Habitats Regulations Assessment of the Nuneaton and Bedworth Local Plan Review

Addendum v2

Nuneaton and Bedworth Borough Council

60673395

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Delivering a better world

Quality information

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Revision History

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1. Introduction

Scope of Project

1.1 Under the Conservation of Habitats and Species Regulations 2017 (as amended), an Appropriate Assessment is required, where a plan or project is likely to have a significant effect upon a European Site, either individually or 'in combination' with other projects.

1.2 AECOM was appointed by Nuneaton and Bedworth Borough Council to undertake a Habitats Regulations Assessment (HRA) of its Borough Plan Review 2024-2039. The objective of this assessment was to identify any aspects of the Borough Plan Review that would cause an adverse effect on the integrity of European sites (Special Areas of Conservation (SACs), Special Protection Areas (SPAs), candidate Special Areas of Conservation (cSACs), potential Special Protection Areas (pSPAs) and, as a matter of Government policy, Ramsar sites), either alone or in combination with other plans and projects, and to advise on appropriate policy mechanisms for delivering mitigation where such effects were identified.

1.3 A single issue addendum to the HRA has been identified as being required, in order to specifically address the issue of hydrological linkage between allocations in the Local Plan and downstream European sites. While this matter was discussed in the submitted HRA, particularly paragraphs 5.20 to 5.27 of the appropriate assessment, a more detailed consideration of linkages between allocated sites and the River Sowe and River Anker (and thus the Severn Estuary SAC/SPA/Ramsar site and Humber Estuary SAC/SPA/Ramsar site) is deemed to be necessary. That is the purpose of this addendum. Since this is an addendum it does not replace the submission HRA and does not repeat all information in that report.

2. Internationally Designated Sites Discussed in this Addendum

2.1 In their response to the consultation on the Local Plan Review and its HRA, Natural England observed that the Plan area is located upstream of the Severn Estuary Special Area of Conservation (SAC) and Ramsar Site (approximately 96km to the south-west) and is hydrologically linked to the designated sites through the River Sowe tributary of the Warwickshire River Avon. The Plan area is also located upstream of the Humber SAC/Ramsar site (125km to the north-east) and is hydrologically linked to the designated site through the River Anker which flows into the River Trent tributary of the River Humber.

2.2 The Severn Estuary migratory fish species (Atlantic salmon, sea trout, allis shad, twaite shad, sea lamprey, river lamprey and European eel) travel upstream through the River Severn and its tributaries, spending part of their life cycle in the wider Severn hydrological catchment. Currently the tidal weir at Tewkesbury is believed to present an obstacle to most of the migratory fish species, with the exception of the European eel, which has been recorded within the Warwickshire Avon. The Humber Estuary migratory fish species are the sea lamprey, river lamprey and the European eel. The river lamprey has been recorded as far upstream as the R. Dove (Staffordshire/Derbyshire). It is also understood that European eel have been recently recorded in the River Sherbourne, which is a tributary of the River Sowe. There is therefore the possibility of these species being present during the Plan period within the River Anker and River Sowe (and possibly tributaries) which would render these rivers functionally-linked habitat for the Humber Estuary SAC/Ramsar site and Severn Estuary SAC/Ramsar site.

Ecological Context and Interest Features of Designated Sites

Humber Estuary SAC and Ramsar site

Introduction

2.3 The Humber is the second-largest coastal plain estuary in the UK, and the largest coastal plain estuary on the east coast of Britain. It is a muddy, macro-tidal estuary, fed by the Rivers Ouse, Trent and Hull, Ancholme and Graveney. Suspended sediment concentrations are high, and are derived from a variety of sources, including marine sediments and eroding boulder clay along the Holderness coast. This is the northernmost of the English east coast estuaries whose structure and function is intimately linked with soft eroding shorelines. Habitats within the Humber Estuary include 1330 Atlantic salt meadows and a range of sand dune types in the outer estuary, together with subtidal sandbanks (H1110 Sandbanks which are slightly covered by sea water all the time), extensive intertidal mudflats (H1140 Mudflats and sandflats not covered by seawater at low tide), glasswort beds (H1310 *Salicornia* and other annuals colonising mud and sand), and 1150 coastal lagoons.

2.4 As salinity declines upstream, reedbeds and brackish saltmarsh communities fringe the estuary. These are best-represented at the confluence of the Rivers

Ouse and Trent at Blacktoft Sands. Upstream from the Humber Bridge, the navigation channel undergoes major shifts from north to south banks, for reasons that have yet to be fully explained. This section of the estuary is also noteworthy for extensive mud and sand bars, which in places form semi-permanent islands. Significant fish species include river lamprey *Lampetra fluviatilis* and sea lamprey *Petromyzon marinus* which breed in the River Derwent, a tributary of the River Ouse.

Qualifying features

2.5 The SAC and Ramsar site have numerous qualifying features. Natural England particularly flagged the following in their advice as these are designated features of the SAC:

- 1095 Sea lamprey *Petromyzon marinus*; and
- 1099 River lamprey *Lampetra fluviatilis*

2.6 These are both anadromous species (spending part of their life cycle in the sea and part upstream in freshwater) and, provided there are no significant blockages, can migrate a considerable distance upstream from the SAC boundary in order to breed and spawn.

2.7 In addition, as identified earlier European eel is also a designated interest feature of the Humber Estuary, appearing on the Ramsar citation.

Conservation objectives

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

- *The extent and distribution of qualifying natural habitats and habitats of qualifying species*
- *The structure and function (including typical species) of qualifying natural habitats*
- *The structure and function of the habitats of qualifying species*
- *The supporting processes on which qualifying natural habitats and habitats of qualifying species rely*
- *The populations of qualifying species, and,*
- *The distribution of qualifying species within the site'.*

Threats/pressures to site integrity

2.9 The following threats/ pressures to the site integrity of the Humber Estuary SAC are listed in Natural England's Site Improvement Plan[1] with further details provided within the Supplementary Advice on Conserving and Restoring Site Features[2]:

[1] http://publications.naturalengland.org.uk/publication/5427891407945728

[2] https://designatedsites.naturalengland.org.uk/Marine/SupAdvice.aspx?SiteCode=UK0030170&SiteName=humber%20estuary&SiteNameDisplay=Humber+Estuary+SAC&countyCode=&responsiblePerson=&SeaArea=&IFCAArea=&NumMarineSeasonality=8

- Water pollution
- Coastal squeeze
- Undergrazing
- Invasive species
- Public access/disturbance
- Fisheries management
- Direct landtake
- Air pollution
- Shooting/scaring
- Inappropriate scrub control

2.10 For the purposes of this HRA the key threat is blockage to migratory fish passage throughout the catchment of the watercourses that feed the River Humber (and thus the SAC) either through physical blockage, changes to water levels or changes to water chemistry.

2.11 The Supplementary Advice on the Conservation Objectives has a specific attribute 'Structure and function: biological connectivity' for both migratory fish species, with the associated target '*Restore connectivity of estuarine features to surrounding rivers, freshwater, marine and coastal habitats, to ensure larval dispersal and recruitment, maintain nursery grounds for mobile species, and to allow movement of migratory fish'.* The fact that the target is to restore connectivity (rather than simply preserving existing connectivity) is relevant to the assessment as it means consideration must be given to anything which would interfere with endeavours to restore connectivity.

Severn Estuary SAC and Ramsar site

Introduction

2.12 The Severn Estuary lies on the south-west coast of Britain at the mouth of four major rivers (the Severn, Wye, Usk, and Avon). The immense tidal range (the second highest in the world) and classic funnel shape make the Severn Estuary unique in Britain and very rare worldwide. This tidal range creates strong tidal streams and high turbidity, producing communities characteristic of the extreme physical conditions of liquid mud and tide-swept sand and rocks. The Estuary includes a wide diversity of habitats including Sandbanks which are slightly covered by sea water all the time, Mudflats and sandflats not covered by sea water at low tide, Atlantic salt meadows, and Reefs, which are identified as Annex I habitat types in their own right.

2.13 The estuarine fauna includes: invertebrate populations of importance (especially as a food resource for a wide range of bird and fish species), internationally important populations of waterfowl; and large populations of migratory fish, including sea lamprey *Petromyzon marinus*, river lamprey *Lampetra fluviatilis* (both of which spawn in freshwater but complete part of their life cycle in the sea), and twaite shad *Alosa fallax*.

Qualifying features

2.14 The SAC and Ramsar site have numerous qualifying features but as per Natural England advice the features of relevance to this assessment are:

- 1095 Sea lamprey *Petromyzon marinus*;
- 1099 River lamprey *Lampetra fluviatilis*; and
- S1103 Twaite shad *Alosa fallax*

2.15 In addition, the Severn Estuary Ramsar site is designated for the following additional migratory fish species: Atlantic salmon, sea trout, allis shad and European eel.

2.16 These are all anadromous species (spending part of their life cycle in the sea and part upstream in freshwater) and, provided there are no significant blockages, can migrate a considerable distance upstream from the SAC boundary in order to breed and spawn.

Conservation objectives

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

- *The extent and distribution of qualifying natural habitats and habitats of qualifying species*
- *The structure and function (including typical species) of qualifying natural habitats*
- *The structure and function of the habitats of qualifying species*
- *The supporting processes on which qualifying natural habitats and habitats of qualifying species rely*
- *The populations of qualifying species, and,*
- *The distribution of qualifying species within the site'.*

Threats/pressures to site integrity

2.18 The following threats/ pressures to the site integrity of the Severn Estuary SAC are listed in Natural England's Site Improvement Plan[3] with further details provided within the Supplementary Advice on Conserving and Restoring Site Features:

- Public access/disturbance
- Physical modification
- Impacts of development
- Coastal squeeze
- Changes in land management
- Changes in species distributions

[3] http://publications.naturalengland.org.uk/publication/4590676519944192

- Water pollution
- Air pollution
- Recreational and commercial fishing
- Invasive species
- Marine litter
- Marine pollution

2.19 For the purposes of this HRA the key threat is blockage to migratory fish passage throughout the catchment of the watercourses that feed the River Severn (and thus the SAC) either through physical blockage, changes to water levels or changes to water chemistry.

2.20 The Supplementary Advice on the Conservation Objectives has a specific attribute 'Structure and function: biological connectivity' for both migratory fish species, with the associated target '*Restore connectivity of estuarine features to surrounding rivers, freshwater, marine and coastal habitats, to ensure larval dispersal and recruitment, maintain nursery grounds for mobile species, and to allow movement of migratory fish'.* The fact that the target is to restore connectivity (rather than simply preserving existing connectivity) is relevant to the assessment as it means consideration must be given to anything which would interfere with endeavours to restore connectivity.

3. Likely Significant Effects

3.1 Linking impact pathways to the Humber Estuary SAC/Ramsar and Severn Estuary SAC/Ramsar consist of anything that would block passage of migratory fish up and downstream or interfere with conservation measures to improve fish passage. This includes not only physical blockages in the river (weirs or other obstructions) but reductions in flow volume/rate or water quality.

3.2 The consideration of the Nuneaton and Bedworth Borough Plan Review and its potential effects on Humber Estuary SAC/Ramsar or Severn Estuary SPA/Ramsar is documented in Table 1 and each allocation is specifically assessed in Table 2.

3.3 With regard to the Severn Estuary SAC/Ramsar and Humber Estuary SPA/Ramsar, parts of site SHA3 (Tuttle Hill) in Nuneaton, and site SEA2 (Wilson's Lane) lie adjacent to the River Anker and River Sowe respectively and are therefore indirectly connected to the Humber Estuary or Severn Estuary. Non-Strategic Residential Allocations also lie close to the River Anker.

3.4 The second stage of HRA known as Appropriate Assessment is therefore required.

3.5 The Conservation of Habitats and Species Regulations (2017 as amended) require that plans are not considered purely in isolation but 'in combination' with other projects and plans. Those most relevant in relation to the Nuneaton and Bedworth Borough Council's Borough Plan Review include:

- Hinckley and Bosworth Borough Council Local Plan (2006 to 2026)
- Rugby Borough Council Local Plan 2011 - 2031
- Coventry City Council l Local Plan 2011 - 2031
- North Warwickshire Borough Council 2021
- Warwick District Local Plan 2011 - 2029

3.6 In addition to other plans and projects relevant to the immediate area around Nuneaton & Bedworth, consideration of habitat connectivity for the Severn Estuary and Humber Estuary SACs and Ramsar sites (see below) involves watercourses connecting to the Severn and Humber that cover a very large geographic area. The areas are too large for specific Local Plans to be listed here but any interference with riverine habitat connectivity in Nuneaton & Bedworth would operate in combination with any similar issues arising throughout the upstream catchments of both European sites.

3.7 The potential for policies and allocations to have likely significant effects in combination as well as in isolation has been taken into account in the screening table overleaf. For example, given the distance of Nuneaton & Bedworth from the Severn Estuary and Humber Estuary no specific allocation would be likely to significantly affect either SAC/Ramsar site except when considered alongside all other similar allocations in proximity to tributaries of those European sites.

Table 1 Likely Significant Effects Test

Policy	Summary	Likely Significant Effects Test (LSE)
DS1 – Sustainable Development	Sets out that the Council will secure sustainable development by requiring all new development to contribute towards the national need to achieve net zero carbon emissions. Development must be adaptable / resilient to climate change, of a high quality, address the prudent use / safeguarding of natural resources and be fully supported by infrastructure provision. Sets out a range of key sustainable development issues that applications must address.	**No Likely Significant Effect** By definition sustainable development must mean development that will not adversely affect European sites.
DS2 – Settlement Hierarchy and Roles	Sets out the settlement hierarchy for the Borough. States that most development will be directed to Nuneaton as the primary town. Other development will be directed to, or adjacent to, other settlements, at a scale that reflects the role and function of the settlement and its order in the hierarchy, as well as the settlement's ability to accommodate change.	**No Likely Significant Effect** Defining a settlement hierarchy poses no risk to European sites.
DS3 – Overall Development Needs	Sets out the overall quantum of housing and employment development to be delivered in the Borough, as well as the allocation of cemetery space and gypsy and traveller pitches (the latter already subject to a separate HRA).	**Likely Significant Effects** The location and amount of development are fundamental to the potential for effects on European sites and numerous allocated sites lie within 3km of Ensor's Pool SAC with one large site immediately adjacent to it.
DS4 – Residential Allocations	Sets out the allocated sites for residential development and the quantum of housing expected on each.	**Likely Significant Effects** The location and amount of development are fundamental to the potential for effects on European sites and numerous allocated sites lie within 3km of Ensor's Pool SAC with one large site immediately adjacent to it. Similarly, non-strategic residential allocations NSRA 11 and NSRA 14 lie adjacent to the

Policy	Summary	Likely Significant Effects Test (LSE)
		River Anker and are therefore adjacent to potential functionally linked habitat for the Humber Estuary SAC and Ramsar site.
DS5 – Employment Allocations	Sets out the allocated sites for employment development and the quantum of floorspace expected on each.	**Likely Significant Effects** The location and amount of development are fundamental to the potential for effects on European sites and numerous allocated employment sites lie within 3km of Ensor's Pool SAC.
DS6 – Green Belt	Sets out the protection and treatment of Green Belt land in the Borough	**No Likely Significant Effect** The status of Green Belt is not related to the potential for impacts on European sites
DS7 – Monitoring of Housing Delivery	Sets out the Council approach to monitoring housing delivery and what would be done to address any shortfall	**No Likely Significant Effect** Monitoring of housing delivery will not affect European sites
DS8 - Review	Sets out the circumstances under which Plan review will occur	**No Likely Significant Effect** No mechanism to affect European sites
SA1 – Development Principles on Strategic Sites	Sets out the broad requirements that must be met by all strategic development sites allocated in the Borough Plan Review	**No Likely Significant Effect** Setting out general development principles will not affect European sites
SHA1 –Top Farm	Among other requirements this policy sets out the necessity for provision of at least 1,700 dwellings in a mix of dwelling types and sizes, potential on-site GP surgery or financial contribution to new GP practice to serve the north Nuneaton area, provision of a district centre including community facilities and provision of 2 form entry primary school (approximately 210 pupils)	**No Likely Significant Effect** Although allocating housing development this allocation is more than 3km from Ensor's Pool SAC and therefore beyond the groundwater catchment of the site as advised by the Environment Agency. However, the site is adjacent to a tributary of the River Anker and therefore has an indirect connection to functionally-linked land for the Humber Estuary SAC/Ramsar downstream.

Policy	Summary	Likely Significant Effects Test (LSE)
SHA2 – Arbury	Among other requirements this policy sets out the necessity for provision of at least 1,525 dwellings in a mix of dwelling types and sizes, financial contribution to local NHS Clinical Commissioning Group, provision of a local centre, including community facilities and provision of a Community Park.	**Likely Significant Effects** This allocation lies adjacent to Ensor's Pool SAC. The site is adjacent to a tributary of the River Anker and therefore has an indirect connection to functionally-linked land for the Humber Estuary SAC/Ramsar downstream.
SHA3 – Tuttle Hill	Among other requirements this policy sets out the necessity for provision of at least 400 dwellings in a mix of dwelling types and sizes.	**No Likely Significant Effect** Allocation is within the 3km groundwater catchment of the site as advised by the Environment Agency for Ensor's Pool SAC. It also lies adjacent to the River Anker and is therefore adjacent to potential functionally linked habitat for the Humber Estuary SAC and Ramsar site
SHA4 – Hospital Lane	Among other requirements this policy sets out the necessity for provision of at least 398 dwellings in a mix of dwelling types and sizes and potential on-site GP surgery or financial contribution to new GP or expanded surgery.	**No Likely Significant Effect** Although allocating housing development, this allocation is more than 3km from Ensor's Pool SAC and therefore beyond the groundwater catchment of the site as advised by the Environment Agency. The site contains a watercourse that may be a tributary of the Breach Brook and thus connect to the River Sowe, and therefore could have an indirect connection to the Severn Estuary SAC/Ramsar site downstream
SHA5 – West of Bulkington	Among other requirements this policy sets out the necessity for provision of at least 348 dwellings in a mix of dwelling types and sizes	**No Likely Significant Effect** Although allocating housing development this allocation is more than 3km from Ensor's Pool SAC and therefore beyond the groundwater catchment of the site as advised by the Environment Agency. However, the site is adjacent to a tributary of the River Anker and therefore has an indirect connection to functionally-linked land for the Humber Estuary SAC/Ramsar downstream.

Policy	Summary	Likely Significant Effects Test (LSE)
SHA6 –Hawkesbury Golf Course (Remaining Land)	Among other requirements this policy sets out the necessity for provision of 176 dwellings in a mix of dwelling types and sizes, and provision of a community building.	**No Likely Significant Effect** Although allocating housing development this allocation is more than 3km from Ensor's Pool SAC and therefore beyond the groundwater catchment of the site as advised by the Environment Agency.
SEA2 – Wilson's Lane	Among other requirements this policy sets out that strategic employment site SEA-2 will be developed for employment, comprising use classes E(g) (prior to 1 Sept 2020 use class B1), B2 and B8, as well as residential uses and will involve the provision of approximately 18 ha of employment land and approximately 73 dwellings in a mix of dwelling types and sizes.	**No Likely Significant Effect** Although allocating employment, this allocation is more than 3km from Ensor's Pool SAC and therefore beyond the groundwater catchment of the site as advised by the Environment Agency. However, it is immediately adjacent to the River Sowe and is therefore adjacent to potential functionally linked habitat for the Severn Estuary SAC and Ramsar site.
SEA3 – Prologis Extension	Among other requirements this policy sets out the necessity for provision of approximately 5.3 ha of employment land for E(g) (prior to 1 Sept 2020 use class B1), B2 and B8 uses.	**No Likely Significant Effect** Although allocating employment, this allocation is more than 3km from Ensor's Pool SAC and therefore beyond the groundwater catchment of the site as advised by the Environment Agency. However, it is close to a tributary of the River Sowe and is therefore adjacent to potential functionally linked habitat for the Severn Estuary SAC and Ramsar site.
SEA4 – Coventry Road, Nuneaton	Among other requirements this policy sets out that strategic employment site SEA-4 will be developed for employment uses comprising use classes E(g) (prior to 1 Sept 2020 use class B1, B2 and B8, and provision of approximately 9 ha of employment land.	**No Likely Significant Effect** Allocation is within the 3km groundwater catchment of the site as advised by the Environment Agency for Ensor's Pool SAC. However, it is close to a tributary of the River Anker and is therefore adjacent to potential functionally linked habitat for the Severn Estuary SAC and Ramsar site.
SEA6 – Bowling Green Lane	Among other requirements this policy sets out that strategic employment site SEA-4 will be	**No Likely Significant Effect**

Policy	Summary	Likely Significant Effects Test (LSE)
	developed for employment uses comprising use classes E(g) (prior to 1 Sept 2020 use class B1), B2 and B8 and residential uses, including provision of approximately 19 ha of employment land and approximately 150 dwellings.	Although allocating employment, this allocation is more than 3km from Ensor's Pool SAC and therefore beyond the groundwater catchment of the site as advised by the Environment Agency. However, it lies close to the River Sowe and is therefore adjacent to potential functionally linked habitat for the Severn Estuary SAC and Ramsar site
CEM1 – Land North of Marston Lane Bedworth	Allocation CEM-1 will be safeguarded for use as cemetery burial grounds to serve the Borough's long term burial needs. Alternative green-belt compatible uses that preserve the openness of the Green Belt such as playing pitch provision will be considered acceptable where they will facilitate the development of the wider land allocation for burial space.	**No Likely Significant Effect** Allocation is within the 3km groundwater catchment of the site as advised by the Environment Agency for Ensor's Pool SAC.
H1 – Range and Mix of Housing	Generally sets out the expected range of housing types and mix of housing required in the Borough	**No Likely Significant Effect** Type of housing is not relevant to potential for effects on European sites.
H2 – Affordable Housing	Sets out the details regarding the extent of affordable housing provision required in the Borough	**No Likely Significant Effect** Type of housing is not relevant to potential for effects on European sites.
H3 – Gypsies, Travellers and Showpersons	Sets out the general requirements for gypsy and traveller provision, including reference to the Gypsy & Traveller DPD which has been subject to its own HRA.	**No Likely Significant Effect** The HRA of the Gypsy & Traveller DPD concluded there would be no likely significant effect on Ensor's Pool SAC from allocated sites and Natural England accepted that conclusion.
E1 – Nature of Employment Growth	Sets out the broad acceptability of different types of employment growth and among other requirements states that 'Applications for economic uses, focusing particularly on use classes E(g(ii)) (prior to 1 Sept 2020 use class	**No Likely Significant Effect** Particular employment allocations pose likely significant effects and these are considered separately. However,

Policy	Summary	Likely Significant Effects Test (LSE)
	B1(b)), B2 and B8 on the strategic employment sites and the portfolio of existing employment sites will be approved subject to them satisfactorily meeting the policies in the plan.	the broad policy requiring employment growth does not specify a quantum or location of development.
E2 – Existing Employment Estates	Among other requirements it states that the redevelopment, and/or expansion of existing employment sites listed in Table 11 (as shown on the policies map) for use class E(g)(ii) and B use classes employment purposes will be approved.	**No Likely Significant Effect** This broad policy does not specify a quantum or location of development, other than that it would relate to existing employment estates. Moreover, since these are existing employment sites redevelopment of the sites to continue to provide employment is unlikely to pose impact pathways to the SAC.
TC1 – Town Centre Requirements	Among other requirements states that development within the town centres will need to support the aspirations of the Transforming Nuneaton and Transforming Bedworth initiatives.	**No Likely Significant Effect** Setting requirements for town centre development without a specific mention to quantum of development will not affect European sites.
TC2 – Nature of Town Centre Growth	Among other requirements states that development within Nuneaton and Bedworth town centres will be expected to create a more accessible, well-connected and well-designed centre, with particular emphasis on linkages by walking, cycling and public transport.	**No Likely Significant Effect** Setting requirements for town centre development without a specific mention to quantum of development will not affect European sites.
TC3 – Hierarchy of Centres	Among other requirements sets out the hierarchy that should be used to undertake any sequential assessments for town centre uses.	**No Likely Significant Effect** Setting hierarchy for town centre uses will not affect European sites.
HS1 – Ensuring the Delivery of Infrastructure	General policy relating to infrastructure delivery. Among other requirements states that development will be required to provide infrastructure appropriate to the scale and context of the site in order to mitigate any impacts of the development, and address the needs associated with the development.	**No Likely Significant Effect** A general policy regarding appropriate and timely delivery of infrastructure supporting development will not affect European sites.

Policy	Summary	Likely Significant Effects Test (LSE)
HS2 – Strategic Accessibility and Sustainable Transport	Policy does not make any allocations but among other requirements states that transport proposals in line with those identified in the Coventry and Warwickshire Local Enterprise Partnership Strategic Economic Plan, Warwickshire County Council Local Transport Plan 2011 - 2026 (or subsequent updates) and Warwickshire County Council Cycle Network Development Plan/Local Cycling and Walking Infrastructure Plan (LCWIP) will be approved.	**No Likely Significant Effect** Requiring accessibility and transport proposals to be in line with existing adopted plans and strategies will not affect European sites.
HS3 – Telecommunications and Broadband Connectivity	Among other requirements states that development must facilitate the provision of superfast broadband infrastructure including fibre to premises (in line with the latest Government target) in order to enable the delivery of broadband services across the borough.	**No Likely Significant Effect** Provision of broadband connectivity will not affect European sites.
HS4 – Retaining Community Facilities	Sets out the limited circumstances in which development which would lead to the loss of community facilities will be permitted	**No Likely Significant Effect** Setting out criteria for loss of community facilities will not affect European sites.
HS5 – Health	Requires all major development proposals will be required to demonstrate that they would have an acceptable impact on health and wellbeing.	**No Likely Significant Effect** Requirements for health and wellbeing will not affect European sites.
HS6 – Sport and Exercise	Among other requirements, states that proposals which assist in creating a healthy environment across the borough using sports, leisure, and recreation facilities and/or opportunities to exercise will be approved.	**No Likely Significant Effect** Requirements for health and wellbeing will not affect European sites.
HS7 – Creating a Healthier Food Environment	Among other things, limits new hot food takeaways to town centres.	**No Likely Significant Effect** Requirements for health and wellbeing will not affect European sites.

Policy	Summary	Likely Significant Effects Test (LSE)
NE1 – Green & Blue Infrastructure	The borough's green and blue infrastructure assets will be protected, managed, enhanced or created to provide nature recovery networks. New development proposals will enhance, sustain and restore existing and create green (including wildbelts) and blue infrastructure (including canals); whilst at the same time protecting and enhancing rights of way. The policy also specifically requires an undeveloped green buffer to Ensor's Pool.	**No Likely Significant Effect** A policy promoting a more connected approach to green infrastructure and buffering of important wildlife sites such as Ensor's Pool and ancient woodland will not negatively affect European sites
NE2 – Open Space and Playing Fields	Sets out a range of requirements by which new development will create an improved green network of publicly accessible and linked open spaces to support growth	**No Likely Significant Effect** A policy promoting an improved green network will not negatively affect European sites
NE3 – Biodiversity and Geodiversity	Sets out requirements to protect and enhance both biodiversity and geodiversity. This includes the statement that '*Development that would adversely affect Special Areas of Conservation or cause significant harm to Sites of Special Scientific Interest will not normally be granted planning permission'.*	**No Likely Significant Effect** A policy protecting and enhancing biodiversity and geodiversity will not negatively affect European sites
NE4 – Managing Flood Risk and Water Quality	Among other requirements, identifies that new development should be prioritised to areas of lowest flood risk and must not increase flood risk elsewhere. This should consider the risk from all sources including fluvial, surface water and groundwater flood risk, making use of the Strategic Flood Risk Assessments (both Level 1 and Level 2) available public mapping such as the Flood Map for Planning and the Flood Risk from Surface Water map and historic flood information (which is available from the LLFA & other partners).	**No Likely Significant Effect** A policy managing flood risk and protecting water quality will not negatively affect European sites
NE5 – Landscape Character	Among other requirements, states that major development proposals must demonstrate how	**No Likely Significant Effect**

Policy	Summary	Likely Significant Effects Test (LSE)
	they will conserve, enhance, restore or create a sense of place, as well as respond positively to the landscape setting in which the development proposal is located. Developers must take account of the Land Use Designations Study and landscape guidelines when preparing their landscape strategy.	A policy protecting landscape character will not negatively affect European sites
BE1 – Contamination and Land Instability	Sets out the requirements that development proposals located on or adjacent to land which may have been subject to contamination and/or land instability will need to demonstrate.	**No Likely Significant Effect** A policy setting out circumstances for development on contaminated land will not negatively affect European sites
BE2 – Renewable and Low Carbon Energy	Among other requirements, notes that the council is committed to supporting low carbon developments. In addition, schemes providing renewable and low carbon technologies will be approved unless material considerations indicate otherwise. These include schemes that promote biomass energy, ground and air source heat pumps, solar thermal and solar photovoltaic.	**No Likely Significant Effect** A policy on renewable energy will not negatively affect Ensor's Pool SAC given its qualifying interest features.
BE3 – Sustainable Design and Construction	Sets out the Council's requirements for sustainable development	**No Likely Significant Effect** Ensuring sustainable design and construction will not negatively affect European sites
BE4 – Valuing and Conserving Our Historic Environment	Sets out the Council's requirements for conservating and enhancing historic assets	**No Likely Significant Effect** Protecting the historic environment will not negatively affect European sites

Table 2 Detailed assessment of the potential connection of each allocated site to Severn Estuary SAC/Ramsar or Humber Estuary SAC/Ramsar. Amber shading indicates a connection exists.

Allocation	Connection
SHA1 – Top Farm	Change Brook connects this site to the River Anker
SHA2 - Arbury	According to the Level 2 Flood Risk Assessment undertaken for the Local Plan, there are two unnamed watercourses which flow to the south of the site, one of which lies adjacent to the boundary for a short distance. These drain into Griff Brook. Griff Brook then flows east, where it meets Wem Brook, which ultimately drains into the River Anker.
SHA3 – Tuttle Hill	Straddles Coventry Canal but no connection to River Anker or River Sowe
SHA4 – Hospital Lane	400m from Breach Brook which connects to River Sowe. No clear connection between the development site and the brook but respondents to the Local Plan consultation have indicated a connection exists.
SHA5 – West of Bulkington	Opposite side of railway embankment from Wem Brook and a tributary past the site may connect to Wem Brook which ultimately drains to River Anker although connection is indirect.
SHA6 – Hawkesbury Golf Course (Remaining Land)	Adjacent to Coventry Canal but no connection to River Sowe or Anker. The Level 2 Strategic Flood Risk Assessment for the Local Plan states that there is a small watercourse linked to the largest pond at the centre of the site, but there is no indication this is connected to the River Sowe.
SEA2 – Wilson's Lane	Adjacent to River Sowe.
SEA3 – Prologis Extension	Opposite side of New Road from a field drain connecting to Breach Brook which connects to River Sowe
SEA4 – Coventry Road Nuneaton	Opposite side of B4113 from start of Griff Brook which drains to Wem Brook and ultimately to River Anker
SEA6 – Bowling Green Lane	88m from River Sowe on the opposite side of Bowling Green Lane
NSRA1 – Former Bedworth Rugby Club, Smarts Road	Approximately 40m from River Sowe, but separated by built development
NSRA2 – Former Manor Park Community School, Nuneaton	No connection to River Anker or River Sowe
NSRA3 – West of Coventry Road/Wilson's Lane, Exhall	No connection to River Anker or River Sowe
NSRA4 – Vicarage St Development Site, Nuneaton	No connection to River Anker or River Sowe
NSRA5 – Land Rear of Burbage Lane	No connection to River Anker or River Sowe

Allocation	Connection
NSRA6 – Land at Bucks Hill, Nuneaton	Ditch in the site, but no connection to Bar Pool Brook c. 120m west separated by built development and no connection to River Anker and River Sowe
NSRA7 – Abbey Street, Nuneaton	No connection to River Anker or River Sowe
NSRA8 – Land Rear of Lilleburne Drive and Willow Close, Nuneaton	Connected to Bar Pool Brook but no connection to River Anker or River Sowe
NSRA9 – Former New Inn Public House, Bulkington	No connection to River Anker or River Sowe
NSRA10 – Land at Bermuda Road, Nuneaton	No connection to River Anker or River Sowe
NSRA11 – Upper Abbey Street, Nuneaton	Straddles tributary of River Anker which is c. 400m downstream
NSRA12 – Kingswood Road, Nuneaton	No connection to River Anker or River Sowe
NSRA13 – Armson Road, Exhall	No connection to River Anker or River Sowe
NSRA14 – Mill Street/Bridge Street, Nuneaton	Adjacent to River Anker
NSRA15 – Bennett's Road. Kerseley	No connection to River Anker or River Sowe

3.8 In summary, sites SHA1, SHA2, SHA5, SEA4, NSRA11 and NSRA 14 are all connected either directly or indirectly to the River Anker, and thus indirectly to the Humber Estuary SAC/Ramsar site downstream. Sites SHA4, SEA2, SEA3 and SEA6 are all connected either directly or indirectly to the River Sowe and thus indirectly to the Severn Estuary SAC/Ramsar site downstream.

4. Appropriate Assessment

Humber Estuary and Severn Estuary

4.1 The Warwickshire Avon and its tributaries are believed to offer scope for species such as river lamprey, sea lamprey, Atlantic salmon and sea trout. Similar scope is believed to exist during the plan's lifetime for river lamprey to reach the Warwickshire tributaries of the Humber Estuary. Sea lamprey and river lamprey are both qualifying features of the Severn Estuary SAC and Humber Estuary SAC, while Atlantic salmon, sea trout, allis shad and European eel are features of the Severn Estuary Ramsar site, and European eel is a feature of the Humber Estuary Ramsar site. These are all migratory fish, with adults swimming upstream into freshwater. They may swim as far upstream as they can penetrate past barriers, whether natural or artificial such as weirs. The removal or modification of existing weirs to facilitate fish passage is identified as a key action in River Basin Management Plans under the Water Framework Directive. Introduction of new structures that could impede migratory fish movement is also not supported.

4.2 In addition to barriers to dispersal, poor water quality can also affect the suitability of watercourses for these species to breed. Maintaining or achieving a good standard of water quality (Good Ecological Status under the Water Framework Directive is considered an appropriate standard for functionally linked watercourses used by migratory fish species https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/307788/river-basin-planning-standards.pdf) and sufficient flows is a necessary consideration when considering the potential impact of plans on functionally linked watercourses used by migratory fish species and longer term there should be an aspiration to restore connectivity by removing barriers and to improve the quality of our freshwater habitats.

4.3 The Local Plan includes a policy (Policy NE4, Managing Flood Risk) that requires flood risk assessment regarding all sources including groundwater and surface water and which ensures that no increase in flood risk arises either on-site or on surrounding/downstream sites. Moreover, if water quality cannot be maintained, there will be an assumption against the development proposal. This will apply to all development in the Borough, including those identified in Table 2 as being potentially functionally-linked to either the Severn Estuary SAC/Ramsar (via tributaries of the River Sowe) or Humber Estuary SAC/SPA (via tributaries of the River Anker). The policy also requires these assessments to account for climate change.

4.4 The policy also states that all new developments should contribute to creating space for water through use of blue and green infrastructure, and where relevant, restoring functional floodplains (flood zone 3b). New developments should also seek opportunities for river restoration and enhancement, e.g., de-culverting, removing structures and reinstating a natural, sinuous river channel. As a minimum all developments are required to provide an 8 m wide undeveloped buffer strip from the watercourse (from top of bank or centreline of culvert) to allow access for routine maintenance and emergency clearance.

4.5 This will ensure that the water quality, flows and passability of the Rivers Anker and Sowe is not compromised for use by migratory fish by allocations anywhere in the borough, and particularly not those identified in Table 2. Indeed, the proximity of these sites to the Rivers Anker and Sowe, particularly site SEA2, which is adjacent to the River Sowe, potentially provides opportunities to naturalise the flood plain and reduce obstacles to fish passage in the rivers.

4.6 Industrial sites in general, including distribution sites such as SEA3, pose risks in terms of impacts on water quality and it is important that protective measures, such as oil/petrol interceptors, are put in place to prevent pollution events. Policy NE4 requires all development to introduce necessary measures to protect water quality and to implement SUDS which will also protect water quality. Moreover, it is an offence to pollute watercourses anyway under the Environmental Permitting (England and Wales) Regulations 2016, irrespective of whether they are linked to European sites, and therefore there are already sufficient legal drivers in place to ensure water quality protection measures are included.

In Combination Assessment

4.7 As discussed in the Likely Significant Effects section, the potential for in combination effects with Local Plan allocations exists for all net new development throughout the Anker and Sowe floodplains, particularly where development lies close to or on the rivers or tributaries such as those identified in Table 2. However, the requirements of Policy NE4 would ensure that none of the Nuneaton & Bedworth Local Plan allocations would operate negatively in combination with other plans and projects on the Humber Estuary or Severn Estuary.

4.8 Abstraction for the Public Water Supply occurs throughout the Severn Estuary and Humber Estuary surface water and groundwater catchments and could reduce water levels in relevant rivers providing functional linkage for migratory fish. However, all water companies are required to produce Water Resource Management Plans that identify how they intend to meet water need in their supply areas over forthcoming decades (accounting for climate change). These are based on robust population growth estimates. All WRMPs must themselves undergo HRA to either establish that no adverse effect on the integrity of European sites will arise, or to identify and secure compensation for adverse effects on integrity after demonstrating the derogation tests can be met.

4.9 The directly relevant WRMP for Nuneaton and Bedworth is that for Severn Trent Water. The water company consulted on their WRMP through to February 2023. The final plan is due to be published in late 2023. It is based on water supply needs and robust population projections to 2085 and thus well beyond the end of the Local Plan period. The WRMP is accompanied by a Habitats Regulations Assessment which The preferred programme includes demand management measures targeted at leakage reduction, water efficiency measures and fitting of enhanced and smart meter technology . For demand-side measures that are likely to require some form of physical intervention or amendment to infrastructure (e.g. pipe repair), some instances of effect pathways might be conceivable but it is not possible to predict or identify specific locations where such measures might be applied. However, the HRA concludes that it is very likely that adverse effects on the integrity of European sites could be avoided at a scheme level following down-the-line scheme specific HRA. Therefore, the

Local Plan is not expected to have an adverse effect on integrity in combination with the Severn Trent WRMP.

5. Conclusions

5.1 Likely Significant Effects on the Severn Estuary SAC/Ramsar and Humber Estuary SAC/Ramsar could not be dismissed due to the proximity of several allocations to upstream watercourses in the catchment (the River Anker and River Sowe) or their tributaries.

5.2 Following this assessment it can be concluded that the Local Plan will not pose adverse effects on the integrity of any sites either alone or in combination with other plans or projects. No changes to the Local Plan were identified as being necessary for Severn Estuary SAC/Ramsar or Humber Estuary SAC/Ramsar.

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