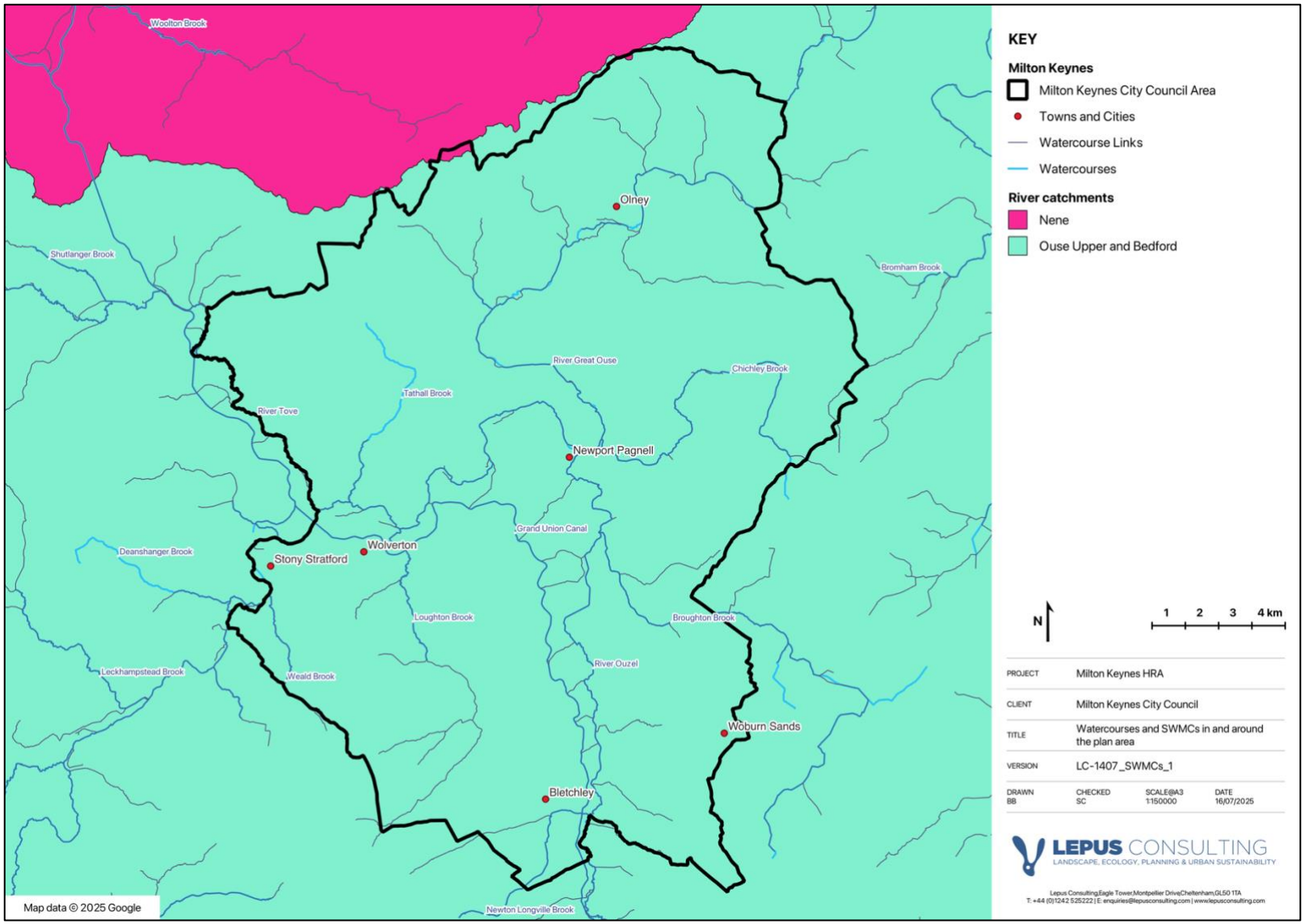

Figure 3.2: *Watercourses and Surface Water Management Catchments (SWMCs) in and around the Plan area*

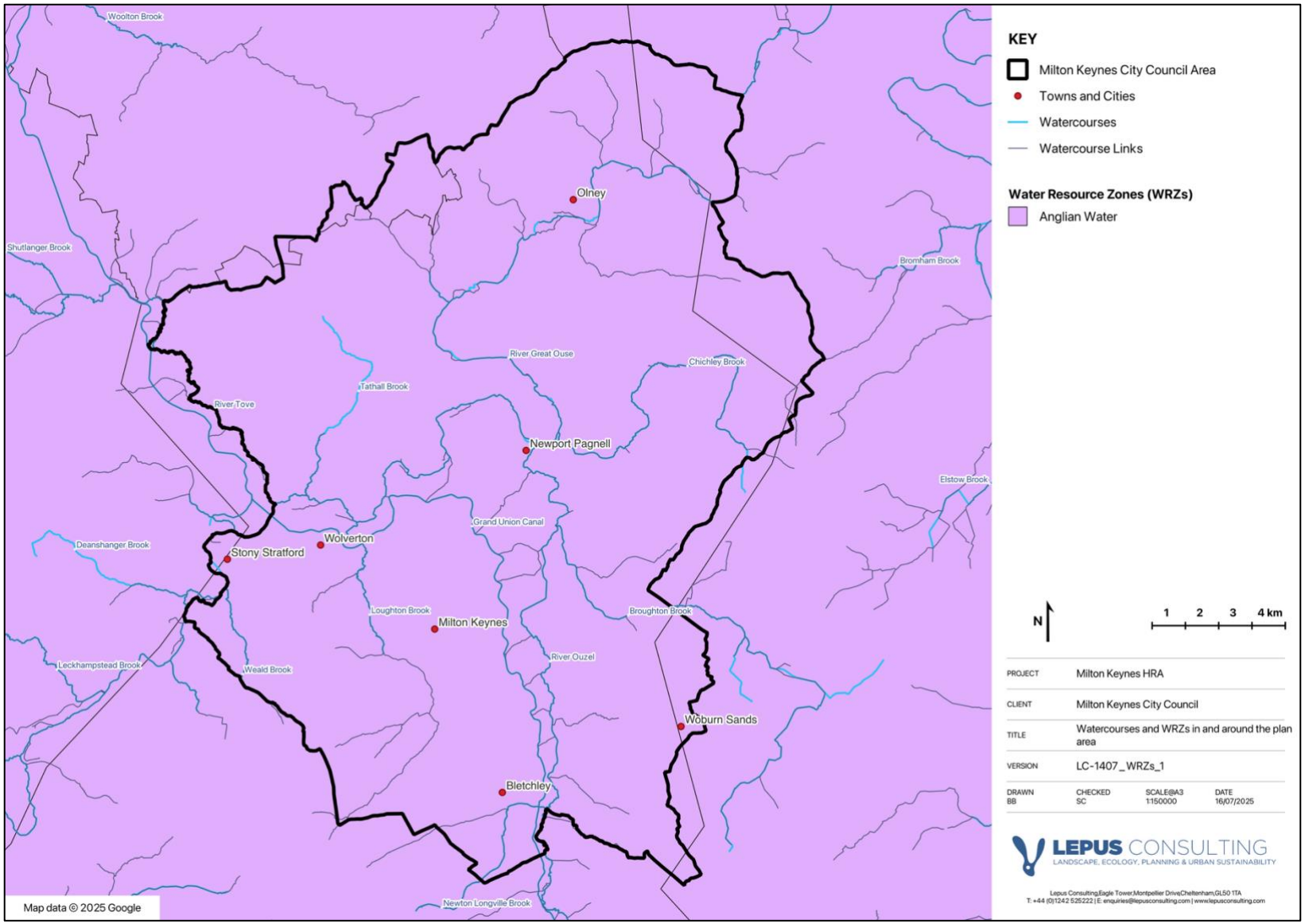

***Figure 3.3**: Water Resource Zones (WRZs) in and around the Plan area*

3.5.16 The MKCP may impact functionally linked watercourses and habitat through a deterioration in water quality, flows and loss, and/or deterioration of riparian and in-stream habitat. If this is the case, the MKCP may have adverse effects on the achievement of the conservation objectives which aim to maintain and restore the condition of these features for relevant qualifying species. NE consider that 'good' ecological status under the WFD is an appropriate standard for functionally linked watercourses[48].

3.5.17 As noted in **paragraph 3.5.8**, the Plan area falls within hydrological catchments associated with the Ouse Washes SPA, Ouse Washes SAC, Ouse Washes Ramsar, The Wash and North Norfolk Coast SAC, The Wash SPA and The Wash Ramsar.

3.5.18 The Ouse Washes SAC lies between the Hundred Foot/New Bedford River to the southeast and the Old Bedford River/Counter Drain to the northwest. The primary reason for designation of the site as a SAC is due to the populations of Spined Loach (*Cobitis taenia*), as set out in **Appendix B**[49]. The Ouse Washes SPA covers the SAC designation area and also a wider area of flood storage. It plays a major flood storage role in the area, being subject to regular winter flooding. It includes two canalised main rivers of the River Great Ouse, and an extensive area of wet grassland and field drains. These habitats support an internationally significant population of wintering and breeding birds (see **Appendix B**)[50]. The Ouse Washes Ramsar designation covers the same boundary as both the SPA and SAC. This Ramsar site is notified for nationally and internationally important numbers of wintering waterfowl, nationally important numbers of breeding waterfowl, Spined Loach, invertebrates, and its seasonally flooded washland habitats which include unimproved neutral grassland communities (**Appendix B**)[51]. The Plan area is connected to these designated sites by the River Great Ouse which flows from the Plan area in a north easterly direction to these designations. These designations are known to be sensitive to changes in water quality and water levels through increased flooding and nutrient loading, which can impact the extent, composition and quality of habitat available[52]. As noted above, based on the findings of the Phase 1 and Phase 2 IWMS, it can be concluded that there is unlikely to be a significant effect upon European sites that are hydrologically linked to the Plan area and in addition functionally linked watercourses.

[48] DEFRA (2014) Water Framework Directive implementation in England and Wales: new and updated standards to protect the water environment: May 2014. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/307788/river-basin-planning-standards.pdf [Date accessed: 01/07/25]

[49] Natural England (2015) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features Ouse Washes Special Area of Conservation (SAC) Site Code: UK0013011.

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

[51] JNCC (1976) Ramsar Information Sheet: Ouse Washes Ramsar.

[52] Natural England (2014) Site Improvement Plan: Ouse Washes SPA and SAC.

3.5.19 The River Great Ouse discharges at The Wash, which is designated as an SPA, SAC and Ramsar site. The Wash and North Norfolk Coast SAC and The Wash Ramsar 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 beech system. These systems support populations of Common Seal (*Phoca vitulina*) and Otter (*Lutra lutra*)[53],[54],[55]. The habitats also provide rich foraging grounds and important roosting habitat for a number of bird species for which The Wash SPA and Ramsar sites are designated. The species and habitats for which these sites are designated are sensitive to changes in water levels[56]. The Plan area is connected to these designated sites by the River Great Ouse, which flows from the Plan area in a north easterly direction and discharges at The Wash. As noted above, based upon the findings of the Phase 1 IWMS, it can be concluded that there is unlikely to be a significant effect upon European sites, and in addition functionally linked watercourses, that are hydrologically linked to the Plan area. A change in water quality due to either diffuse or point source discharges of wastewater and surface water runoff can therefore be screened out of any further assessment in the HRA process.

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 (ZoI) based on detailed visitor survey data. The ZoI is the area within which there are likely to be significant effects arising from recreational activities undertaken by additional residents due to growth. This is often calculated by taking the distance 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 and urbanisation effects from the MKCP.

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 km[57]. However, this review recognises that some visitors are prepared to travel longer distances to visit particular sites, for instance coastal and wetland sites.

[53] Natural England (2019) European Site Conservation Objectives for The Wash and North Norfolk Coast Special Area of Conservation Site Code: UK0017075.

[54] JNCC (1988) Ramsar Information Sheet: The Wash Ramsar.

[55] Natural England (2019) European Site Conservation Objectives for The Wash Special Protection Area Site Code: UK9008021.

[56] Natural England (2014) Site Improvement Plan: The Wash and North Norfolk Coast.

[57] Weitowitz, D, C., Panter, C., Hoskin, R., 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: 01/07/25]

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 seven European sites located within 15km of the Plan area (**Appendix B**).

3.6.5 There are two European sites located within 15km of the Plan area: the Upper Nene Valley Gravel Pits SPA and Upper Nene Valley Gravel Pits Ramsar.

3.6.6 The Upper Nene Valley Gravel Pits SPA and Ramsar 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 dog owners) 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 disturbance[58].

3.6.7 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 Survey[59]; and
- Bird Disturbance Survey[60].

3.6.8 These surveys identified bird disturbance from walkers with dogs, walkers, water sport activities, wildfowling and anglers. Visitor survey results showed that 75% of visitors on a short visit, directly from home, in the winter lived within a 5.9km ZoI 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 illustrated in **Figure 3.4,** the boundary of the Plan area is located on the edge of this ZoI and, therefore, recreational impacts upon the Upper Nene Valley Gravel Pits SPA and Ramsar from development within the MKCP can be scoped out of the HRA process.

[58] Natural England (2014) Site Improvement Plan Upper Nene Valley Gravel Pits SPA.

[59] 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: 15/07/25].

[60] 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: 17/07/25]

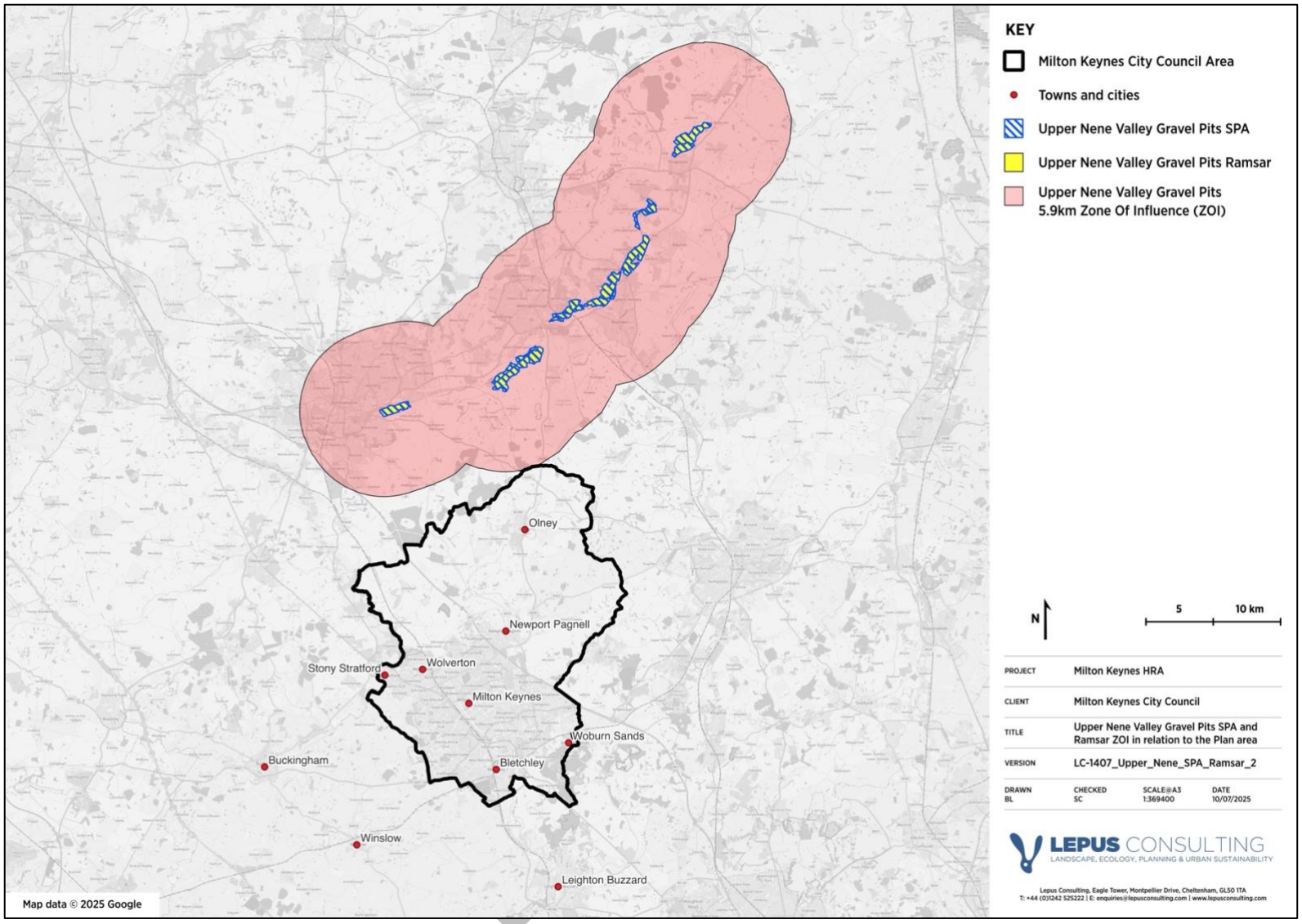

Figure 3.4: *Upper Nene Valley Gravel Pits SPA and Ramsar Recreational ZoI*

3.7 Urbanisation effects

3.7.1 Urbanisation effects typically occur when development is located close to a European site boundary. Urbanisation effects may include noise and vibration disturbance, lighting effects, visual disturbance, cat predation, fly-tipping, wildfire, littering, vandalism and damage to/fragmentation of habitats. There are no European sites within the Plan area or immediately adjacent to the Plan area boundary and, therefore, direct urbanisation effects can be scoped out.

3.7.2 Urbanisation effects may also, however, take place at FLL (see definition in **paragraph 3.3.8**). This is especially relevant for European sites which are designated for species that rely on the wider landscape for activities such as feeding, commuting and foraging. 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 in respect of plans which may significantly affect FLL.

3.7.3 The Upper Nene Valley Gravel Pits SPA and Ramsar site is designated for its breeding bird assemblage of lowland open waters and their margins, wintering waterbird species, an assemblage of over 20,000 waterbirds in the non-breeding season[61]. 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 (*Pluvialis apricaria*) and Lapwing (*Vanellus vanellus*)[62] 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.

3.7.4 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, Natural England has been involved in a partnership project with the Wildlife Trust in surveying and analysing potential functionally linked land 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 manner[63].

3.7.5 The Plan area falls within 10km of the Upper Nene Valley Gravel Pits SPA and Ramsar sites and, therefore, urbanisation effects upon areas of FLL will be scoped in for further consideration in the screening assessment (**Chapter 4**). This will take into consideration the current land use of the allocation site and surrounding area, and the size of each allocation (sites of less than 1ha in size can be screened out[64]).

[61] Natural England (2014) European Site Conservation Objectives for Upper Nene Valley Gravel Pits SPA (UK9020296)

[62] Lapwing are part of the waterbird assemblage.

[63] Natural England (25th July 2025) Email communication to Lepus Consulting.

[64] 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]

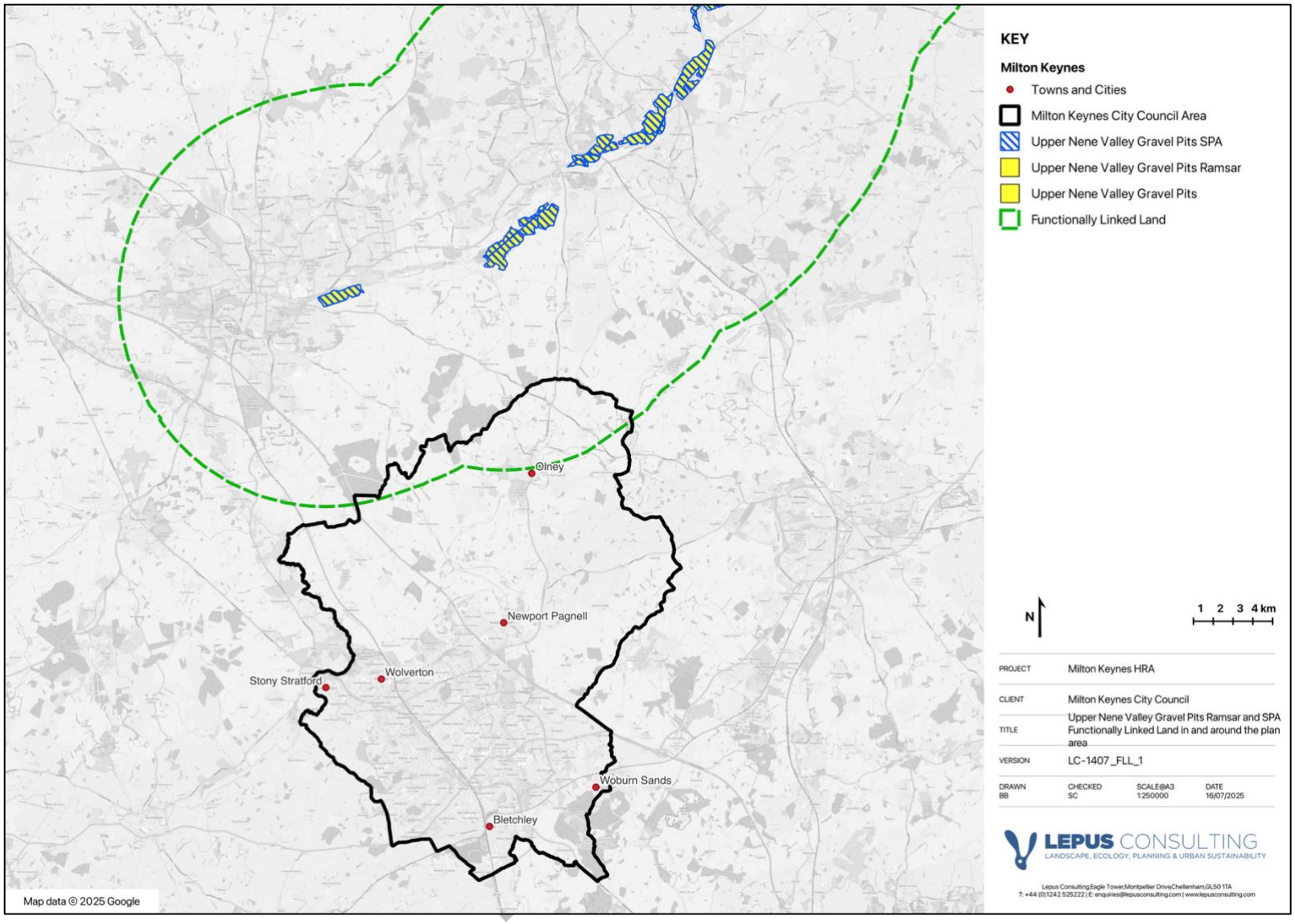

Figure 3.5: *Upper Nene Valley Gravel Pits SPA and Ramsar area of Functionally Linked Land*

3.7.6 It is unlikely that FLL associated with any other European site will be affected by development set out in the MKCP.

3.8 European sites and threats and pressures

3.8.1 The impact pathways which have the potential to affect European sites are summarised in **Table 3.1**. These will form the basis of the HRA screening assessment provided in **Chapter 4**.

Table 3.1: *Summary of impact pathways to European sites which may be associated with the Local Plan*

European site name	Air Pollution Impact Pathway?	Water Quality and/or Quality Changes Impact Pathway?	Recreational Pressure Impact Pathway?	Urbanisation Impact Pathway?
Ouse Washes Ramsar	No	No	No	No
Ouse Washes SAC	No	No	No	No
Ouse Washes SPA	No	No	No	No
The Wash and North Norfolk Coast SAC	No	No	No	No
The Wash Ramsar	No	No	No	No
The Wash SPA	No	No	No	No
Upper Nene Valley Gravel Pits Ramsar	No	No	No	Yes (FLL)
Upper Nene Valley Gravel Pits SPA	No	No	No	Yes (FLL)

4 Screening

4.1 Policy and allocations screening

4.1.1 Each policy which forms the Regulation 19 version of the MKCP was evaluated against the HRA screening criteria (see **Table 2.1**), taking into consideration case law and best practice (see **Section 1.3**). The screening assessment concluded LSEs in-combination at the Upper Nene Valley Gravel Pits SPA and Upper Nene Valley Gravel Pits Ramsar designations. **Appendix C** provides the output of this screening exercise which has informed the test of likely significance i.e. will the MKCP have an LSE, alone or in-combination, at a European site.

4.1.2 It is concluded that LSEs, either from the MKCP 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
- **Category K:** Policies unlikely to have a significant effect either alone or in-combination

4.1.3 A number of policies were, however, considered likely to have an LSE and on the basis of the screening assessment as they fell into **Category L** – Policies or proposals which might be likely to have a significant effect in combination.

4.1.4 The following policies (**Table 4.1**) will, therefore, be explored in the AA (Stage 2 of the HRA process) in more detail (see **Chapter 5**).

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 and allocations is provided in **Appendix C)***

Policy Number	Policy Name	Screening Conclusion
Policy GS1	Our spatial strategy	Potential in-combination urbanisation LSEs from windfall development upon areas of FLL associated with the Upper Nene Valley Gravel Pits SPA and Ramsar site (Lapwing and Golden Plover).
Policy GS2	Strategy for homes	Potential in-combination urbanisation LSEs from windfall development upon areas of FLL associated with the Upper Nene Valley Gravel Pits SPA and Ramsar site (Lapwing and Golden Plover).
Policy GS7	Wind and solar development	Potential in-combination urbanisation LSEs from wind and solar development upon areas of FLL associated with the Upper Nene Valley Gravel Pits SPA and Ramsar site (Lapwing and Golden Plover).

4.1.5 Guidance provided by North Northamptonshire Council and West Northamptonshire Council indicates that FLL associated with Lapwing and Golden Plover for which the Upper Nene Valley Gravel Pits SPA and Ramsar sites are designated can be found up to 10km from these designations[65]. No allocations are located within 10km of the Upper Nene Valley Gravel Pits SPA or Ramsar site designations. However, as the Plan area lies within 10km of the Upper Nene Valley Gravel Pits SPA and Ramsar designations, any windfall development that comes forward within this area would have the potential for adverse impacts upon areas of FLL associated with these designations. Land to the north of the Plan area, and within the 10km radius, is more rural in nature. As set out in **paragraph 3.7.3**, for an area to constitute significant FLL it generally needs to be of a reasonable size (over a hectare), comprise arable, wetland or grassland and have long, clear sightlines uninterrupted by nearby hedgerows. The urbanisation effect of windfall development is, therefore, screened into the HRA process for further assessment through an AA.

4.1.6 In addition, 'solar and wind areas of suitability' identified in the MKCP are coincident with areas of potentially FLL associated with the Upper Nene Valley Gravel Pits SPA and Ramsar site designations, being within 10km of these designations. Wind and solar energy have the potential to cause other LSEs, such as disruption to bird migration routes and risk of collision. The urbanisation effect of wind and solar development will, therefore, be screened into the HRA process for further assessment through an AA.

4.2 Screening Conclusion

4.2.1 As required under the Habitats Regulations, an assessment of LSEs of the MKCP upon European sites has been undertaken. The screening checks (**Appendix C**) indicate that the MKCP has the potential to have LSEs at the Upper Nene Valley Gravel Pits SPA and Upper Nene Valley Gravel Pits Ramsar site designations in-combination. The MKCP is not directly connected with, or necessary, to the management of any European site. The screening assessment takes no account of mitigation measures that the MKCP may incorporate to mitigate adverse impacts upon European sites. It is, therefore, concluded that the MKCP will be screened into the HRA process. The next stage of the HRA process will be Stage 2, AA (**Chapter 5**).

[65] 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]

5 Urbanisation Effects – Appropriate Assessment

5.1 Introduction

5.1.1 This AA focuses on assessing the ecological in-combination urbanisation effects from windfall development and wind and solar development set out in the MKCP upon areas of FLL associated with the Upper Nene Valley Gravel Pits SPA and Ramsar.

5.1.2 The HRA screening process (**Chapter 4**) concluded that the following policies have the potential to result in LSEs on this SPA and Ramsar as a result of urbanisation effects on areas of FLL.

- Policy GS1 – Our spatial strategy;
- Policy GS2 – Strategy for homes; and
- Policy GS7 – Wind and solar development.

5.2 Baseline Information

Introduction

5.2.1 As noted in **Section 3.7,** urbanisation effects may include the direct loss / damage to 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.

5.2.2 Urbanisation effects have the potential to have direct impacts upon areas of FLL and also cause the fragmentation of connecting habitat between the SPA, Ramsar and other areas of FLL. Fragmentation can lead to the isolation of habitat and an increase in urban edge effects.

5.2.3 Birds can also be sensitive to the effects of renewable energy projects. The degree of impact will depend on the nature of renewable energy sources. Natural England has commissioned a body of research into the ecological effects of solar farms, in particular on birds[66]. This literature review notes 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 Natural England (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 wildlife[67]. Similar impacts, such as direct loss of habitat, collision risk and displacement due to disturbance are also associated with wind energy[68], with guidance aimed at assessing and monitoring the impacts of wind farms on wild birds[69].

Upper Nene Valley SPA and Upper Nene Valley Ramsar

5.2.4 The Upper Nene Valley Gravel Pits SPA and Ramsar is comprised of a cluster of disused sand and gravel bits 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-swap, marsh, wet ditches, rush pasture, rough grassland and scattered scrub provide valuable resting and feeding habitat for wintering water birds, especially ducks and waders[70]. The SPA is designated for the following individual qualifying species:

- Eurasian Bittern (*Botaurus stellaris*)
- European Golden Plover (*Pluvialis apricaria*)
- Gadwall (*Mareca strepera*)
- Waterbird assemblage (non-breeding)[71]

[66] 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].

[67] 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-energ [Date Accessed: 30/06/25].

[68] NatureScot (2025) Wind farm impacts on birds. Available at: https://www.nature.scot/professional-advice/planning-and-development/planning-and-development-advice/renewable-energy/onshore-wind-energy/wind-farm-impacts-birds [Date accessed: 01/08/25]

[69] Natural England and DEFRA (2015) Guidance – Wild birds, surveys and monitoring for onshore wind farms. Available at: https://www.gov.uk/guidance/wild-birds-surveys-and-monitoring-for-onshore-wind-farms [Date accessed: 01/08/25]

[70] 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.

[71] 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*).

5.2.5 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 Lapwing[72] 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.

5.2.6 The British Trust for Ornithology (BTO) Wetland Bird Survey (WeBS) Alert for the Upper Nene Valley Gravel Pits SPA[73] reports that Golden Plover have 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).

5.2.7 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 species[74]. 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).

[72] Lapwing are part of the waterbird assemblage.

[73] WeBS Report Online. Available at: https://app.bto.org/webs-reporting/alerts.jsp

[74] 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]

- Noise and visual disturbance - drawing on the Waterbird Disturbance Tool Kit[75] (**Table 5.1**).
- Cat predation ranges.
- Presence of large and/or multiple overhead power lines.

5.2.8 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 **Section 3.6**, 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 5.1**, research suggests that these species are likely to respond to visual and noise stimuli at 300m.

Table 5.1: *Waterbird Disturbance Toolkit – Species disturbance distances*

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

5.2.9 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 from which people will access designated sites by foot (rather than accessing sites from car parking locations as with recreational impacts).

5.3 Appropriate Assessment

5.3.1 No allocations are located within 10km of the Upper Nene Valley Gravel Pits SPA or Upper Nene Valley Gravel Pits Ramsar.

5.3.2 As illustrated in **Figure 3.5**, the northern most area of the Plan area is however located within 10km of the SPA and Ramsar. Windfall development and solar / wind renewable development within this area therefore has the potential for adverse effects upon FLL associated with the SPA and Ramsar.

5.3.3 The location of windfall and solar / wind development 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 5.2.7**. The impact of windfall and solar / wind development will therefore need to be taken into consideration in a project level HRA.

[75] 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]

5.3.4 Policy CEA10 - Protection and enhancement of environmental infrastructure network, Priority Species and Priority Habitats – sets out the requirement for new development to satisfy the Habitats Regulations. It also provides wording specifically in relation to impacts upon FLL associated with the Upper Nene Valley Gravel Pits SPA and Ramsar. This policy requires new development to ensure no adverse impacts upon the site integrity of the Upper Nene Valley Gravel Pits SPA and Ramsar, and where development sites may coincide with FLL, to undertake overwintering bird surveys early in the planning process ahead of submitting an application and inform a project level HRA.

5.3.5 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[76],[77], whilst recognising the multi-staged planning and approval procedural approach to plan making[78].

Conclusion

5.3.6 Taking into consideration the planning policy requirements in Policy CEA10, it can be concluded that there will be no adverse impacts on the integrity of any European site or areas of FLL, either alone or in-combination, as a result of urbanisation effects.

[76] Ltd (NANT Ltd) v Suffolk Coastal District Council, Court of Appeal, 17 February 2015. Available at: https://www.eastsuffolk.gov.uk/assets/Planning/Suffolk-Coastal-Local-Plan/Core-Strategy-and-DMP/No-Adastral-New-Town-Ltd-v-SCDC.pdf [Date Accessed: 11/11/21]

[77] 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 fufil obligations - Directive 92/43/EEC - Conservation of natural habitats - Wild fauna and flora. Case C-6/04. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A62004CC0006 [Date Accessed: 11/11/21].

[78] R (o a o Devon Wildlife Trust) v. Teignbridge DC [2015] EWHC 2159 (Admin). 28 July 2015. Available at: https://www.casemine.com/judgement/uk/5a8ff76460d03e7f57eac083 [Date Accessed: 11/11/21]

6 Next steps

6.1 Screening Conclusions

6.1.1 The MKCP is not directly connected with or necessary to the management of any European site. A screening assessment was therefore undertaken which identified a number of LSEs associated with the MKCP. Taking no account of mitigation measures, the MLP has the potential to affect the following European sites:

- **Urbanisation impacts upon areas of FLL** – Upper Nene Valley Gravel Pits SPA and Upper Nene Valley Gravel Pits Ramsar.

6.1.2 The HRA therefore progressed to the next stage of the HRA process, the AA. The AA explored the impact of urban development upon areas FLL associated with the Upper Nene Valley Gravel Pits SPA and Upper Nene Valley Gravel Pits Ramsar.

6.1.3 When taking into consideration mitigation provisions secured through Policy CEA10, the AA concluded no adverse impacts on the site integrity of the Upper Nene Valley Gravel Pits SPA and Upper Nene Valley Gravel Pits Ramsar due to urbanisation effects upon FLL as a result of the MKCP, either alone or in-combination.

6.2 Next steps

6.2.1 The purpose of this report is to inform the HRA of the Publication Draft Version of the MKCP using best available information.

6.2.2 MKCC, as the Competent Authority, has responsibility to make the Integrity Test, which can be undertaken in light of the conclusions set out in this report.

6.2.3 This report will be submitted to Natural England, the statutory nature conservation body, for formal consultation. MKCC must ‘have regard’ to Natural England’s representations under the provisions of the Habitats Regulations prior to making a final decision as to whether they will ‘adopt’ the conclusions set out within this report as their own.

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Appendix A: In-Combination Assessment

Plans and projects	Status	Summary of plan/project aspects which may act in-combination with MKCP to cause an LSE	Review of HRA data and summary of potential in-combination LSEs
Bedford Borough Council Local Plan	The Bedford Local Plan 2030 was adopted on 15th January 2020[1]. The council is currently considering the withdrawal of the current new plan (Local Plan 2040) which was at examination	The 2030 plan allocates growth to provide a minimum 3,169 new dwellings.	To support the development of the 2040 plan, a Habitats Regulations Assessment (HRA) was undertaken[2]. This looked at impacts upon the Upper Nene Valley Gravel Pits SPA/Ramsar in terms of functionally linked habitat for birds. It concluded no adverse impacts on site integrity of any European site from the Local Plan either alone, or in-combination. The combined impact of neighbouring authority growth, in-combination with the MKCP, on air quality, hydrology and public access and disturbance impacts, will be considered further in the HRA process.
Buckinghamshire Council Local Plan	Buckinghamshire Council was created in April 2020 from the areas that were previously administered by the former Buckinghamshire County Council and former districts of South Bucks, Chiltern, Wycombe and Aylesbury Vale. The	Consultation has been undertaken to date on the vision and objectives for development and transport for Buckinghamshire[3].	A scoping report HRA[4] was conducted in March 2023. The HRA identified LSEs at Burnham Beeches SAC, and Ashridge Commons and Woods SSSI (Chiltern Beechwoods SAC). The combined impact of neighbouring authority growth, in-combination with the MKCP, on air quality, hydrology and public access and disturbance impacts, will be considered further in the HRA process.

[1] Bedford Borough Council (2020) Local Plan 2030. Available at: https://www.bedford.gov.uk/files/local-plan-2030.pdf/download?inline [Date accessed: 26/09/25].

[2] AECOM (2024) Bedford Borough Local Plan 2040 Habitats Regulations Assessment. Available at: https://edrms.bedford.gov.uk/OpenDocument.aspx?id=No1L4FLZTYpNCVf5ithsPQ%3d%3d&name=Bedford%20Local%20Plan%20HRA%20April%202022.pdf [Date accessed: 17/07/25]

[3] Buckinghamshire Council (2023) The Local Plan for Buckinghamshire – Draft vision and objectives. Available at: https://media.buckinghamshire.gov.uk/documents/Draft_vision_and_objectives_2_1.pdf [Date accessed: 17/07/25]

[4] Bodsey Ecology Limited (2018) The Bedford Borough Local Plan 2030:Draft Submission September 2018 - Habitats Regulations Assessment. Available at: https://edrms.bedford.gov.uk/OpenDocument.aspx?id=67PnVbzF3aKwT%2fVgxkUfEw%3d%3d&name=26%20-%20Habitats%20Regulations%20Assessment.pdf [Date accessed: 26/09/25]

Plans and projects	Status	Summary of plan/project aspects which may act in-combination with MKCP to cause an LSE	Review of HRA data and summary of potential in-combination LSEs
	Council is at the early stages of preparing the Buckinghamshire Local Plan.		
Central Bedfordshire Local Plan	The Central Bedfordshire Local Plan 2015 to 2035 was adopted in July 2021[5]. The Council is in the early stages of preparing a new local plan.	The adopted plan provides for approximately 39,350 new homes and 24,000 new jobs.	The adopted Local Plan was supported by an HRA[6]. This provided a screening assessment which concluded no likely significant effects when mitigation was applied. It is noted that this assessment was undertaken prior to the Sweetman ruling (see **paragraph 2.2.3** of the main HRA report). The combined impact of neighbouring authority growth, in-combination with the MKCP, on air quality, hydrology and public access and disturbance impacts, will be considered further in the HRA process.
North Northamptonshire Local Plan	The current Local Plan for North Northamptonshire includes the Joint Core Strategy and supporting area-based plans. The Joint Core Strategy adopted in July 2016 provides the strategic planning policies for the future development of the area from 2016 to 2031.	The Joint Core Strategy[7] aims to provide 35,000 – 40,000 new homes over the plan period.	An HRA for the Joint Core Strategy was not available at the time of writing on the Council's website. The combined impact of neighbouring authority growth, in-combination with the MKCP, on air quality, hydrology and public access and disturbance impacts, will be considered further in the HRA process.

[5] Central Bedfordshire Council (2018) Central Bedfordshire Council Local Plan (2015-2035). Available at: https://www.centralbedfordshire.gov.uk/info/153/central_bedfordshire_local_plan_2015_to_2035 [Date accessed: 17/07/25]

[6] Central Bedfordshire Council (2018) Central Bedfordshire Council Local Plan (2015-2035) Habitats Regulations Assessment. Available at: https://www.centralbedfordshire.gov.uk/info/153/central_bedfordshire_local_plan_2015_to_2035/1036/technical_reports_local_plan [Date accessed: 17/07/25]

[7] North Northamptonshire Joint Planning Unit (2016) North Northamptonshire Joint Core Strategy 2011 – 2031.

Plans and projects	Status	Summary of plan/project aspects which may act in-combination with MKCP to cause an LSE	Review of HRA data and summary of potential in-combination LSEs
	The Council is currently preparing a new local plan and has undertaken consultation on the scope and issues which will be included in the plan.		
West Northamptonshire Local Plan	The Council is currently preparing a new Local Plan[8] to guide development up to 2041. Consultation on a Regulation 18 Draft Plan ran between April and June 2024.	The Local Plan sets out the provision of 39,150 new dwellings over the Plan period.	An HRA screening report was prepared to support the development of the new local plan[9]. This HRA made the following conclusions: - No LSEs in relation to Rutland Water SPA/Ramsar; - LSEs at the Upper Nene Valley Gravel Pits SPA/Ramsar due to recreational disturbance, direct loss of functionally linked land and non-physical disturbance; and, - LSEs to the Upper Nene Valley Gravel Pits SPA/Ramsar as a result of changes to water quality. The combined impact of neighbouring authority growth, in-combination with the MKCP, on air quality, hydrology and public access and disturbance impacts, will be considered further in the HRA process.
Vale of Aylesbury	The Vale of Aylesbury Local Plan was adopted in September 2021[10].	This plan aims to deliver a total of 28,600 new homes and 27	The VALP 2017 Submission HRA[11] summarised the outputs of a screening assessment. It focused on the Chilterns Beechwoods SAC and Aston Rowant SAC. It concluded no LSEs as a result of

[8] West Northamptonshire Council. New Local Plan for West Northamptonshire. Available at: https://www.westnorthants.gov.uk/planning-policy/new-local-plan-west-northamptonshire [Date accessed: 17/07/25]

[9] Urban Edge Environmental Consulting (2024) Habitats Regulations Assessment for the West Northamptonshire Local Plan. Screening Report for the Draft Local Plan. Available at: https://www.westnorthants.gov.uk/planning-policy/new-local-plan-west-northamptonshire [Date accessed: 17/07/25]

[10] Buckinghamshire Council (2021) Vale of Aylesbury Local Plan (VALP) 2013 – 2033. Adopted Plan September 2021. Available at: https://www.buckinghamshire.gov.uk/planning-and-building-control/planning-policy/local-planning-guidance/local-development-plans/ [Date accessed: 17/07/25]

[11] Land Use Consultants. VALP Habitat Regulations Assessment (2017).

Plans and projects	Status	Summary of plan/project aspects which may act in-combination with MKCP to cause an LSE	Review of HRA data and summary of potential in-combination LSEs
		hectares of employment land over the plan period.	VALP upon any European site, either alone, or in-combination with other plans and projects, and, as such, ruled out the requirement for further assessment of the VALP under the Habitats Regulations. The combined impact of neighbouring authority growth, in-combination with the MKCP, on air quality, hydrology and public access and disturbance impacts will be considered further in the HRA process.
Milton Keynes Local Transport Plan	Milton Keynes is in the process of preparing its 5th Local Transport Plan.	The Local Transport Plan 5 will sit over other transport strategies and policies such as the Local Cycling and Walking Plan (LCWIP) and the Bus Service Improvement Plan (BSIP)	No HRA was available at the time of writing for LPT5 or previous versions of the LTP. Policies set out in LTP5, the LCWIP and BSIP are likely to encourage a modal shift from the private car and positive impacts upon air quality.
Milton Keynes Waste Development Plan Document (2007 – 2026)	The Milton Keynes Waste DPD was adopted in February 2008[12].	The DPD covers the management of household (municipal) waste, commercial and industrial, and construction and demolition waste. The DPD encourages sustainable waste management practices through the development of policies and proposals to guide actions and decisions.	The Waste DPD was supported by an HRA screening assessment[13] which concluded that there would be no likely significant effects of the DPD and, therefore, a full Appropriate Assessment was not required.

[12] Milton Keynes City Council (2008) Milton Keynes Waste Development Plan Document (2007 – 2026). Available at: https://www.milton-keynes.gov.uk/sites/default/files/2022-02/Waste%20DPD.pdf [Date accessed: 17/07/25]

[13] Milton Keynes (2007) Milton Keynes Council Waste Development Plan Document Appropriate Assessment- Screening Report. Available at: https://www.milton-keynes.gov.uk/sites/default/files/2022-02/WDPD_AA_Screening_report.pdf [Date accessed: 17/07/25]

Plans and projects	Status	Summary of plan/project aspects which may act in-combination with MKCP to cause an LSE	Review of HRA data and summary of potential in-combination LSEs
Milton Keynes Local Minerals Plan	The Miton Keynes Local Minerals Plan was adopted in July 2017[14].	The Minerals Plan sets out the strategic vision and objectives for minerals-related development; identifies the mineral resources of local and national importance, as well as the amount of these to be provided from within Milton Keynes; identifies the development strategy and site-specific allocations to facilitate delivery of a steady and adequate supply of aggregates and maintenance of landbanks; and sets out the policies and proposals against which planning applications for minerals-related development will be determined.	The Minerals Local Plan was accompanied by an HRA Scoping Report[15]. This report concluded that there were no European sites upon which the Plan could pose any significant effects and, therefore, there was no requirement for the Plan to undergo further assessment under the Habitats Regulations.
Anglian River Basin Management Plan (RBMP)	The Anglian RBMP[16] was updated in December 2022.	The Plan provides an overview of river basin planning in England and Wales for the Anglian River Basin	The RBMP was supported by an HRA[17]. It concluded no adverse impacts on the integrity of any European sites either alone, or in-combination.

[14] Milton Keynes City Council (2017) Minerals Local Plan – Adopted Version. Available at: https://www.milton-keynes.gov.uk/planning-and-building/planning-policy/minerals-policy [Date accessed: 17/07/25]

[15] Milton Keynes Council (2013) Minerals Local Plan Habitats Regulations Scoping Brief, September 2013. Available at: https://www.milton-keynes.gov.uk/sites/default/files/2022-01/401%20Minerals%20Local%20Plan%20-%20Habitats%20Regulation%20Assessment%20Scoping%20Brief.pdf [Date accessed: 17/07/25]

[16] 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: 01/07/25]

[17] 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: 01/07/25]

Plans and projects	Status	Summary of plan/project aspects which may act in-combination with MKCP to cause an LSE	Review of HRA data and summary of potential in-combination LSEs
		District. It includes objectives for each water body and a summary of the measures necessary to reach those objectives.	The RBMP actions are focused on improving waterbodies and water dependent habitat sites. Whilst development activities arising from Local Development Plans (including the MKCP) may inhibit the ability of the RBMP to achieve objectives relating to European site protected areas, the overall effect of the RBMP is to promote management towards Good Ecological Status (GES).
Anglian Water – Water Resource Management Plan	An updated Water Resource Management Plan[18] for Anglian Water was approved by the government and published in 2024.	The WRMP24 sets out how Anglian Water will maintain a sustainable and secure supply of drinking water over the plan period. WRMP24 proposes to meet growing demand primarily through additional inward transfers of water, facilitated by a new storage reservoir in south Lincolnshire and new pipelines to supply water around the Anglian Water region. Demand management will also contribute to meeting the supply-demand balance by 2050.	The WRMP was supported by an HRA[19]. It concluded no adverse impacts on the integrity of any European site either alone, or in-combination, so long as adjustments are made to the application of measures described in the individual assessments.

[18] 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: 01/07/25]

[19] 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: 17/07/25]

Plans and projects	Status	Summary of plan/project aspects which may act in-combination with MKCP to cause an LSE	Review of HRA data and summary of potential in-combination LSEs
Affinity Water (AW) Water Resource Management Plan	Final WRMP published (WRMP24)[20]	Whilst the Plan area is not located within the AW WRMP area, to increase resilience to drought, water trading with Affinity Water 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. The objective to increase water availability and water efficiency is mirrored in the Water Resource East (WRE) summary, with the goals for desalination, reservoir design and planning, and water re-use. Affordability of bills and viability of housing are also discussed in the WRE report[21].	An HRA[22] 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

[20] Affinity Water (2024) Water Resource Management Plan 2024. Available at: https://affinitywater.uk.engagementhq.com/wrmp [Date accessed: 17/07/25]

[21] JBA Consulting (2024). Milton Keynes Integrated Water Management Study Phase 1. Final Report. Available at: https://www.milton-keynes.gov.uk/sites/default/files/2024-07/Integrated%20Water%20Management%20Study%20Part%201_0.pdf [Date accessed: 17/07/25].

[22] 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: 17/07/25]

Plans and projects	Status	Summary of plan/project aspects which may act in-combination with MKCP to cause an LSE	Review of HRA data and summary of potential in-combination LSEs
Anglian Water – Drought Plan	The Anglian Water Drought Plan[23] was published in April 2022.	The Drought Plan outlines the operational steps that will be conducted if we face a drought in the next five years. It describes how supplies will be enhanced, demands managed, and environmental impacts minimised. It proposes ongoing leakage reduction measures, water efficiency, and monitoring and metering activities.	An HRA[24] was prepared in support of the Drought Plan. It concluded no adverse impacts on the integrity of any European site either alone, or in-combination. This plan aims to protect the water environment in times of drought. It is unlikely that the Drought Plan will have alone, or in-combination, effects on the water environment.
Essex and Suffolk Water – Drought Plan	The Draft Essex and Suffolk Water Drought Plan[25] was published in 2024.	The Drought Plan outlines the operational steps that will be conducted if we face a drought in the next five years. It describes how supplies will be enhanced, demands managed, and environmental impacts minimised. It proposes ongoing leakage reduction measures, water efficiency, and monitoring and metering activities.	An HRA was not publicly available on the Drought website at the time of writing. This plan aims to protect the water environment in times of drought. It is unlikely that the Drought Plan will have alone, or in-combination, effects on the water environment.

[23] 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: 01/07/25]

[24] 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: 01/07/25]

[25] Essex and Suffolk Water (2022) Our Draft Drought Plan 2022 Summary. Available at: https://www.nwg.co.uk/globalassets/corporate/environment-pdfs/drought-plan/esw/drought-management-plan-summary-esw-final.pdf [Date accessed: 17/07/25]

Appendix B: European site conservation objectives and threats and pressures

Ouse Washes SAC[1,]

Conservation objectives:

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

- The extent and distribution of 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[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 atmospheric nitrogen deposition and acidification;
- 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.

Ouse Washes SPA[4]

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)

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[1] Natural England (2018) European Site Conservation Objectives for Ouse Washes SAC (UK0013011). Available at: https://publications.naturalengland.org.uk/publication/4894882430713856 [Date accessed: 02/07/25]

[2] Natural England (2014) Site Improvement Plan: Ouse Washes (SIP160). Available at: https://publications.naturalengland.org.uk/publication/5354106084392960 [Date accessed: 02/07/25]

[3] 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: 02/07/25]

[4] Natural England (2019) European Site Conservation Objectives for Ouse Washes SPA (UK9008041). Available at: https://publications.naturalengland.org.uk/publication/6636062256398336 [Date accessed: 02/07/25]

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[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;
- 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;
- Air pollution – impact of atmospheric nitrogen deposition and acidification;
- 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.

Ouse Washes Ramsar[7]

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.

Ramsar Criterion	Justification for the application of each criterion
1	The site is one of the most extensive areas of seasonally-flooding washland of its type in Britain.
2	The site supports several nationally scarce plants, including Small Water Pepper *Polygonum minus*, Whorled Water-milfoil *Myriophyllum verticillatum*, Greater Water Parsnip *Sium latifolium*, River Waterdropwort *Oenanthe fluviatilis*, Fringed Water-lily *Nymphoides peltata*, Long-stalked Pondweed *Potamogeton praelongus*, Hair-like Pondweed *Potamogeton trichoides*, Grass-wrack Pondweed *Potamogeton compressus*, Tasteless Water-pepper *Polygonum mite* and Marsh Dock *Rumex palustris*. Invertebrate records indicate that the site holds relict fenland fauna, including the British Red Data Book species Large Darter Dragonfly *Libellula fulva* and the Rifle Beetle *Oulimnius major*.

[5] Natural England (2014) Site Improvement Plan: Ouse Washes (SIP160). Available at: https://publications.naturalengland.org.uk/publication/5354106084392960 [Date accessed: 02/07/25]

[6] 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: 02/07/25]

[7] JNCC (1976) Information Sheet on Ramsar Wetlands (RIS): Ouse Washes. Available at: https://jncc.gov.uk/jncc-assets/RIS/UK11051.pdf [Date accessed: 03/07/25]

Ramsar Criterion	Justification for the application of each criterion
	The site also supports a diverse assemblage of nationally rare breeding waterfowl associated with seasonally-flooding wet grassland.
5	Assemblages of international importance: Species with peak counts in winter: • 59133 Waterfowl (five year peak mean 1998/99-2002/2003)
6	Qualifying Species/populations (as identified at designation): Species with peak counts in winter: • Tundra Swan, *Cygnus columbianus bewickii*, Northwest Europe 1140 individuals, representing an average of 3.9% of the population (five year peak mean 1998/9-2002/3) • Whooper Swan, *Cygnus cygnus*, Iceland/UK/Ireland 653 individuals, representing an average of 3.1% of the population (five year peak mean 1998/9-2002/3) • Eurasian Wigeon, *Anas penelope*, Northwest Europe 22630 individuals, representing an average of 1.5% of the population (five year peak mean 1998/9-2002/3) • Gadwall, *Anas strepera strepe*ra, Northwest Europe 438 individuals, representing an average of 2.5% of the GB population (five year peak mean 1998/9- 2002/3) • Eurasian Teal, *Anas crecca*, Northwest Europe 3384 individuals, representing an average of 1.7% of the GB population (five year peak mean 1998/9-2002/3) • Northern Pintail, *Anas acuta*, Northwest Europe 2108 individuals, representing an average of 3.5% of the population (five year peak mean 1998/9-2002/3) • Northern Shoveler, *Anas clypeata*, Northwest and central & Europe 627 individuals, representing an average of 1.5% 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 Plan[8]:

- 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 spring flooding and winter flood depths. These two factors have had an adverse impact on vegetation and bird features of the site.

[8] Ibid.

The Wash & Norfolk Coast SAC[9]

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 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[10,11]

- 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,

[9] 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: 03/07/25]

[10] Natural England (2014) Site Improvement Plan: The Wash and North Norfolk Coast (SIP245). Available at: https://publications.naturalengland.org.uk/publication/5327498292232192 [Date accessed: 03/07/25]

[11] 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: 03/07/25]

- 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 SPA[12]

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)

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[13,14]

[12] Natural England (2019) European Site Conservation Objectives for The Wash SPA (UK9008021). Available at: https://publications.naturalengland.org.uk/publication/5747661105790976 [Date accessed: 03/07/25]

[13] Natural England (2014) Site Improvement Plan: The Wash and North Norfolk Coast (SIP245). Available at: https://publications.naturalengland.org.uk/publication/5327498292232192 [Date accessed: 03/07/25]

[14] 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: 03/07/25]

- 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 Ramsar[15]

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.

Ramsar Criterion	Justification for the application of each criterion
1	The Wash is a large shallow bay comprising very extensive saltmarshes, major intertidal banks of sand and mud, shallow water and deep channels.
3	Qualifies because of the inter-relationship between its various components including saltmarshes, intertidal sand and mud flats and the estuarine waters. The saltmarshes and the plankton in the estuarine water provide a primary source of organic material which, together with other organic matter, forms the basis for the high productivity of the estuary.
5	Assemblages of international importance: Species with peak counts in winter: 292541 Waterfowl (five year peak mean 1998/99-2002/2003)
6	Qualifying Species/populations (as identified at designation): Species with peak counts in spring/autumn: • Eurasian Oystercatcher, *Haematopus ostralegus ostralegus*, Europe and northwest Africa (wintering) 15616 individuals, representing an average of 1.5% of the population (five year peak mean 1998/9-2002/3) • Grey Plover, *Pluvialis squatarola*, Eastern Atlantic/western Africa (wintering) 13129 individuals, representing an average of 5.3% of the population (five year peak mean 1998/9-2002/3 - spring peak)

[15] JNCC (1988) Information Sheet on Ramsar Wetlands (RIS): The Wash. Available at: https://jncc.gov.uk/jncc-assets/RIS/uk11072.pdf [Date accessed: 03/07/25]

Ramsar Criterion	Justification for the application of each criterion
	• Red Knot, *Calidris canutus islandica*, Western and southern Africa (wintering) 68987 individuals, representing an average of 15.3% of the population (five year peak mean 1998/9-2002/3) • Sanderling, *Calidris alba*, Eastern Atlantic 3505 individuals, representing an average of 2.8% of the population (five year peak mean 1998/9-2002/3) • Eurasian Curlew, *Numenius arquata arquata*, N. a. arquata Europe (breeding) 9438 individuals, representing an average of 2.2% of the population (five year peak mean 1998/9-2002/3) • Common Redshank, *Tringa totanus totanus*, 6373 individuals, representing an average of 2.5% of the population (five year peak mean 1998/9-2002/3) • Ruddy Turnstone, *Arenaria interpres interpres*, Northeastern Canada, Greenland/western Europe and northwest Africa 888 individuals, representing an average of 1.7% of the GB population (five year peak mean 1998/9- 2002/3) Species with peak counts in winter: • Pink-footed Goose, *Anser brachyrhynchus*, Greenland, Iceland/UK 29099 individuals, representing an average of 12.1% of the population (five year peak mean 1998/9-2002/3) • Dark-bellied Brent Goose, *Branta bernicla bernicla*, 20861 individuals, representing an average of 9.7% of the population (five year peak mean 1998/9-2002/3) • Common Shelduck, Tadorna tadorna, Northwest Europe 9746 individuals, representing an average of 3.2% of the population (five year peak mean 1998/9-2002/3) • Northern Pintail, *Anas acuta*, Northwest Europe 2108 individuals, representing an average of 3.5% of the population (five year peak mean 1998/9-2002/3) • Dunlin, *Calidris alpina alpina*, Western Siberia/western Europe 36600 individuals, representing an average of 2.7% of the population (five year peak mean 1998/9-2002/3) • Bar-tailed Godwit, *Limosa lapponica lapponica*, Western Palearctic 16546 individuals, representing an average of 13.7% 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 Plan[16]:

N/A

Upper Nene Valley Gravel Pits SPA[17]

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)

[16] Ibid.

[17] 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: 02/07/25]

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[18,19]

- 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;
- Air pollution – impact of air pollution, including nitrogen deposition and acidification;
- 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 Ramsar[20]

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.

Ramsar Criterion	Justification for the application of each criterion
5	The site regularly supports 20,000 or more waterbirds: In the non-breeding season, the site regularly supports 23,821 individual waterbirds (five year peak mean 1999/2000-2003/04).
6	Qualifying Species/populations (as identified at designation): Species with peak counts in winter: • Mute Swan, *Cygnus olor*, 629 individuals, representing an average of 1.7% GB population (five year peak mean 1999/2000-2003/4) • Gadwall, *Anas strepera strepe*ra, Northwest Europe 773 individuals, representing an average of 2.0% of the population (five year peak mean 1999/2000-2003/4) 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.

[18] Natural England (2014) Site Improvement Plan: Upper Nene Valley Gravel Pits SPA (SIP254). Available at: https://publications.naturalengland.org.uk/publication/6732225261338624 [Date accessed: 02/07/25]

[19] Natural England (2017) European Site Conservation Objectives: Supplementary advice on conserving and restoring site features Upper Nene Valey Gravel Pits Special Protection Area (SPA) Site Code: UK9020296 Available at: https://designatedsites.naturalengland.org.uk/TerrestrialAdvicePDFs/UK9020296.pdf [Date accessed: 04/07/25]

[20] 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: 03/07/25]

Threats and Pressures at European site which may be affected by the Local Plan[21]:

- 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 pubic rights of way is a significant cause of disturbance in some areas. The site is also subject to a variety of recreational activities including fishing and water sports. Demand for access and formal/informal recreational activities within the Nene Valley are increasing; development of facilities/opportunities is often in an uncoordinated manner.

[21] Ibid.

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

The Milton Keynes City Plan (MKCP) policies and allocations have been screened using the DTA HRA pre-screening categories[1] presented in **Table C.1.**

Table C.1: *Assessment and reasoning categories from Part F of the DTA Handbook*

Assessment and reasoning categories from Chapter F of The Habitats Regulations Assessment Handbook (DTA Publications, 2013):
A. General statements of policy / general aspirations.
B. Policies listing general criteria for testing the acceptability / sustainability of proposals.
C. Proposal referred to but not proposed by the plan.
D. General plan-wide environmental protection / site safeguarding / threshold policies
E. Policies or proposals that steer change in such a way as to protect European sites from adverse effects.
F. Policies or proposals that cannot lead to development or other change.
G. Policies or proposals that could not have any conceivable or adverse effect on a site.
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).
I. Policies or proposals with a likely significant effect on a site alone.
J. Policies or proposals unlikely to have a significant effect alone.
K. Policies or proposals unlikely to have a significant effect either alone or in combination.
L. Policies or proposals which might be likely to have a significant effect in combination.
M. Bespoke area, site or case-specific policies or proposals intended to avoid or reduce harmful effects on a European site.

[1] Tyldesley, D., and Chapman, C. (2013) The Habitats Regulations Assessment Handbook (September) (2013) edition UK: DTA Publications Limited. Available at: www.dtapublications.co.uk [Date accessed: 17/07/25]

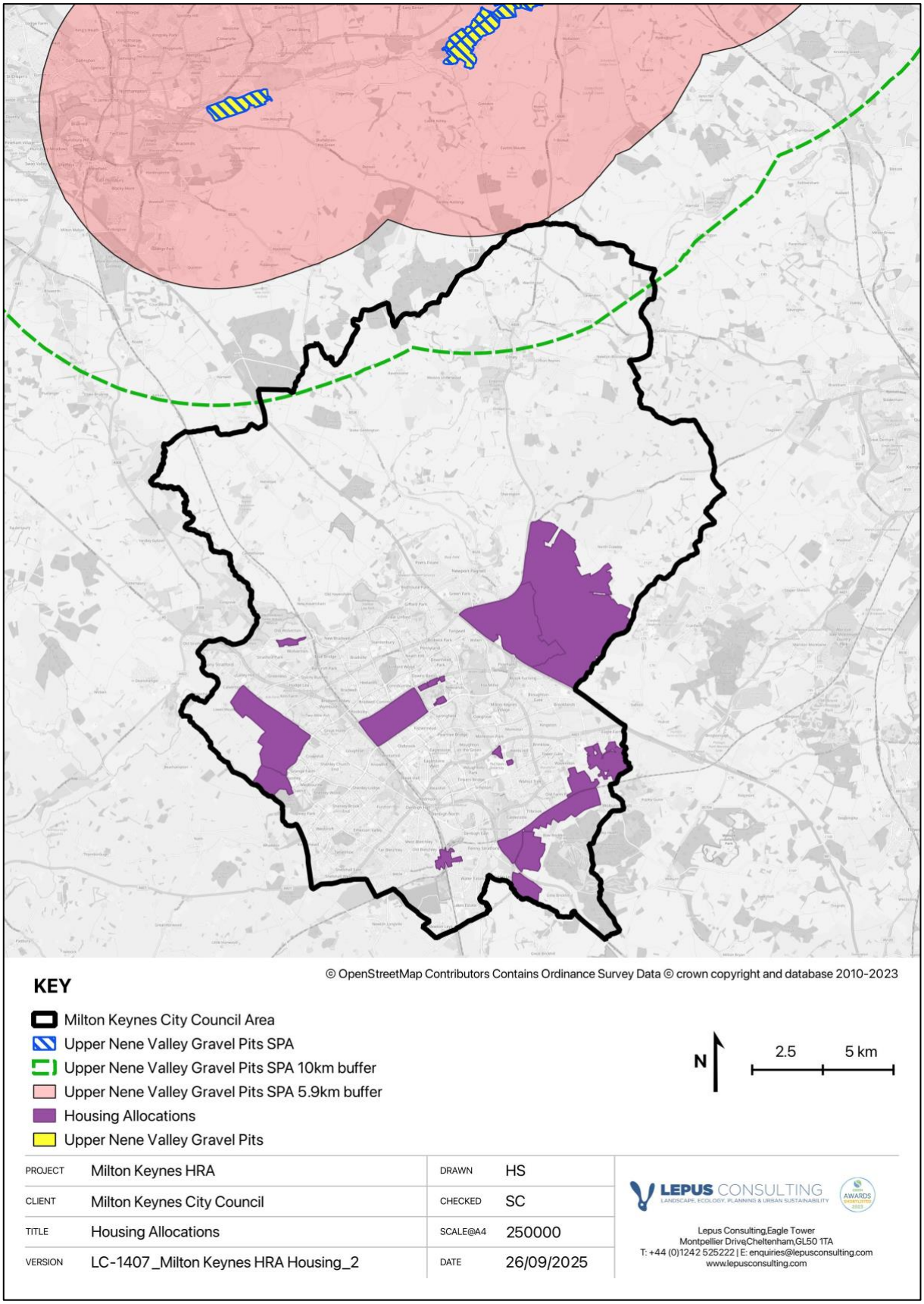

Figure C.1: *Location of MKCP Housing Allocations*

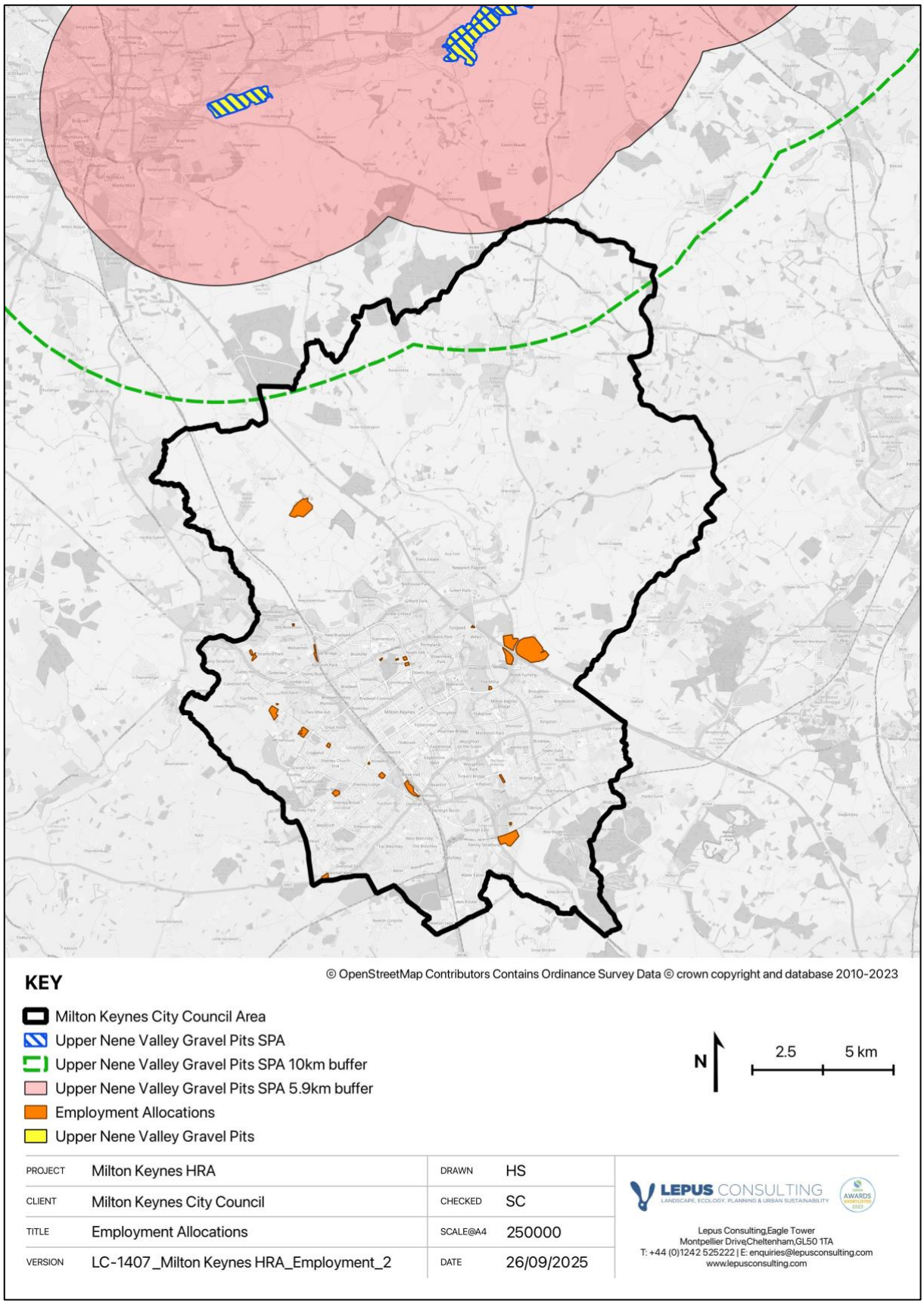

Figure C.2: *Location of MKCP Employment Allocations*

Vision and Spatial Objectives

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
N/A	Ambition	The ambition sets out the vision for Milton Keynes. 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 A	Screen out
N/A	Objectives	The objectives define the aims of the MLP 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

Growth Strategy

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
Policy GS1	Our spatial strategy	This policy sets out the focus of development within Milton Keynes over the Plan period. This policy supports development which has the potential for LSEs as follows: • Urbanisation impacts upon areas of FLL associated with windfall development – Upper Nene Valley Gravel Pits SPA and Ramsar.	Category L	Screen in
Policy GS2	Strategy for homes	This policy sets out a strategy for delivery of a minimum of 50,372 (net) new homes over the Plan period, and a buffer of 59,779 homes, and the locations for this development. The location of these allocations is presented in **Figure C.1**. This policy triggers development which has the potential for LSEs as follows: • Urbanisation impacts upon areas of FLL associated with windfall development – Upper Nene Valley Gravel Pits SPA and Ramsar.	Category L	Screen in
Policy GS3	Strategy for economic prosperity	This policy sets out the strategy for economic development in Milton Keynes for around 300,000 square metres of office, education, or research and development uses and 210.2ha of employment land. The location of these allocations is presented in **Figure C.2**. Given the location of employment allocations, LSEs upon European sites are unlikely to be triggered.	Category K	Screen out
Policy GS4	Strategy for people friendly and healthy places	This policy sets out requirements for an appropriate mix and distribution of social and cultural infrastructure, and community facilities which are connected by active and public transport options. This policy will not directly trigger a change or development which could lead to an LSE at any European site, either alone, or in-combination.	Category K	Screen out

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
Policy GS5	Our retail hierarchy	This policy sets out a retail hierarchy for Milton Keynes in terms of locations and nature of retail to be supported. Given the location of retail centres, LSEs upon European sites are unlikely to be triggered by this policy.	Category K	Screen out
Policy GS6	Open countryside	This policy sets out requirements and criteria for development in the open countryside. This policy will not directly trigger a change or development which could lead to an LSE at any European site, either alone, or in-combination.	Category F	Screen out
Policy GS7	Wind and solar development spatial strategy	This policy sets out preferred areas for wind and solar development. These areas coincide with areas of FLL associated with the Upper Nene Valley Gravel Pits SPA and Ramsar designations. Wind and solar projects are likely to have the following potential impacts upon European sites: • Urbanisation impacts upon areas of FLL associated with wind and solar development – Upper Nene Valley Gravel Pits SPA and Ramsar.	Category L	Screen in
Policy GS8	Hanslope Park	This policy allocates Hanslope Park for redevelopment to maintain its role in national security/governmental logistics. The location of this allocation is presented in **Figure C.2**. Given the location of this allocation, LSEs upon European sites are unlikely to be triggered.	Category K	Screen out
Policy GS9	Supporting growth with infrastructure	This policy supports infrastructure required to aid growth. The location of these allocations is presented in **Figures C.1** and **C.2**. Given the location of allocations and development coming forward in the MKCP, LSEs upon European sites are unlikely to be triggered.	Category K	Screen out
Policy GS10	Movement and access	This policy supports new development where it minimises the need to travel, promotes accessibility by public transport and active travel modes, and protects grid roads and redways. This 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 GS11	Adjacent and cross-boundary growth	This policy sets criteria for proposed allocations or development proposals on the edge of Milton Keynes City administrative area that are either wholly or partly within the administrative boundary of a neighbouring authority. This policy will not trigger a change or development which could lead to an LSE at any European site, either alone, or in-combination.	Category B	Screen out
Policy GS12	Redevelopment of Wolverton Railway Works	This policy supports mixed-use residential development at Wolverton Railway works, including approx. 400 homes, education provision, health and social provision, and a mix of non-residential floorspace and community uses. The location of this allocation is presented in **Figures C.1** and **C.2**. Given the location of this allocation, LSEs upon European sites are unlikely to be triggered.	Category K	Screen out

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
Policy GS13	Redevelopment of Walton Campus	This policy supports mixed-use residential led development at Walton Camps which includes approx. 300 new homes on Site 1 and 150 homes on Site 2, education facilities or provisions, and health and social care facilities. The location of this allocation is presented in **Figures C.1** and **C.2**. Given the location of this allocation, LSEs upon European sites are unlikely to be triggered.	Category K	Screen out
Policy GS14	Eastern Strategic City Extension	This policy supports new strategic, residential led, mixed-use development at the Eastern Strategic City Extension, which includes approx. 16,000 homes (7,750 in the Plan period), two sites to accommodate 28 gypsy and traveller pitches, 40 hectares of employment land, local centres, transport provisions, and education and healthcare facilities. The location of this allocation is presented in **Figures C.1** and **C.2**. Given the location of this allocation, LSEs upon European sites are unlikely to be triggered.	Category K	Screen out
Policy GS15	East of Wavendon Strategic City Extension	This policy supports mixed-use, residential led strategic development at the East of Wavendon Strategic City Extension, which includes approx. 2,250 homes, education and health facilities, and local centres. The location of this allocation is presented in **Figures C.1** and **C.2**. Given the location of this allocation, LSEs upon European sites are unlikely to be triggered.	Category K	Screen out
Policy GS16	Wavendon Strategic Buffers	This policy protects Wavendon's character as a distinct and historic settlement. This 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 GS17	South of Bow Brickhill Strategic City Extension	This policy supports mixed-use, residential led strategic development south of Bow Brickhill Strategic City Extension, which includes approx. 1,300 new homes, education and health facilities, and local centres. The location of this allocation is presented in **Figures C.1** and **C.2**. Given the location of this allocation, LSEs upon European sites are unlikely to be triggered.	Category K	Screen out
Policy GS18	Levante Gate Strategic City Extension	This policy supports mixed-use, residential led strategic development at Levante Gate Strategic City Extension, which includes approx. 1,250 new homes, education and health facilities, and local centres. The location of this allocation is presented on **Figures C.1** and **C.2**. Given the location of this allocation, LSEs upon European sites are unlikely to be triggered.	Category K	Screen out
Policy GS19	Shenley Dens Strategic City Extension	This policy supports mixed-use, residential led strategic development Shenley Dens Strategic City Extension, which includes approx. 1,000 new homes, education and health facilities, and local centres. The location of this allocation is presented on **Figures C.1** and **C.2**. Given the location of this allocation, LSEs upon European sites are unlikely to be triggered.	Category K	Screen out

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
Policy GS20	Western Expansion Area	This policy supports housing (200ha) employment (10-20ha) education and open space development. The location of this allocation is presented on **Figures C.1** and **C.2**. Given the location of this allocation, LSEs upon European sites are unlikely to be triggered.	Category K	Screen out
Policy GS21	Milton Keynes East Strategic Urban Area	This policy supports housing (5,000 homes) employment (105ha) education and transport development. The location of this allocation is presented on **Figures C.1** and **C.2**. Given the location of this allocation, LSEs upon European sites are unlikely to be triggered.	Category K	Screen out
Policy GS22	South East Milton Keynes Strategic Urban Extension	This policy supports the development of 3,000 dwellings alongside education and transport facilities. The location of this allocation is presented on **Figures C.1** and **C.2**. Given the location of this allocation, LSEs upon European sites are unlikely to be triggered.	Category K	Screen out
Policy GS23	South of Caldecotte Strategic Employment Allocation	This policy supports the development of Class B2 and B8 employment space. The location of this allocation is presented on **Figures C.1** and **C.2**. Given the location of this allocation, LSEs upon European sites are unlikely to be triggered.	Category K	Screen out

Infrastructure First

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
Policy INF1	Infrastructure First Principles	This policy sets out requirements for new development to provide appropriate infrastructure. It does not, therefore, 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 INF2	Infrastructure planning and delivery principles for strategic allocations	This policy sets out requirements for new development to provide appropriate infrastructure at the strategic allocations for growth. It does not, therefore, 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

Central Milton Keynes

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
N/A	Vision for Central Milton Keynes	The vision for Central Milton Keynes sets out aspirations for this area around key themes. 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 A	Screen out
Policy CMK1	Central Milton Keynes Development Framework Area	This policy sets out the development framework for Central Milton Keynes, including Campbell Park. It sets out the location of housing, employment and retail uses. Given the location of development set out in this policy, LSEs on European sites are unlikely.	Category K	Screen out
Policy CMK2	Central Milton Keynes Placemaking Principles	This policy lists general criteria for place-making that development must achieve. It does not, therefore, 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 CMK3	Central Milton Keynes Skyline Strategy (Tall Buildings)	This policy lists general criteria tall buildings in Milton Keynes. It does not, therefore, 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

Central Bletchley

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
Policy CB1	Supporting investment in Central Bletchley	This policy supports development in Central Bletchley and sets development principles for the area. Given the location of development set out in this policy, LSEs on European sites are unlikely.	Category K	Screen out

People friendly and healthy places

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
Policy PFHP1	Delivering healthier places	This policy sets out requirements for new development proposals to reduce health inequalities and address local health priorities. It does not, therefore, 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 PFHP2	Provision and protection of community facilities	This policy sets out requirements for provision of new community facilities and where the loss of existing facilities would be supported. It does not, therefore, 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 PFHP3	New Local Centres	This policy sets out requirements for new local centres in key areas. Given the location of development set out in this policy, LSEs on European sites are unlikely.	Category K	Screen out
Policy PFHP4	Delivering a healthier food environment	This policy supports development where it contributes to an improvement in the food environment. It does not, therefore, 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 PFHP5	Designing people friendly places	This policy sets principles for the design of people friendly places. It does not, therefore, 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 PFHP6	Designing healthy streets	This policy sets principles for the design of healthy streets. It does not, therefore, 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 PFHP7	Well-designed buildings and spaces	This policy sets objectives and principles for the design of buildings and spaces. It does not, therefore, 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 PFHP8	Tall buildings outside CMK	This policy sets requirements for the design of tall buildings outside CMK. It does not, therefore, 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 PFHP9	Amenity for healthy buildings and spaces	This policy sets requirements new development in terms of amenity provision at buildings and in spaces. It does not, therefore, 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

High Quality Homes

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
Policy HQH1	Healthy homes	This policy sets out requirements for development to provide a mix of home types. It does not, therefore, 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 HQH2	Affordable homes	This policy sets out requirements for affordable homes. It does not, therefore, 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 HQH3	Supported and specialist homes	This policy sets out requirements for development of supported and specialist homes. It does not, therefore, 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 HQH4	Supporting transit-oriented development and estate regeneration	This policy sets out criteria for transit-oriented development and estate regeneration. It does not, therefore, 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 HQH5	Homes for co-living	This policy sets out requirements for the development of homes for co-living. It does not, therefore, 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 HQH6	Houses in multiple occupation	This policy sets out requirements for the development of houses in multiple occupation. It does not, therefore, 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 HQH7	Pitches for Gypsies and Travellers	This policy safeguards gypsy and traveller pitches in Calverton Lane (12 pitches) and Willen Road (6 pitches) and allocates new pitches and provides criteria for development of these sites. Given the location of development set out in this policy, LSEs on European sites are unlikely.	Category K	Screen out
Policy HQH8	Accommodation for boat dwellers	This policy sets out criteria for permanent moorings on waterways. It does not, therefore, 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 HQH9	Exception sites	This policy sets out criteria where exception sites will be supported. It does not, therefore, 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 Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
Policy HQH10	Amenity for homes	This policy sets out the criteria for amenity in homes. It does not, therefore, 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 HQH11	Children's Care Homes	This policy sets out the criteria for change of use to children's care homes. It does not, therefore, 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

Climate and environmental action

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
CEA1	Sustainable buildings	This policy sets out the criteria for sustainable buildings. It does not, therefore, 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
CEA2	Green roofs and walls	This policy sets out requirements for incorporation of green roofs and walls into development. It does not, therefore, 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
CEA3	Resilient design	This policy sets out requirements for resilient design of buildings. It does not, therefore, 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
CEA4	Retrofitting	This policy sets out requirements for retrofitting of buildings. It does not, therefore, 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
CEA5	Water efficiency	This policy sets out requirements for water efficiency in building design. It does not, therefore, trigger development or change and would, therefore, not lead to an LSE at any European site, either alone, or in-combination.	Category D	Screen out
CEA6	Low and zero carbon energy provision	This policy sets out requirements for low and zero carbon energy provision. It does not, therefore, 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 Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
CEA7	Mitigating wider environmental pollution	This policy sets out requirements for mitigation of environmental pollution. It is a plan wide environmental protection policy. It does not, therefore, trigger development or change and would, therefore, not lead to an LSE at any European site, either alone, or in-combination.	Category D	Screen out
CEA8	Provision and protection of accessible open space	This policy sets out requirements for the provision and protection of open space. It does not, therefore, 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
CEA9	Biodiversity and habitats networks	This policy sets out requirements for the protection of biodiversity and habitats networks. It is a plan wide environmental protection policy. It does not, therefore, trigger development or change and would, therefore, not lead to an LSE at any European site, either alone, or in-combination.	Category D	Screen out
CEA10	Protection and enhancement of environmental infrastructure networks, priority species and priority habitats	This policy sets out requirements for the protection and enhancement of environmental networks and priority species and habitats. It includes high-level protection for European sites in terms of potential effects upon Functionally Linked Land associated with the Upper Nene Valley Gravel Pits SPA and Ramsar. This mitigation policy cannot be applied at the screening stage. As it is a bespoke European site protection policy it will be screened into the HRA process for application as mitigation in the AA.	Category M	Screen in
CEA11	Urban greening, trees and woodland	This policy sets out requirements for incorporation of urban greening, trees and woodland into development. It does not, therefore, trigger development or change and would, therefore, not lead to an LSE at any European site, either alone, or in-combination.	Category D	Screen out
CEA12	Conserving and enhancing landscape character/Special Landscape Areas	This policy sets out requirements for the conservation and enhancement of landscape. It is a plan wide environmental protection policy. It does not, therefore, trigger development or change and would, therefore, not lead to an LSE at any European site, either alone, or in-combination.	Category D	Screen out
CEA13	Sustainable drainage systems (SuDS) and integrated flood risk management	This policy sets out requirements for development to provide SuDS and integrated flood risk management. It is a plan wide environmental protection policy. It does not, therefore, trigger development or change and would, therefore, not lead to an LSE at any European site, either alone, or in-combination.	Category D	Screen out

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
CEA14	Protecting and enhancing watercourses	This policy sets out requirements to protect and enhance watercourses. It is a plan wide environmental protection policy. It does not, therefore, trigger development or change and would, therefore, not lead to an LSE at any European site, either alone, or in-combination.	Category D	Screen out
CEA15	Managing food risk	This policy sets out requirements for development to manage flood risk management. It is a plan wide environmental protection policy. It does not, therefore, trigger development or change and would, therefore, not lead to an LSE at any European site, either alone, or in-combination.	Category D	Screen out

Economic and cultural prosperity

Policy Reference	Policy name	Summary of Policy and Identification of LSEs	Screening category	Screening conclusion
ECP1	Protecting employment land and buildings	This policy provides protection for existing employment land and buildings. It does not, therefore, 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
ECP2	Supporting the vitality and viability of centres	This policy protects retail floorspace within Primary Shopping Areas (defined in the policy) and supports development which enhances these. It does not, therefore, 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
ECP3	Sequential and impact tests	This policy sets out requirements for sequential and impact tests in terms of retail development. It does not, therefore, 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
ECP4	Hotel and visitor accommodation	This policy sets out requirements for hotel and visitor accommodation. It does not, therefore, 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
ECP5	Supporting a diverse rural economy	This policy sets out requirements for development in the countryside and rural settlements. It does not, therefore, 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
ECP6	Heritage	This policy sets out requirements for the protection of heritage assets. It is a plan wide environmental protection policy. It does not, therefore, trigger development or change and would, therefore, not lead to an LSE at any European site, either alone, or in-combination.	Category D	Screen out

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

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